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INTRODUCTION

Riverpark Final Environmental Impact Report

SCH# 2002091081

Response to Comments

In compliance with Section 15132 of the *CEQA Guidelines*, this document serves as the Final EIR for the proposed project: Vesting Tentative Tract Map (VTTM) 53425, General Plan Amendment 02-002, Zone Change 02-002, Conditional Use Permit 02-009, Hillside Development Application 02-003, including an Innovative Application, Oak Tree Permit 02-025, and Adjustment No. 02-010.

As required, this document provides responses to written comments received on the Draft EIR and response to public testimony received at public hearings before the City of Santa Clarita Planning Commission on the following dates: March 2, 2004, April 20, 2004, April 29, 2004, May 13, 2004, May 18, 2004, June 15, 2004, June 29, 2004, July 20, 2004, August 31, 2004, December 21, 2004, January 25, 2005, and March 22, 2005. The Draft EIR was circulated for review from March 3, 2004 to May 3, 2004. Due to additional new information, Section 4.6 of the Riverpark Draft EIR was recirculated from March 24, 2004 to May 7, 2004. Section 15132 of the *CEQA Guidelines* requires that the Final EIR consist of the following elements:

(a) The Draft EIR or a revision of the draft.[1]

(b) Comments and recommendations received on the Draft EIR either verbatim or in summary.[2]

(c) A list of persons, organizations, and public agencies commenting on the Draft EIR.

(d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.

(e) Any other information added by the Lead Agency.

---

1 All references to the Draft EIR are to the Draft EIR for the Riverpark project, SCH No. 2002091081, released for public comment on March 3, 2004, and incorporated by reference into the Final EIR (*CEQA Guidelines*, Sections 15132, 15150, and 15362). All references to Revised Riverpark Draft EIR Section 4.6, Biological Resources, are to Revised Riverpark Draft EIR Section 4.6, Biological Resources, released for public comment on March 24, and incorporated by reference into the Final EIR (*CEQA Guidelines*, Sections 15132, 15150, and 15362).

2 Ibid.

The Final EIR is organized in the following manner:

Comment Letters

Topical Responses

Responses to Comment Letters

Hearing Transcripts

Responses to Hearing Transcripts

Revised Draft EIR Pages

Final Revisions

Project Revisions and Additional Information

Appendices to the Final EIR:

- **APPENDIX A – Water Reports**
- **APPENDIX B – Air Quality Data/Reports**
- **APPENDIX C – Biological Data/Reports**
- **APPENDIX D – Revised Tentative Tract Maps**
- **APPENDIX E – Innovative Application Compliance Report**
- **APPENDIX F – Education Information**
- **APPENDIX G – Water Quality Data/Reports**
- **APPENDIX I – Staff Reports**
- **APPENDIX J – Flood and Floodplain Modifications**
- **APPENDIX K – Project Revisions and Additional Information**

Letter No. 1

California Regional Water Quality Control Board

Los Angeles Region

Terry Tamminen
Secretary for Environmental Protection

Over 51 Years Serving Coastal Los Angeles and Ventura Counties
Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

Arnold Schwarzenegger
Governor

March 16, 2004

Jeff Hogan, Associate Planner
City of Santa Clarita
23920 Valencia Blvd, Suite 300
Santa Clarita, CA 91355

Dear Jeff Hogan,

Re: CEQA Documentation for Project in the Santa Clara Watershed

Project Title : Riverpark (Panhandle)
Mater Case #02-175

We appreciate the opportunity to comment on the CEQA documentation for the above-mentioned project. For your information a list of permitting requirements and Regional Board Contacts is provided in Attachment A hereto.

The project site lies in the Santa Clara watershed that was listed as being impaired pursuant to Section 303 (d) of the Clean Water Act. Impairments listed in reaches downstream from the proposed project include nutrients and their effects, salts, coliform bacteria, and historic pesticides. The Los Angeles Regional Water Quality Control Board will be developing Total Maximum Daily Loads (TMDLs) for the watershed, but the proposed project is expected to proceed before applicable TMDLs are adopted. In the interim, the Regional Board must carefully evaluate the potential impacts of new projects that may discharge to impaired waterbodies.

Our review of your documentation shows that it does not include information on how this project will change the loading of these pollutants into the watershed. Please provide the following additional information for both the construction and operational phases of the project.

- For each constituent listed above, please provide an estimate of the concentration (ppb) and load (lbs/day) from non-point and point source discharges. 1
- Estimates of the amount of additional runoff generated by the project during wet and dry seasons. 2
- Estimate of the amount of increased or decreased percolation due to the project. 3

- Estimates of the net change in cubic feet per second of groundwater and surface water contributions under historic drought conditions (as compiled by local water purveyors, the Department of Water Resources, and others), and 10-year 50-year, and 100-year flood conditions. 4

If you have any questions please call me at (213) 576 6683.

Sincerely,

Elizabeth Erickson
Associate Geologist, TMDL Unit
Los Angeles Regional Water Quality Control Board

EE
Attachments (1)
cc:
State Clearinghouse
File

ATTACHMENT A

✓ If the proposed project will result in a **discharge of dredge or fill into a surface water** (including a dry streambed), and is subject to a **federal license or permit**, the project may require a *Section 401 Water Quality Certification*, or waiver of Waste Discharge Requirements. For further information, please contact:

Valerie Carillo, Nonpoint Source Unit at (213) 576-6759.

✓ If the project involves **inland disposal of nonhazardous contaminated soils and materials**, the proposed project may be subject to *Waste Discharge Requirements*. For further information, please contact:

Rodney Nelson, Landfills Unit, at (213) 620-6119

****

✓ If the overall project area is **larger than five acres**, the proposed project may be subject to the State *Board's General Construction Activity Storm Water Permit*. For further information, please contact:

Tracy Woods, Statewide General Construction Activity Storm Water Permits at (213) 620-2095.

✓ If the project involves a facility that is proposing to discharge storm water associated with **industrial activity** (e.g., manufacturing, recycling and transportation facilities, etc.), the facility may be subject to the State Board's *General Industrial Activities Storm Water Permit*. For further information, please contact:

Kristie Chung, Statewide General Industrial Storm Water Permits at (213) 620-2283.

✓ If the proposed project involves requirements for new development and construction pertaining to **municipal storm water programs**, please contact:

Dan Radulescu, Municipal Storm Water Permits, Los Angeles County at (213) 620-2038;
Jeff Mack, Municipal Storm Water Permits, Ventura County at (213) 620-2121.

✓ The proposed project also shall comply with the local regulations associated with the applicable **Regional Board stormwater permit**:

Los Angeles County and Co-permittees:
NPDES No. CAS614001
Waste Discharge Requirements Order No. 96-054.

Long Beach County and Co-permittees:
NPDES CAS004003
Waste Discharge Requirements Order No. 99-060.

Ventura County and Co-permittees:
NPDES No. CAS004002
Waste Discharge Requirements Order No. 00-108.

****

✓ If the proposed project involves any construction and/or groundwater **dewatering to be discharged to surface waters**, the project may be subject to *NPDES/Waste Discharge Requirements*. For further information, please contact:

Augustine Anijielo, General Permitting and Special Projects Unit at (213) 576-6657(All Region 4 Watersheds).

✓ If the proposed project involves any construction and/or groundwater **dewatering to be discharged to land or groundwater**, the project may be subject to *Waste Discharge Requirements*. For further information, please contact:

Kwang-il Lee, Non-Chapter 15 Unit, at (213) 620-2269 (All Region 4 Watersheds).

Revised : March 11, 2004

Letter No. 2

California Regional Water Quality Control Board

Los Angeles Region

Over 51 Years Serving Coastal Los Angeles and Ventura Counties

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Terry Tamminen
Secretary for Environmental Protection

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

Arnold Schwarzenegger
Governor

March 22, 2004

Mr. Jeff Hogan
Associate Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 300
Santa Clarita, CA 91355-2196

Dear Mr. Jeff Hogan,

Re: CEQA Documentation for Project in the Santa Clara Watershed

Riverpark Project
Master Case Nos. 02-175
SCH # 2002091081

We appreciate the opportunity to comment on the CEQA documentation for the above-mentioned project. For your information a list of permitting requirements and Regional Board Contacts is provided in Attachment A hereto.

The project site lies in the Santa Clara watershed that was listed as being impaired pursuant to Section 303 (d) of the Clean Water Act. Impairments listed in reaches downstream from the proposed project include nutrients and their effects, salts, coliform bacteria, and historic pesticides. The Los Angeles Regional Water Quality Control Board will be developing Total Maximum Daily Loads (TMDLs) for the watershed, but the proposed project is expected to proceed before applicable TMDLs are adopted. In the interim, the Regional Board must carefully evaluate the potential impacts of new projects that may discharge to impaired waterbodies.

Our review of your documentation shows that it does not include information on how this project will change the loading of these pollutants into the watershed. Please provide the following additional information for both the construction and operational phases of the project.

- For each constituent listed above, please provide an estimate of the concentration (ppb) and load (lbs/day) from non-point and point source discharges. 1
- Estimates of the amount of additional runoff generated by the project during wet and dry seasons. 2
- Estimate of the amount of increased or decreased percolation due to the project. 3

- Estimates of the net change in cubic feet per second of groundwater and surface water contributions under historic drought conditions (as compiled by local water purveyors, the Department of Water Resources, and others), and 10-year 50-year, and 100-year flood conditions. 4

We are specifically concerned about the lack of quantitative estimates concerning cumulative impacts of this project with other projects planned for the immediate vicinity within the decade. Please indicate your organizations plans to predict project impacts, mitigate those impacts, and document the effects of the project to prevent long term deterioration of the aquatic habitat and water quality in the Santa Clara River. 5

If you have any questions please call me at (213) 576 6683.

Sincerely,

Elizabeth Erickson
Associate Geologist, TMDL Unit
Los Angeles Regional Water Quality Control Board

EE
Attachments (1)
cc:
State Clearinghouse
File

ATTACHMENT A

✓ If the proposed project will result in a **discharge of dredge or fill into a surface water** (including a dry streambed), and is subject to a **federal license or permit**, the project may require a *Section 401 Water Quality Certification*, or waiver of Waste Discharge Requirements. For further information, please contact:

Valerie Carillo, Nonpoint Source Unit at (213) 576-6759.

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Rodney Nelson, Landfills Unit, at (213) 620-6119

****

✓ If the overall project area is **larger than five acres**, the proposed project may be subject to the State *Board's General Construction Activity Storm Water Permit*. For further information, please contact:

Tracy Woods, Statewide General Construction Activity Storm Water Permits at (213) 620-2095.

✓ If the project involves a facility that is proposing to discharge storm water associated with **industrial activity** (e.g., manufacturing, recycling and transportation facilities, etc.), the facility may be subject to the State Board's *General Industrial Activities Storm Water Permit*. For further information, please contact:

Kristie Chung, Statewide General Industrial Storm Water Permits at (213) 620-2283.

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Dan Radulescu, Municipal Storm Water Permits, Los Angeles County at (213) 620-2038;
Jeff Mack, Municipal Storm Water Permits, Ventura County at (213) 620-2121.

✓ The proposed project also shall comply with the local regulations associated with the applicable **Regional Board stormwater permit:**

Los Angeles County and Co-permittees:
NPDES No. CAS614001
Waste Discharge Requirements Order No. 96-054.

Long Beach County and Co-permittees:
NPDES CAS004003
Waste Discharge Requirements Order No. 99-060.

Ventura County and Co-permittees:
NPDES No. CAS004002
Waste Discharge Requirements Order No. 00-108.

****

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Augustine Anijielo, General Permitting and Special Projects Unit at (213) 576-6657(All Region 4 Watersheds).

✓ If the proposed project involves any construction and/or groundwater **dewatering to be discharged to land or groundwater,** the project may be subject to *Waste Discharge Requirements*. For further information, please contact:

Kwang-il Lee, Non-Chapter 15 Unit, at (213) 620-2269 (All Region 4 Watersheds).

Revised : March 11, 2004

Letter No. 3

State of California—Business, Transportation and Housing Agency ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL
28648 The Old Road
Valencia, CA 91355
(661)294-5540
(800) 735-2929 (TT/TDD)
(800) 735-2922 (Voice)

April 6, 2004

File No.: 540.10868.9367

Mr. Jeff Hogan
Associate Planner
Impact Analysis Department
23920 Valencia Blvd.
Santa Clarita, Ca 90012

Dear Mr. Hogan:

This is in response to the Notice of Preparation of a draft Environmental Impact Report, dated March 3, 2004 for the Riverpark Project (02-175).

The proposed project will be located within the City of Santa Clarita. However, until an agreement is made between the City of Santa Clarita and the County of Los Angeles, this area will be within the jurisdiction of the California Highway Patrol. Therefore, traffic enforcement, emergency incident management, public service, assistance and accident investigation will be the responsibility of our agency. 1 2

In reviewing this project, State Clearinghouse Number 2002091081, our concern is what effect this projects will have on traffic. The project will increase traffic volume on Newhall Ranch Road, San Fernando Road, Bouquet Canyon, Valencia Blvd., Magic Mountain Parkway and Mc Bean Parkway, all of which connect to I-5 and or SR-14. The increased traffic will ultimately cause delays in emergency response times. Additionally, we have great concern for the purposed additional roadways which would necessitate additional resources and officers to provide traffic enforcement, emergency incident management, public service, assistance and accident investigation. 3

Lieutenant M. Odle will be our Department's contact person for the project. If you have any questions or concerns, he may be reached at the above address or telephone number.

Thank you for allowing us the opportunity to comment on this project.

Sincerely,

E. CONLEY, Captain
Commander
Newhall Area

Letter No. 4

STATE OF CALIFORNIA–BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, REGIONAL PLANNING
IGR/CEQA BRANCH
120 SO. SPRING ST.
LOS ANGELES, CA 90012
PHONE (213) 897-6536
FAX (213) 897-1337
E-Mail:NersesYerjanian@dot.ca.gov

RECEIVED
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APR 2 8 2004
PLANNING AND BUILDING SERVICES
CITY OF SANTA CLARITA

Flex your power!
Be energy efficient!

Mr. Jeff Hogan
Planning Department
City of Santa Clarita
23920 Valencia Blvd., Suite 300
Santa Clarita, CA. 91355

RE: IGR/CEQA# 040301NY
DEIR/Riverpark Developement
SCH#2002091081
LA/14/28.08

April 21, 2004

Dear Mr. Hogan:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the **Riverpark** Project (1,183 du + 40,000SF Retail/Commercial).

Please reference the Department's **Traffic Impact Study Guideline** on the Internet at http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf

- Apply the equitable share responsibility formula on page 2 of Appendix B **(Methodology for Calculating Equitable Mitigation Measures)** and set aside a portion of Transportation Impact Fees generated for the future State Highway improvement projects. The City may need to recalculate or establish an additional fee for this purpose. 1

- Construction of the proposed project in or adjacent to the Santa Clara River ought to be coordinated with the construction of the Cross Valley Connector in order to minimize temporary impacts to the river. 2

- The discussion of the cumulative impacts needs to also include whether or not the impacts are cumulatively considerable. If they are considered cumulatively considerable, a discussion as to the magnitude of the impact associated with this project based on the resource that is being cumulatively impacted is necessary. Also a discussion on if the mitigation measures suggested by this project that would possibly make these 3

- cumulative impacts less than significant within the region. 3

- The proposed nature reserve area should include corridor tunnels under adjacent roadways to ensure connectivity with habitat north and south. 4

If you have any questions regarding this response, please call the Project Engineer/Coordinator Mr. Yerjanian at (213) 897-6536 and refer to IGR/CEQA 040301NY.

Sincerely,

Cheryl J. Powell
IGR/CEQA Branch Chief
Regional Transportation Planning

"Caltrans improves mobility across California"

Letter No. 5

SOUTHERN CALIFORNIA

ASSOCIATION of GOVERNMENTS

Main Office

818 West Seventh Street

12th Floor

Los Angeles, California

90017-3435

t (213) 236-1800

f (213) 236-1825

www.scag.ca.gov

April 26, 2004

RECEIVED
PLANNING DIVISION
APR 28 2004
PLANNING AND BUILDING SERVICES
CITY OF SANTA CLARITA

Mr. Jeff Hogan
Associate Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 300
Santa Clarita, CA 91355-2196

RE: **Comments on the Draft Environmental Impact Report for the RiverPark Project – SCAG No. I 20040121**

Dear Mr. Hogan:

Thank you for submitting the **Draft Environmental Impact Report for the RiverPark Project** to SCAG for review and comment. As areawide clearinghouse for regionally significant projects, SCAG reviews the consistency of local plans, projects, and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

It is recognized that the proposed Project considers a Tentative Tract Map, Zone Change and General Plan Amendment, Conditional Use Permit, Review and Oak Tree Permit for the development of approximately 1,183 dwelling units. The proposed Project will be developed on approximately 695 acres, and is located east of Bouquet Canyon Road and north of Soledad Canyon Road in the City of Santa Clarita.

SCAG staff has evaluated the **Draft Environmental Impact Report for the RiverPark Project** for consistency with the Regional Comprehensive Plan and Guide (RCPG) and Regional Transportation Plan (RTP). The Draft EIR does not include an analysis of project consistency with relevant and applicable policies of SCAG's RCPG and RTP, which were outlined in our November 17, 2003 letter on the Notice of Preparation (NOP) for this Draft EIR. . It would be helpful if the Final EIR would provide a discussion and address the manner in which the proposed Project is consistent with or detracts from the achievement of RCPG and RTP policies. SCAG's November 17, 2003 letter is attached for your information. 1

We expect the Final EIR to specifically cite the appropriate SCAG policies and address the manner in which the Project is consistent with applicable core policies or supportive of applicable ancillary policies. Please use our policy numbers to refer to them in your Draft EIR. Also, we would encourage you to use a side-by-side comparison of SCAG policies with a discussion of the consistency or support of the policy with the proposed Project. 2

Based on the information provided in the Draft EIR, we are unable to determine whether the Project is consistent with SCAG policies. If you have any questions, please contact me at (213) 236-1867. Thank you.

Sincerely,

JEFFREY M. SMITH, AICP
Senior Regional Planner
Intergovernmental Review

Attachment: SCAG Letter, November 17, 2003 – SCAG No. I 20030603

SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS

Main Office

818 West Seventh Street

12th Floor

Los Angeles, California

90017-3435

t (213) 236-1800

f (213) 236-1825

www.scag.ca.gov

November 17, 2003

Mr. Jeff Hogan
Associate Planner
City of Santa Clarita
Department of Planning and Building Services
23920 Valencia Boulevard
Santa Clarita, CA 93155

RE: **Comments on the Revised Notice of Preparation for a Draft Environmental Impact Report for the Riverpark (Panhandle) Project – SCAG No. I 20030603**

Dear Mr. Hogan:

Thank you for submitting the **Revised Notice of Preparation for a Draft Environmental Impact Report for the Riverpark (Panhandle) Project** to SCAG for review and comment. As areawide clearinghouse for regionally significant projects, SCAG reviews the consistency of local plans, projects, and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

We have reviewed the **Revised Notice of Preparation**, and have determined that **the proposed Project is regionally significant per California Environmental Quality Act (CEQA) Guidelines (Section 15206).** The proposed Project considers the construction of more than 500 dwelling units. CEQA requires that EIRs discuss any inconsistencies between the proposed project and the applicable general plans and **regional plans (Section 15125 [d]).** If there are inconsistencies, an explanation and rationalization for such inconsistencies should be provided.

Policies of SCAG's Regional Comprehensive Plan and Guide and Regional Transportation Plan, which may be applicable to your project, are outlined in the attachment. **We expect the DEIR to specifically cite the appropriate SCAG policies and address the manner in which the Project is consistent with applicable core policies or supportive of applicable ancillary policies. Please use our policy numbers to refer to them in your DEIR. Also, we would encourage you to use a side-by-side comparison of SCAG policies with a discussion of the consistency or support of the policy with the Proposed Project.**

Please provide a minimum of 45 days for SCAG to review the DEIR when this document is available. If you have any questions regarding the attached comments, please contact me at (213) 236-1867. Thank you.

Sincerely,

JEFFREY M. SMITH, AICP
Senior Regional Planner
Intergovernmental Review

COMMENTS ON THE REVISED PROPOSAL TO DEVELOP A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE RIVERPARK (PANHANDLE) PROJECT SCAG NO. I 20020494

PROJECT DESCRIPTION

The proposed Project considers a Tentative Tract Map, Zone Change and General Plan Amendment, Conditional Use Permit, Review and Oak Tree Permit for the development of approximately 1,183 dwelling units. The proposed Project will be developed on approximately 695 acres, and is located east of Bouquet Canyon Road and north of Soledad Canyon Road in the City of Santa Clarita.

CONSISTENCY WITH REGIONAL COMPREHENSIVE PLAN AND GUIDE POLICIES

The **Growth Management Chapter (GMC)** of the Regional Comprehensive Plan and Guide (RCPG) contains the following policies that are particularly applicable and should be addressed in the Draft EIR for the Riverpark (Panhandle) Project.

3.01 The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.

Regional Growth Forecasts

The Draft EIR should reflect the most current SCAG forecasts which are the 2001 RTP (April 2001) Population, Household and Employment forecasts for the North Los Angeles County Council of Governments (NLACOG) subregion and the City of Santa Clarita. These forecasts are as follows:

NLACOG Subregion	2000	2005	2010	2015	2020	2025
Population	576,478	658,450	786,419	912,257	1083,020	1259,350
Household	174,293	211,038	264,936	319,701	378,169	442,773
Employment	187,780	218,429	250,111	268,842	285,963	304,163

City of S. Clarita	2000	2005	2010	2015	2020	2025
Population	146,415	151,226	166,822	182,153	202,970	224,460
Household	48,571	54,372	60,227	66,197	72,555	79,581
Employment	48,971	50,783	52,846	54,064	55,179	56,366

3.03 The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.

GMC POLICIES RELATED TO THE RCPG GOAL TO IMPROVE THE REGIONAL STANDARD OF LIVING

The Growth Management goals to develop urban forms that enable individuals to spend less income on housing cost, that minimize public and private development costs, and that enable firms to be more competitive, strengthen the regional strategic goal to stimulate the regional economy. The evaluation of the proposed project in relation to the following policies would be intended to guide efforts toward achievement of such goals and does not infer regional interference with local land use powers.

3.05 Encourage patterns of urban development and land use, which reduce costs on infrastructure construction and make better use of existing facilities.

3.09 Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.

3.10 Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.

GMC POLICIES RELATED TO THE RCPG GOAL TO IMPROVE THE REGIONAL QUALITY OF LIFE

The Growth Management goals to attain mobility and clean air goals and to develop urban forms that enhance quality of life, that accommodate a diversity of life styles, that preserve open space and natural resources, and that are aesthetically pleasing and preserve the character of communities, enhance the regional strategic goal of maintaining the regional quality of life. The evaluation of the proposed project in relation to the following policies would be intended to provide direction for plan implementation, and does not allude to regional mandates.

3.12 Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.

3.14 Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.

3.17 Support and encourage settlement patterns, which contain a range of urban densities

3.18 Encourage planned development in locations least likely to cause environmental impact.

3.19 SCAG shall support policies and actions that preserve open space areas identified in local, state and federal plans.

3.20 Support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.

3.21 Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.

3.22 Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.

3.23 Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.

GMC POLICIES RELATED TO THE RCPG GOAL TO PROVIDE SOCIAL, POLITICAL, AND CULTURAL EQUITY

The Growth Management Goal to develop urban forms that avoid economic and social polarization promotes the regional strategic goal of minimizing social and geographic disparities and of reaching equity among all segments of society. The evaluation of the proposed project in relation to the policy stated below is intended guide direction for the accomplishment of this goal, and does not infer regional mandates and interference with

local land use powers.

3.24 Encourage efforts of local jurisdictions in the implementation of programs that increase the supply and quality of housing and provide affordable housing as evaluated in the Regional Housing Needs Assessment.

3.27 Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.

REGIONAL TRANSPORTATION PLAN

The **Regional Transportation Plan (RTP)** also has goals, objectives, policies and actions pertinent to this proposed project. This RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. Among the relevant goals, objectives, policies and actions of the RTP are the following:

Core Regional Transportation Plan Policies

4.01 Transportation investments shall be based on SCAG's adopted Regional Performance Indicators:

Mobility - Transportation Systems should meet the public need for improved access, and for safe, comfortable, convenient, faster and economical movements of people and goods.

- *Average Work Trip Travel Time in Minutes – 25 minutes (Auto)*
- *PM Peak Freeway Travel Speed – 45 minutes (Transit)*
- *PM Peak Non-Freeway Travel Speed*
- *Percent of PM Peak Travel in Delay (Fwy)*
- *Percent of PM Peak Travel in Delay (Non-Fwy)*

Accessibility - Transportation system should ensure the ease with which opportunities are reached. Transportation and land use measures should be employed to ensure minimal time and cost.

- *Work Opportunities within 45 Minutes door to door travel time (Mode Neutral)*
- *Average transit access time*

Environment - Transportation system should sustain development and preservation of the existing system and the environment. (All Trips)

- *CO, ROG, NOx, PM10, PM2.5 – Meet the applicable SIP Emission Budget and the Transportation Conformity requirements*

Reliability – Transportation system should have reasonable and dependable levels of service by mode. (All Trips)

- *Transit – 63%*
- *Highway – 76%*

Safety - Transportation systems should provide minimal accident, death and injury. (All Trips)

- *Fatalities Per Million Passenger Miles – 0*
- *Injury Accidents – 0*

Equity/Environmental Justice - The benefits of transportation investments should be equitably distributed among all ethnic, age and income groups. (All trips)

- *By Income Groups Share of Net Benefits – Equitable Distribution of Benefits among all Income Quintiles*

Cost-Effectiveness - Maximize return on transportation investment (All Trips). Air Quality, Mobility, Accessibility and Safety

- *Return on Total Investment – Optimize return on Transportation Investments*

4.02 Transportation investments shall mitigate environmental impacts to an acceptable level.

4.04 Transportation Control Measures shall be a priority.

4.16 Maintaining and operating the existing transportation system will be a priority over expanding capacity.

AIR QUALITY CHAPTER CORE ACTIONS

The **Air Quality Chapter** core actions related to the proposed project includes:

5.07 Determine specific programs and associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provision of community based shuttle services, provision of demand management based programs, or vehicle-miles-traveled/emission fees) so that options to command and control regulations can be

assessed.

5.11 Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.

OPEN SPACE CHAPTER ANCILLARY GOALS

Outdoor Recreation

9.01 Provide adequate land resources to meet the outdoor recreation needs of the present and future residents in the region and to promote tourism in the region.

9.02 Increase the accessibility to open space lands for outdoor recreation.

9.03 Promote self-sustaining regional recreation resources and facilities.

Public Health and Safety

9.04 Maintain open space for adequate protection of lives and properties against natural and man-made hazards.

9.05 Minimize potentially hazardous developments in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipment.

Resource Production

9.07 Maintain adequate viable resource production land, particularly lands devoted to commercial agriculture and mining operations.

Resource Protection

9.08 Develop well-managed viable ecosystems or known habitats of rare, threatened and endangered species, including wetlands.

WATER QUALITY CHAPTER RECOMMENDATIONS AND POLICY OPTIONS

The **Water Quality Chapter** core recommendations and policy options relate to the two

water quality goals: to restore and maintain the chemical, physical and biological integrity of the nation's water; and, to achieve and maintain water quality objectives that are necessary to protect all beneficial uses of all waters.

11.07 Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.

CONCLUSIONS

All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Roles and Authorities

THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG) is a ***Joint Powers Agency*** established under California Government Code Section 6502 et seq. Under federal and state law, SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). SCAG's mandated roles and responsibilities include the following:

SCAG is designated by the federal government as the Region's ***Metropolitan Planning Organization*** and mandated to maintain a continuing, cooperative, and comprehensive transportation planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program pursuant to 23 U.S.C. '134, 49 U.S.C. '5301 et seq., 23 C.F.R. '450, and 49 C.F.R. '613. SCAG is also the designated ***Regional Transportation Planning Agency,*** and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) under California Government Code Section 65080 and 65082 respectively.

SCAG is responsible for developing the demographic projections and the integrated land use, housing, employment, and transportation programs, measures, and strategies portions of the ***South Coast Air Quality Management Plan,*** pursuant to California Health and Safety Code Section 40460(b)-(c). SCAG is also designated under 42 U.S.C. '7504(a) as a ***Co-Lead Agency*** for air quality planning for the Central Coast and Southeast Desert Air Basin District.

SCAG is responsible under the Federal Clean Air Act for determining ***Conformity*** of Projects, Plans and Programs to the State Implementation Plan, pursuant to 42 U.S.C. '7506.

Pursuant to California Government Code Section 65089.2, SCAG is responsible for ***reviewing all Congestion Management Plans (CMPs) for consistency with regional transportation plans*** required by Section 65080 of the Government Code. SCAG must also evaluate the consistency and compatibility of such programs within the region.

SCAG is the authorized regional agency for ***Inter-Governmental Review*** of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12,372 (replacing A-95 Review).

SCAG reviews, pursuant to Public Resources Code Sections 21083 and 21087, Environmental Impacts Reports of projects of regional significance for consistency with regional plans [California Environmental Quality Act Guidelines Sections 15206 and 15125(b)].

Pursuant to 33 U.S.C. '1288(a)(2) (Section 208 of the Federal Water Pollution Control Act), SCAG is the authorized ***Areawide Waste Treatment Management Planning Agency.***

SCAG is responsible for preparation of the ***Regional Housing Needs Assessment,*** pursuant to California Government Code Section 65584(a).

SCAG is responsible (with the Association of Bay Area Governments, the Sacramento Area Council of Governments, and the Association of Monterey Bay Area Governments) for preparing the ***Southern California Hazardous Waste Management Plan*** pursuant to California Health and Safety Code Section 25135.3.

Revised July 2001

Letter No. 6

STATE OF CALIFORNIA–THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *Governor*

SANTA MONICA MOUNTAINS CONSERVANCY
RAMIREZ CANYON PARK
5750 RAMIREZ CANYON ROAD
MALIBU, CALIFORNIA 90265
PHONE (310) 589-3200
FAX (310) 589-3207

April 26, 2004

Jeff Hogan
Associate Planner
City of Santa Clarita
23920 Valencia Boulevard
Santa Clarita, California 91355

Riverpark Revised Biology Section of the DEIR Comments
SCH# 2002091081

Dear Mr. Hogan:

The Santa Monica Mountains Conservancy (Conservancy) is concerned about the biological resources on the project site and Santa Clara River watershed.

Western spadefoot toads

The Revised Biology Section of the Draft Environmental Impact Report (DEIR) is being circulated in response to the discovery of western spadefoot toads on the proposed project site. Approximately 16 to 20 pairs of western spadefoot toads and many egg masses were discovered in March 2004. They were discovered in three seasonal rainpools on the proposed project site.

The locations where the toads occur will be destroyed by the proposed development. The development footprint was not changed at all upon the discovery of the toads on the proposed project site. The development footprint should be reduced in size to accommodate and preserve the toad habitat. 1

The proposed mitigation for the impacts to the toads is to create ponds in the undeveloped portion of the proposed project site and transplant the toads to the created ponds. The Revised Biology Section is deficient for failing to provide a detailed plan on the creation of the toad habitat. 2

The design and creation of the habitat must be accomplished by an expert, who has done the design and creation of numerous other functioning wetlands and vernal pools. The mitigation ratio for the created habitat must be 2:1 at a minimum. 3

Before the toads are transplanted into the newly created pools, the water quality must be surveyed and determined to be safe for the toads. The toads should only be transplanted during the breeding season to ensure that the maximum number of toads are transplanted. For 4

the best results, the toads should be collected in two consecutive years prior to construction activities taking place in existing occupied habitat. 5

Western spadefoot toads reach reproductive maturity at three years. One of the performance criteria of the project must include the identification of tadpoles in the created habitat. 6
Tadpoles should especially be in the ponds between years three and four after transplantation. 7

Fairy shrimp

When the project site was originally surveyed for the Draft Environmental Impact Report (DEIR), no seasonal pools were discovered. However in March 2004 and maybe in 2003, six seasonal pools were detected on the project site. Three of those pools had a long enough duration to sustain western spadefoot toads. The Revised Biology Section states for the federally endangered San Diego and Riverside fairy shrimps that they are not expected to occur on the proposed project site because the "soils present on site are not suitable to support vernal/seasonal pools." Fairy shrimp and western spadefoot toads can co-occur in the same ponds. Both fairy shrimp and spadefoot toads require water to remain in the ponds for a similar duration of time. 8 9

The Revised Biology Section is deficient for failing to perform surveys, following U.S. Fish and Wildlife Service protocols, for Riverside and San Diego fairy shrimp. These surveys for fairy shrimp must be done during the 2005 ponding season before any construction occurs. 10

Open Space

To adequately mitigate the permanent loss of river adjacent habitat, the undeveloped open space on the proposed project site must be dedicated to a park agency for management and maintenance. To adequately maintain and protect the western spadefoot toad habitat and open space, the funds for maintenance of the property should be raised through the establishment of a Community Facilities District (CFD). 11

The Conservancy appreciates the opportunity to comment. Please direct any questions or future documents to Susan Shanks of our staff at (310) 589-3200 ext. 124 and at the above Ramirez Canyon Park address.

Sincerely,

Jerome C. Daniel

JEROME C. DANIEL
Chairperson

Letter No. 7

California Regional Water Quality Control Board

Los Angeles Region

Terry Tamminen
Secretary for Environmental Protection

Over 51 Years Serving Coastal Los Angeles and Ventura Counties
Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

Arnold Schwarzenegger
Governor

April 29, 2004

Mr. Jeff Hogan, Associate Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 300
Santa Clarita, CA 91355-2196

REVIEW OF THE DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE RIVERPARK PROJECT IN THE CITY OF SANTA CLARITA

Dear Mr. Hogan:

Thanks for the opportunity to review and comment on the Draft Program Environmental Impact Report (EIR) for Riverpark Project in the City of Santa Clarita. This letter summarizes our comments on the draft program EIR.

The Los Angeles Regional Water Quality Control Board (Regional Board) is a State agency that deals with water quality issues. Therefore, our review was limited to the sections on Water Quality.

We have several comments on the Water Quality section and Water Quality Technical Report:

Section 4.8.1 Water Quality

Pg. 27 - Better site designs are very effective Best Management Practices (BMPs) in preventing pollutants from entering storm and non-storm runoff. Please identify Better Site Design BMPs that are relevant to the project. (1)

Pg. 60 – To the extent possible, the City of Santa Clarita should be responsible for the inspection and maintenance of post-construction BMPs for this project. Home Owners Associations (HOA) are not always diligent in operating and maintaining BMPs. Also, the HOA can dissolve or be transferred to another entity. (2)

Pg. 60 – Please summarize inspection and maintenance schedule for the project BMPs on a table format. Also, if HOA ends up being responsible for operation and maintenance of project BMPs, there needs to be a legal agreement to ensure implementation of this program. In addition, the City of Santa Clarita must also conduct follow-up inspections on annual basis (at minimum) to make sure that post-construction BMPs are being properly maintained. (3)

Pg. 71, Table 4.8.1-11 – There should be some reduction in average annual runoff volume with the implementation of BMPs. For example, biofilters such as swales should result in decrease in runoff volumes due to evapotranspiration and infiltration. (4)

Pg. 95 - Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit (Order No. 01-182) requires street sweeping twice a month for high traffic areas and no less than once a year for low traffic areas. Please increase the street sweeping frequency from once a month to twice a month for high traffic areas. 5

Appendix 4.8 Water Quality Technical Report

Pg. 4 – In accordance with the Los Angeles County MS4 Permit, the City of Santa Clarita must periodically inspect the legibility of the catch basin stencil or label. Catch basins with illegible stencils shall be recorded and re-stenciled or re-labeled within 180 days of inspection. 6

Pg. 6 – Common Area Drainage Facility Inspection and Cleaning must be performed per schedule outlined on pg. 48 of the Los Angeles County MS4 Permit. 7

Pg. 8 – The Los Angeles County SUSMP requires that runoff from approximately the 85th percentile storm to be treated. This is equivalent to 0.75-inch storm event based on downtown Los Angeles Rain gage. The Newhall Ranch area typically receives larger storms and more overall rainfall than downtown Los Angeles. For sizing criteria, please use rainfall data from a local rain gage. The Stormwater Management Model modeling analysis for the River Village Project (*Stormwater Quality Assessment and Water Quality Management Plan for the Newhall Ranch Development, December 30, 2002*) recommended a design storm depth of 1.15 inches to achieve 80 percent capture and treatment of stormwater runoff. 8

Pg. 11 – Please include discussion on sizing criteria for flow-based BMP such as Biofiltration Swales. Again, rainfall data from a local rain gage should be used for this analysis. 9

If you have any questions, please do not hesitate to contact me at (213) 620-2093.

Sincerely,

Michael Yang, P.E.
Associate Water Resources Control Engineer

cc:
Michael Lauffer, State Water Resources Control Board
Bruce Fujimoto, State Water Resources Control Board
Eugene Bromley, U.S. Environmental Protection Agency, Region 9
Dan Lafferty, Los Angeles County Department of Public Works

Letter No. 8

State of California – The Resources Agency ARNOLD SCHWARZENEGGER, *Governor*

DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201

May 6, 2004

BY FACSIMILE AND U.S. MAIL

Mr. Jeff Hogan
City of Santa Clarita
Department of Planning and Building Services
23920 Valencia Boulevard
Santa Clarita, CA 91355
Fax No.: (661) 259-8125

Draft Environmental Impact Report and Revised Biology Section for the Draft Environmental Impact Report for the Riverpark Project SCH # 2002091081, Los Angeles County

Dear Mr. Hogan:

The following statements and comments have been prepared pursuant to the Department of Fish and Game's (Department) authority as Trustee Agency with jurisdiction over natural resources affected by the project (CEQA Section 15386) and pursuant to our authority as a Responsible Agency under CEQA Section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (Fish and Game Code Section 2050 et seq) and Fish and Game Code Section 1600 et seq.:

The Draft Environmental Impact Report (DEIR) for the proposed project includes development of 695.4 acres of land for single and multi-family uses and commercial uses to include 1,183 dwelling units, 40,000 square feet of commercial uses, a recreational trail system, a 29-acre active/passive park, associated infrastructure and 442 acres of open space area focusing around the Santa Clara River. The project would also include the extension of Newhall Ranch Road including the Newhall Ranch Road/Golden Valley Road Bridge over the Santa Clara River to the Golden Valley Road/Soledad Canyon Road flyover. The project would include the construction of a portion of Santa Clarita Parkway from Newhall Ranch Road south for approximately 1,500 square feet. The project is located at the eastern terminus of Newhall Ranch Road, east of Bouquet Canyon Road between Castaic Lake Water Agency property and Soledad Canyon Road in the central part of the City of Santa Clarita.

The majority of the project site is undeveloped and supports 14 plant communities, including riversidian sage scrub, inland holly-leaf cherry scrub, mulefat scrub, southern willow scrub, southern riparian scrub, mixed oak and grass and riverwash. Areas within the project site not supporting native vegetative communities are presently used and have been used historically for agricultural purposes with some existing buildings, disturbed areas and areas reverting back to ruderal and natural vegetative communities.

The Santa Clara River and several tributaries to the Santa Clara River are within the proposed project site. The project proposes various construction activities within the Santa Clara River including bank protection and removal of riparian habitat and will be addressed through the approved Natural Rivers Management Plan (NRMP). The Department's comments in this response letter will focus on impacts to six Department jurisdictional drainages, tributaries to the Santa Clara River which are not included within the NRMP.

Impacts to Biological Resources

1. Western Spadefoot - The revised biology section of the DEIR acknowledges the presence of western spadefoot toad, a California Species of Special Concern, within three of six seasonal ponds on the project site. All of the breeding ponds for western spadefoot are proposed for removal by the project.

   a. The continual loss of western spadefoot habitat within the Santa Clarita Valley, and Southern California as a whole, concerns the Department. The seasonal pools and associated uplands and floodplains habitats associated with the species are often lost with project development. Mitigation measures for this species are often experimental, and not always successful. The recent discovery of western spadefoot on the project site, despite past negative survey results for this species suggests the potential undocumented loss of occupied habitat for this species in the Santa Clarita area. These potential undocumented losses increase the importance of the known populations on the project site. The preservation, avoidance and protection of all existing seasonal pools which support or could support western spadefoot should be accomplished on the project site. 1

   b. If the lead agency determines that avoidance of western spadefoot habitat is not feasible, creation of breeding pools and protection of adjacent unfragmented suitable upland habitat should be made a condition of project approval. The Department recommends the creation of at least two to three separate pools which are situated away from the developed footprint areas and not subject to human disturbances such as artificial night lighting, pollution, fuel management activities, etc. Human access to the pool should be discouraged with all proposed roads and recreational trails situated a minimum of 150 feet from the pools as the egg and larval stages of western spadefoot are susceptible to human disturbances such as collecting, and disturbances to the sites from foot traffic, bicycles, dirt bikes, pets, etc. Location of any created pool should be done in consultation with and approved by the Department as a condition of lead agency approval of the project. 2

   c. The Department also recommends the relocation of the 16-foot wide equestrian trail from the portion of the Santa Clara River near the Los Angeles Aquaduct pipeline. This portion of the trail should be relocated adjacent to the bike/pedestrian trail located further up the hillside. The Department, in general, does not approve of equestrian trails within the 100-year flood plain for a variety of reasons; especially when other options are available. This particular section of the equestrian trail would come within 100 feet of areas currently being proposed by the project proponent for Spadefoot toad mitigation. Due to the size of the development, and the specific habitat requirements of the Spadefoot toad, few areas are suitable 3

for mitigation. The Department requests the lead agency make the relocation of the trail a condition of approval for the project. Without trail relocation the Department may be unable to accept the mitigation measures for Spadefoot toad as adequate, and therefore meeting the lead agencies responsibilities under CEQA Section 15021. 3

2. San Diego Black-tailed jackrabbit - The DEIR states that the San Diego black-tailed jackrabbit is common where it occurs in the region and abundant in coastal Orange County and the high deserts of Los Angeles County; that displaced individuals of this jackrabbit species will disperse to remaining open space; and that individuals lost i.e. killed by the project is expected to be low. This conclusion is difficult to draw since population estimates were not submitted with the DEIR. 4

   a. It is the Department's opinion that the project will result in a cumulative adverse impact to San Diego black-tailed jackrabbit, a California Species of Special Concern. This subspecies is localized within the coastal plains of southern California including the Santa Clara River Valley. These areas have been and are continuing to be heavily developed and degraded. Jackrabbits do not adapt well to habitat losses and associated disturbances from human proximity. These disturbances include, but are not limited to, increased recreational uses, incursion of dogs and cats, shooting, homeless encampments, etc. all of which may be prohibited through mitigation measure but in reality are difficult to enforce. The assumption that displaced jackrabbits will somehow survive by dispersing into remaining degraded open areas of uncertain protected status does not meet the mitigation requirements set forth and described under Section 15021 of CEQA. Insufficient mitigation measure for this subspecies will further assist its decline and may in the future cause more restrictive regulatory measures to protect this resource. The Department recommends a more detailed discussion in the EIR of the project related impacts to San Diego black-tailed jackrabbit with a tangible habitat avoidance and/or preservation element. 5

3. Native Nesting Birds - Project impacts on nesting native birds should be evaluated. The proposed project will result in removal and/or disturbance of vegetation and ground substrates and therefore has the potential to directly impact nesting native bird species. 6

   a. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act(MBTA) of 1918(50 C.F.R. Section 10.13). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). 7

   b. Proposed project activities (including disturbances to native and non-native vegetation and man-made nesting substrates) should take place outside of the breeding bird season which generally runs from March 1- September 1 (as early as February 1 for raptors) to avoid take (including disturbances which would cause abandonment of active nests containing eggs and/or young). Take means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill (Fish and Game Code Section 86). 8

   c. If the project activities cannot feasibly avoid the breeding bird season, the Department recommends that beginning thirty days prior to the disturbance of 9

suitable nesting habitat the project proponent should arrange for weekly bird surveys to detect any protected native birds in the habitat to be removed and any other such habitat within 300 feet of the construction work area (within 500 feet for raptors). The surveys should be conducted by a qualified biologist with experience in conducting breeding bird surveys. The surveys should continue on a weekly basis with the last survey being conducted no more than three days prior to the initiation of clearance/construction work. If a protected native bird is found, the project proponent should delay all clearance/ construction disturbance activities in suitable nesting habitat or within 300 feet of nesting habitat (within 500 feet for raptor nesting habitat) until August 31 or continue the surveys in order to locate any nests. If an active nest is located, clearing and construction within 300 feet of the nest (within 500 feet for raptor nests) shall be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting. Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing. Construction personnel should be instructed on the sensitivity of the area. The project proponent should record the results of the recommended protective measures described above to document compliance with applicable State and federal laws pertaining to the protection of native birds. 9

Impacts to Botanical Resources

1. Sage Scrub Habitat - The DEIR states that the proposed project will result in the loss of 22.6 acres of planted sage scrub and 76.3 acres of Riversidian sage scrub and that the loss of these vegetative communities would not be considered significant. The biological mitigation section in the DEIR does not discuss mitigation for loss of sage scrub habitat. 10

   a. Portions of the proposed project site are included by the U.S. Fish and Wildlife Service as proposed critical habitat for the coastal California gnatcatcher (CGC). Proposed loss of habitat for CGC should be considered a significant cumulative impact as this species has been observed in several locations within the Santa Clarita area on private lands which have been or are proposed for development. 11

   b. It is not clear in the DEIR if the planted sage scrub area to be developed was planted as mitigation for loss of this plant community for a previous project. Continued loss of habitat for CGC from development and human induced wildfire within and near areas designated as and/or considered for critical habitat does not favor the recovery of this species. Sage scrub habitat on the project site should be avoided and where infeasible preserved at an off site location or as a last resort, created within protected undeveloped areas on the project site. 12

2. Holly-leafed Cherry - Table 4.6-4 of the DEIR states that 8.3 acres of holly-leafed cherry will be temporarily impacted by the proposed project and 2.9 acres will be permanently impacted for a total of 11.2 acres impacted out of a total of 12.9 acres on the project site. 13

   a. The Department considers holly-leafed cherry woodland a declining vegetative community the loss of which would be considered a significant adverse impact to wildlife habitat. This vegetative community is being systematically eliminated and/or degraded within the Santa Clara River watershed by 14

development. It is unclear what temporary impacts to this plant community entails other than the removal of individuals and replanting of this species which will still result in an unacceptable impact to this resource. All holly-leafed cherry habitat should be avoided by project activities. Any project activity which may further result in additional loss of holly-leafed cherry habitat by facilitating future road projects or other developments in adjacent off site areas should be redesigned to avoid these impacts. 14

3. Sensitive Botanical Species - The DEIR states that additional field surveys shall be conducted to minimize direct losses to Parry's larkspur, slender mariposa lily and Plummer's mariposa lily. Identified plants discovered within the project footprint shall be removed and replanted onto cut slopes or other appropriate habitats. The DEIR further indicates that Resource Management and Monitoring Plan (RMMP) including the management, monitoring, success criteria and adaptive management guidelines for the mitigation of impacts to these species shall also be identified at a future time before grading permits are issued for the project. 15

   a. The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered plant species. Department studies have shown that these efforts are experimental in nature and largely unsuccessful.

   b. The Department recommends conducting comprehensive focused survey for special status plant species early in the project planning stage so that surveys may be done at optimum times of the year and during a year/s of ample rainfall to maximize detection. If special status species are found then project plans may be drawn to avoid these resources on the site and avoid the necessity of relocation as a mitigation proposal. 16

   c. If avoidance is not feasible the Department recommends the acquisition (at a minimum of a 2:1 mitigation ratio) and protection in perpetuity of habitat supporting the target species. Acquisition should occur at an area which has equal or superior habitat values for impacted species. Relocation of sensitive plant species should only be proposed as a last resort when avoidance has been demonstrated to be infeasible. All relocation plans including methods, monitoring and success criteria in the RMMP should be included in the EIR for public review for adequacy. If the RMMP is not disclosed during the public comment period for the proposed project, recommended measures by reviewing parties to address deficiencies need not be considered by the lead agency which is not in the best interest of assuring successful mitigation goals. The RMMP should be approved by the Department as a condition for project approval by the lead agency. 17

   d. In order to assure for any tangible mitigation the EIR should discuss land acquisition and protection in perpetuity for sensitive plant species as a backup to the proposed relocation plan if relocation efforts have shown to fail years later. A security should be established in the amount necessary for said land acquisition which can be drawn upon in the event that relocation measures fail for sensitive plant species. This subsequent measure to assure for successful mitigation should be made a condition of project approval. Please contact Ms. Mary Meyer, Plant Ecologist, at (805) 640-8019 to discuss further. 18

Impacts to Riparian Resources

1. Department Jurisdictional Drainages - The proposed project will result in the loss (filling in) of six tributary drainages to the Santa Clara River and that an amendment or variance to the Natural Rivers Management Plan will be implemented to mitigate for loss of riparian resources.

   a. The Department would prefer that the proposed project be redesigned to avoid the destruction of jurisdictional drainages. All drainages should be avoided and provided with substantial setbacks which preserve their value to on-site and off-site wildlife populations.

   b. Because the above referenced drainages are outside the NRMP planning area the Department will requires a separate Streambed Alteration Agreement (SAA), pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant prior to any direct or indirect impact (including preliminary geotechnical activities) of any Department jurisdictional streambed, bank or channel or associated riparian resources. The Department's issuance of a SAA is considered a project that is subject to CEQA. To facilitate our issuance of the Agreement, the Department as a responsible agency under CEQA may consider the local jurisdiction's (lead agency) document for the project. To minimize additional requirements by the Department under CEQA the document should fully identify the potential impacts to any, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the Agreement. Mitigation ratios for the permanent loss of jurisdictional drainages are generally calculated at a 5:1 ratio. Early consultation is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources.

2. Impacts to Mature Cottonwoods - Following a 3/12/04 site tour by Department staff it was the Department's understanding that bank protection was proposed to be pulled farther back out of the Santa Clara drainage although the NRMP had authorized the bank stabilization to encroach farther into the drainage at this location.

   a. Although pulling back bank stabilization reduces impacts to the Santa Clara River bed, the result of doing so at the described location will result in the loss of several mature cottonwood trees. The Department recommends pulling back the bank protection farther back to avoid destruction of these trees. Riparian woodlands along the Santa Clara are vital to nesting raptors and other bird species and provide important shading which helps to retain soil moisture for a multitude of wildlife species. As groundwater within the region continues to drop, establishing a riparian canopy along the river may become increasingly difficult with mitigation plantings being more dependent on supplemental water until their root system develops deep enough to tap into the water table. It is best to leave established mature trees along the river in place as these trees are continuing to survive changing conditions and past drought cycles.

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In conclusion, the Department recommends that the above concerns are addressed prior to lead agency approval of the proposed project. Mitigation suggestions should be made a condition of project approval by the lead agency.

Thank you for this opportunity to provide comment. Questions regarding this letter and further coordination on these issues should be directed to Mr. Scott Harris, Associate Wildlife Biologist, at (626) 797-3170.

Sincerely,

C. F. Raysbrook
Regional Manager

cc: Ms. Morgan Wehtje, Camarillo
Ms. Terri Dickerson, Laguna Niguel
Mr. Scott Harris, Mission Hills
Ms. Mary Meyer, Ojai
CFR-Chron; HCP-Chron
Department of Fish and Game

State Clearinghouse
Sacramento

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spharris\RiverparkDEIR.doc

Letter No. 9

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

JAMES F. STAHL
Chief Engineer and General Manager

March 16, 2004

File No. 31-150.10.26

Mr. Jeff Hogan, Associate Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 300
Santa Clarita, CA 91355-2196

Dear Mr. Hogan:

Notice of Completion/Availability on the Draft Environmental Impact Report
Riverpark Project

The County Sanitation Districts of Los Angeles County (Districts) received the above referenced Notice of Completion/Availability on March 3, 2004. Regarding solid waste management for the above-mentioned project in the City of Santa Clarita, the Districts offer the following comments:

Section 4.9, Solid Waste Disposal, Part 3, Existing Conditions, Subpart D, Landfill Expansion and Development Plans, of the Draft Environmental Impact Report currently states the following in reference to the status of the Puente Hills Landfill: "in the process of applying for expansion in order to provide additional capacity." The Draft Environmental Impact Report should be updated with the current tonnage limits and landfill life imposed by the current conditional use permit for the Puente Hills Landfill, which became effective November 1, 2003. Please note the following: the conditional use permit for the Puente Hills Landfill authorizes the disposal of a maximum of 13,200 tons per day. Typically, the landfill closes early due to this permit-imposed tonnage restriction. Disposal operations will continue under the conditional use permit until October 31, 2013, at which time the site will stop accepting waste for disposal. Permitted capacity and other information are detailed in the enclosed fact sheet. 1

In addition to the Puente Hills Landfill, the Puente Hills Materials Recovery Facility will also be available to the proposed project. The Puente Hills Materials Recovery Facility is scheduled to begin operating in September 2004. The facility is permitted to accept 4,400 tons per day and 24,000 tons per week of municipal solid waste. Permitted capacity and other information are detailed in the enclosed fact sheet. It is likely that the Puente Hills Materials Recovery Facility will start operating at 2,000 tons per day and, as market demand necessitates, will ultimately increase to full capacity. 2

If you have any questions regarding these comments, please contact the undersigned at the above listed telephone number, extension 2731.

Very truly yours,

James F. Stahl

John D. Kilgore
Supervising Engineer
Planning Section

JDK:MV:eg

Enclosures

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FACT SHEET
PUENTE HILLS LANDFILL

LOCATION:

2800 South Workman Mill Road
Whittier, CA 90601

Immediately southeast of the intersection of the San Gabriel Valley (I-605) Freeway and the Pomona (SR-60) Freeway, in unincorporated Los Angeles County.

PROJECT DESCRIPTION:

The 1365-acre Puente Hills Landfill site is owned and operated by the Sanitation Districts of Los Angeles County (Sanitation Districts) in compliance with federal, state and local standards. With the exception of certain holidays, the site is open to the public six days a week (Monday through Saturday) from 6:00 a.m. to 5:00 p.m. The Puente Hills Landfill operates under a local land use permit that is valid through October 31, 2013. The permit allows the landfill to accept a maximum of 13,200 tons of refuse per day.

The landfill operation is designed to eliminate or minimize any potential impacts on nearby residents. Refuse accepted for disposal is compacted by crawler tractors and compactors. Refuse is covered at the end of each workday with a combination of soil and various alternate daily cover materials, such as green waste, thermodegradable film, and foam. Various specific measures are employed to control potential nuisances due to noise, odor, litter, dust, and vectors and to minimize landfill traffic impacts and overall visual impacts.

BACKGROUND:

The site was first permitted as a privately owned landfill in 1957. In 1970, the Sanitation Districts purchased the site and took over operation of the landfill. Puente Hills Landfill accepts only non-hazardous solid and inert waste; the disposal of hazardous or liquid waste is not allowed. More than 101 million tons of refuse have been disposed of at the site.

Puente Hills Landfill operates in compliance with the following permits and requirements:

- Conditional Use Permit No. 02-027-(4) granted by the County Planning Commission on December 18, 2002.
- Solid Waste Facilities Permit (No. 19-AA-053) issued by the County of Los Angeles - Department of Health Services on July 11, 2003.
- Waste Discharge Requirements (Order No. 90-046, 91-035, 93-062, 93-070, 94-103, and 99-059) issued by the California Regional Water Quality Control Board, Los Angeles Region.

Revised November 2003

- **Dust and Litter Control**. Control of dust and litter is carried out on a continuous basis. Water trucks spray the access roads and excavation areas to control dust from truck traffic and landfill operations. Litter is controlled by litter fences and by the daily application of cover material. Sanitation Districts' employees routinely police the area for litter and debris. The Sanitation Districts enacted an ordinance, which requires vehicles using Puente Hills Landfill to cover their loads or pay an additional surcharge and be cited. Following three citations for uncovered loads, the customer faces suspension of disposal privileges. This ordinance acts as a deterrent to the littering of roadways on and off the Sanitation Districts' property.

- **Odor Control**. The Sanitation Districts have implemented several measures to control odors originating from incoming wastes, including, but not limited to, the use of wind machines or fans to dilute and disperse odors, the use of odor masking or neutralizing agents to reduce odors, and the rejection of odorous loads, where appropriate.

- **Neighborhood Response.** The Sanitation Districts have established a 24 hours a day neighborhood hotline (562) 692-5628, which allows residents to relate any landfill concerns to the Sanitation Districts. Sanitation Districts' personnel follow a standard procedure to investigate each concern and implement appropriate corrective actions, if necessary.

- **Illegally Deposited Wastes**. The Sanitation Districts and the County of Los Angeles - Department of Health Services monitor the disposal area on a continuous basis for illegally deposited hazardous, toxic or infectious wastes. All vehicles entering the site are screened for radioactive materials as they pass through the weigh scales. The Sanitation Districts have also instituted a load checking program consisting of a random selection of at least seven loads each day for a thorough search. If illegal wastes are found, they are transferred to appropriate off-site disposal facilities. The hauler whose load contained the illegal waste is charged for proper disposal and, for repeated violations, faces suspension of disposal privileges. Equipment operators, as well as inspectors, stationed in the active disposal area are trained to identify hazardous waste. This program acts as a strong deterrent to illegal disposal of wastes at the Puente Hills Landfill.

- **Landscape and Irrigation System**. Finished slopes of the landfill are landscaped, and irrigation systems are installed. Additional landscaping and irrigation systems will be installed as landfill operations progress. The Sanitation Districts have worked actively with surrounding communities to develop appropriate landscaping.

PUENTE HILLS MATERIALS RECOVERY FACILITY
FACT SHEET

LOCATION:

The Puente Hills Materials Recovery Facility (MRF) is located at 2808 Workman Mill Road, Whittier, California 90601. This location is approximately 14 miles east of downtown Los Angeles southeast of the intersection of the Pomona Freeway (SR-60) and the San Gabriel River Freeway (I-605) as shown in the attached map.

PROJECT DESCRIPTION:

The Puente Hills MRF will be owned and operated by the County Sanitation Districts of Los Angeles County (Sanitation Districts). The purpose of the Puente Hills MRF is to recover recyclable materials from commercial waste and to provide for the efficient transfer of the residual waste to permitted landfills for proper disposal. No waste or recyclables will be disposed of at the site.

The project is located on approximately 25 acres and comprises the processing building, administrative offices, scales, parking and maintenance areas. The processing building will be approximately 215,000 square feet is area and will be approximately 55 feet tall. Waste will be delivered to the processing building in collection trucks, which will discharge their loads inside of the enclosed building. Recyclable materials including various grades of paper and plastic will be recovered through a combination of manual and mechanical methods. Residual waste will be placed into large capacity trailers for transfer to permitted landfills. Initially, residual waste from the Puente Hills MRF will be directly hauled to landfills in trucks. By 2009, residual waste from the Puente Hills MRF will be delivered to rail yards for transfer to remote landfills via rail (waste-by-rail).

BACKGROUND:

The Puente Hills MRF is currently under construction with scheduled completion by late 2004. The facility is permitted to accept 4,400 tons per day and 24,000 tons per week of municipal solid waste. The disposal of liquid or hazardous waste will not be allowed.

PERMITS:

The Puente Hills MRF will be operated in compliance with the following permits, as well as other applicable technical permits:

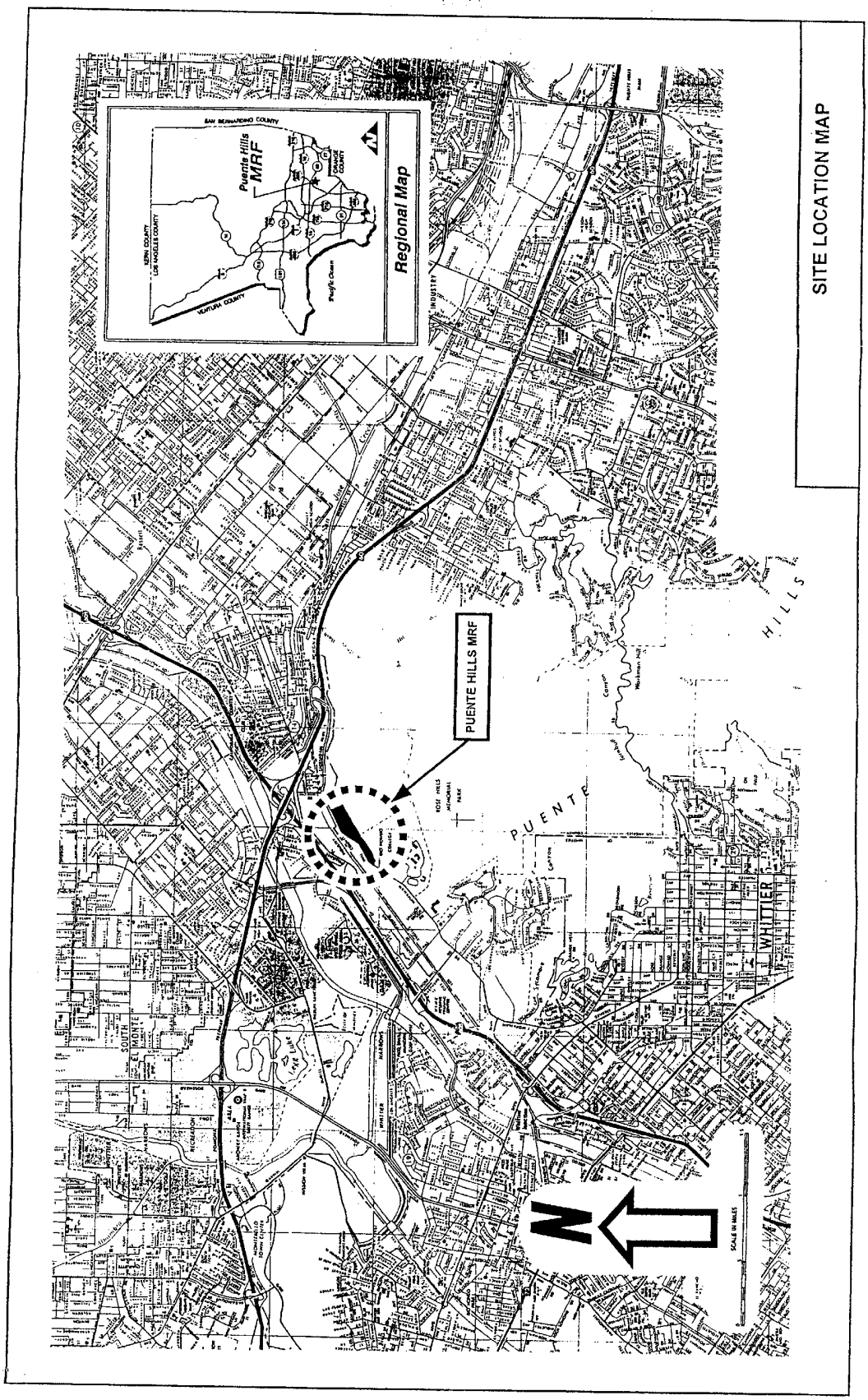
- Conditional Use Permit (CUP No. 92-251(4)) issued by the Los Angles County Board of Supervisors
- Oak Tree Permit (No. 92-251(4)) issued by the Los Angeles County Board of Supervisors.
- Solid Waste Facilities Permit (No. 19-AA-1043) issued by the Los Angeles County Department of Health Services.

ENVIRONMENTAL CONTROL FEATURES:

The Sanitation Districts will employ several environmental control systems to eliminate or reduce to minimal levels potential impacts on the environment and surrounding areas. These measures include:

- **Dust and Litter Control.** The Puente Hills MRF will be designed and operated to minimize the creation, emission, and accumulation of excessive dust, particulates, and litter. Measures to control dust at the Puente Hills MRF will include a water misting system inside the facility to remove dust and particulates from the air. Additionally, the site will be checked for litter and the parking lots, access roads and the site entrance will be swept daily to remove dirt, dust and litter. The Sanitation Districts will require all customers using the facility to cover their loads in order to reduce litter.

Last Updated: August 4, 2003


SITE LOCATION MAP
Regional Map
Puente Hills MRF
PUENTE HILLS MRF
WHITTIER
PUENTE
HILLS
SOUTH EL MONTE
N

Letter No. 10

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

JAMES F. STAHL
Chief Engineer and General Manager

March 29, 2004

File No: 26-00.04-00

Mr. Jeff Hogan, Associate Planner
Planning & Building Services Department
City of Santa Clarita
23920 Valencia Boulevard, Suite 300
Santa Clarita, CA 91355

Dear Mr. Hogan:

Vesting Tentative Tract Map No. 53425, Master Case No. 02-175, Riverpark Project

The County Sanitation Districts of Los Angeles County (Districts) received a Draft Environmental Impact Report for the subject project on March 3, 2004. The proposed development is located within the jurisdictional boundaries of District No. 26. We offer the following updated information regarding sewerage service:

1. The Districts' 24-inch diameter Bouquet Canyon Relief Trunk Sewer, located in Bouquet Canyon Road, conveyed a peak flow of 6.4 million gallons per day (mgd) when last measured in 2003. (1)

2. A 9 mgd expansion of the Valencia Water Reclamation Plant (WRP) (one of the two WRPs in the Santa Clarita Valley Joint Sewerage System (SCVJSS)) will be completed in late-2004. The SCVJSS currently processes an average flow of 18.1 mgd. (2)

If you have any questions, please contact the undersigned at (562) 699-7411, extension 2717.

Very truly yours,

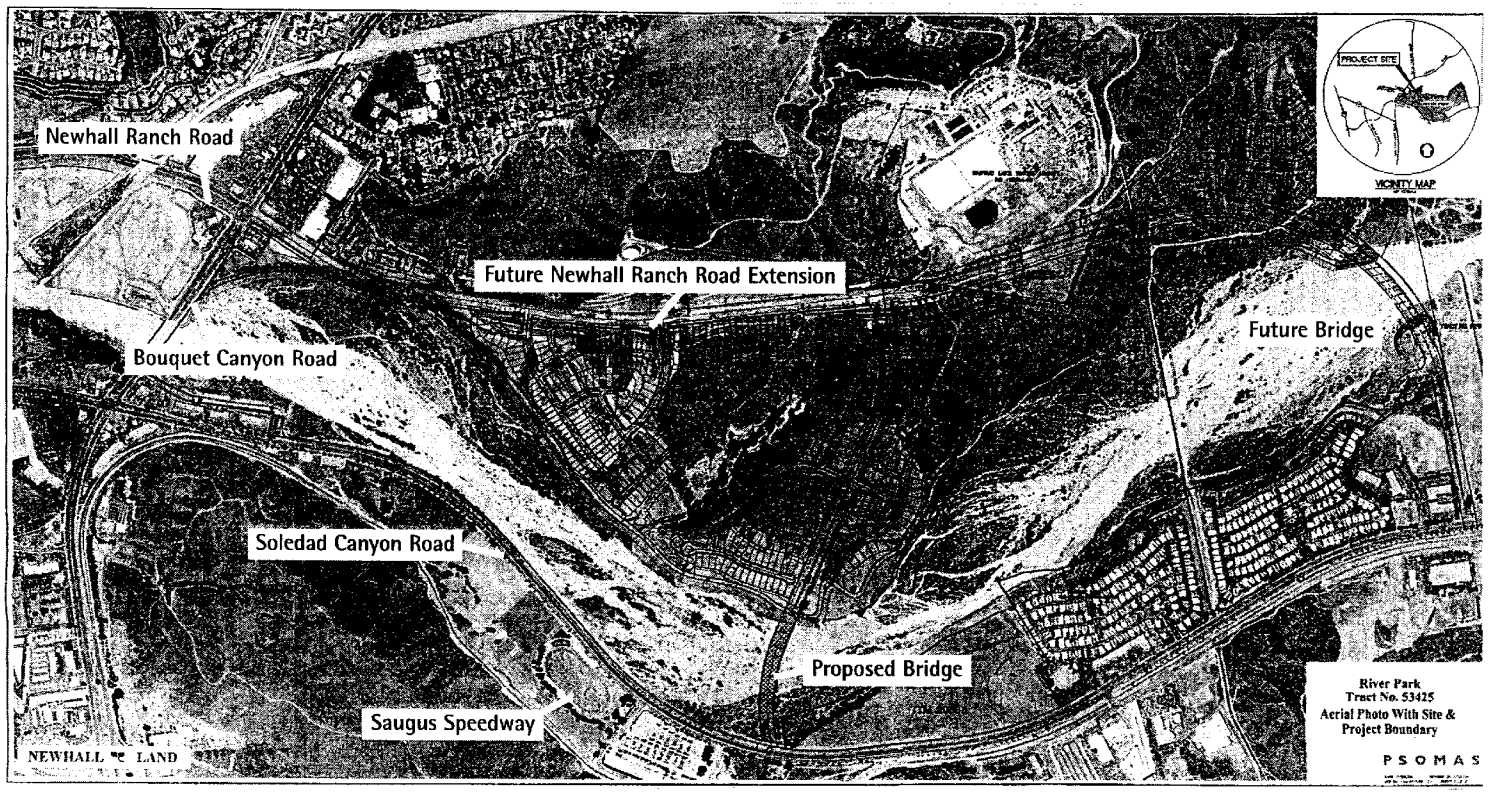
James F. Stahl

Ruth I. Frazen
Engineering Technician
Planning & Property Management Section

RIF:rf

327355.1

Proposed River Park Project Plans Announced



Aerial photo of the proposed River Park project, shows site and project boundary. The project is bordered on the north by the future Newhall Ranch Road extension. The road, a link in the Cross Valley Connector, will cross the river via a future bridge and join Golden Valley Road. A second river crossing is proposed at the project's midpoint.

By Rena' Cherrick
Staff Writer

In Jurassic Park-fashion, an excursion of 4x4s ascended up steep terrain and skirted through sandy riverbeds during a site tour of the Riverpark Project last week. Scheduled by the city's Planning Commission, it was an opportunity to acquaint individuals with the proposed site and educate the public

spectacular view, as they are located near the riverbed, said Marlee Lauffer, vice president of communications for Newhall Land. However, many are concerned the river will be lost while others are concerned homes will face potential floods in the future. For homes located in the river's 100-year flood zone, precautions have been taken and new technology utilized

nector of Interstate 5 and the 14 freeway. In the future, the Santa Clarita Parkway will be completed to join the development to Soledad Canyon, but isn't currently scheduled for completion in this project.

As part of a vast valley of cascading hills and breathtaking views, the area also boasts of two Native American Village sites. One will be preserved while the other

ment," Lauffer said. However, a small number, approximately 15 oaks, will need to be relocated to another area. Three of these are heritage oak trees.

This area is also home to the Arroyo Toad, listed as an endangered species. In recent years, it has disappeared from 76 percent of its original historic range. With public trails and a 29-acre park, developers are confident they can

Aerial photo of the proposed River Park project, shows site and project boundary. The project is bordered on the north by the future Newhall Ranch Road extension. The road, a link in the Cross Valley Connector, will cross the river via a future bridge and join Golden Valley Road. A second river crossing is proposed at the project's midpoint.

By Rena' Cherrick
Staff Writer

In Jurassic Park-fashion, an excursion of 4x4s ascended up steep terrain and skirted through sandy riverbeds during a site tour of the Riverpark Project last week. Scheduled by the city's Planning Commission, it was an opportunity to acquaint individuals with the proposed site and educate the public with detailed logistics.

As part of a development community by Newhall Land and Farming, the proposed site will include 1183 homes and a small retail center at the corner of Newhall Ranch Road and Bouquet Canyon Road. Single-dwelling homes will comprise 439 and the remaining 744 will comprise two apartment complexes. The larger complex will border Castaic Lake Water Agency and is referred to as the secondary ridgeline.

Many of the homes will offer a spectacular view, as they are located near the riverbed, said Marlee Lauffer, vice president of communications for Newhall Land. However, many are concerned the river will be lost while others are concerned homes will face potential floods in the future. For homes located in the river's 100-year flood zone, precautions have been taken and new technology utilized, Lauffer continued. Similar to the Bridgeport development, buried bank stabilization has proven quite successful. It will raise the area about 15 feet and will extend beyond the river corridor to about 100-feet. This new technology mixes natural soil with concrete and calls for the use of natural plants. In addition, a trail will run parallel to the corridor and add to the park-like setting, she said.

An extension of Newhall Ranch Road will cut across the property to join the city's Cross-Valley connector of Interstate 5 and the 14 freeway. In the future, the Santa Clarita Parkway will be completed to join the development to Soledad Canyon, but isn't currently scheduled for completion in this project.

As part of a vast valley of cascading hills and breathtaking views, the area also boasts of two Native American Village sites. One will be preserved while the other will be developed. However, before moving forward with any development the area will be studied and any artifacts will be collected. Jeff Hogan, associate planner for the city is unsure if they will find anything. Previously farming country, the land was used for agriculture purposes, he commented.

The site covers 700 acres with 87 oak trees scattered intermittently throughout. Many will remain to enhance the project's 400 acres of open space. "We tried to retain the natural environment," Lauffer said. However, a small number, approximately 15 oaks, will need to be relocated to another area. Three of these are heritage oak trees.

This area is also home to the Arroyo Toad, listed as an endangered species. In recent years, it has disappeared from 76 percent of its original historic range. With public trails and a 29-acre park, developers are confident they can protect the toad from further danger.

An environmental impact report is scheduled for release in mid-February and will address some potential areas of concern for many. In addition, a scheduled March 2 planning meeting will help to give residents a better idea of the site specifics. Depending on city approval, land development could begin as early as next year with a completed due date of two years, Lauffer said.

Letter No. 11

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 890-4330

RECEIVED
PLANNING DIVISION
MAY 03 2004
PLANNING AND BUILDING SERVICES
CITY OF SANTA CLARITA

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN

April 23, 2004

Jeff Hogan, Associate Planner
City of Santa Clarita
Department of Planning and Building Services
23920 Valencia Boulevard
Santa Clarita, CA 93155

Dear Mr. Hogan:

NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE RIVERPARK PROJECT (STATE CLEARINGHOUSE NO. 2002091081) – "SANTA CLARITA" (EIR #1947/2004)

The Draft Environmental Impact Report for the proposed Riverpark Project has been reviewed by the Planning Division, Land Development Unit, and Forestry Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION:

Figure 4.13-1, Fire Station Locations, depicts the locations of two fire stations incorrectly. Fire Station 126 is shown much closer to the project site than its true location, although its address is given correctly in the text. It is about 1.35 miles from the intersection of Bouquet Canyon and Newhall Ranch Roads. The location shown for Fire Station 124 is the former temporary site. The new permanent location is at 25870 Hemingway Avenue, Stevenson Ranch, approximately ¾ mile to the north. 1

It should be noted that the response distances quoted are to the nearest major intersection, not to the center of the development. Additional travel distance/time would be required to reach Areas A, B, C, and D. 2

Section 4.13.4.d, Operational Impacts, says that "The Fire Department serves the site from Station 111." It is incorrect to say that any particular station serves a site. As stated in Section 4.13.3a, while Station 111 is the closest existing fire station, many stations would respond to a major incident such as a structure fire or a brush fire. Moreover, the crew of Fire Station 111 may not be available when an incident occurs at the project site. 3

In the same section, the statement that a fire station site is not required within this development is attributed to a fire prevention inspector. This statement was made in an email from Debbie Aguirre, Supervising Analyst, on June 13, 2003. 4

LAND DEVELOPMENT UNIT/GENERAL REQUIREMENTS:

The following comments regarding this project are in addition to the conditions that were detailed in the letter dated November 12, 2002. (EIR #1517/2002) (See enclosed copy of letter). 5

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

AGOURA HILLS	BRADBURY	CUDAHY	HAWTHORNE	LA MIRADA	MALIBU	POMONA	SIGNAL HILL
ARTESIA	CALABASAS	DIAMOND BAR	HIDDEN HILLS	LA PUENTE	MAYWOOD	RANCHO PALOS VERDES	SOUTH EL MONTE
AZUSA	CARSON	DUARTE	HUNTINGTON PARK	LAKEWOOD	NORWALK	ROLLING HILLS	SOUTH GATE
BALDWIN PARK	CERRITOS	EL MONTE	INDUSTRY	LANCASTER	PALMDALE	ROLLING HILLS ESTATES	TEMPLE CITY
BELL	CLAREMONT	GARDENA	INGLEWOOD	LAWNDALE	PALOS VERDES ESTATES	ROSEMEAD	WALNUT
BELL GARDENS	COMMERCE	GLENDORA	IRWINDALE	LOMITA	PARAMOUNT	SAN DIMAS	WEST HOLLYWOOD
BELLFLOWER	COVINA	HAWAIIAN GARDENS	LA CANADA FLINTRIDGE	LYNWOOD	PICO RIVERA	SANTA CLARITA	WESTLAKE VILLAGE
							WHITTIER

Access roads shall be maintained with a minimum of ten (10) feet of brush clearance on each side. Fire access roads shall have an unobstructed vertical clearance clear-to-sky. Oak trees overhanging fire access roads shall be maintained to provide a vertical clearance of 13 feet, 6 inches. 5

COMMERCIAL:
Development may require fire flows up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be based on the size of buildings, their relationship to other structures, property lines, and types of construction used. Fire hydrant spacing shall be 300 feet and shall meet the following requirements:

1. No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.
2. No portion of a building shall exceed 400 feet via vehicular access from a properly spaced public fire hydrant.
3. Additional hydrants will be required if hydrant spacing exceeds specified distances.
4. When cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block.
5. A cul-de-sac shall not be more than 500 feet in length when serving land zoned for commercial use.
6. A Fire Department approved turning area shall be provided at the end of a cul-de-sac.

Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all cul-de-sacs. All on-site driveways shall provide a minimum unobstructed width of 28 feet, clear-to-sky. The on-site driveway is to be within 150 feet of all portions of the exterior walls of the first story of any building. Driveway width for commercial developments shall be increased when any of the following conditions will exist: 6

1. Provide 28 feet in width when a building has three or more stories, or is more than 35 feet in height above access level. The height of the building is measured from the lowest point of access to the height of the eaves. Also, for using fire truck ladders, the centerline of the access roadway shall be located parallel to, and within 30 feet of an exterior wall on one side of the proposed structure.
2. Provide 34 feet in width when parallel parking is allowed on one side of the access roadway/driveway. Preference is that such parking is not adjacent to the structure.
3. Provide 42 feet in width when parallel parking is allowed on each side of the access roadway/driveway.
4. Any access way less than 34 feet in width shall be labeled "Fire Lane" on the final recording map, and final building plans.
5. For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING – FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.

Should any questions arise regarding subdivision, water systems, or access, please contact Inspector Marvin Dorsey at (323) 890-4243.

FORESTRY DIVISION:
The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance.

The loss of Oak tree habitat should be mitigated for pursuant to the provisions of the City of Santa Clarita's Oak Tree Ordinance. In order to limit the threat of wildfire, the use of native/low fuel volume plants should be mandatory in the landscape plan for this project. The proposed project contains an SEA (Significant Ecological Area). Creative environmental design to protect and preserve this sensitive area is recommended. 7 8 9

This property is located within the area described by the Forester and Fire Warden as a Very High Fire Hazard Severity Zone or Fire Zone 4. The development of this project must comply with all Very High Fire Hazard Severity Zone code and ordinance requirements for fuel modification. 10

As required by Section 1117.2.1 of the County of Los Angeles Fire Code, a fuel modification plan, a landscape plan, and an irrigation plan shall be submitted with any subdivision of land or prior to any new construction, remodeling, modification or reconstruction where such activities increase the square footage of the existing structure by at least 50% within a 12-month period and where said structure or subdivision is located within an area designated as a Very High Fire Hazard Severity Zone or within Fire Zone 4. 11

A fuel modification plan, a landscape plan, and an irrigation plan shall be developed and approved prior to construction. Said plans shall be reviewed and approved by the County of Los Angeles Fire Department, Forestry Division. Specific questions regarding fuel modification requirements should be directed to the Fuel Modification Office at (626) 969-5205. 12

The remaining statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division have been addressed. However, careful consideration to the long-term significant cumulative impacts of this project should be considered for future development in the City of Santa Clarita. 13

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

DAVID R. LEININGER, CHIEF, FORESTRY DIVISION
PREVENTION BUREAU

DRL:sc

Enclosure

ENCLOSURE

(323) 890-4330

November 12, 2002

Julie Berger, Project Planner
Impact Sciences, Inc.
30343 Canwood Street, Suite 210
Agoura Hills, CA 91301

Dear Ms. Berger:

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE RIVER PARK PROJECT, 1,009 DWELLING UNITS, "SANTA CLARITA" (EIR #1517/2002)

The Notice of Preparation of a Draft Environmental Impact Report for the proposed River Park Project has been reviewed by the Planning Section, Land Development Unit, and Forestry Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION:

The information about fire protection service appearing in the Sand Canyon Joint Venture Environmental Impact Report (EIR), which you faxed us on 11/22/02, is still largely valid. Some additions and clarifications are noted below.

- New Fire Station 126 is now in operation. (The first paragraph on Page 4.13-4 speaks of it in the future). It is temporarily located at 27400 Tourney Rd., Valencia, CA 91355 until Spring, 2003, when the permanent fire station will be opened on Citrus Street at Magic Mountain Parkway. Fire Station 126 is staffed by a 4-person engine company. Fire Station 73 now has one 3-person engine company as well as the truck company. All other stations' resources in the Santa Clarita Valley are the same as they were at the time of the Sand Canyon Joint Venture EIR. Station 124 has been relocated to 25870 Hemingway Avenue, Stevenson Ranch, CA 91381.

- The terms "first alarm fire response" (in the Summary) and "primary fire protection service" (Page 4.13-2) are undefined and should be avoided. Different kinds of incidents receive different numbers and types of response units in the first alarm. It is not quite accurate to identify specific stations as the ones that will "serve" the project site. The closest available District response units are dispatched as needed to an incident anywhere within the District's territory. It is more accurate to identify certain stations as the closest, and, therefore, most likely to respond to an incident at the site.

- The information you provided on funding methods of service expansion to new development is correct. Please note that the developer fee is calculated to cover the *full* cost of equipment as well as construction and land for new stations (Page 4.13-4). This fee, or an in-lieu donation, constitutes mitigation in full of growth impacts.

The jurisdictional station for this project is Station 111. It is approximately 0.6 miles or 1.7 minutes from the intersection of Bouquet Canyon Road and Newhall Ranch Road. Dependent upon access and estimated response times, the Fire Department may require a site within this tract for fire station at the east-end of their project to adequately protect this tract and the surrounding community. The Fire Department has an existing need for an additional fire station in this area, and this project would exacerbate this need. We would need a detailed map showing the location of proposed land uses and existing and proposed roads to calculate response distances/times from existing stations for a full analysis of impacts.

Nationally recognized response time targets for urban areas are five minutes for a basic life support unit (e.g., engine company) and eight minutes for an advanced life support unit (e.g., paramedic squad). The Fire Department is currently meeting these standards. The average response time in the City of Santa Clarita during 2001 was 5 minutes, 40 seconds. It should be noted that the city encompasses rural and undeveloped areas as well as urban areas.

Any development would increase service demand on the existing fire protection resources in the general area. Additional manpower, equipment, and facilities are needed in the area now. Mitigation of this increase in service would be met through the City of Santa Clarita's developer fee program for fire protection facilities and equipment, if access and response times to the east end of the project are found to be adequate.

The Fire Department does not compute ratios of firefighters to residents or building area.

LAND DEVELOPMENT UNIT -- GENERAL REQUIREMENTS:

The proposed development may necessitate multiple ingress/egress access for the circulation of traffic, and emergency response issues. The Department may condition future development to provide additional means of access. The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and hydrants.

This property is located within the area described by the Forester and Fire Warden as a Fire Zone 4, Very High Fire Hazard Severity Zone (VHFHSZ). All applicable fire code and ordinance requirements for construction, access, water mains, fire hydrants, fire flows, brush clearance and fuel modification plans, must be met.

Specific fire and life safety requirements for the construction phase will be addressed at the building fire plan check. There may be additional fire and life safety requirements during this time.

Every building constructed shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width, unobstructed, clear-to-sky. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.

When a bridge is required, to be used as part of a fire access road, it shall be constructed and maintained in accordance with nationally recognized standards and designed for a live load sufficient to carry a minimum of 75,000 pounds.

The maximum allowable grade shall not exceed 15% except where the topography makes it impractical to keep within such grade, and then an absolute maximum of 20% will be allowed for up to 150 feet in distance. The average maximum allowed grade, including topography difficulties, shall be no more than 17%. Grade breaks shall not exceed 10% in 10 feet.

When involved with a subdivision, Fire Department requirements for access, fire flows and hydrants are addressed during the subdivision tentative map stage.

Fire sprinkler systems are required in some residential and most commercial occupancies. For those occupancies not requiring fire sprinkler systems, it is strongly suggested that fire sprinkler systems be installed. This will reduce potential fire and life losses. Systems are now technically and economically feasible for residential use.

HIGH-DENSITY RESIDENTIAL:

Development may require fire flows up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be based on the size of the buildings, their relationship to other structures, property lines, and types of construction used. Fire hydrant spacing shall be 300 feet and shall meet the following requirements:

1. No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.

2. No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant.

3. When cul-de-sac depth exceeds 200 feet, hydrants will be required at the corner and mid-block.

4. Additional hydrants will be required if the hydrant spacing exceeds specified distances.

Turning radii shall not be less than 42 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all cul-de-sacs. When serving land zoned for residential uses having a density of more than four units per net acre:

1. A cul-de-sac shall be a minimum of 34 feet in width and shall not be more than 700 feet in length.

2. The length of the cul-de-sac may be increased to 1,000 feet if a minimum of 36 feet in width is provided.

3. A Fire Department approved turning area shall be provided at the end of a cul-de-sac.

All on-site driveways shall provide a minimum unobstructed width of 26 feet, clear-to-sky. The on-site driveway is to be within 150 feet of all portions of the exterior walls of the first story of any building. The 26-feet width does not allow for parking, and shall be designated as a "Fire Lane," and have appropriate signage. The 26 feet in width shall be increased to:

1. Provide 34 feet in width when parallel parking is allowed on one side of the access way.

2. Provide 36 feet in width when parallel parking is allowed on both sides of the access way.

3. Any access way less than 34 feet in width shall be labeled "Fire Lane" on the final recording map, and final building plans.

4. For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING - FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.

SINGLE-FAMILY DWELLING UNITS:

Single-family detached homes shall require a fire flow of 1,250 gallons per minute at 20 pounds per square inch residual pressure for a two-hour duration. Fire hydrant spacing shall be 600 feet and shall meet the following requirements:

1. No portion of lot frontage shall be more than 450 feet via vehicular access from a public fire hydrant.

2. No portion of a structure should be placed on a lot where it exceeds 750 feet via vehicular access from a properly spaced public fire hydrant.

3. When cul-de-sac depth exceeds 450 feet on a residential street, hydrants shall be required at the corner and mid-block.

4. Additional hydrants will be required if hydrant spacing exceeds specified distances.

Fire Department access shall be provided to within 150 feet of all portions of the exterior walls of the first story of any single unit. If exceeding 150 feet, provide 20-feet, paved width "Private Driveway/Fire Lane" to within 150 feet of all portions of the exterior walls of the unit. Fire Lanes serving 3-4 units shall be increased to 24 feet in width, and if serving 5 or more units, the Fire Lane shall be increased to 26 feet. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all cul-de-sacs. Streets or driveways within the development shall be provided with the following:

1. Provide 36 feet in width on all collector streets and those streets where parking is allowed on both sides.

2. Provide 34 feet in width on cul-de-sacs up to 700 feet in length. This allows parking on both sides of the street.

3. Provide 36 feet in width on cul-de-sacs from 701 to 1,000 feet in length. This allows parking on both sides of the street.

4. For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING - FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.

5. Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road.

6. A Fire Department approved turning area shall be provided, at the end of a driveway of 300 feet or more in length.

LIMITED ACCESS DEVICES (GATES ETC.):

All access devices and gates shall meet the following requirements:

1. Any single gate used for ingress and egress shall be a minimum of 26 feet in width, clear-to-sky.

2. Any gate used for a single direction of travel, used in conjunction with another gate, used for travel in the opposite direction, (split gates) shall have a minimum width of 20 feet each, clear-to-sky.

3. Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way, and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an intercom system is used, the 50 feet shall be measured from the right-of-way to the intercom control device.

4. All limited access devices shall be of a type approved by the Fire Department.

5. Gate plans shall be submitted to the Fire Department, prior to installation. These plans shall show all locations, widths and details of the proposed gates.

TRAFFIC CALMING MEASURES:
All proposals for traffic calming measures (speed humps/bumps, traffic circles, roundabouts, etc.) shall be submitted to the Fire Department for review, prior to implementation.

Should any questions arise regarding design and construction, and/or water and access, please contact Inspector J. Scott Greenelsh at (323) 890-4235.

FORESTRY DIVISION:
The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

DAVID R. LEININGER, FORESTRY DIVISION
PREVENTION BUREAU

DRL:lc

Letter No. 12

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

JAMES A. NOYES, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
www.ladpw.org

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: WM-4

April 29, 2004

RECEIVED
PLANNING DIVISION

APR 30 2004

PLANNING AND BUILDING SERVICES
CITY OF SANTA CLARITA

Mr. Jeff Hogan
Associate Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 300
Santa Clarita, CA 91355-2196

Dear Mr. Hogan:

RESPONSE TO NOTICE OF COMPLETION/AVAILABILITY
DRAFT ENVIRONMENTAL IMPACT REPORT
RIVER PARK PROJECT
CITY OF SANTA CLARITA

Thank you for the opportunity to provide comments on the subject document, which we received on March 9, 2004. The project proposes to develop 6 parcels of land into 439 single-family lots, 744 multifamily units, 2 commercial lots, a private street, recreation, a water quality basin, a park, river trail, bridge, open space, and Santa Clara River lots. The 695.4 acre project site is located at the terminus of Newhall Ranch Road, east of Bouquet Canyon Road between the Castaic Lake Water Agency property and Soledad Canyon Road in the City of Santa Clarita. We have reviewed the submittal and offer the following comments:

Environmental Programs

Section 4.2, "Flood," should address the following. All development projects which fall into one of the Standard Urban Storm Water Mitigation Plan (SUSMP) project types, characteristics, or activities, must obtain SUSMP approval by the appropriate agency. (1)

Section 4.9, "Solid Waste Disposal," should address the following. Table 4.9-1 of the Environmental Impact Report (EIR), regarding existing landfill capacities based on the County's 1997 Countywide Siting Element, is outdated and contains incorrect information. The EIR section should be revised using the County's 2002 Annual Report Countywide Siting Element Assessment update. (2)

Notwithstanding, as projected in the 1997 Countywide Siting Element, approved by a majority of the cities in the County of Los Angeles with a majority of the population and by the County Board of Supervisors, a shortfall in permitted daily landfill capacity may be experienced in the County within the next few years. The development activities associated with the proposed project and the postdevelopment operation over the life of the proposed project will increase the generation of solid waste and negatively impact the solid waste management infrastructure in the County. Therefore, in addition to the mitigation measures included in Section 4.9, mitigation measures to divert solid waste for this project should include, but are not limited to: 3

- Implementation of requirements to divert at least 50 percent of construction debris from the landfills.
- Implementation of the City's "curbside residential and commercial recycling" for inhabitants after project build-out. 4
- Implementation of the City's "yard-trimming recycling" for inhabitants after project build-out. 5

Moreover, the existing hazardous waste management (HWM) infrastructure in this County is inadequate to handle the hazardous waste currently being generated. The proposed project may generate household hazardous waste, which could adversely impact existing HWM infrastructure. This issue should be addressed and mitigation measures provided. 6

Section 4.15, "Human Made Hazards," should address the following. Should any operation within the subject project include the construction, installation, modification, or removal of underground storage tanks, our Environmental Programs Division must be contacted for required approvals and operating permits. If any excavated soil is contaminated by or classified as hazardous waste by an appropriate agency, the soil must be appropriately managed and disposed. 7

If you have any questions, please contact Mr. Wilson Fong at (626) 458-3581.

Flood Maintenance

The project site is in an area close to a soft-bottom channel, storm drain, and catch basins maintained by Public Works.

Page I-2 of the introduction mentions the different types of water quality improvements and Best Management Practices that will be included as part of the project. Water quality detention basins and grassy swales have the potential to become vector breeding grounds if not designed to drain within 72 hours. For more specific information, we suggest the developer contact the appropriate vector control agency for the project area. Also, detention basins and grassy swales have the potential to be classified a riparian habitat area. Once the plans and specifications have been prepared, we will be able to provide more specific comments to the project. At that time, maintenance responsibility will have to be determined for each water quality improvement. 8

If you have any questions, please contact Mr. Jerry Burke at (626) 458-4114.

Geotechnical and Materials Engineering

The proposed project will not have significant environmental effects from a geology and soils standpoint, provided the appropriate ordinances and codes are followed. The project is located within a mapped potentially liquefiable area, per the State of California Seismic Hazard Zone Map, Mint Canyon Quadrangle. However, a liquefaction analysis is not warranted at this time. Detailed liquefaction analyses, conforming to the requirements of the State of California Division of Mines and Geology Special Publication 117, must be conducted at the tentative map and/or grading/building plan stages. 9

If you have any questions, please contact Mr. Amir M. Alam at (626) 458-4925.

Land Development

Hydrology, SUSMP, Sewer, and Water Review

A drainage concept/SUSMP report is required to assess drainage and SUSMP impacts and to determine appropriate mitigation. We recommend that this report not be approved until Public Works has reviewed and approved the drainage concept/SUSMP report. We also recommend that a copy of the drainage concept/SUSMP report, once approved, be included in the environmental document. 10

The Draft Environmental Impact Report (DEIR) shall require a sewer area study be submitted to determine if the proposed and existing sewerage system within the City of Santa Clarita servicing this project have adequate capacity to accept all tributary area sewer discharges. This tributary area shall include, but not be limited to, the proposed 11

flows from the project site and tributary flows from adjacent city areas and, if applicable, all other tributary areas beyond the City's boundaries. The sewer area study shall be approved by the City and/or agencies having jurisdiction of the tributary area. If the system is found to have insufficient capacity, upgrade of the proposed and existing sewerage system is required to the satisfaction of all affected agencies. In addition, the sewer deficiencies shall be addressed in the final environmental documents. 11

Per the DEIR, Section XIII Utilities (g): The proposed project may create a need for local or regional water supplies. Further analysis is required in the EIR. 12

Pursuant to recent legislation related to Senate Bill 221 and Senate Bill 610, the DEIR shall address the adequacy of the regional water supply to ensure availability of water for the new development without adversely affecting existing users. The document shall provide for review the water supply assessment and water supply verification from water purveyors of the project. We recommend the assessment and verification from water purveyors be addressed prior to certification of the DEIR. 13

If you have any questions, please contact Mr. Timothy Chen at (626) 458-4921.

Transportation Planning

The proposed project will not have any significant impacts on County of Los Angeles highways. 14

If you have any questions, please contact Mr. Hubert Seto at (626) 458-4349.

Programs Development

Section 4.12-12 states that when the bike trail is completed, it will "provide an integral link with existing and planned regional trails within the County of Los Angeles, including the San Francisquito Creek Trail and the Pacific Crest Trail in eastern Santa Clarita Valley." The County of Los Angeles does not currently operate and maintain any bike paths, lanes, or routes in the vicinity of the proposed project. Would this project benefit the County's network of bike trails? 15

Section 4.12-27 states that "new residents of the proposed project are expected to use the City of Santa Clarita's and the County's existing and proposed trail systems in the Santa Clarita Valley area as they are constructed." What existing County trails are referred to here? 16

Who will pay for construction of the bike trails, lanes, and/or routes? 17

Who will fund the on-going maintenance of the bike trails, lanes, and or routes? 18

All bike paths, lanes, and/or routes must conform to the standards set forth in Chapter 1000 of the State of California Department of Transportation Highway Design Manual. 19

All plans pertaining to bikeways (preliminary and final) must be reviewed and concurrence must be given by the Public Works' Bikeway Coordinator who can be reached at (626) 458-3941. 20

Increasing the extent of bike paths within the County of Los Angeles is a main goal as it increases our vast network of already existing trails.

If you have any questions, please contact Mr. Richard Yribe at (626) 458-3919.

Traffic and Lighting

In order to complete our review, the following should be included in the traffic study:

- The County's methodology should be used when evaluating the County and/or County/city intersections. The study should address the cumulative impacts generated by this and nearby developments and include a Level of Service analysis for the affected intersections. If traffic signals or other mitigation measures are warranted at the affected intersections, the developer should determine its proportionate share of traffic signal or other mitigation costs. A copy of our Traffic Impact Analysis Report Guidelines is enclosed. 21

- The traffic analysis should include a scenario in which the Newhall Ranch Road/Golden Valley Road extension is not completed. For this scenario, the following intersection shall be added to the study as alternate routes may be used. It should be noted that as indicated in the County's Traffic Impact Analysis Report Guidelines, building permits for the project will be withheld until assumed transportation circulation improvements are in place. 22

  Golden State (I-5) Freeway SB Ramps at Valencia Boulevard

- The traffic count data sheets and the Intersection Capacity Utilization calculation sheets for the County and/or County/city intersections. 23

- The latest revision of the tentative tract map for the project showing site access points and internal circulation.

24

If you have any questions, please contact Ms. Jennifer Frary of our Traffic Studies Section at (626) 300-4792.

Waterworks & Sewer Maintenance

Waterworks

25

The proposed project is not within any of the County of Los Angeles Waterworks Districts and, therefore, no comments are offered.

Sewer Maintenance

The Waterworks & Sewer Maintenance Division is responsible for the operation and maintenance of the local sewers within the unincorporated area of the County of Los Angeles. Therefore, the entire project will be required to be annexed to the Consolidated Sewer Maintenance District. This will be in addition to County Sanitation Districts of Los Angeles County's requirements. The EIR should discuss the collection and disposal of the wastewater that would be generated by the proposed project.

26

If you have any questions, please contact Ms. May Hong at (626) 300-3322.

Watershed Management

San Gabriel River/Santa Clara Watersheds

27

The proposed project should include investigation of watershed management opportunities to maximize capture of local rainfall on the project site, eliminate incremental increases in flows to the storm drain system, and provide filtering of flows to capture contaminants originating from the project site.

On pages ES-4, ES-5, and ES-22, the notion that less sediment to the Santa Clara River is an environmental benefit has not been established. In fact, downstream erosion may worsen and beaches may become depleted of sand. We suggest considering debris carrying systems or open drainage conveyances to reduce the number or size of debris basins.

28

Runoff increases from a developed site since there are less permeable surfaces and landscape irrigation increases. In particular, smaller storms that would have been fully absorbed on site now contribute incremental increases to surface runoff. Groundwater is not recharged at the same rate. We suggest using permeable hard surfaces for driveways, patios, and parking lots. We also suggest that bank lining not be impermeable. For example, ungrouted rip rap is not a water-tight, sealed material. 29 30 31 32

The project will be subject to National Pollutant Discharge Elimination System (NPDES) requirements. Best Management Practices and SUSMPs will be required for the project. We suggest that water quality basins be designed to percolate as much runoff as possible. At the same time, provisions must be taken to safeguard ground water quality. We also suggest that land designated as a significant ecological area and land within the river corridor not be disturbed or destroyed. 33

If you have any questions please contact Mr. Bruce Hamamoto at (626) 458-5918.

Water Quality

The proposed project should fully assess and incorporate all appropriate Best Management Practices to enhance quality of urban runoff and stormwater. The project shall comply with all the requirements of the NPDES Municipal Storm Water Permit issued by the Los Angeles Regional Water Quality Control Board to the County of Los Angeles and local agencies, including, but not limited to, Parts IV.D. and IV.E., Development Planning and Development Construction.

The following should be reviewed to assure your project is in compliance with the NPDES Permit. 34

- The NPDES Municipal Storm Water Permit can be viewed on the web at http://www.swrcb.ca.gov/rwqcb4/html/programs/stormwater/la_ms4_final/FinalPermit.pdf
- The Standard Urban Storm Water Mitigation Plan Manual can be viewed or downloaded from the web at http://www.ladpw.org/wmd/npdes/table_contents.cfm

- The 2002 list of Impaired Water Bodies can be found on the web at http://www.swrcb.ca.gov/tmdl/docs/2002reg4303dlist.pdf.

Coastal Los Angeles County and the Upper Santa Clara River Watershed are in Region 4. The Antelope Valley area of Los Angeles County is in Region 6B.

- More information on Total Maximum Daily Loads (TMDLs) can be found on the following web sites: http://www.swrcb.ca.gov/tmdl/tmdl.html and also at http://www.swrcb.ca.gov/rwqcb4/html/meetings/tmdl/tmdl.html.

- Handbooks that can offer a better understanding of Best Management Practices can be viewed or downloaded from the web at http://www.cabmphandbooks.net/

35

If your project is located within an incorporated city, please contact your local Building and Safety Office for requirements specific to your project.

If you have any questions, please contact Mr. Frank Kuo at (626) 458-4350.

If you have any questions regarding the environmental review process of Public Works, please contact Ms. Massie Munroe at (626) 458-4359.

Very truly yours,

JAMES A. NOYES
Director of Public Works

ROD H. KUBOMOTO
Assistant Deputy Director
Watershed Management Division

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Enc.

Traffic Impact Analysis Report Guidelines

January 1, 1997

Prepared by the County of Los Angeles
Department of Public Works

James A. Noyes
Director of Public Works

Table of Contents

JHC:ce
T-2/ACCESS2
(01/22/99)

I. Introduction

The County of Los Angeles Department of Public Works has established the following Guidelines for the preparation of Traffic Impact Analysis (TIA) reports. The purpose of these Guidelines is to establish procedures to ensure consistency of analysis and the adequacy of information presented and timely review by County staff. It is strongly recommended that the applicant's traffic engineer consult with County staff before beginning the study to establish the scope and basic assumptions of the study and any deviations from these Guidelines to avoid unnecessary delays or revisions. For assistance in the TIA scoping process, the Traffic and Lighting Division, Traffic Studies Unit, can be contacted at (626) 458-5909.

II. Requirements

Generally, the Department staff is concerned with adverse impacts on traffic if:

1. Traffic generated by a project considered alone or cumulatively with other related projects, when added to existing traffic volumes, exceeds certain capacity thresholds of an intersection or roadway, contributes to an unacceptable level of service (LOS), or exacerbates an existing congested condition.

2. Project generated traffic interferes with the existing traffic flow (e.g., due to the location of access roads, driveways, and parking facilities).

3. Proposed access locations do not provide for adequate safety (e.g., due to limited visibility on curving roadways).

4. Nonresidential uses generate commuter or truck traffic through a residential area.

5. Project generated traffic significantly increases on a residential street and alters its residential character.

A traffic report must be prepared by a registered Civil or Traffic Engineer. A traffic report is generally needed if a project generates over 500 trips per day or where other possible adverse impacts as discussed in the Analysis and Impact Section (see page 4) of these Guidelines are identified. Before a full review is conducted, the County staff will check the completeness of the TIA report using the attached check list (Exhibit A). If the report is missing any of the check list items, it will be returned for revision.

III. TIA Report Contents

A. Project Description

The following information is required:

1. A description of the project, including those factors which quantify traffic generators, e.g., dwelling units, square feet of office space, persons to be employed, restaurant seats, acres of raw land, etc. For residential developments, the description should indicate the type of residence, (e.g., one level or townhouse condominiums, and if its use is for families, adults or retirees).

2. A plot plan showing proposed driveways, streets, internal circulation, and any new parking facilities on the project site.

3. A vicinity map showing the site location and the study area relative to other transportation systems.

4. A brief history of the projects that are part of the phased Master Plan or a parent tract/parcel map.

B. Transportation Circulation Setting

The following information is required:

1. **Existing and Proposed Site Uses**

   A description of the permitted and/or proposed uses of the project site in terms of the various zoning and land use categories of the County, and the status and the usage of any facilities currently existing on the site.

2. **Existing and Proposed Roadways and Intersections**

   A description of existing streets and roadways, both within the project site (if any) and in the surrounding area. Include information on the roadway classifications (per the Highway Plan), the number of lanes and roadway widths, signalized intersections, separate turn lanes, and the signal phases for turning movements.

Existing daily directional and peak-hour through and turning traffic volumes on the roadways surrounding and/or logically associated with the project site, including Secondary and Major highways and freeways. Local streets affected by the project should also be shown. Each report shall include appendices providing count data used in the preparation of the report. The source and date of the traffic volume information shall be indicated. Count data should not be over one year old. Since peak volumes vary considerably, a ten percent daily variation is not uncommon, especially on recreational routes or roadways near shopping centers; therefore, representative peak-hour volumes are to be chosen carefully.

All assumed roadways and intersections or any other transportation circulation improvements must be identified and discussed. The discussion should include the scope and the status of the assumed improvements including the construction schedule and financing plan. It should be noted that all assumed roadways and intersections or any other transportation circulation improvements will be made a condition of approval for the project to be in place prior to the issuance of building permits. If assumed improvements do not get built on time due to an unforeseeable condition, traffic conditions for a different assumed highway network or other mitigation measures will be considered if a traffic study is submitted with a different assumed network or other measures are recommended to mitigate the traffic impact in question.

C. Analysis and Impact

The following information is required:

1. Trip Generation Analysis

Tabulate the estimated number of daily trips and a.m. and p.m. peak-hour trips generated by the proposed project entering and exiting the site. Trip generation factors and source are to be included. The trip generation rates contained in the latest edition of the Institute of Transportation Engineers Trip Generation manual should generally be used, except in the case of condominiums/townhomes when the following rates should be used per unit:

	ADT	A.M.-Peak	P.M.-Peak
		Outgoing/Incoming	Outgoing/Incoming
Condominiums/ Townhomes	8.0	0.48/0.06	0.26/0.47

There may be a trip reduction due to internal and/or pass-by trips. Internal trip reduction can only be applied for mixed-use types of developments and pass-by trip reduction for retail/commercial types of developments. Internal or pass-by trip reduction assumptions will require analytical support based on verifiable actual similar developments to demonstrate how the figures were derived and will require approval by the County.

2. Trip Distribution

Diagrams showing the percentages and volumes of the project and nearby project's a.m. and p.m. peak-hour trips logically distributed on the roadway system must be provided. The Regional Daily Trip Distribution Factors (Exhibit D-3) contained in the Congestion Management Program (CMP) Land Use Analysis Guidelines shall be referenced for regional trip distribution assumptions. If it is assumed that new routes will alter traffic patterns, adequate backup including traffic distribution maps must be provided showing how and why these routes will alter traffic patterns.

The study area should include arterial highways, freeways, and intersections generally within a one-mile radius of the project site.

Note: This distance may be greater than one-mile for rural areas depending on the proximity to nearby signalized intersections and the availability of master plan access routes.

3. Related Projects List

A list of related projects that are approximately within a one-and-a-half mile radius of the project site and would reasonably be expected to be in place by the project's build out year must be included in the report. Related projects shall include all pending, approved, recorded, or constructed projects that are not occupied at the time of the existing traffic counts.

The County of Los Angeles Department of Regional Planning (DRP) and other public agencies (if necessary) should be contacted to obtain the latest listings. A table and a map showing the status, project/zone change/conditional use permit/parcel map/tract number, and the location of each project must be provided. For a computer printout of the listing of all filed projects within the County, Land Development Management Section of the DRP, at (213) 974-6481 can be contacted.

4. **LOS Analysis**

If it appears that the project's generated traffic alone or together with other projects in the area could worsen the LOS of an intersection or roadway, a "before" and "after" LOS analysis is necessary. The Intersection Capacity Utilization (ICU) or Critical Movement Analysis are two methods often used to assess existing and future LOS at intersections.

If the ICU planning method is used, a maximum of 1,600 vehicles per hour per lane should be used (2,880 vehicles per hour should be used for dual left-turn lanes) and a ten percent yellow clearance cycle should be included. Intersection LOS analysis and calculation work sheets, as well as diagrams showing turning volumes shall be included in the report for the following traffic conditions.

(a) Existing traffic;
(b) Existing traffic plus ambient growth to the year the project will be completed (preproject);
(c) Traffic in (b) plus project traffic;
(d) Traffic in (c) with the proposed mitigation measures (if necessary);
(e) Traffic in (c) plus the cumulative traffic of other known developments; and
(f) Traffic in (e) with the proposed mitigation measures (if necessary).

The project's impact on two-lane roadways should also be analyzed for all of the above traffic conditions if those two-lane roadways are used for access. LOS service analysis contained in the Highway Capacity Analysis, Chapter 8, Two-Lane Highways, should be used to evaluate the project's impact. For simplified analysis, use the established significant impact thresholds for two-lane roadways as shown on page 7.

5. Significant Impact Threshold

For intersections, the impact is considered significant if the project related increase in the volume to capacity (v/c) ratio equals or exceeds the threshold shown below.

INTERSECTIONS		
Preproject		Project /C Increase
LOS	V/C	
C	0.71 to 0.80	0.04 or more
D	0.81 to 0.90	0.02 or more
E/F	0.91 or more	0.01 or more

The project is deemed to have a significant impact on two-lane roadways when it adds the following percentages based on LOS of the preproject conditions.

TWO-LANE ROADWAYS				
		Percentages Increase in Passenger Car Per Hour (PCPH) by Project		
		Preproject LOS		
Directional Split	Total Capacity (PCPH)	C	D	E/F
50/50	2,800	4	2	1
60/40	2,650	4	2	1
70/30	2,500	4	2	1
80/20	2,300	4	2	1
90/10	2,100	4	2	1
100/0	2,000	4	2	1

6. **Analysis Discussion**

Discuss conclusions regarding the adverse impacts caused by the proposed project on the roadway system. If the cumulative traffic impact of this and other projects require mitigation measures, such as traffic signals, then estimate the percent share using the project percent share formula given in the Section III D of the TIA Guidelines. When the proposed project and other nearby developments are expected to significantly impact adjacent roadways, the developer may be required to enter into a secured agreement to contribute to a benefit district to fund major roadway and bridge improvements in the region. Also, for all recommendations to increase the number of travel lanes on a street or at an intersection as a mitigation measure, the report must clearly identify the impacts associated with such a change such as whether or not additional right of way will be required and whether it is feasible to acquire the right of way based on the level of development of the adjacent land and buildings (if any).

Discuss other possible adverse impacts on traffic. Examples of these are: (1) the limited visibility of access points on curved roadways; (2) the need for pavement widening to provide left-turn and right-turn lanes at access points into the proposed project; (3) the impact of increased traffic volumes on local residential streets; and (4) the need for road realignment to improve sight distance.

Projects which propose to amend the County's General Plan Land Use and substantially increase potential traffic generation must provide an analysis of the project at current planned land use versus proposed land use in the build out condition for the project area. The purpose of such analysis is to provide decision makers with the understanding of the planned circulation network's ability to accommodate additional traffic generation caused by the proposed General Plan Land Use amendments.

D. Traffic Models and Model Generated TIA's

Computerized traffic models are planning tools used to develop future traffic projections based on development growth patterns. The Department currently operates two traffic models, one for the Santa Clarita Valley and another for the Ventura Corridor area. The Department can test proposed development project traffic impacts for the public in these areas for a fee. For assistance in the traffic modeling, the Planning Division, Transportation Planning/Assessments Section, can be contacted at (626) 458-4351.

For TIA's prepared using data from outside traffic modeling, the following information is required:

1. The type of modeling software used to generate the traffic analysis report data (i.e., TRANPLAN, EMME/2, etc.).

2. The list of land use assumptions by traffic analysis zones (TAZ's) and their sources used in the traffic model in lieu of a related projects list.

3. A copy of the computerized roadway network assumed to be in place at the time of the project. Streets should be color-coded by street type. Also, TAZ's and their corresponding centroidal connectors, as well as number of lanes should be displayed.

4. The list of trip generation rates used in the traffic model and their sources.

5. Model runs (plots) identifying both the with and without project scenarios. The volumes displayed on the plots should be in 100's for Average Daily Vehicle Trips (ADT) and 10's for peak-hour plots.

E. Traffic Signals

The following information is required:

Traffic signal warrant analysis using the State of California Department of Transportation (Caltrans) Peak-Hour (Figures 9-8 and 9-9 of Caltrans Traffic Manual) and Estimated Average Daily (Figure 9-4 of Caltrans Traffic Manual) Traffic Warrant Analysis should be provided. If the installation of signals is warranted with the addition of the project's traffic, then the installation will be the sole responsibility of the project. If it is warranted with cumulative traffic of the project and other related projects, the following formula should be used to calculate the project percent share.

$$\text{Project Percentage Share} = \frac{\text{Project Traffic}}{\text{Project+Other Related Projects Traffic}}$$

The project percent share should be based on the peak-hour volumes that warrant signals. If both peak hours satisfy the installation of signals, the average of the two peak-hour volumes should be used in the percent share analysis.

F. Mitigation Measures

The following information is required.

Identify feasible mitigation measures which would mitigate the project and/or other related projects' significant impacts to a level of insignificance. Also, identify those mitigation measures which will be implemented by others. Those mitigation measures that are assumed to be implemented by others will be made a condition of approval for the project to be in place prior to issuance of building permits. Mitigation measures may include, but are not limited to, the following:

1. Traffic Engineering Techniques.

a. Locate access points to optimize visibility and reduce potential conflict.
b. Design parking facilities to avoid queuing into public streets during peak arrival periods.
c. Provide additional off-street parking.
d. Dedicate visibility easements to assure adequate sight distance at intersections and driveways.
e. Signalize or modify traffic signals at intersections.
f. Install left-turn phasing and/or multiple turning lanes to accommodate particularly heavy turning movements.
g. Widen the pavement to provide left- or right-turn lanes to lessen the interference with the traffic flow.[1]
h. Widen intersection approaches to provide additional capacity.
I. Prohibit left turns to and from the proposed development.
j. Restrict on-street parking during peak hours to increase street capacity.[1]

2. Contribute to a benefit district to fund major capital improvements

[1] Physical roadway improvements to improve capacity should be considered before considering parking restrictions.

a. Construct a grade separation.
b. Improve or construct alternate routes.
c. Complete proposed routes shown on the Los Angeles Highway Plan.
d. Improve freeway interchanges (bridge, widening, modifications, and etc.).

3. **Transportation System Management (TSM) Techniques**[2]

a. Establish flexible working hours.
b. Encourage employee use of carpools and public transportation (specific measures must be indicated).
c. Establish preferential parking for carpools.
d. Restrict truck deliveries to Major and Secondary highways and encourage deliveries during the off-peak hours.
e. Establish a monitoring program to ensure that project traffic volumes do not exceed projected traffic demand.

Note: When it appears that other jurisdictions will be impacted by a development, the Department will request that the involved jurisdiction also review the TIA. A written response from that jurisdiction should be provided with appropriate follow-up to the lead County agency.

G. CMP Guidelines

The following information is required:

Where the project meets the criteria established in the County of Los Angeles' CMP Land Use Analysis Guidelines, a CMP analysis must be provided. A copy of the latest Guidelines will be available upon request. A CMP TIA is required for all projects required to prepare an Environmental Assessment based on local determination or projects requiring a traffic study.

[2] Contributions to a benefit district and/or TSM techniques may not be used to lower LOS in the capacity calculations.

The geographic area examined in the TIA must include the following, at a minimum.

- All CMP arterial monitoring intersections (see Exhibit B of the Guidelines), including freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the a.m. or p.m. peak hours.
- Main line freeway monitoring locations (see Exhibit C of the Guidelines) where the project will add 150 or more trips, in either direction, during the a.m. or p.m. weekday peak hours.
- Caltrans must also be consulted to identify other specific locations to be analyzed on the State highway system.

If, based on these criteria, the TIA identifies no facilities for study, no further traffic analysis is required.

JHC:ce
T-2/ACCESS
(01/07/99)

Attach.

EXHIBIT A
TRAFFIC IMPACT ANALYSIS REPORT CONTENTS CHECK LIST

Note: Before a full review is conducted, PW's staff will check the completeness of the Traffic Impact Analysis Report. If the Report is missing any of the items listed below, it will be returned for revision.

CONTENT	YES/ NO	COMMENT
Site Plan • Access locations • Interior circulation		
Trip Generation Rates • Institute of Transportation Engineers (ITE) trip generation rates • Documentation for alternate rates		
Trip Distribution • Regional • Local project (am/pm) • Local related projects(am/pm)		
Traffic Counts • Taken within one year • Date/Time		
Discounting • Internal trip discounts for mixed use developments • Pass-by trip discounts for commercial/retail developments • Backup		
Level of Service Calculations • Intersection Capacity Utilization (ICU) or Criteria Movement Analysis • 10 percent yellow clearance for ICU planning method • 1,600 vehicles per lane (vpl); 2,880 vpl for dual left-turn lanes for ICU planning method • Calculation sheets • Scenarios as required per Guidelines • Existing/Future lane configurations		
Signal Warrant Analysis • Peak-hour/Average Daily Traffic per the State of California Department of Transportation standards		
Mitigation Measures • Project impacts • Cumulative developments impacts • Projects percent share of the cost to mitigate cumulative development impacts		
Congestion Management Program Analysis		

JHC:ce
T-2/ACCESS3
02/22/99

Letter No. 13

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

FAXED: APRIL 30, 2004

April 30, 2004

Mr. Jeff Hogan
City of Santa Clarita
Planning & Building Services Department
23920 Valencia Blvd., Suite 300
Santa Clarita, CA 91355

Dear Mr. Hogan:

Draft Environmental Impact Report (DEIR) for Riverpark Panhandle Project: Santa Clarita

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated in the Final Environmental Impact Report.

Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the certification of the Final Environmental Impact Report. The SCAQMD would be happy to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Charles Blankson, Ph.D., Air Quality Specialist – CEQA Section, at (909) 396-3304 if you have any questions regarding these comments.

Sincerely

Steve Smith

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rule Development & Area Sources

Attachment

SS: CB

LAC040303-02
Control Number

Draft Environmental Impact Report (DEIR) for Riverpark Panhandel Project: Santa Clarita

1. Project Emissions and Mitigation: On pages 4.4-67 and 4.4-68 of the DEIR, the lead agency lists two mitigation measures that could reduce project emissions by substantial amounts, but they have been deemed technologically infeasible by the lead agency, as stated on page 4.4-68. These measures are: 4.4-8, All on- and off-road construction equipment would use aqueous fuel, and 4.4-9, All on- and off-road construction equipment would employ cooled exhaust gas recirculation technology. Based on information from the URBEMIS 2002 model, these two measures could potentially reduce NO_X emissions by 54 percent, CO and VOC emissions by up to 90 percent, and PM10 emissions by 85 percent or more. Though the lead agency describes these measures as infeasible, it nevertheless includes their control efficiencies in the mitigated constructed emissions in Table 4.4-22. The lead agency justifies this approach by stating on page 4.4-68, "However, if these mitigation measures are found feasible at the time of construction, ... the project's emissions would be reduced substantially." Given the uncertainty of the feasibility of mitigation measures 4.4-8 and 4.4-9, it is inappropriate for the lead agency to claim emission reduction credit from them. The SCAQMD, therefore, recommends that the control efficiencies associated with these two mitigation measures be removed from the mitigated emissions in Table 4.4-22, unless the lead agency is willing to require implementation of these measures. 1

2. Proposed Mitigation Measures: It is recommended that the lead agency modify some of the mitigation measures already incorporated into the project, as stated on page 4.4-65 of the DEIR, as well as add new measures. The lead agency proposes to use methanol- or natural gas-powered mobile equipment and pile drivers instead of diesel if readily available at competitive prices. It also proposes to use propane- or butane-powered on-site mobile equipment instead of gasoline if readily available at competitive prices. The SCAQMD recommends that these two measures be modified to include the use of compressed natural gas-powered equipment with oxidation catalysts instead of diesel-powered engines, or if diesel equipment has to be used, to use particulate filters, oxidation catalysts and low sulfur diesel as defined in SCAQMD Rule 431.2, i.e., diesel with less than 15 ppm sulfur content. 2

Other mitigation measures that the SCAQMD recommends include: 3

- Trucks hauling dirt, sand, gravel or soil are to be covered in accordance with Section 23114 of the California Vehicle Code.
- Construction access roads leading to the main roads should be paved to avoid dirt being carried on to the roadway.
- Truck routes to be redirected to avoid residential areas and schools.

3. CALINE4 and CAL3QHC: The lead agency used the simplified screening method presented in the BAAQMD CEQA Guidelines, December 1999, to complete the CO hotspots analysis. The BAAQMD CEQA Guidelines state that a full CALINE4 analysis should be completed for proposed projects that generate over 10,000 vehicle trips per day. The draft EIR states in Section 4.3 Traffic/Access that the project would generate 13,000 average trips per day. Since SCAQMD does not recommend the use of the BAAQMD 4

simplified screening method, and BAAQMD does not recommend using its simplified screening method for projects of the magnitude proposed, SCAQMD recommends that the lead agency use either CALINE4 or CAL3QHC to analyze the CO hotspots for the Final EIR. 4

The CO hotspots analysis should be completed according to the methodology prescribed by the *Transportation Project-Level Carbon Monoxide Protocol (CO Protocol)* by the Institute of Transportation Studies, UC Davis, revised December 1997. The CO Protocol may be downloaded from the California Department of Transportation website at http://www.dot.ca.gov/hq/env/air/coprot.htm. CALINE4 can also be downloaded from the California Department of Transportation website at: http://www.dot.ca.gov/hq/env/air/calinesw.htm. CAL3QHC can be downloaded from Caliifornia Environmental Protection Agency website at http://www.epa.gov/scram001/tt22.htm. 5

4. EMFAC 7G and CO Hotspots Analysis: The lead agency used EMFAC 7G emissions factors in the CO hotspots analysis. Please note that EMFAC 2002 was released by CARB in April 2003 as the official motor vehicle emission factor model and became the only approved motor vehicle emission factor model on June 30, 2003, according to Federal Register, Volume 68, Number 62, April 1, 2003. Please remodel the CO concentrations with EMFAC 2002 emission factors for the Final EIR. The model is available on the ARB website at: www.arb.ca.gov/msei/on-road/latest_version.htm 6

Letter No. 14

4/11/2004

Jeff Hogan Associate Planner
City of Santa Clarita
23920 Valencia Blvd. Suite 300
Santa Clarita, CA.91355

Dear Sir:

I am writing to you about the planned site of Riverpark. After reviewing the EIR I cannot see where the City will be able to come up with the additional funds to hire more officers and widen the roads as is suggested. I know that the cross-valley connector is important but I cannot see the City putting its self into debt for the upgrades just so the developer will finish the road. 1 2

If you would live up Bouquet and try going to work at 6:30 in the morning you would be frustrated as all of us are with the traffic as bad as it is. As a resident of the Emblem track I worry about the ridgeline also there is no reason for this to be touched. The buildings are going to be on the roadside not the ridge. It does not need to be cut down, 30-50 feet. This is one reason we moved here. It is like a little bit of country in the city. We see hills not rooftops. I don't think anyone has considered us we pay your salary and we should not have to put up with the dust, noise, and all the small and large animals that are going to be coming our way once this gets started. Also there is the element of crime with that Many apts. and homes. We are getting enough small things happening in the neighborhood. Now you want more people to come in the area. 3 4

How about the school we have already been told Emblem school will have to take all the children that's not bad, except that our roads need attention now what is going to happen when they are used for up to 500 trips a day or more. Remember this is an old track one of the first here. It's always a nightmare when school is starting or ending during the year. Try coming here one day most of the people cannot get out of their driveways till the traffic is gone. 5

We could probably live with the houses but the apt. Will not be accepted. Cut these out and leave 450 houses and you could have a nice area, I left the San Fernando Valley because of too many people. I remember coming here as a child to visit my uncle at his Business in Saugus, Haags garage also to the Benz ranch it's a shame all that's there is houses. 6

Please keep the ridgeline the same as it is. No apts. We do not need all this with Plum Cyn. It takes me 45 to 1 hr. every morning to go to San Fernando to work. Wonderful 15 miles. Please think about it.

Louise Hartwell
22570 Los Tigres Dr.
Santa Clarita, CA 91350

Letter No. 15

Tuesday, April 28, 2004

Planning Commission and
City Counsel
City of Santa Clarita
23920 Valencia Blvd.
Santa Clarita, CA 91355

Subject: Riverpark Development

To Whom It May Concern:

I have been a resident of Santa Clarita (Saugus) since 1976. I have seen Bouquet Canyon grow from a two-lane road to its present maximum size. Growth is good, but planned, organized growth is needed. I voted for cityhood to stop the "unplanned" type of growth that the Riverpark development represents.

This proposed development greatly concerns me for six main reasons:

- Adding more congestion to Bouquet Canyon, Newhall Ranch Road and the main intersection of Valencia Blvd./Soledad Canyon Road and San Fernando/Bouquet Canyon Road.
- The overcrowding of Emblem School and Bridgeport Elementary Schools and no additional accommodations for new middle schools/high schools.
- Adding to the existing noise and air pollution of lower Bouquet Canyon Road.
- Potential flood damage.
- Lack of water available for more development.
- Loss of wildlife habitat.

1

I realize that **AFFORDABLE** apartment housing is needed, but feel that putting high-density housing in the already strained "center" of town is serving no purpose other than that of the developer. Apartments should be located closer to the freeways and they should be **AFFORDABLE**. The biggest complaint I hear from people regarding lack of apartments is that people can't afford what is being built here.

2

When the developers were showing the Planning Commission and City Counsel members their proposed development area, I'm positive that it was viewed in the afternoon before homebound commute traffic begins.

3

Currently the traffic from 6:30 a.m. – 8:30 a.m. (minimum) on Bouquet Cyn. towards Newhall Ranch Rd. and the Valencia Blvd. Intersection on any given weekday is bumper-to-bumper coming down the canyon. Added with the congestion of cars coming in and out of the Emblem tract, we already have a commute nightmare. This doesn't even address the late afternoon to early evening traffic with cars attempting to turn left from Newhall Ranch Rd. to Bouquet Cyn. First, you must wait while the traffic lights cycle several times to be able to make a "legal" left-hand turn. In addition to that, you have people going straight, making U-turns between Burger King and the shopping center. I'm concerned that adding this development will bring us back to the days where it took 10-15 minutes to get from Soledad Cyn Rd./ Valencia Blvd. up Bouquet Cyn. Rd. to Espuella. The extension of Newhall Ranch Road will not alleviate the traffic going up Bouquet Cyn Rd. and will increase the congestion on Newhall Ranch Road.

4

Since I live in the Emblem tract I'm greatly concerned with regards to the safety factor facing the traffic coming in and out of our tract. Emblem school is a wonderful neighbor. But it has grown over the years and the traffic patterns have become almost unbearable for those of us living in the "U" routing system through the tract to "drop off" kids going to school. Most of the parents coming into our neighborhood are fine, but some come barreling down our street like it's their own

5

6

personal race track, not taking into account that people live here and children are walking to school. You take a risk with your life and vehicle if, God forbid, you want to back out of your driveway during the morning school rush. Putting more students into Emblem would be disastrous. 6

And, what about Jr. High and High Schools? Where will these new students go? We're always being asked to be taxed more and more to expand our schools. Why aren't developers being required to build Middle Schools and High Schools? 7

When I moved to Saugus, it was a peaceful, quiet community. You could sit in your backyard in the evening and all you would hear would be the coyotes and Saugus Speedway on Saturday nights. Noise pollution was non-existent. Now, with the widening of Bouquet Canyon – sitting in my yard has become anything but a peaceful experience. All evening long you hear cars racing up and down Bouquet, like a daily Speedway. It frightens me to think of what the noise will be like if the ridgeline is altered any and more people are "dumped" into our roads. This doesn't even address the air pollution! How about an AQMD study with regard to traffic pollution? 8 9 10

As a reminder to the Planning Commission and City Counsel, the Santa Clara River is a natural flood control riverbed. I don't know how many of you lived in Santa Clarita during the end of the 80's or early 90's when we had a strong El Nino. As a reminder, the torrent of rain causing natural flooding in this same riverbed was so strong that it washed out part of Soledad Canyon Road. What will it do to a housing development built on a flood plain? 11

There are currently so many concerns and questions with regard to our supply of water and a water table that is becoming polluted and dwindling. How on earth can we be considering more development when we're already being asked to conserve water? Also, the cost of water continues to rise because we don't have enough water available to existing residence. 12 13

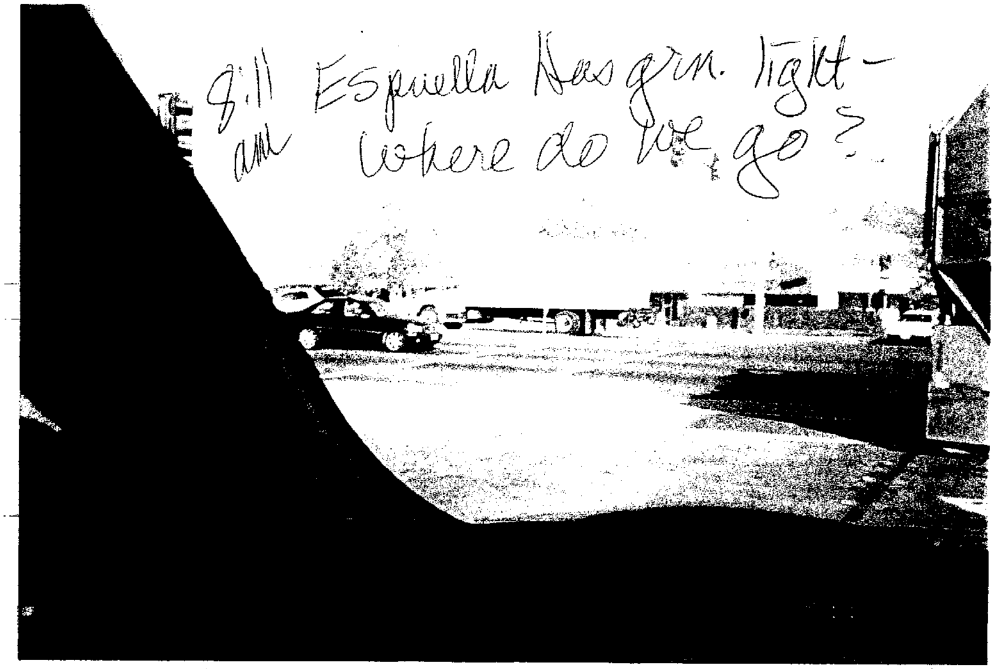
What will happen to the small amount of wildlife that continues to use the ridge as their habitant? Where will the coyotes and rattlesnakes go? This doesn't even address the concern over endangered species that make the flood plain their home. 14 15

The final thing that concerns me most is that I don't feel the people are being listened to. How can a builder already be putting in stakes for grading and also "building roads" when permits have not yet been granted? Newhall, Land and Farming has been good for our community. They currently hold a lame duck status by their sale to a developer who is well known for creating strip malls and mass housing developments. This is a poorly planned project for what it will do to the infrastructure of lower Bouquet Canyon. 16

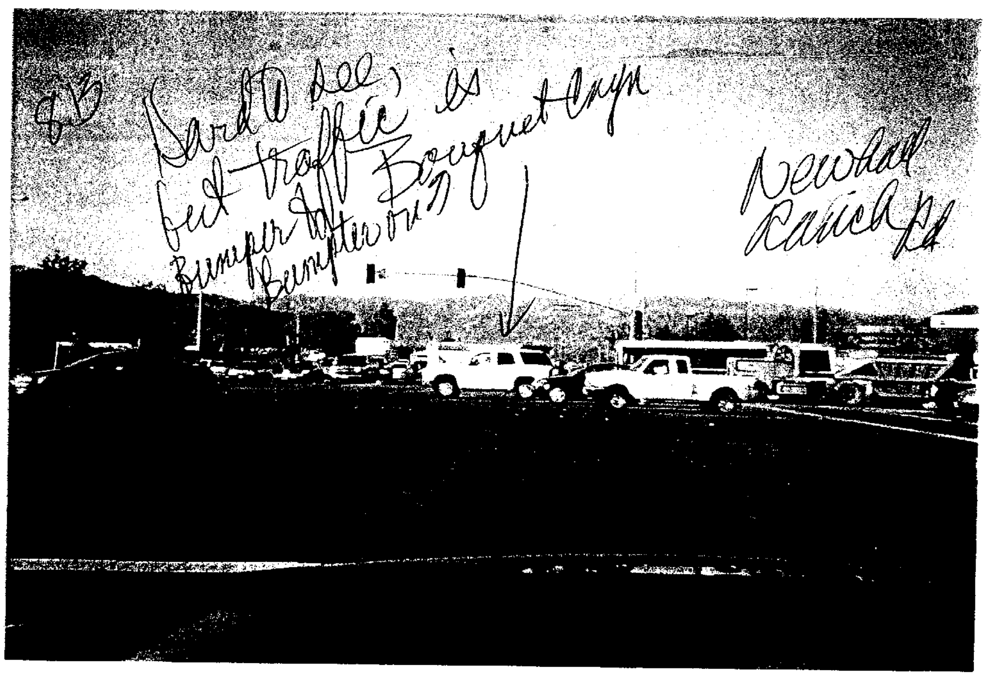
Sincerely,

Mary Stelow

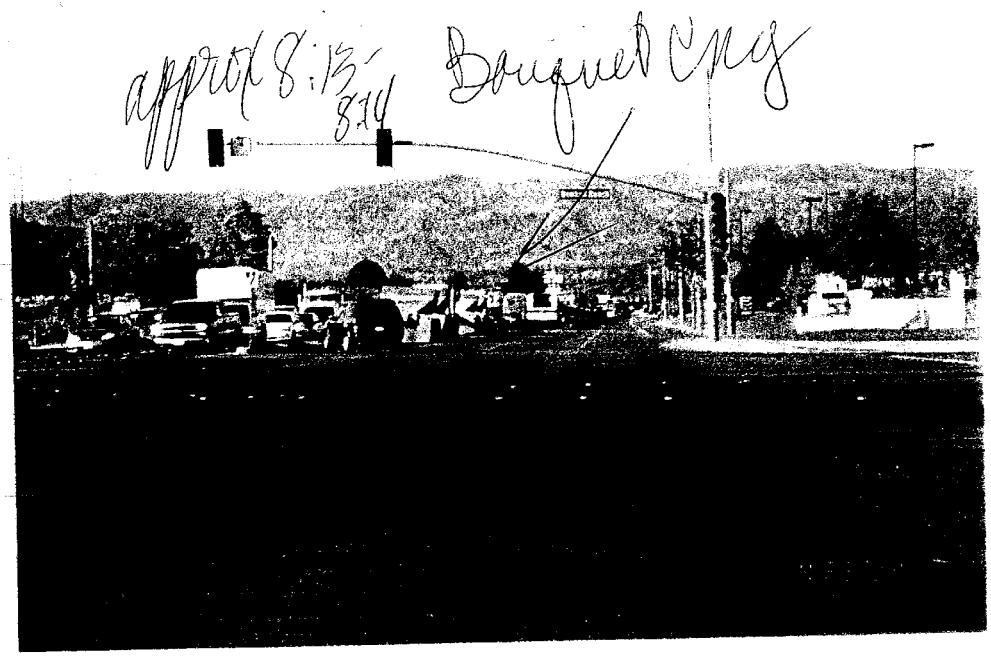
Mary Stelow
22553 Paraguay Dr.
Santa Clarita (Saugus), CA 91350

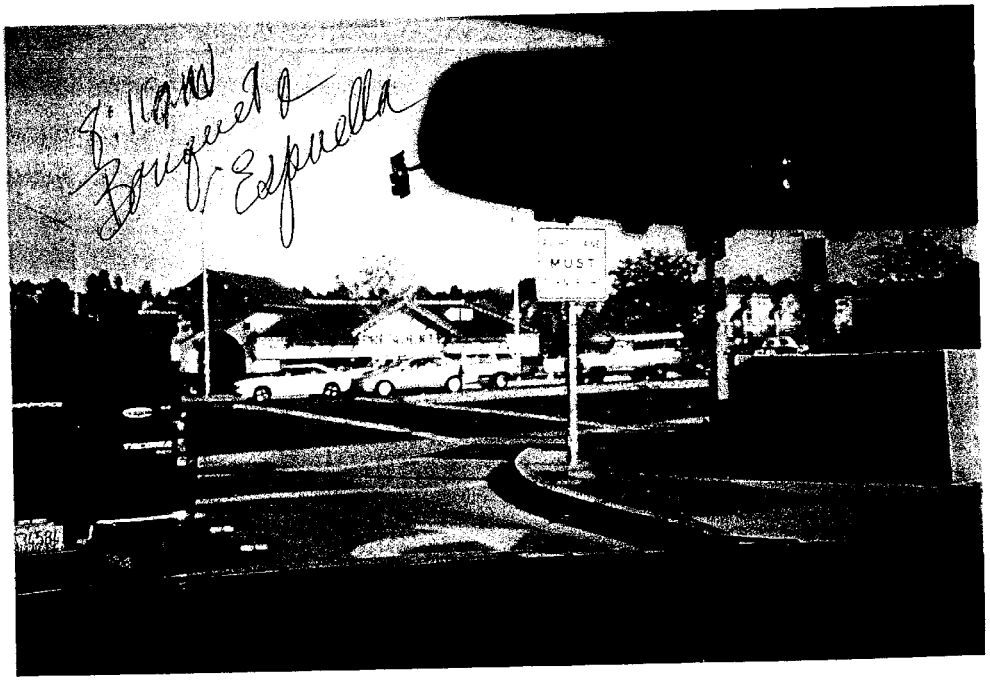

8:11 am
Espuella Has grn. light —
where do we go?

4/25/04.

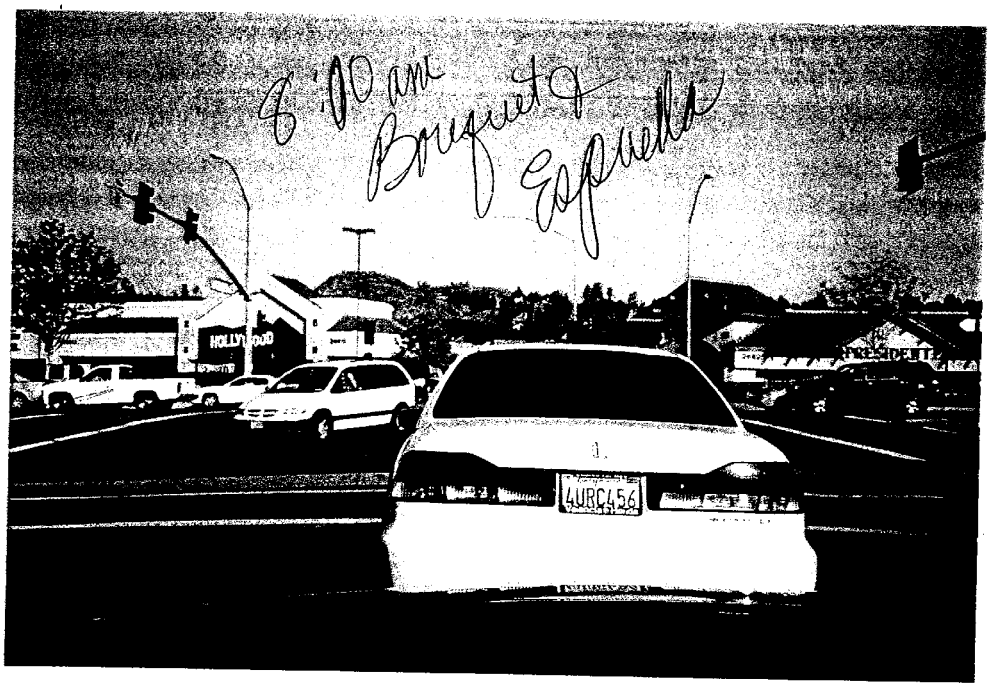

8:13
Hard to see,
but traffic is
Bumper to
Bumper on Bouquet Cnyn
Newhall
Ranch Rd

4/25/04





4/26/04

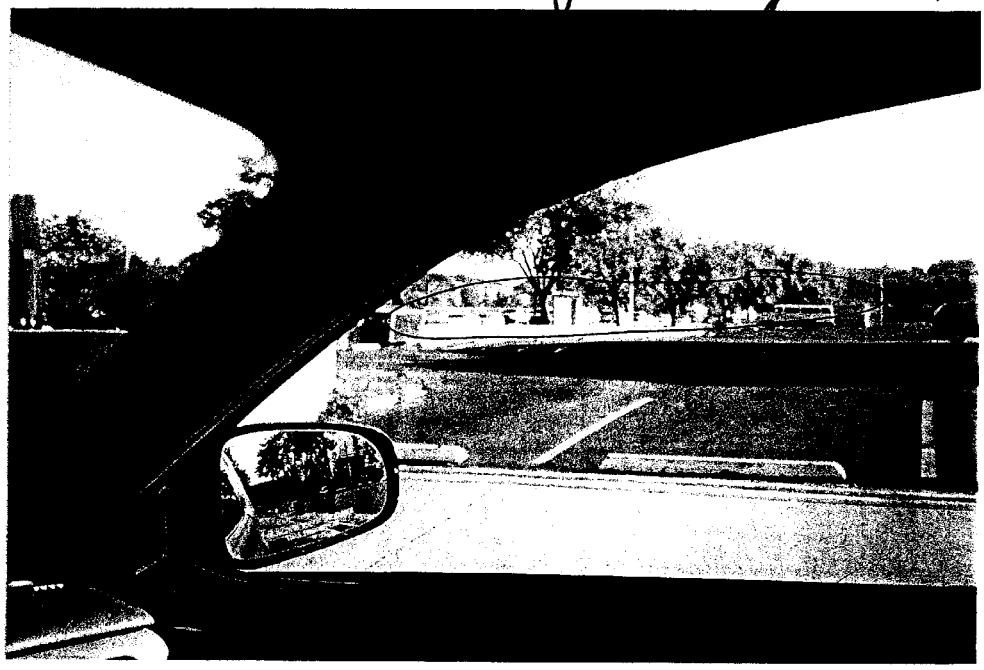

8:00 am
Bouquet
Esquela
HOLLYWOOD
4URC456

4/27/04


RIGHT
MUS
TURN
4URC456

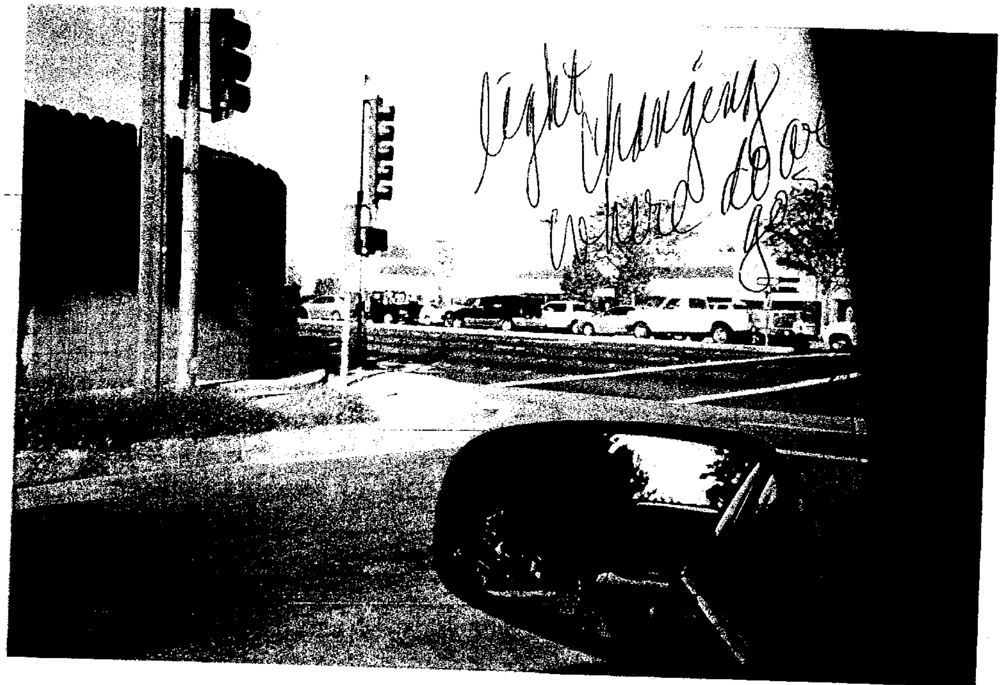
4/27

Bauguet Ave grn. light



4/27

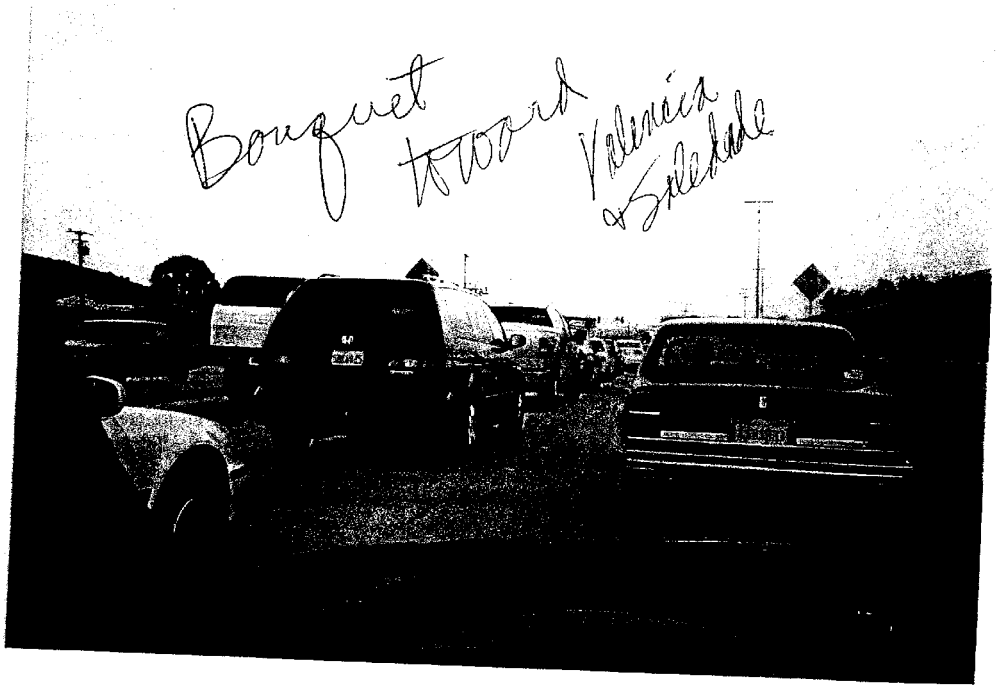
Traffic jumpter to jumpter @ Bauguet



4/27

cars in intersection


8:20 AM


Bouquet toward Valencia & Sierra Hwy
8:20 AM

Letter No. 16

23840 Bennington Drive
Valencia, CA 91354-2600
April 29, 2004

Mr. Jeff Hogan
Planning Department, Ste. 302
City of Santa Clarita
23920 Valencia Blvd.
Santa Clarita, CA 91355

Dear Mr. Hogan:

Thank you for taking my phone call a few minutes ago…yes, voicing my opinion in writing, hopefully, will serve my views in a more permanent way.

I strongly object to the proposed Riverpark Plan and it's 1,179 housing units. As mentioned in my phone call, the Newhall Ranch corridor *currently* is extremely busy and noisy at commuter times of day (4:30 a.m.-8:30 a.m. and again from 3:30 p.m. to 7:00 p.m.) and is projected to become even busier once the Cross Valley Connector is completed. Adding 1,179 homes and the corresponding traffic congestion, air pollution, and noise level increase, i.e., the entire EIR impact, can only add to our valley's pollution woes. I live in the Northbridge development, sadly backing on to Newhall Ranch Road, and already feel hemmed in from traffic/noise, exhaust fumes, etc. from the current expanded housing, the soon-to-be-built out Creekside communities, the current Plum Canyon developments (with a huge number of homes *still* to be completed), and now, the proposed Riverpark community. 1 2

I'm sure many other residents of this terrific city wish further development could be slowed or curbed and concentration be put on working with L.A. County to expand the I-14 and I-5 corridors to enable our residents an easier/faster route to higher paying positions to support our ever-increasing cost of housing here. It's truly a myth that these exist in any certain numbers here. So, if our residents continue to head to the south for jobs and we continue to crowd our valley with further building, what will we all see, breath or move through (if we can move at all!)? Bet no one's considered polling local doctors to see the increase in the number of asthmatic/breathing condition cases that have cropped up in the past 8-10 years. 3

Thanks for hearing my opinion.

Sincerely,

Sheryol L. Neill

Letter No. 17

Friends of the Santa Clara River

660 Randy Drive, Newbury Park, California 91320-3036 • (805) 498-4323

April 29, 2004

Mr. Jeff Hogan, Associate Planner
City of Santa Clarita
23920 Valencia Boulevard Suite 300
Santa Clarita, CA 91355-2196

Re: Riverpark Project EIR

Dear Mr. Hogan,

Friends of the Santa Clara River offers the following comments on the Riverpark Project Environmental Impact Report.

Once again, those of us who have attempted over the years to care for the Santa Clara River are confronted with a large development project which cannot avoid having significant and degrading impacts on the River ecosystem. 1

The unprecedented growth in the Santa Clara watershed over the last few decades has caused an array of cumulative impacts to flora and fauna, not to mention air quality, water quality, aethetics, traffic and nearly every other category addressed by the California Environmental Quality Act. 2
Continued encroachment by development into the River floodplain and terrace lands has resulted in habitat loss and fragmentation which have been cited by many experts as the major causes for the decline of species and loss of biological diversity (Noss, 1987; Beier and Loe, 1992; Beier et al, 2002; Forman et al, 2003). 3
Further, the continued filling and channelization of the River has altered and is altering the hydrology of the watershed, increasing storm runoff and decreasing water quality (the River is now impaired for ammonia, chloride, coliform, nitrate/nitrite and organic enrichment). 4 5 6
These cumulative impacts have not been adequately addressed in the subject EIR nor in other EIRs for projects in the Santa Clara watershed. 7
Continuing failure to address and to act on these impacts is, we believe, turning a large section of the River, in and around Santa Clarita, into a biological "dead zone". 8

The Santa Clara River is the largest and one of the last undammed and relatively natural riverine systems remaining in southern California. Considering the southern California region as a whole, the U. S. Fish and Wildlife Service (Faber et al, 1989) has estimated that 95 to 97 percent of riparian communities have been eliminated due to human influences. 9

Damage occurs primarily because (1) the river is channelized by hardening its banks; (2) riparian and terrace habitats have been lost and fragmented; (3) urban edge effects, including illegal ORV use, degrade riparian biological values; (4) adequate buffer zones protecting the riparian corridor have not been provided; and (5) the function of the river terrace area as wildlife habitat or wildlife corridor is eliminated. 10 11 12 13 14

We are submitting two scientific studies in support of the statement that urban development degrades adjacent biological resources. The first (Kelly et al, 1993) is a paper by two University of California Riverside scientists entitled "Buffer Zones for Ecological Reserves in California: Replacing Guesswork with Science". This paper shows that even nature reserves over a mile in width suffer urban edge effects at their centers - and of course the Santa Clara River riparian corridor is much narrower than these reserves and even more susceptible to such effects. The second (Rottenborn, 1999) is a paper by a Stanford University scientist entitled "Predicting the impacts of urbanization on riparian bird communities". This paper shows impacts to bird communities out to a distance of 500 meters, or over 1500 feet, from the urban edge. 15

More studies are definitely needed on the impacts of development on riparian ecosystems. For the Santa Clarita area, in particular, where development is anticipated over 20 miles of the River and tributaries, what we really have is an experiment on a large scale with the fate of the River ecosystem in the balance. Creating larger buffer zones to conserve more of the riparian community is a must. To quote from the closing sentence in the Stanford paper: "The single most important step that can be taken to conserve riparian communities in the face of urbanization is to minimize development in and along floodplains by maintaining broad buffers of undeveloped land between developed areas and riparian habitats." 16 17 18

The Riverpark project will have impacts bringing into play the City's General Plan policies on Significant Ecological Areas. Policy 5.3 under Goal 5 states "New development must be sensitive to the Significant Ecological Areas through utilization of creative planning techniques to avoid and minimize disturbance of these and other sensitive areas." **Only by creating an adequate buffer zone around Riverpark can this policy be effectively implemented.** We suggest that among the most creative planning techniques which could and should be used here is the development and adoption of a Floodplain/Terrace Avoidance Alternative for Riverpark. The EIR Alternative 2 is a step in that direction but considers only the Q50 floodplain instead of the floodplain and terrace areas which are steadily becoming rarer in the River corridor and which provide high quality habitat for such species as the spadefoot toad and arroyo toad. 19 20

Besides larger buffer areas, establishing the east terminus of the River trail at Santa Clarita Parkway would greatly help in protecting riparian resources. Continuing the trail beyond the Parkway will negatively impact the eastern portion of the project area which has significant biological value. These impacts are related to increased disturbance by humans, ORVs and domestic animals. 21 22

Thank you for considering these comments.

Sincerely,

Ron Bottorff

References:
Beier, P. and S. Loe, *A checklist for evaluating impacts to wildlife movement corridors,* Wildlife Society Bulletin 20:434-440, 1992.
Faber, et al, *The Ecology of Riparian Habitats of the Southern California Coastal Region: A Community Profile, U.S. Department of the Interior,* Biological Report 85(7.27), September 1989
Forman. R.T.T. *Land Mosaics: The Ecology of Landscapes and Regions*, Cambridge University Press, 1995.
Kelly, Patrick J. and John T. Rotenberry, *Buffer Zones for Ecological Reserves in California: Replacing Guesswork with Science*, in *Interface Between Ecology and Land Development in California*, Southern California Academy of Sciences, 1993.
Noss, R. F., *Protecting natural areas in fragmented landscapes,* Natural Areas Journal 7:2-13, 1987.
Rottenborn, S.C. *Predicting the impacts of urbanization on riparian bird communities*, Biological Conservation 88 (1999).

Interface Between Ecology and Land Development in California
Edited by J.E. Keeley. 1993. Southern California Academy of Sciences, Los Angeles.

Buffer Zones for Ecological Reserves in California: Replacing Guesswork with Science

Patrick A. Kelly [1] and John T. Rotenberry [2]

[1] *Urban and Environmental Outreach Program, 139 Highlander Hall*
University of California, Riverside, CA 92521
Tel. (714) 787-3419; Fax. (714) 787-7251

[2] *Natural Reserve System and Department of Biology*
University of California, Riverside, CA 92521
Tel. (714) 787-3953; Fax. (714) 787-4286

Abstract. An integral part of any habitat conservation plan is the design and establishment of one or more ecological reserves to provide for the continued existence of threatened or endangered species. As a consequence of rapid urbanization, however, potential reserve areas in southern California often abut areas of intense human use. Although the extension of undesirable anthropogenic disturbance beyond urban boundaries into potential reserve habitat (sometimes referred to as "edge effects") can be identified, currently little scientific attention is being paid to reserve buffering. The importance of understanding boundary processes cannot be understated: areas near boundaries may be unsuitable for protected species, hence reducing the effective size of a reserve. Furthermore, this reduction disproportionately affects relatively smaller reserves (which have a higher perimeter/area ratio) that are characteristic of a fragmented landscape. We describe several approaches to quantifying edge effects at the urban/wildland interface; such research can obviate the use of guesswork in the design of buffer zones for nature reserves.

Keywords: Coastal sage scrub; core area model; *Dipodomys stephensi*; domestic cat; *Felis catus*; edge effect; habitat conservation plan; habitat fragmentation; reserve design; Riverside; SLOSS; Stephens' kangaroo rat.

Introduction

Ecologists and environmentalists are alarmed by the global rates of contemporary habitat destruction and biodiversity loss. This environmental degradation is primarily a consequence of continued exponential growth of the human population and the subsequent increased demand on space and natural resources (Western 1989; Ehrlich and Wilson 1991; Soule 1991a; Western 1992). Inescapable consequences of such population growth and habitat loss are increasing fragmentation and isolation of remaining natural habitat, and, ultimately, reduction of the natural world to a series of ecological reserves.

These reserves, whether their final boundaries are determined by design or by the residual of unregulated habitat loss, may vary in size from small habitat fragments in an urban landscape (e.g., Soule et al. 1988) to large national parks, national forests, and wilderness areas (e.g., Salwasser et al. 1987; Salwasser 1991). Although some reserves will be of ecosystem proportions, the size distribution of protected areas worldwide is heavily biased towards smaller reserves (Pellew 1991). Whether any reserve is of a sufficient size and appropriate configuration to viably support species populations or communities of special interest, however, has become a matter of considerable debate. Much attention has been focused on what has become known as the SLOSS (Single-Large-Or-Several-Small) question (Diamond 1975; Simberloff and Abele 1976; Diamond 1976; Soulé and Simberloff 1986; Simberloff 1988; Quinn and Harrison 1988).

In regions that are undergoing rapid urbanization, such as much of Southern California, the question of preplanning the establishment of reserves of sufficient size and configuration to maintain population or community viability is often moot, because of high land values and the extent of pre-existing habitat fragmentation. Instead, we often inherit a parcel of natural land abutting or embedded in an urban landscape. The boundaries of these parcels may be permeable to a variety of external forces that may be destabilizing to the specific attributes that we wish to preserve in the reserve. We contend that reserve establishment in urbanized California is a pointless exercise in crisis management if those reserves are going to be gradually eroded away by external forces. Boundary processes must therefore be of paramount importance from the outset of the conservation planning process.

The importance of understanding boundary processes cannot be understated because the effective size of an ecological reserve is almost always smaller than the area contained within the reserve's administrative boundary. Thus, the ultimate fate of any reserve depends on the magnitude of impacts from processes occurring at its boundaries (see Schonewald-Cox and Bayless 1986; Schonewald-Cox 1988; Schonewald-Cox et al. 1992). In his essay "The Eternal External Threat," Daniel Janzen (1986, p. 303) advises preserve managers: "Above all, be a field biologist who works with your preserve's neighbors to keep out what should be kept out." A reserve boundary that is unresistant to deleterious external influences is doomed to degradation by diffusion-like processes. Only the portion of the reserve that withstands degradation remains as the effective or core area reserve. The effective size or core area is a function of the cumulative magnitude of impacts resulting from penetration of the reserve boundary by external forces. Such "edge effects" have been studied in tropical forests (Janzen 1983, 1986; Lovejoy et al. 1986; Laurance 1990, 1991a, 1991b), temperate forests (Wilcove 1984; Temple 1986; Wilcove et al. 1986; Andren and Angelstam 1988), and in simulation models (Buechner 1987; Stamps et al. 1987). However, despite the significant role of urbanization in habitat fragmentation and biodiversity loss, there has yet been little research on edge effects in more urbanized situations (but see Soule et al. 1988; Bolger et al. 1991; Langen et al. 1991; Soule et al. 1992; Alberts et al. 1993; Sauvajot and Buechner 1993; Scott 1993). Although the appropriate size of a reserve is always relative to the specific conservation context, the impact of edge effects is particularly significant for small reserves because of their larger perimeter to area ratios (see below). Extensive habitat fragmentation, as we have in southern California today, precludes the luxury of establishing large reserves for many sensitive species. Therefore, reserve buffering must be adequately addressed in the reserve design phase of any habitat conservation planning process in this region.

We describe several approaches to quantifying edge effects at the urban/wildland interface in California. Our goal is to develop a methodology that is explicitly scientific. It involves the systematic collection of relevant data to ascertain whether edge effects do, indeed, exist, and to develop and test specific hypotheses about the underlying mechanisms that may be responsible for producing those effects.

Theory

We wish to develop an approach that emphasizes processes across the boundaries between reserves and adjacent land-use elements in a landscape mosaic (explicitly following Wiens et al. 1985). The boundary we are most concerned with is the "administrative boundary," the geographical limits to the authority of reserve managers (the legal boundary; see Schonewald-Cox 1988). The concern is how boundaries affect the exchanges or redistribution of materials, energy, and organisms between the reserve and adjacent parcels.

Dynamics across landscape boundaries are due to the action of "vectors," physical forces or animals that actively move material or energy in the system. Vectors are important because they may impose non-random, directional fluxes of materials. When evaluating the potential effects of animal vectors, it becomes necessary to understand individual behavior and movements, home ranges and space use patterns, foraging behavior, and diet.

The degree to which a boundary deflects the movements of vectors may be expressed as a boundary's "permeability," and it may be considered as the degree to which a reserve is "buffered" from a particular vector across that boundary. Permeability or buffering is a function of characteristics of both the boundary and the vectors taken together.

The likelihood that a boundary will be crossed by an animal vector is related to the density of animals outside (or within) a reserve. While the probability that an individual will encounter and perhaps cross a boundary is a function of its movement patterns and position with respect to the boundary, increases in population density produce a dramatic increase in the collective probability of boundary encounter. Thus, there is likely to be a clear density-dependence to cross-boundary movements.

We have already noted that small reserves have larger perimeter-to-area ratios than large reserves. This comparative quantity is not actually a ratio (which are dimensionless), but an index of the amount of perimeter per unit area. We prefer to call this index the 'relative edge' and express it in meters per hectare. A circular reserve will have the least amount of relative edge possible for reserves of equal area. Since the movement or diffusion of vectors across a boundary is directly related to the length of the boundary, in general reserves with high relative edge will have less buffering (more flux) than those with low.

The relationship between perimeter and area has been further refined in the development of the Core-Area Model by Laurance and Yensen (1991). In essence, they derive a shape index (SI) that describes the degree to which any given perimeter-area ratio (relative edge) departs from that of a circle of the same area. Combining the shape index with an edge function (d, the distance to which a disturbance vector penetrates a boundary, in meters) they derived an expression to calculate the core

area of any habitat fragment (in hectares). The authors point out that the only crucial assumption of the Core-Area Model is that d is unimodal.

Conservation in Urbanizing California

In southern California, urbanization of what was formerly wildlands is proceeding rapidly, resulting in extensive habitat fragmentation. Large-scale habitat fragmentation is almost automatically a precursor to conflicts between endangered species preservation and land development. There are a number of mechanisms for resolving such conflicts under the state and federal Endangered Species Acts. One of the most common routes to conflict resolution at this time is by application for a federal Incidental Take or 10(a) Permit through the development of a Habitat Conservation Plan (HCP) for the affected species. HCPs typically involve the establishment of ecological reserves ranging in size from a few hundred to thousands of hectares. The goal of the HCP process is to ensure the continued existence of a sensitive species while allowing some 'incidental take' by an otherwise lawful activity, such as land denaturation and development (cf. Soule 1991b), to continue (Bean et al. 1991; Beatley 1992). As a consequence of rapid urbanization, however, potential reserve areas in southern California are often adjacent to areas of intense human use. Although the extension of undesirable anthropogenic disturbance beyond urban boundaries into potential reserve habitat can be identified, currently little scientific attention is being paid to reserve buffering (in essence, the calculation of $d_{\min}$).

The Buffer Design Process

Buffer design needs to be regarded as a key component of any integrated management strategy for sensitive species. The use of conservation easements and active management practices (habitat manipulation, alien predator control, provision of corridors for, or barriers to, wildlife movement, etc.) are other important components of an integrated management strategy, which can be implemented after potential impacts have been identified and quantified. Therefore, the first step in the buffer design process is the identification and, if possible, ranking of potential impacts.

The process should proceed as though a worst-case scenario exists; the reserve is isolated and suboptimal in size, and the sensitive species distribution is, at least initially, contiguous with the "impact boundary" at a completely permeable administrative boundary. This describes the situation where a housing development or an industrial park directly abuts an unfenced reserve boundary. Obviously, our concern is with the distance to which negative external influences extend into the reserve interior, and thus reduces the effective size of the reserve, and how we might change the permeability of that boundary to reduce vector movement.

The critical questions are:

1. What external forces or processes likely to have a negative impact on the protected species, community or resources in question are operating at the reserve boundary (i.e., what vectors are present)?

2. To what extent are those external forces likely to penetrate the boundary and result in negative impacts on the protected population(s) or community (i.e., how permeable is the boundary)?

3. Can these forces be ranked in terms of likely negative impact to produce a prioritized list of buffering requirements?

4. Are these potentially negative forces amenable to scientific hypothesis testing?

5. How do we collect data to evaluate hypotheses?

6. How do we mitigate for both general and specific impacts (i.e., how do we alter boundary permeability)?

We illustrate this process in a consideration of buffering requirements for the establishment of reserves for the endangered Stephens' kangaroo rat (*Dipodomys stephensi*) in the context of a long-term Habitat Conservation Plan that is being developed by Riverside County (RECON 1990, the short-term HCP). Roughly, that plan envisions three to seven independent reserves, each consisting of 500-2,000 ha.

One likely component of that HCP is the Motte Rimrock Reserve (a part of the University of California Natural Reserve System), a 515 ha ecological reserve located 30 km south of the city of Riverside (Fig. 1). Although, it is surrounded on all sides by major highways and dispersed urbanization, it contains a diverse flora and fauna including a number of sensitive species. Its irregular shape results in a relative edge of about 39 m/ha (perimeter = 20.125 km); since a a circular reserve of the same area would have a relative edge of 15.6 m/ha (Fig. 2), the Motte has an SI value of 2.5. If we run the

Laurance and Yensen Core-Area Model with SI = 2.5 and an arbitrary edge function of $d = 100$ m, we find that approximately 40% of the total area of the Motte would be lost to this hypothetical disturbance. Since no part of the reserve is more than 625 m from an edge, the Motte may not have any core area for certain external impacts, such as far-ranging domestic dogs.

We have hypothesized that the following forces have the potential to operate across reserve-urban interfaces in Riverside County to the detriment of Stephens' kangaroo rats:

1. Introduction of alien predators (particularly domestic cats).
2. Increased levels of nighttime illumination.
3. Increased sound and vibration levels.
4. Trespass (pedestrian, equestrian and off-road vehicle) and associated habitat alteration.
5. Introduction of competitors (commensal rats and mice).
6. Garbage disposal and pollution drift (e.g., pesticides etc.).
7. Disease transmission from domestic or commensal animals to wildlife.
8. Shooting (effects on community dynamics: e.g. mortality of natural predators, such as coyotes).

Our ranking of these forces as to their impact on Stephens' kangaroo rat populations is tentative, other

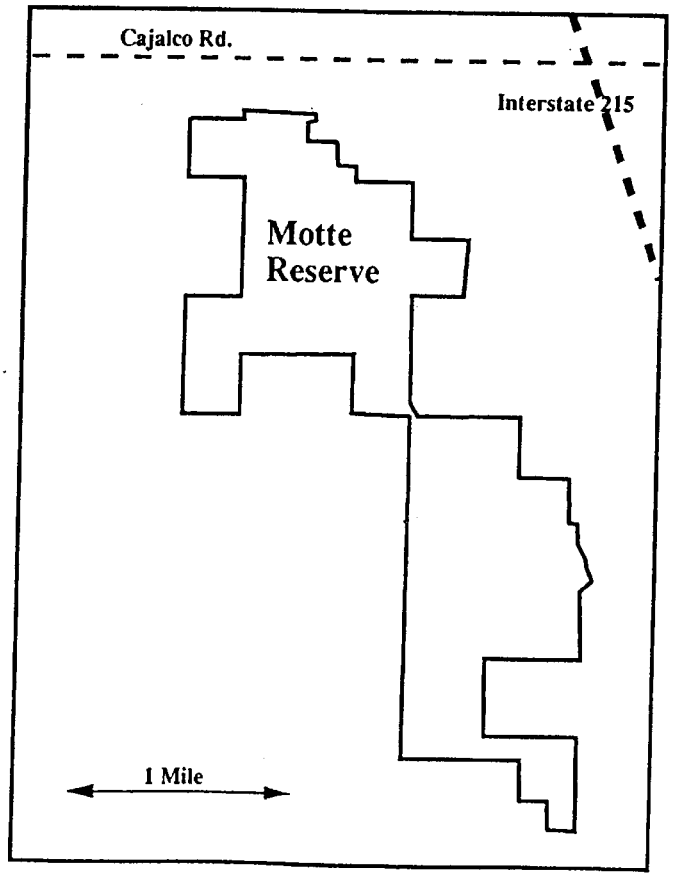


Figure 1. Map showing boundary of the Motte Rimrock Reserve. Adapted from Mayhew and Carlson (1990).

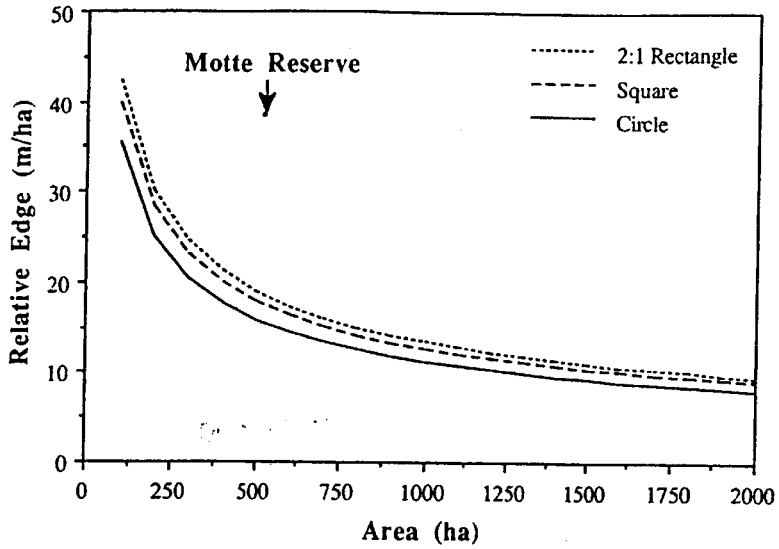


Figure 2. Perimeter/Area (relative edge) as a function of Area for three hypothetical reserve configurations: a circle, a square and a 2:1 rectangle. The relative edge for the Motte Reserve (arrow, ca. 39 m/ha) is at least twice the value for any of the three hypothetical reserve shapes for the same area.

than that we consider the impact of domestic cats (*Felis catus*) as likely to be highly significant. To study the penetration of these vectors into potential reserves, we suggest the use of two approaches:

Empirical non-specific approach

This involves documenting that, indeed, a statistically detectable edge effect exists and certainly represents the minimum degree of sampling and analysis that should be implemented for any reserve design. It should typically involve replicated censuses of target species (or communities) at set distances from hypothetical reserve boundaries under different impact situations. For example, we could calculate kangaroo rat burrow densities as a function of distance from a reserve boundary and contact with external forces. If linear or non-linear regression reveals a consistent relationship between population density and distance from the reserve boundary, an empirically-determined buffer zone (of width *d* meters) for the cumulative impacts can be proposed (Fig. 3). However, that buffer width will be only appropriate for the specific species and edge type under investigation.

Mechanistic hypothesis testing approach

To develop the most appropriate and effective buffer requires the identification of specific mechanisms likely to produce any pattern identified in the previous step. In essence, each of the forces we identified as potentially operating across boundaries to affect kangaroo rat populations serves as a hypothesis that can be tested. Although not always testable under a strict experimental regime, we can nonetheless collect data in such a way as to use strong inference about the influence of any particular mechanism.

As an example, we hypothesize that the predation of house-based domestic cats on kangaroo rat populations is a significant edge-related impact. To examine this hypothesis, we would attempt two approaches: predation documentation and cat movement studies.

House-based cats, unlike their feral cousins, are cooperative in that they often bring home prey items. The prey can be identified and the diet quantified through the help of cooperative pet owners. A variety of studies of this type have been performed throughout the world, most notably in Great Britain. In an English village, for example, domestic cats were responsible for at least 30% and perhaps 50% of the mortality of all sparrows in a one year period (Churcher and Lawton 1987, 1989). Considering the high levels of cat ownership in the U.S., their ability to survive as feral animals, and their innate hunting abilities, the potential of cats as a destabilizing force in ecological reserves is enormous. Studies on the diet of house-based and feral cats in southern California would indicate levels of predation pressure not only on kangaroo rats but also on a variety of other sensitive species (e.g., California gnatcatcher, *Polioptila californica*).

Determining the spatial distribution of feline predation in relation to reserve boundaries is obviously impor-

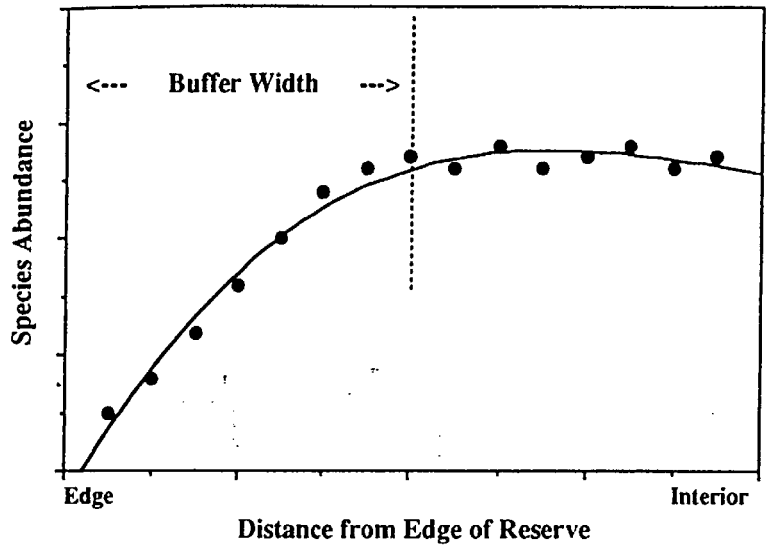


Figure 3. Empirical determination of buffer zone width (*d*) through censusing/sampling at set distances from the reserve boundary. If regression reveals a relationship between population density and distance from the edge of the reserve, a buffer zone of width *d* meters can be proposed for the cumulative impacts.

tant for buffer consideration. Observations in the field in Riverside County of domestic cats more than a mile from human dwellings (P. Kelly, personal observation) hint of the potential for feline impact deep within reserve boundaries. Movements of both house-based and feral cats can be studied using radio telemetry. The study should be designed to provide information on the degree of reserve penetration by gender, age-class and ownership status. Analysis of movement distributions should provide guidelines on buffering requirements for this particular edge effect.

Mitigation Recommendations

The result of non-specific and mechanistic approaches to buffering determination can provide a rationale for appropriate mitigation to counter edge effects. A number of mitigation avenues are available for use. For example, in a large reserve a sacrificial zone of open space equivalent to the buffer width identified in an empirical analysis might be incorporated within the boundaries of the initial reserve design; alternatively, such a zone could be imposed external to a proposed reserve boundary. If specific external impacts can be identified, inappropriate land use options can be limited within a specified distance of reserve boundaries (e.g., through conservation easements or restrictive covenants); if possible or appropriate, barriers can be constructed to block or curtail access by negative influences.

The external forces impinging on ecological reserves are identifiable in California's urbanized regions. However, an important point is that those same forces will impact different taxa in different ways. Appropriate buffering and management for one sensitive species will not necessarily apply to another sensitive taxon that may even use the same habitat. For example, studies on habitat fragments in San Diego indicated that native rodents were usually absent from smaller fragments whereas the bird fauna was not as affected (see Soule et al. 1988; Bolger et al. 1991; Langen et al. 1991; Soule 1991b; Soule et al. 1992). Soule and his colleagues also inferred that the presence of coyotes (*Canis latrans*) is a stabilizing influence, controlling the depredations of gray foxes (*Urocyon cineroargenteus*), domestic cats, and other mesopredators. Studies in Arizona also indicate that coyotes seem to exert a stabilizing influence by controlling the depredations and movements of house-based cats (Goldsmith et al. 1991). For these reasons, the introduction of coyotes has been proposed to control the impacts on California least terns (*Sternus antillarum*) and light-footed clapper rails (*Rallus longirostris*) by urban populations of red foxes (*Vulpes fulva*), another alien predator (Zembal 1993). In the San Joaquin Valley, on the other hand, coyotes are a destabilizing influence in kit fox (*Vulpes macrotis*) recovery efforts (Scrivner et al. 1991).

Conclusions

A comprehensive scientific approach to the issue of reserve buffering in California is long overdue. As we move into an era of multi-species conservation planning, rigorous determination of buffering requirements for ecological reserves will become more difficult and more important. The development of a large-scale HCP is an extremely expensive undertaking: costs are about $25 million in the case of the Coachella Valley fringe-toed lizard (*Uma inornata*) and likely much higher for the Stephens' kangaroo rat HCP (see Beatley 1992). The tremendous costs involved demand that buffering be thoroughly addressed early in the reserve design process. The procedure we have described is very flexible and can be adapted to meet the specific needs of most reserve design situations in California.

To develop a buffering protocol we recommend:

1. Identification and ranking (if possible) of those external forces likely to impact the sensitive population(s) or community (communities) in question.

2. An empirical non-specific approach; censusing sensitive species at set distances from reserve boundaries, under varying impact conditions, to estimate the penetration and impact of negative external forces on the protected population(s).

3. Mechanistic hypothesis testing; study of the most significant forces (e.g. alien predators or competitors, trespass, runoff, light, noise, vibration, etc.) to quantify individual impacts.

4. Adoption of mitigation management practices that maximize buffering but minimize future costs. Public policies affecting conservation programs are subject to sudden change so it is important to minimize reliance on the future availability of funding for management.

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Predicting the impacts of urbanization on riparian bird communities

Stephen C. Rottenborn*

Center for Conservation Biology, Department of Biological Sciences, Stanford University, Stanford, CA 94305-5020, USA

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Abstract

In 1995, birds were surveyed in riparian woodlands along a gradient of urbanization in the Santa Clara Valley, CA, USA, in order to determine the relationships between riparian bird communities and urbanization. Bird species richness and density decreased at a location as the number of bridges near that location increased and as the volume of native vegetation decreased. Species richness also increased as the distance to the nearest building and the width of the riparian habitat increased. Canonical correspondence analysis confirmed that bird community structure was influenced strongly by these variables. Many individual species responded significantly to variables associated with urbanization, most having lower densities on more urbanized sites. Whereas previous studies have demonstrated substantial effects of urbanization on bird communities in the habitats being directly altered, this study indicates that urbanization on lands adjacent to intact riparian woodlands has substantial impacts on riparian bird communities.

Keywords: Urbanization; Birds; Riparian; Canonical correspondence analysis

1. Introduction

The influence of urbanization on bird communities has been examined in a number of studies (e.g. Emlen, 1974; DeGraaf and Wentworth, 1981; Beissinger and Osborne, 1982), most finding that urbanization has profound effects on bird species richness, abundance, and community composition. Low levels of development may increase bird species richness somewhat as additional resources, such as ornamental vegetation, artificial roosting or nesting sites, and anthropogenic food sources, are made available (Lancaster and Rees, 1979; Aldrich and Coffin, 1980; Blair, 1996). However, intense urbanization results in a depauperate bird community dominated by a few species that are common and widespread.

Relatively little attention has been paid to the impacts of urbanization on riparian bird communities. In Florida, Smith and Schaefer (1992) found bird species richness to be higher in riparian habitats in rural areas than in urban areas during summer and found that housing density on adjacent lands influenced riparian bird communities. Similarly, Cubbedge and Nilon (1993) reported variation in the densities of individual species among riparian habitats adjacent to different land use types in Minnesota. These studies indicate that urbanization has important impacts on riparian bird communities.

Urban impacts on riparian systems are worthy of further study for a number of reasons. First, they support very high numbers of plant and animal species (Knopf et al., 1988; Naiman et al., 1993). In arid regions in particular, riparian ecosystems are critical in maintaining high biodiversity on a regional scale (Johnson et al., 1977; Stevens et al., 1977; Knopf, 1985). Despite their importance to biodiversity, riparian systems have been severely degraded by anthropogenic activities. In California, for example, > 95% of the riparian vegetation that was present prior to European settlement of the state has been destroyed or significantly degraded (Smith, 1977; Katibah, 1984). In turn, this habitat degradation has caused substantial declines in the populations of many riparian-associated animal species (Gaines, 1974; Ohmart, 1994), necessitating protection of the remaining riparian habitat.

In arid regions, urbanization usually occurs along rivers at low elevations, where bird species richness and the number of regionally rare species are higher than in any other habitat type in a watershed (Knopf, 1985; Finch, 1989). In 1994–1995, a study of the effects of

* Current address: H.T. Harvey and Associates, PO Box 1180, Alviso, CA 95002, USA. Tel.: +1-408-263-1814; fax: +1-408-263-3823; e-mail: rottenbo@pacbell.net.

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adjacent land use on riparian bird communities in the Santa Clara Valley of California showed that the proportion of native versus exotic vegetation, proximity to a building or bridge, and the amount of development around a riparian plot were closely associated with the distribution of riparian birds among 24 sites along a gradient of urbanization (Rottenborn, 1997). The objective of the present study was to determine the relationships between these urbanization-associated variables and bird species richness, density, and community structure on a much larger number of plots along a longer urbanization gradient in order to predict the effects of further urban sprawl and to conserve the bird communities in the Santa Clara Valley.

2. Methods

2.1. Plot selection and bird recording

The Santa Clara Valley is located between the Diablo and Santa Cruz Mountain Ranges at the southern end of the San Francisco Bay in California, USA. The northern and central portions of the valley are heavily urbanized; suburban areas surround this urban core, and agricultural/grassland areas are present in the southern part of the valley. Within this relatively broad, flat valley, study plots were selected along Coyote Creek, Los Gatos Creek, and the Guadalupe River, three of the largest streams in the study area. They are relatively narrow (mostly < 15 m wide), low-gradient, and slightly meandering, and are crossed by a number of bridges. The narrow (mostly < 80 m wide) corridors of mature woodland that remain along the banks represent some of the most valuable riparian habitat in the San Francisco Bay area (US Army Corps of Engineers, 1986).

Eighty-three plots were selected randomly along the lower reaches of these streams where the native riparian habitat tends to be dominated by Fremont cottonwood *Populus fremontii* and several species of willows *Salix lucidum*, *S. laevigata*, *S. lasiolepis*, and *S. exigua*. Fifteen of these plots, located in areas where the vegetation had been degraded considerably, were excluded from this study. The remaining 68 plots were located adjacent to a number of different land use types along a gradient of urbanization, ranging from heavy industry to agricultural land and open space in more rural areas. Each plot center was at least 75 m from the nearest bridge, and all plots were separated by at least 150 m. The center of each plot was located as close as possible to the center of the riparian corridor, usually at the stream edge.

Birds were surveyed five times on each plot from 23 May to 13 July 1995. The variable circular-plot method (Reynolds et al., 1980) was used to count the number of individuals of each species recorded within 70 m of each plot center for a period of 5 min. All surveys were conducted during the 4 h immediately following sunrise. Only birds within the riparian corridor were counted, and bird densities were determined from the dimensions of the corridor within each 70 m-radius plot. Most of the birds recorded on these surveys were thought to be breeding, or at least oversummering, in the riparian corridors of the study area. Noise from traffic or flowing water was not thought to have a significant effect on the detection of birds during these surveys.

2.2. Measurement of environmental variables

At each plot, a number of environmental variables were measured for use in multiple linear regression models predicting the densities of individual bird species. The diameters of all woody stems > 1 cm in diameter were measured within a radius of 35 m from the plot center (excluding areas outside the riparian corridor). The stem density of all woody plants (TOTSTDEN) and of native (NATSTDEN) and exotic (EXOSTDEN) species, as well as the proportion of stems that were native (NATPROST), were calculated. Because there were several bird species whose abundance might be related directly to the presence or abundance of live oaks *Quercus agrifolia* and *Q. wislizenii*, the density of oak stems (OAKSTDEN) was also calculated for each plot.

For the purposes of measuring habitat structure, five non-overlapping subplots 10 m in diameter were established on each plot, randomly positioned within 35 m of the plot center. Vegetation volume and foliage height diversity were measured at 10 stations along each of two transects in each subplot, laid out approximately parallel and perpendicular to the stream channel. Total vegetation volume (TOTALTVV) and the volume of native (NATIVTVV) and exotic vegetation (EXOTITVV) were measured using a 4.5 m pole following the methods of Mills et al. (1991). The number of stations having vegetation within 11 different vertical strata (0–0.5, 0.6–1.0, 1.1–2.5, 2.6–4.0, 4.1–6.5, 6.6–9.0, 9.1–12.0, 12.1–18.0, 18.1–24.0, 24.1–32.0, and > 32 m), determined using the pole or a range finder (Erdelen, 1984), was used to calculate foliage height diversity (FOLHTDIV; MacArthur and MacArthur, 1961).

Using the graduated pole (for low canopies) or a clinometer, canopy height (CANOPYHT) was measured at the upstream and downstream ends of the transect running parallel to the channel on each subplot, for a total of 10 measurements/plot. At these same 10 locations, a spherical densiometer was used to measure canopy cover (CANOPCOV) facing north, south, east, and west at each point for a total of 40 measurements/plot. All structural vegetation parameters were measured from June to early August.

The area of the portion of a 50 m radius circle around each plot center that fell within the riparian corridor (including the stream channel) was used as a surrogate for riparian corridor width (RIPWIDTH), as the irregular shape of the corridor on some plots precluded direct measurement of corridor width. Cats were counted during bird surveys, and cat density (CATDENS) was determined according to the variable circular-plot method.

Within a radius of 500 m of the plot center, the percent cover by pavement (PAVED500), buildings (BUILD500), and total artificial surface (ARTIF500) were estimated using aerial photos. In addition, the distance from the plot center to the nearest building (DISTBUIL), paved road (DISTPAVE), and bridge crossing the stream (DISTBRID) were measured and the number of bridges crossing the stream within 500 m of the plot center (BRIDG500), as measured along the center of the stream channel, was determined.

2.3. Data analysis

The total number of bird species observed on each plot during the study period was calculated. Because adjacent land use and urbanization may influence species belonging to different migratory status groups in different ways (Rottenborn, 1997), I distinguished permanent residents and summer residents recorded on each plot. For the purposes of this study, summer residents were defined as those species for which nearly all individuals winter south of the study area, mostly Neotropical migrants. Permanent residents were defined as those species for which a substantial proportion of the population is present in the study area year-round. The density of birds on each plot (in terms of the number of individuals recorded within the effective detection distance per 10 ha per census) was calculated by season for these two groups and for all species combined.

Stepwise multiple regression was used to relate patterns of variation in a subset of nine environmental variables to the observed patterns of species richness (after square root transformation) and density among plots, both overall and separately for permanent and summer residents, by finding the regression models containing the optimal combination of explanatory environmental variables. These nine environmental variables (Table 4), found to be closely associated with riparian bird community structure based on a previous study (Rottenborn, 1997), measured native and exotic vegetation characteristics, riparian corridor width, and the degree of urbanization surrounding the bird-survey plots. The stepwise forward selection method used in these regressions included only those variables which were significant in the model at $p < 0.01$.

A bootstrap technique was used to test the sensitivity of these regression models to variation in the plots used to construct the models. From the pool of 68 plots, I randomly selected plots one at a time, with replacement of each selection back into the pool of potential plots, until I had a "bootstrap dataset" consisting of 68 plots. I created 20 such bootstrap datasets and then used each one in a stepwise multiple regression, using the forward selection process to identify environmental variables significant to the model ($p < 0.05$). I then counted the number of bootstrap regression models in which each environmental variable was included as significant. If the variables selected as significant in the original model were selected repeatedly in the bootstrap models, then confidence in the results of the original regression model would be high. Conversely, if the variables selected in the bootstrap models were consistently different from those in the original model or showed no consistency, then the actual importance of the variables selected in the original model would be questionable. This bootstrap technique was carried out separately for each of the six stepwise multiple regressions involving species richness or total density.

Canonical correspondence analysis (CCA) was used to identify the environmental variables that were most strongly associated with the structure of the entire riparian bird community and to determine the locations of species along axes composed of this subset of nine environmental variables. For these ordinations, species data consisted of the density of each bird species recorded on at least four plots at each of the 68 plots. Correlations among environmental variables were also calculated. A Monte Carlo simulation with 99 permutations was used to test the significance of the overall ordination and each of the first two axes.

Although CCA gives some information on the habitat associations of individual bird species, its main goal is to find the environmental variables that best explain the structure of the overall bird community. Therefore, stepwise multiple regression was used to identify the environmental parameters most important in determining the distribution of individual bird species among the plots. In these regressions, the densities of each species recorded on at least four plots were regressed against the entire suite of 20 environmental variables that were measured, and forward selection was used to identify the variables that were significant in each regression ($p < 0.01$).

3. Results

Of 75 bird species recorded on the 68 plots (Table 1), 52 were considered permanent residents and 23 were summer residents. Species richness ranged from eight to 30 species/plot, and density ranged from 141.7 to 593.7 individuals/10 ha. Most species were rare or sparsely distributed in the study area; 31 species were recorded

Table 1
Bird species recorded on 70 m-radius riparian plots ($n = 68$ plots)

Species	No. of plots	Mean density[a]	Species	No. of plots	Mean density[a]
Anna's hummingbird *Calypte anna*[c]	68	25.18 ± 1.32	American kestrel *Falco sparverius*[c]	13	1.27 ± 0.36
American robin *Turdus migratorius*[c]	66	30.15 ± 1.60	Green heron *Butorides virescens*[c]	12	1.58 ± 0.47
Bushtit *Psaltriparus minimus*[c]	65	54.42 ± 2.82	Wilson's warbler *Wilsonia pusilla*[b]	11	1.51 ± 0.47
House finch *Carpodacus mexicanus*[c]	60	31.00 ± 2.21	Barn swallow *Hirundo rustica*[b]	10	0.91 ± 0.32
Song sparrow *Melospiza melodia*[c]	56	16.85 ± 1.27	American crow *Corvus brachyrhynchos*[c]	10	1.41 ± 0.45
California towhee *Pipilo crissalis*[c]	55	17.72 ± 1.37	Steller's jay *Cyanocitta stelleri*[c]	10	2.40 ± 0.75
Black-headed grosbeak *Pheucticus melanocephalus*[b]	54	23.99 ± 2.11	Brewer's blackbird *Euphagus cyanocephalus*[c]	9	4.09 ± 1.73
Northern mockingbird *Mimus polyglottos*[c]	52	8.04 ± 0.78	Western tanager *Piranga ludoviciana*[b]	9	0.70 ± 0.26
Bewick's wren *Thryomanes bewickii*[c]	51	13.72 ± 1.16	Red-winged blackbird *Agelaius phoeniceus*[c]	8	1.60 ± 0.53
Black phoebe *Sayornis nigricans*[c]	51	13.55 ± 1.31	Red-tailed hawk *Buteo jamaicensis*[c]	8	0.69 ± 0.25
Pacific-slope flycatcher *Empidonax difficilis*[b]	49	21.34 ± 2.12	Rock dove *Columba livia*[c]	7	3.01 ± 1.17
Western scrub-jay *Aphelocoma californica*[c]	48	10.49 ± 1.06	Turkey vulture *Cathartes aura*[c]	7	0.86 ± 0.34
European starling *Sturnus vulgaris*[c]	47	18.11 ± 1.77	Western wood-pewee *Contopus sordidulus*[b]	7	1.29 ± 0.51
Chestnut-backed chickadee *Poecile rufescens*[c]	41	12.86 ± 1.45	Dark-eyed junco *Junco hyemalis*[c]	6	1.16 ± 0.52
Mourning dove *Zenaida macroura*[c]	38	14.53 ± 1.98	California thrasher *Toxostoma redivivum*[c]	6	1.73 ± 0.70
Black-chinned hummingbird *Archilochus alexandri*[b]	37	15.96 ± 2.24	American goldfinch *Carduelis tristis*[c]	5	1.26 ± 0.56
Lesser goldfinch *Carduelis psaltria*[c]	36	9.39 ± 1.49	Violet-green swallow *Tachycineta thalassina*[b]	5	0.53 ± 0.26
Downy woodpecker *Picoides pubescens*[c]	36	8.23 ± 1.10	Hutton's vireo *Vireo huttoni*[c]	5	0.85 ± 0.39
Warbling vireo *Vireo gilvus*[b]	35	10.83 ± 1.50	Common yellowthroat *Geothlypis trichas*[c]	4	0.70 ± 0.37
Mallard *Anas platyrhynchos*[c]	30	8.45 ± 1.28	Willow flycatcher *Empidonax traillii*[b]	4	0.32 ± 0.16
Bullock's oriole *Icterus bullockii*[b]	29	4.31 ± 0.70	Western kingbird *Tyrannus verticalis*[b]	3	0.16 ± 0.10
Nuttall's woodpecker *Picoides nuttallii*[c]	27	6.08 ± 1.06	Acorn woodpecker *Melanerpes formicivorus*[c]	3	0.82 ± 0.47
Brown-headed cowbird *Molothrus ater*[c]	26	6.12 ± 1.10	Great egret *Ardea alba*[c]	3	0.28 ± 0.17
Oak titmouse *Baeolophus inornatus*[c]	26	8.14 ± 1.39	Black-crowned night-heron *Nycticorax nycticorax*[c]	3	0.27 ± 0.16
Yellow warbler *Dendroica petechia*[b]	26	6.62 ± 1.23	Pied-billed grebe *Podilymbus podiceps*[c]	3	0.24 ± 0.13
Spotted towhee *Pipilo maculatus*[c]	25	7.28 ± 1.26	Tree swallow *Tachycineta bicolor*[b]	2	0.08 ± 0.06
Belted kingfisher *Ceryle alcyon*[c]	24	3.24 ± 0.67	Hairy woodpecker *Picoides villosus*[c]	2	0.41 ± 0.33
Swainson's thrush *Catharus ustulatus*[b]	21	3.70 ± 0.84	Common merganser *Mergus merganser*[c]	2	0.25 ± 0.20
California quail *Callipepla californica*[c]	20	6.02 ± 1.19	Brown creeper *Certhia americana*[c]	2	0.57 ± 0.43
Cliff swallow *Petrochelidon pyrrhonota*[b]	18	3.74 ± 1.14	Olive-sided flycatcher *Contopus cooperi*[b]	2	0.17 ± 0.12
Allen's hummingbird *Selasphorus sasin*[b]	17	3.31 ± 0.85	Western bluebird *Sialia mexicana*[c]	1	0.07
N. rough-winged swallow *Stelgidopteryx serripennis*[b]	16	2.04 ± 0.68	Great horned owl *Bubo virginianus*[c]	1	0.17
Ash-throated flycatcher *Myiarchus cinerascens*[b]	16	3.27 ± 0.81	Western screech-owl *Otus kennicottii*[c]	1	0.09
Red-shouldered hawk *Buteo lineatus*[c]	15	1.50 ± 0.38	American coot *Fulica americana*[c]	1	0.56
White-breasted nuthatch *Sitta carolinensis*[c]	15	3.20 ± 0.77	Cooper's hawk *Accipiter cooperii*[c]	1	0.09
Hooded oriole *Icterus cucullatus*[b]	14	2.58 ± 0.70	American redstart *Setophaga ruticilla*[b]	1	0.19
Northern flicker *Colaptes auratus*[c]	14	3.13 ± 0.82	Yellow-breasted chat *Icteria virens*[b]	1	0.06
House sparrow *Passer domesticus*[c]	13	3.07 ± 0.85			

[a] Density = number of individuals 10 ha (± standard error).
[b] Indicates summer resident.
[c] Indicates permanent resident.

on fewer than 10 plots, and only 19 species were recorded on more than half of the 68 plots.

3.1. Species richness and density multiple regression models

The three regression models for species richness were highly significant, having three to four significant variables in each model and with r^2 values of 0.58–0.77 (Tables 2 and 3). Each of the three regression models for density had only two significant variables lower and r^2 values (0.25–0.34) than the models for species richness, but all were still highly significant.

Native vegetation volume (NATIVTVV), which was highly correlated (negatively) with exotic vegetation volume (EXOTITVV, Table 4), was included in all six models and was positively associated with species richness and density. The number of bridges within 500 m of a plot (BRIDG500) was the most important variable in all five of the models in which it appeared, explaining more of the variation in each model than any other variable. In the only model in which BRIDG500 did not appear, the distance to the nearest bridge (DISTBRID), which was highly correlated (negatively) with the number of bridges near a plot, was the most important variable. In all models, species richness and density decreased as the number of bridges near a plot or proximity of a plot to the nearest bridge increased. Total species richness and permanent resident species richness increased significantly as the distance to a

Table 2
Regression coefficients and y-intercepts for multiple regression equations of species richness (SR) and density (DENS) versus environmental variables[a]

	Intercept	BRIDG500	NATIVTVV	DISTBUIL	RIPWIDTH	DISTBRID	F[b]
Total SR	3.67	−0.20b	0.29b	0.01b	0.001a	–	51.5c
Permanent resident SR	3.61	−0.15b	0.18b	0.01b	–	–	29.8c
Summer resident SR	1.37	−0.19b	0.33a	–	0.001b	–	27.2c
Total DENS	226.35	−24.80b	56.66a	–	–	–	20.2c
Permanent resident DENS	148.64	–	32.20a	–	–	0.07a	11.4c
Summer resident DENS	33.31	−9.59a	23.51a	–	–	–	16.6c

[a] Letters following the regression coefficients indicate the significance of each variable in the overall regression equation (a, $p < 0.01$, b, $p < 0.001$, c, $p < 0.0001$).
[b] F-values are for tests of significance of the overall regression equations.

Table 3
Proportion of variance (r^2) explained by variables selected in multiple linear regressions of riparian bird species richness and density. Separate results for permanent residents, summer residents, and all species. The proportion of variance explained by the model containing all significant variables is given in the total section

	Species richness			Density		
	Permanent	Summer	Total	Permanent	Summer	Total
BRIDG500	0.41	0.35	0.49	–	0.21	0.25
NATIVTVV	0.05	0.08	0.14	0.08	0.13	0.13
DISTBUIL	0.12	–	0.09	–	–	–
RIPWIDTH	–	0.13	0.05	–	–	–
DISTBRID	–	–	–	0.18	–	–
Total	0.58	0.56	0.77	0.26	0.34	0.38

Table 4
Correlations among environmental variables used in multiple linear regressions of bird species richness and density and in canonical correspondence analyses

	NATS-TDEN	EXOS-TDEN	NATI-VTVV	EXOT-ITVV	ARTI-F500	DIST-BUIL	DIST-BRID	BRID-G500	RIPW-IDTH
NATSTDEN	1.00	−0.13	0.42	−0.35	−0.16	0.21	0.18	−0.14	0.11
EXOSTDEN	–	1.00	−0.24	0.34	0.13	−0.17	−0.01	0.13	−0.23
NATIVTVV	–	–	1.00	−0.63	−0.19	0.28	0.29	−0.26	0.29
EXOTITVV	–	–	–	1.00	−0.08	−0.15	−0.18	0.13	0.02
ARTIF500	–	–	–	–	1.00	−0.55	−0.15	0.33	−0.45
DISTBUIL	–	–	–	–	–	1.00	0.15	−0.28	0.19
DISTBRID	–	–	–	–	–	–	1.00	−0.57	0.17
BRIDG500	–	–	–	–	–	–	–	1.00	−0.31
RIPWIDTH	–	–	–	–	–	–	–	–	1.00

building (DISTBUIL) increased, while total species richness and summer resident species richness increased significantly with increasing riparian corridor width (RIPWIDTH).

The bootstrap regressions confirmed that the original regression models were not very sensitive to variations in the plots used to construct the models (Table 5). The variables found to be significant in the original models were selected as significant in 14–20 of the bootstrap models. In contrast, variables that were not included as significant in the original models appeared in no more than 10 of the bootstrap models. These results indicate that the variables found to be significant in the original models were indeed the variables most closely associated with species richness and density.

3.2. Canonical correspondence analysis

The results of the CCA of the riparian bird community appear in Fig. 1 as a biplot of the species scores

along the first two axes of the ordination. Although there was little overall variance in the species data, as noted by the relatively low eigenvalues for the first two axes (0.25 and 0.08), the ordination explained this variance fairly well. The first two axes explained 14 and 5% of the variance in the species data, respectively, and the vectors for the environmental variables and the species scores together explained 49% of the variance in the species–environment relationships along the first axis and 17% of the variance on the second axis. The species-

Table 5
Results of the bootstrap regressions of species richness (SR) and density (DENS) vs environmental variables

	BRIDG500	NATIVTVV	DISTBUIL	RIPWIDTH	DISTBRID	Other[b]
Total SR	20[a]	20	18	16	–	6
Permanent resident SR	20	19	15	–	–	8
Summer resident SR	20	18	–	20	–	10
Total DENS	17	20	–	–	–	10
Permanent resident DENS	–	14	–	–	20	10
Summer resident DENS	16	19	–	–	–	8

[a] For each of the variables that were included as significant in one of the original regression models, this table gives the number of bootstrap equations (out of a total of 20) in which the variable appeared as significant ($p < 0.05$)
[b] Other indicates the maximum number of bootstrap equations in which a variable that was not included as significant in the original model was found to be significant.

Fig. 1. Canonical correspondence analysis ordination diagram for the riparian bird community. Points correspond to the scores of individual species as a function of the axes, which are linear combinations of environmental variables. Arrows represent the environmental variables included in the model best representing the distribution of the species among the plots. The lengths of the arrows indicate the relative importance of each environmental variable in the model, and the direction of each arrow relative to the axes indicates how well the environmental variable is correlated with each axis. The location of each bird species relative to the arrows indicates the environmental conditions associated with the occurrence of each species.

environment correlations, indicating the ability of the environmental variables to explain the variation in bird community composition, were 0.87 for the first axis and 0.73 for the second. The overall ordination and the first and second axes were significant ($p = 0.01$).

Native vegetation volume (NATIVTVV), riparian corridor width (RIPWIDTH), distance to a building (DISTBUIL), number of bridges (BRIDG500), and percent cover by artificial surface around a plot (ARTIF500), the most important variables in the multiple regressions of species richness and density, were again the variables most strongly associated with bird community structure (Fig. 1). The first axis of the ordination was influenced primarily by number of bridges (BRIDG500) and artificial surface cover (ARTIF500) in one direction and by native vegetation volume (NATIVTVV), riparian corridor width (RIPWIDTH), distance to a building (DISTBUIL), and distance to a bridge (DISTBRID) in the opposite direction. This axis seems to separate the plots in narrow riparian corridors and in the most heavily urbanized areas from plots in less urbanized areas and/or in broader riparian corridors. Most of the species on the positive end of this axis are urban-adapted species, while many of those on the negative end are sensitive to human disturbance or require specific habitat features that are not present in highly urbanized areas.

Axis II was affected most strongly by native vegetation volume. Many of the species on the positive end of axis II, which is negatively correlated with native vegetation volume, are species generally associated with early-seral habitats. With the exception of rock dove, house sparrow, and Brewer's blackbird, the species on the negative end of axis II are generally associated with structurally complex habitats.

3.3. Multiple linear regression models for individual bird species

Of the 61 bird species that were recorded on at least four plots, significant regression models ($p < 0.01$) were constructed for 48 species (Table 6); the r^2 values for these significant models ranged from 0.08 to 0.64. In contrast, the densities of 13 species were not significantly related to any of the environmental variables ($p > 0.01$). Of the 21 environmental variables used in these analyses, 17 were included in models for at least one species. The variables that were significant in the most models, and which therefore seemed to be important to the most species, were the number of bridges within 500 m (BRIDG500), riparian corridor width (RIPWIDTH), total vegetation volume (TOTALTVV), and distance to the nearest bridge (DISTBRID).

Based on the results of the CCA and these regressions, the species whose populations are likely to decline as a result of increasing urbanization in the study area ("sensitive" species) and those whose populations are likely to remain stable or increase as a result of urbanization barring extensive habitat destruction ("tolerant" species) were identified (Table 7).

4. Discussion

4.1. Patterns of association between birds and urbanization

Changes in riparian bird communities resulting from urbanization may be caused by a number of factors. The most extreme impacts on riparian bird communities, which result from the outright destruction of riparian vegetation, are due primarily to the loss of structural resources (Rottenborn, 1997). However, where riparian woodlands remain intact, other urbanization-related factors may influence these bird communities. This study differs from most previous studies of the effects of urbanization on birds in one major respect: whereas most studies have examined the direct effects of habitat alteration, this study focused on the ways in which intact remnants of riparian habitat have been affected by urbanization on adjacent lands.

Variation in avian species richness, density, and community structure was closely related to environmental variables associated with urbanization. Plots closer to developed areas generally had lower species richness than those farther from development, and the densities of a number of species increased as proximity to roads and buildings decreased. The percent cover by buildings or by all artificial surfaces within 500 m of a plot was associated with the densities of some species but was not as important as the distance to the nearest building or road. Although some urban-adapted species, such as mourning dove and northern mockingbird, were positively associated with the percent cover by artificial surface around these plots, most species were negatively related to these variables. These results are similar to those of Friesen et al. (1995), who found that the density of housing around forest patches in Ontario was strongly associated with the species richness and abundance of Neotropical migrants nesting in the woodlots, indicating that urbanization can have substantial impacts on habitat remnants that are not directly altered.

Along streams in the Santa Clara Valley, cat density tends to be higher adjacent to residential and industrial areas than adjacent to undeveloped agricultural areas (Rottenborn, 1997). The number of people intruding into riparian corridors is probably also higher where setbacks between riparian habitats and developed areas are narrow and where housing density is higher on adjacent lands. Birds using riparian corridors very close to roads and buildings may be affected by noise and

Table 6
Significant ($p < 0.01$) positive (+) and negative (−) relationships between habitat/land use variables and bird densities

	CANOPCOV	CANOPHT	FOLHTDIV	TOTALTVV	NATIVTV	NATSTDEN	NATPROST	EXOSTDEN	OAKSTDEN	DISTPAVE	DISTBUIL	DISTBRID	BUILD500	PAVED500	ARTIF500	BRIDG500	RIPWIDTH	r^2
Great egret												+						0.263
Green heron						+												0.121
Black-crowned night-heron																		ns[a]
Turkey vulture												+						0.094
Mallard						+							−					0.203
Red-shouldered hawk		+										+						0.210
Red-tailed hawk											+							0.128
American kestrel												+						0.093
California quail				+									−				+	0.557
Rock dove											−					+		0.365
Mourning dove						+												0.081
Black-chinned hummingbird							−						+					0.172
Anna's hummingbird											−							0.094
Allen's hummingbird																		ns
Belted kingfisher																		ns
Acorn woodpecker																		ns
Nuttall's woodpecker				+												−		0.320
Downy woodpecker											+					−		0.143
Northern flicker		+													−			0.238
Western wood-pewee		+							+	+								0.231
Willow flycatcher																		ns
Pacific-slope flycatcher	+			+												−		0.322
Black phoebe					−							−						0.102
Ash-throated flycatcher								−			+						+	0.346
Western kingbird		−				−							−				+	0.577
Hutton's vireo									+				−					0.340
Warbling vireo	+									+						−		0.246
Steller's jay		+						+									+	0.228
Western scrub-jay																		ns
American crow																		ns
Swainson's thrush					+					+								0.307
American robin	+															−		0.239
Violet-green swallow																	+	0.139
N. rough-winged swallow			−												−			0.484
Cliff swallow		−		−														0.321
Barn swallow			−	−														0.575
Chestnut-backed chickadee					+													0.148
Oak titmouse									+						−		+	0.521
Bushtit					+											−		0.228
White-breasted nuthatch	+								+		+						+	0.610
Bewick's wren				+						+								0.359
California thrasher		−		+													+	0.305
Northern mockingbird													+					0.128
European starling																		ns
Yellow warbler					+			−	−				−				+	0.582
Common yellowthroat																		ns
Western tanager																		ns
Spotted towhee				+					+					−	−		+	0.640
California towhee																−		0.194
Song sparrow						+										−		0.354
Dark-eyed junco								+			+							0.263
Black-headed grosbeak	+															−		0.392
Red-winged blackbird	−											+						0.468
Brewer's blackbird																+		0.267

(Table continued on next page)

Table 6–*contd.*

	CANOPCOV	CANOPYHT	FOLHTDIV	TOTALTVV	NATIVTV	NATSTDEN	NATPROST	EXOSTDEN	OAKSTDEN	DISTPAVE	DISTBUIL	DISTBRID	BUILD05D	PAVE05D	ARTIF05D	BRIDG05D	RIDWIDTH	r^2
Brown-headed cowbird																		ns
Hooded oriole																		ns
Bullock's oriole			+				+									–		0.212
House finch																		ns
Lesser goldfinch								–				+						0.127
American goldfinch												+						0.081
House sparrow							–									+		0.326

[a] ns, multiple regression model contains no significant variables.

movements of people and domestic animals on adjacent lands (Reijnen et al., 1995, 1996), influences that would not be as great in riparian corridors far from developed areas. Although this study does not identify a minimum buffer width required for the maintenance of the integrity of riparian bird communities, these results indicate that broader buffers better maintain riparian bird species richness.

Bird species richness and density were negatively related to the abundance and proximity of bridges. This relationship may be a direct result of disturbance from traffic, noise, or human ingress, or a result of barriers to free movement across gaps between sections of riparian habitat (Lens and Dhondt, 1994; Machtans et al., 1996). Alternatively, the abundance of bridges may be simply a proxy variable for the overall degree of urbanization around a plot, therefore representing a number of different factors acting in concert to influence riparian bird communities. Bridge locations did not seem to be influenced significantly by topography or other natural features that might impact these riparian bird communities.

Of the species that were negatively associated with the abundance or close proximity of bridges, sedentary species such as song sparrow and California towhee might be affected by the fragmentation of riparian corridors by bridges, and species such as great egret, American kestrel, black-headed grosbeak, warbling vireo, and Pacific-slope flycatcher may be averse to the noise and disturbance associated with bridges. Three species were positively associated with bridge abundance; rock dove and house sparrow are exotic species that nest under bridges, while Brewer's blackbird is an abundant urban-adapted species in the study area.

The positive relationship of bird species richness and density with native vegetation is to be expected since exotic vegetation is often deficient in structural and dietary resources required by many native animal

Table 7
Predicted sensitivity of bird species to urbanization in the Santa Clara Valley

Tolerant species[a]	
Mallard	American crow
Red-shouldered hawk	Bushtit
Rock dove	American robin
Mourning dove	Northern mockingbird
Anna's hummingbird	European starling
Black-chinned hummingbird	California towhee
Allen's hummingbird	Dark-eyed junco
Belted kingfisher	Brewer's blackbird
Black phoebe	Brown-headed cowbird
Northern rough-winged swallow	Hooded oriole
Barn swallow	House finch
Cliff swallow	House sparrow
Western scrub-jay	
Sensitive species	
Pied-billed grebe	Chestnut-backed chickadee
Green heron	Oak titmouse
Black-crowned night-heron	White-breasted nuthatch
Great egret	Bewick's wren
Turkey vulture	Swainson's thrush
Red-tailed hawk	California thrasher
American kestrel	Warbling vireo
California quail	Hutton's vireo
Acorn woodpecker	Yellow warbler
Downy woodpecker	Common yellowthroat
Nuttall's woodpecker	Wilson's warbler
Northern flicker	Western tanager
Ash-throated flycatcher	Black-headed grosbeak
Western wood-pewee	Spotted towhee
Willow flycatcher	Song sparrow
Pacific-slope flycatcher	Red-winged blackbird
Western kingbird	Bullock's oriole
Violet-green swallow	Lesser goldfinch
Steller's jay	American goldfinch

[a] Abundance of "tolerant" species is expected to increase or remain stable in riparian habitats following urbanization, while abundance of "sensitive" species is expected to decline following urbanization.

species (Anderson et al., 1977; Mills et al., 1989). The abundance of exotic vegetation in riparian areas in the Santa Clara Valley is substantially higher in urban areas adjacent to residential and industrial lands than in rural areas adjacent to agricultural land (Rottenborn, 1997). Likewise, the width of the riparian corridor was significant in several regression models and in the CCA. While some species may actually have been attracted to larger expanses of habitat, broader corridors likely contained greater habitat heterogeneity and more later-successional tree species (at the edges of the corridors) than narrow ones, and broader strips of riparian woodland may have provided a greater buffer from human influences to birds nesting in the interior of the corridor.

Examination of the CCA and the significant relationships between environmental variables and the densities of individual bird species revealed several patterns. Neotropical migrants, such as Swainson's thrush, yellow warbler, western wood-pewee, Wilson's warbler, willow flycatcher, and warbling vireo, were positively related to broad riparian corridors and high native vegetation volume and negatively related to variables associated with intense development. Although a few Neotropical migrants that use exotic vegetation frequently (e.g. black-chinned hummingbird, Allen's hummingbird, and hooded oriole) were present in heavily urbanized areas, the majority of Neotropical migrants seemed to show an aversion to riparian habitat in developed areas, as has been reported elsewhere (Friesen et al., 1995).

Species that glean insects from foliage or bark showed a strong preference for less urbanized areas, possibly reflecting low insect densities on heavily urbanized plots having abundant exotic vegetation (Mills et al., 1989). In contrast, ground-foraging and seed-eating species showed no clear patterns of distribution relative to urbanization. Most cavity-nesting species displayed a clear negative association with more urbanized plots; this may be due to a shortage of older trees with cavities or to competition with European starlings, which were positively associated with urbanization. Most of the species that nest on or near the ground, including California thrasher, California quail, spotted towhee, and Bewick's wren, were also negatively related to urbanization, possibly due to predation by cats and other predators in urban areas.

4.2. Conservation of bird diversity in riparian habitats

In many areas, urbanization is likely to continue to spread in the next century (US Department of the Interior, 1994), subjecting riparian systems currently in rural or natural areas to detrimental impacts. The foregoing relationships allow one to predict how further urbanization could affect riparian bird communities in the future. Thus, the densities of most obligate riparian species, Neotropical migrants, foliage and bark-foraging insectivores, ground-nesting birds, native cavity-nesters, and oak-associated species are likely to decline with the encroachment of bridges, adjacent development, and other elements of built landscapes.

However, some of the detrimental effects of urbanization on riparian bird communities can be minimized with proper planning. The single most important step that can be taken to conserve riparian bird communities in the face of urbanization is to minimize development in and along floodplains by maintaining broad buffers of undeveloped land between developed areas and riparian habitats. Habitat restoration efforts, particularly those that broaden riparian corridors and link fragments of riparian habitat, would augment habitat area and enhance the value of existing habitat by further buffering riparian birds from human influences outside the corridor. Where development has occurred in close proximity to riparian habitats, efforts to minimize direct human disturbance of riparian plant and bird communities (e.g. by restricting access to riparian habitats) and replace exotic plants with native species would also benefit riparian bird communities.

Acknowledgements

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Letter No. 18

SCOPE
Santa Clarita Organization for Planning and the Environment
TO PROMOTE, PROTECT AND PRESERVE THE ENVIRONMENT, ECOLOGY AND QUALITY OF LIFE IN THE SANTA CLARITA VALLEY
POST OFFICE BOX 1182, SANTA CLARITA, CA 91386

5-3-04

Jeff Hogan
Planning Dept.
City of Santa Clarita
23920 Valencia Blvd.
Santa Clarita, Ca. 91355

CITY OF SANTA CLARITA
2004 MAY -3 P 5:2
RECEIVED
CITY CLERK'S OFFICE

Re: River Park Project MC 02-175, SCH#2002091081

Dear Mr. Hogan:

Please find below our initial comments on the environmental impact report. We will be submitting additional comments and back up documents.

Biology

We are concerned about the adequacy of the biological surveys. As the City is well aware, this same environmental consultant (Impact Sciences) prepared the EIR for Newhall Ranch and did not disclose the spine flower(See attached LA Times article). Presence of the spade foot toad was not disclosed on this project even though many people were well aware of its existence. We request that *independent* new surveys for the arroyo toad be conducted according to required protocol. It has also come to our attention that Lou Courtois, the biologist on the previous project, ignored data regarding the toad and did not use required survey protocols. (See Attachments as listed.) Spadefoot toads were sighted in San Francisquito Canyon in 2001 and the sightings were confirmed by Scott Harris, Dept. of Fish and Game. Additional unmitigated impacts to the California fully protected Black-tailed jack rabbits, 1 2 3

We request disclosure of all confidentiality agreements between the developer and the consultants involved with this project. 4

Status reports on the Natural River Management Plan are required each April. We request that these reports be included by reference in the EIR. We further request that and independent firm, not Impact Sciences, be hired to perform the oversight. Impact Sciences is now conducting all environmental review for Newhall/Lennar projects and providing mitigation oversight. This creates a situation rife with conflicts of interest that no honest business entity would tolerate. 5

We request that public notification be required when additional surveys are conducted under such mitigation so that the public can be assured that proper protocols are followed. 6

Further, the City must address the cumulative impacts to the Santa Clara River watershed. Such impacts have been extensive and devastating. They include impacts to endangered species, water supply and water quality, and air pollution which the City itself has asserted during the CEMEX mine proceeding. We hereby submit and incorporate by reference all documents submitted and research conducted by the City of Santa Clarita and known to exist in its files, of public documents. regarding impacts to the Santa Clara River. We attach the recent Santa Clara River cumulative impact letter submitted by multiple organizations (see attached letter). These cumulative impacts must be addressed. 7

Water

Although an SB610 Assessment is provided, it neglects to adequately disclose current water demand from previously approved, but not yet built projects as found in the County the development monitoring system. The demand in the SB610 Assessment is only for existing connections and does not adequately disclose approved, but unbuilt projects. Up to date figures must be included in the water supply assessment and the water section of the EIR. 8

The water demand stated in the SB610 analysis is in fact less than that currently now being used according to the 2003 Santa Clarita water Supply report). Water used for agriculture must be included as existing demand according to the water code. Also, as the County is well aware, some 7000AF of the agricultural withdrawal was relied on to approve the Newhall Ranch specific Plan, so demand for this water already exists. 9

The SB610 analysis also includes water from the Saugus Aquifer that is polluted by ammonium perchlorate. This is contrary to requirements of the law regarding what can be counted as existing water supply (See section 10910(d)(1) and (2). We have attached documents that indicate the reduction in supply from that pollution and ask that this section be corrected. 10

Further, the SB610 analysis relies on the 41,000 acre foot water transfer for which there is no certified Environmental Impact Report. The EIR was decertified by the 2nd District Appellate Court in 2002 (*Friends of the Santa Clara River v. Castaic Lake Water Agency*). This is contrary to Section 10910(d)(2)((D). 11

We believe that it is improper to count the 41,000 acre foot water transfer from Kern County for planning purposes until the two decertified Environmental Impact Reports have been completed and approved by the respective lead agencies and the Courts.. It was clear that the neither the Courts nor the settlement agreement intended that this water transfer would be used to approve new projects, but only that water from it could be used for existing customers. Neither the Court nor the City of Santa Clarita may rely on the unpublished decision included in the Administrative record which merely addresses use of the transfer by current residents. We will be entering a number of supporting documents into the administrative record to provide the basis for this statement of fact. 12

Ammonium Perchlorate Pollution

At a public hearing. the project proponent stated that the water from contaminated wells closed due to excessive levels of ammonium perclorate pollution should be counted because they will be back on line in a year. 13

There is no supporting documentation to collaborate that statement. We have attached the DTSC clean-up schedule for your reference. Additionally, the process for well head clean up used in other localities does not clean to the state health goal level of 6ppb. The process in used in Puente Valley requires a brine line. The Santa Clarita Valley does not have a brine line. The Sanitation Districts recently investigated the cost of building a brine line during hearings to establish a TMDL for chlorides with the Regional Water Quality Board. They estimated the cost to be approximately $50 million. There is no funding for such a project. Condemnations and property acquisitions necessary to build the brine line would take years. 13

The second process put forward by the water agencies is bio remediation. This is still an experimental process requiring Dept. of Health Services certification before it can be used in the Santa Clarita Valley. Such certification normally takes two years. 14

Additionally, there is concern that, because of the mineral composition of the ground water in the Santa Clarita Valley, the proposed clean-up process will raise the levels of nitrates in the effluent. Ground water in the Santa Clarita Valley has been experiencing rising levels of nitrates (an indication of over draft) for the last several years. Many wells are well over the half mark to the maximum contaminant level allowed. Further increases in nitrate levels would not be acceptable. 15

Santa Clarita Valley Water Supply Report

This report was required of the water Agencies by Supervisor Antonovich beginning in 1999 to help evaluate the water supply in the Santa Clarita Valley. Disclosure of the water production reports is also required by the 1987 update to CLWA's enabling legislation (Water Code Chapter 103 Section 15.2(a)). It is important for the Commission to review the latest water production figures because of the substantial number of new units that are now requesting water service (an estimated 2000 to 4000 units). Such rapid increases in water demand must be evaluated before new approvals are granted. 16

It is now May of 2004 and this water supply report has not been released to the City or the public.

We assert that the Commission will not be able to adequately evaluate the water supply for this huge project without obtaining answers to the above issues. We therefore request that the issues be addressed and documentation supplied during the course of these hearings.

The City may not rely on an SB610 Assessment or and Urban Water Management Plan that it knows to be inaccurate.

We continue to protest the reliance on water withdrawals from the Santa Clara River in excess of safe yields. Water levels are dropping in wells in the eastern reaches and tributaries, an indication of overdraft, even though rainfall measured 24 inches last year, 10 inches above normal. Reliance on groundwater that will over draft the basin is contrary to the LA County General Plan, the Santa Clarita Area wide Plan and the City General Plan. (See attached documents.). Withdrawal in excess of safe yield that affects endangered species may also be contrary to SB610. There is no completed base line study on the Santa Clara River. Studies submitted to the public utilities commission show average production to be approximately 17

28,000 Acre Feet. Production has far exceed that amount over the last seven years (see Bachman study attachment). 17

Increased use of imported water and its affects on water quality were not addressed. Reliance on larger amounts of imported water may make compliance with the Chloride TMDL impossible. It already will result in the exceedance of health standards for Trihalomethane pollution in areas that must depend on higher ratios of imported water. 18

We request that these issues be addressed and that a Subsequent or Supplemental EIR be prepared and recirculated before this project is approved. 19

Hillside Management

This project proposes removal of a significant ridgeline. That ridgeline currently buffers and existing neighbor hood from the traffic and air pollution and would buffer this community from the significant impacts in those areas that will occur if the Newhall Ranch Road extension is approved. This project does not conform to the Hillside Ordinance of the City of Santa Clarita. It does not propose any amenities that would not otherwise be required as significant impacts under federal and state law. Therefore the City may not approve removal of the significant ridgeline. 20

Innovative Application Not Circulated

Apparently the applicant submitted an "Innovative Application" for the Ridgeline Ordinance at the April 20th meeting of the Planning Commission on this project . However, this application was not included, nor was it circulated in the Environmental Impact Report. Therefore, the impacts that would arise from any proposed change to make the project "innovative or move the project to comply with the hillside ordinance were not addressed in the EIR, nor provided as an alternative. We request that we receive a copy of this application and that any changes due to this proposal be properly circulated to the public to allow for adequate comment. 21

We propose an innovative alternative that would move the entire project back from the flood plain of the Santa Clara River and preserve both the River and provide oak tree avoidance. It would also provide mitigation areas for species such as the rare Black-tailed jack rabbit, the spadefoot toad Lizard. 22

Flood Hazard

The map of the project Significant Ecological Area, figure 4.6-6 of the additional Revised Biological Resources Information Document shows a severe constriction of river flow by this project and the project on the opposite bank, also owned by Newhall Land and Farming (Lennar Corp.). This constriction will cause back up of flood flows upstream of the project and increased velocity and erosiveness of flows downstream of the project (see attached Army Corps article from the New York Times.) Increased velocity will affect downstream property owners and jurisdictions. 23

As the City is already aware, the current constriction at Bouquet Bridge caused by a reduced bridge span, caused considerable damage to the bridge in the 1997 El Nino event, resulting in a huge cost (some $600,000) to the tax payers. We incorporate by reference all information 24

currently in the City files regarding previous flood damage. We believe that the constriction caused by illegal extension of the flood plain into the river by the project on the opposite bank must be addressed as a safety/flood hazard issue in this Environmental document. 25

Conclusion

We oppose this project in its current configuration. We request that a project alternative be submitted that adheres to the City's Hillside Ordinance and preserves a greater portion of the floodplain. This would also serve as mitigation for the impacts to the many rare and endangered species impacted by this project. Given the Santa Clarita Valley's current water supply problems, Lennar Corp. should also be required to provide a "no net loss" offset program for the proposed water usage on the project. This could include re-planting high water use landscape areas with lower water use, drought tolerant natives, a toilet replacement program, use of gray water, etc. Lastly, public and alternative non-auto modes of transportation must be incorporated into the project design to reduce air pollution. 26 27 28 29

In the past, the City has allowed changes to the project design without re-circulating the environmental document. Under such a method, by the time the project is approved, no one in the public can be sure exactly what is being proposed and how impacts are being addressed. We request in advance that changes (including those that have already occurred) be re-circulated and public comment allowed, before the project is approved. 30

Thank-you for your time.

Sincerely,

Larry Kanner

Attachments as indicated in the text and listed below

Attachments

1. LA Times Article on Newhall's failure to disclose

2. Arroyo toad occurance map,news articles on sitings, DFG letter
3. Cumulative Impact Letter
4. SB 610 Definition of existing water supplies
5. Reports showing continued contamination of the Saugus Aquifer and quantifying loss of production.
6. Water AGency reports indicating safe "perennial yeild is 32,000 AF and chart on water pumpage in the Santa Clara River
7. Rainfall and well level data
8. Bachman, PhD Hydrologist submittal to the PUC re: Santa Clara River
9. US Army Corps of Engineers article indicating impacts from flood flow constriction in a river system.

3/24/2003

Questions Surround Newhall Project

L.A. County supervisors plan to vote Tuesday. But opponents say the developer failed to provide accurate environmental data.

By Richard Fausset
Times Staff Writer

Los Angeles County supervisors will consider granting final approval to the 21,600-home Newhall Ranch project Tuesday, nearly three years after a judge forced the developer to prove it has enough water for the massive subdivision.

But some of the project's most serious complications spring from a different source — the discovery on the site of the endangered San Fernando Valley spineflower and fallout from an investigation into the developer's alleged destruction of the plant.

In county government, details of the spineflower case have led to a disagreement over the trustworthiness of Newhall Land & Farming Co.'s latest environmental reports, which supervisors will consider Tuesday. County biologist Daryl Koutnik said the planning staff is comfortable with the documents, but the supervisors' ecological advisory committee doubts whether the company's new environmental reports are complete.

"We're not dealing with a company here that is willing to divulge its information," committee member Frank Hovore said at a January meeting. "So why should we believe this information is even credible?"

The discovery of the plant on the development site was announced in May 2000, a few days before Kern County Superior Court Judge Roger D. Randall temporarily blocked supervisors' initial approval of the project.

More recently, the Los Angeles County district attorney's office investigated allegations that the developer destroyed some spineflowers, but dropped its probe in February as part of a settlement with Newhall.

The company asserts it did nothing wrong.

But others are not convinced. In a letter to her Los Angeles County colleagues this month, Ventura County Supervisor Kathy Long said public records provide "a clear picture of Newhall deliberately withholding spineflower discoveries from regulatory agencies, censoring consultant's conclusions made available to the public, and targeting spineflower colonies for destruction."

Others say the controversy has exposed flaws in Los Angeles County's environmental reporting procedures.

A state Assembly bill has been introduced to address the issue, and last week Supervisor Michael Antonovich introduced a motion to study changes locally.

If the supervisors are now wary of the system used to analyze Newhall Ranch, some opponents wonder why the board is considering a final vote on the project Tuesday.

> *'People are saying, "What else are these people not telling us?" '*
>
> **Teresa Savalkie,** Friends of the Santa Clara River

Such problems pose new challenges for officials who were already dealing with complex issues stemming from the proposal.

Despite a series of lawsuits that complicated the water rights picture, Newhall believes it has developed one of the most detailed water supply plans ever, with water coming from four sources — including purchases from a private company in Kern County, which critics see as a dangerous step toward privatization of California water.

Effect Reanalyzed

On Randall's orders, the company reanalyzed the project's effect on traffic, aquatic life and a wildlife corridor.

If supervisors sign off on the reports, they will still have to be approved by the Kern County court.

But the spineflower issue has provided new ammunition for critics who say that Newhall cannot be trusted to protect the fragile resources of the Santa Clarita Valley, one of Southern California's fastest-growing suburbs.

"People are saying, 'What else are these people not telling us?' " said Teresa Savalkie, a member of the group Friends of the Santa Clara River.

For Newhall, which has promised to create a preserve for the flowers as part of the settlement, the outcry is part of "a very concerted campaign on the part of a small group of people to make an issue of trust," spokeswoman Marlee Lauffer said.

"There have certainly been things that in retrospect we might have done differently," she said. "But never with any kind of intent."

The county advisory group, the Significant Ecological Area Technical Advisory Committee, is concerned that the new environmental reports were prepared by consultants hired by Newhall who were required to sign confidentiality agreements with the company.

The agreements forbid the consultants from discussing their findings with anyone, including government officials.

In the spineflower case, Newhall consultants who signed the agreements refused to be interviewed by state Department of Fish and Game investigators.

Citing such concerns, Ventura County — which filed the 1998 lawsuit to delay the project — has threatened a second legal action against Los Angeles County if the project is approved.

The Newhall Ranch property, which borders Ventura County on the west, caused officials there to fear that the project will encourage sprawl and overburden local roads and water supplies.

Santa Clarita environmentalists say the spineflower case is reminiscent of other controversies involving Newhall Land & Farming Co.

In 1991, a Newhall subsidiary pleaded no contest to charges of illegally altering the Santa Clara riverbed and jeopardizing the habitat of two endangered species, the least Bell's vireo songbird and the unarmored three-spined stickleback fish.

In a court settlement, the company agreed to pay $94,600 in fines and conduct $300,000 in habitat restoration.

In 2000, environmentalists alleged the company was using electronic noisemakers to scare away endangered birds so they would not be found during surveys.

Newhall contended the machines were not used during the surveys, but during construction, for the safety of the birds. The U.S. Fish and Wildlife Service investigated the matter but declined to file charges.

Arroyo Toad

Questions about the spineflowers have led the advisory committee to doubt Newhall's assertion that another endangered species, the arroyo toad, has not been found on the Newhall Ranch property, Hovore said.

Because the frog has been found upstream and downstream of the development site on the Santa Clara River, the committee thinks the toad's presence within the project property is "likely," although Newhall's paid consultant did not find it there.

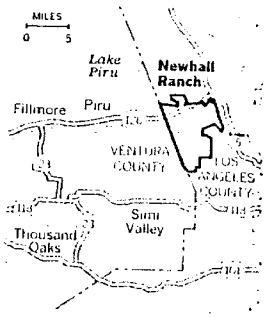
"We asked [the consultants] if there are arroyo toads [on the property] and they said, 'No, there are not,' " Hovore said at the meeting. "Well, how do we know they are telling the truth? They're under a confidentiality agreement."

County planner Lee Stark said Hovore's concerns were unfounded.

The documents under review need not go into so much detail, Stark said, because the company will have to conduct more in-depth surveys when it builds specific tracts on the property.

Lauffer said confidentiality agreements are common in the development industry and have no bearing on the reports.

"The whole issue has been blown so far out of proportion that it's ridiculous," she said. "All pertinent information is made public."



Los Angeles Times

Anaheim Rethinks Motel Stay Ordinance

Hermosa Beach on Edge After Slaying

In a city of few

that the child died from as-
phyxiation and head

NRMP
Arroyo Toad Report
L E G E N D
Impact Sciences Arroyo Toad Sighting May 2001
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Daily News

Published in the Santa Clarita Valley at 24800 Avenue Rockefeller, Valencia

SANTA CLARITA

SUNDAY

dailynews.com JUNE 10, 2001 ONE DOLLAR

WEATHER

Mostly sunny
Highs: 88-94
Lows: 55-62
Back of Viewpoint

Toad report overlooked

Sighting not used in key habitat decision

y Kathleen Sweeney
aff Writer

SANTA CLARITA — The rare 2-ch, greenish-gray toad recently found ong the banks of the Santa Clara iver was first spotted in the river ven years ago by a biologist now con-ucting surveys for Santa Clarita's rgest developer.

In 1994, Louis Courtois saw the royo southwestern toad east of the olden State (5) Freeway, according to e California Natural Diversity Data-ise. But the U.S. Fish & Wildlife Ser-ce didn't discover the report until st month, after The Newhall Land and Farming Company's property was excluded from a critical habitat area for the toad — in part because the amphibian hadn't been found on its property.

"Somehow, it (the 1994 report) was overlooked," said Rick Farris, a senior biologist for the U.S. Fish & Wildlife Service. "We have no explanation why it wasn't accounted for."

The sighting of the endangered toad wasn't the last made by Courtois and other biologists working for the developer, records show.

According to Newhall Land's environmental impact report on its North Valencia I project, the toad was found in 1996 west of McBean Parkway and along the upper San Francisquito Creek — near the same area it was found two years prior. The report notes there is moderate potential for the toad in the area and good habitat.

In 1998, Frank Hovore, a biologist working for Newhall Land on its West-creek and North Valencia II projects, was watching what he believed were arroyo toad eggs in San Francisquito Creek. Then, a large storm swept through the area, washing away the eggs.

In 1999, Courtois, surveying the Santa Clara River east of McBean Parkway for a Castaic Lake Water Agency project, concluded the toad didn't appear within the reaches of this project. But the U.S. Fish & Wildlife Service rejected that finding, saying the surveys weren't conducted within protocol, were incomplete, were conducted during adverse conditions or during a season of severe weather conditions and reporting requirements weren't fulfilled.

"You based your conclusions upon your inability to hear calling arroyo toads because of the 'overwhelming presence of other . species.' We do not agree that the inability to hear arroyo toads over background noise of other species necessarily results in the conclusion that the arroyo toads are absent from site," Fish & Wildlife officials wrote in a letter to Courtois.

See TOAD / Page 4

Management proposal filed

TOAD / From Page 1

In 2000, while surveying land east of I-5 for an endangered fish — the unarmored threespined stickleback — for the Fish & Wildlife Service, Courtois identified six arroyo toads, but didn't report the finding until March 23 — after the critical habitat was identified for protection.

Farris said because the finding was made under a permit for work on the stickleback, law didn't require he immediately report the findings.

"It's possible that it wouldn't have had an effect," on the critical habitat designation, he said.

Nancy Sandburg, a biologist hired by the Center for Biological Diversity and Friends of the Santa Clara River, has since January discovered more than 10 arroyo toads along the Santa Clara River and San Francisquito Creek.

Lois Grunwald, Fish & Wildlife Service spokeswoman, said Newhall Land's property was excluded from the critical habitat area because the company submitted a Natural Rivers Management Plan outlining how the developer will protect any endangered species discovered on the property.

That plan didn't address the arroyo toad because surveyors didn't find evidence of the species, said Marlee Lauffer, Newhall Land spokeswoman. The company also was unaware of Courtois' 2000 findings until he reported it in March.

Because of the recent findings, although Newhall hasn't received Sandburg's report, the company is surveying for arroyos in the area again.

"If it is identified, there are mitigation measures that can deal with it," Lauffer said.

Dan Holland, an ecologist/herpetologist who studied the toads for five years at Camp Pendelton in northern San Diego County, discovered that arroyo toads can be present in a habitat without being seen.

"If you only go out and stand on the bridge and listen for the arroyo toad, that's not how to search for them," Holland said. "You may not find them even if they are there."

Temperature, available food, water flow and the time of year can either drive toads into the open or keep them buried in the sand along river banks. Usually, adults only come out at night.

The toad lives in rivers that have shallow pools adjacent to sandy terraces, and breeding occurs on large streams with persistent water from late March until mid-June, officials said.

The toad has lost about 75 percent of its historical habitat because of urbanization, dam construction beginning in the late 1900s and other activities, officials said. Because of habitat destruction, only eight drainages remain where they will live. The toad became a federally endangered species in January 1995.

While developers insist the river management plan will protect the toad, Holland said construction can disrupt habitat areas in several ways.

Building homes in the upland areas increases predators, such as raccoons, and eliminates habitat around the river where the toads travel.

Concrete soil river bank stabilization can suffocate buried toads, off-road vehicles or pedestrians following trails can squash the toads.

Also, a change in water velocity — which occurs when neighborhoods drain into waterways — will make the river or creek bed less suitable for the toad to lay eggs.

The Army Corps of Engineers and the U.S. Fish and Wildlife Service are reviewing th Newhall Land project permit and the river management plar a process that will take seven months.

Aaron Allen, senior projec manager for the Army Corps said Newhall Land is preparin a biological assessment of th management plan that will spe cifically address the possibl impacts for the toads. Once the assessment is complete, th Corps and Fish & Wildlife Se vice will reinitiate consultatio on the project.

Until then, Newhall Land ha stopped construction, Alle said.

"All the information that i coming to light is all new infor mation to us," he said. "An that's why we are reinitiatin consultation for the species a this time."

SIX SIGHTINGS

Chronology: Biologists have documented six sightings since 1994 of the endangered arroyo southwestern toad.

Date	Location observed	Biologist
1994	East of Golden State (5) Freeway	Louis Courtois
1996	West of McBean Parkway and upper San Francisquito Creek	Unidentified
1998	San Francisquito Creek	Frank Hovore
2000	East of I-5 at Castaic Junction	Louis Courtois
2001	Critical habitat established	
2001	San Francisquito Creek and the Santa Clara River	Nancy Sandburg

Sources: U.S. Fish & Wildlife Service, The Newhall Land and Farming Company's environmental impact reports.

STATE OF CALIFORNIA-THE RESOURCES AGENCY
DEPARTMENT OF FISH AND GAME
South Coast Region 5
4949 View Ridge Avenue
San Diego, California 92123
(619) 467-4201

GRAY DAVIS, Governo

RECEIVED
JUL 06 2000

May 30, 2000

Mr. Ross Pistone
Newhall Land & Farming Co.
23823 W. Valencia Blvd
Valencia , CA 91355

Dear Mr. Pistone,

The California Department of Fish & Game (the Department) has reviewed the Verification Request Letter (VRL) and supporting documentation for the Decoro Bridge over San Francisquito Creek. This project is covered under Streambed Alteration Agreement 5-502-97, for projects under the Natural River Management Plan (NRMP) for the Santa Clara River and its tributaries. The following mitigation measures need to be incorporated into the document before the we can approve the project.

1. The Department has received information indicating the presence of Western Spadefoot toad (*Scaphiopus hammondi*), a state species of special concern, within the project area. This particular species was not included in the NRMP, possibly due to lack of information regarding it's presence in the area. This past year has provided optimal conditions for the Western Spadefoot, and unknown populations have been documented. Thought it will be impossible to survey for Western spadefoot during the proper time of year (January through May) on phase I of the project the species should be surveyed for prior to phase II. If the toad , tadpoles or eggs are found suitable measures should be implemented to salvage them. Salvaged specimens should be relocated to suitable habitat free from future project disturbance. Following mitigation measure BIO-1 (b) and BIO-2 will help minimize impacts to Western spadefoot, but the department will work with Valencia to develop the appropriate measures, and expand the NRMP to include this species.

2. Updated (Spring 2000) bird survey dates needs to be submitted for the project area. Surveys shall be conducted during the appropriate time of year, and include all species present. The Surveys shall be submitted to the Department for review and approval prior to commencing project activities. In the future the most recent bird surveys shall be submitted to the Department with the VRL's for project under the NRMP.

3. If project activities are proposed during the breeding season (March 15- September 1) surveys to detect nesting birds (not just listed or otherwise sensitive birds) shall be conducted as described in mitigation measure BIO-3(b). This measure was intended to protect all nesting birds. Section 3503 of the Fish and Game code state

"It is unlawful to take, possess or needlessly destroy the nest of any bird, except as otherwise provided by this code or any regulation adopted pursuant thereto." Breeding bird surveys shall be completed no earlier than 7 days prior to commencing activities. This is to ensure birds do not move into the area and begin nesting between the time survey are completed and construction begins. If work is going to be completed outside the breeding season, then nesting bird surveys will not be required.

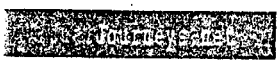
4. If nesting birds are found, the nest sites shall be flagged/fenced and no construction activities shall occur within 300 feet of the nest(500 feet for raptors) until after the nest has fledged. The results of the pre-construction surveys including nest locations shall be submitted to the Betty Courtney of the Department upon survey completion. This information should be transmitted by fax to 661-263-8306. If birds begin nesting in habitat areas adjacent to the project site following the commencement of project activities, then work will not be stopped next to the new nest site. The stated project approach included the installation and use of electronic bird repelling devices along the northern and southern work limits prior to the start of the breeding/nesting season . This was intended as a safeguard to minimize bird activity with the defined work area. The Department does not approve of the placement of these type of devices.

5. Project submitted under the NRMP were approved conceptually by the Department, since detailed CEQA review was to be completed by the lead agency for each individual project. The CEQA document needs to be submitted with the VRL for Department review, in order to adequately assess project impacts. Therefore, on future projects falling within the NRMP, the Department will require a copy of the CEQA document to be submitted with the VRL.

Thank you for you assistance in these matters. If you have any further questions please contact Betty Courtney, of my staff at (661) 263-8306.

Sincerely,

C.F. Raysbrook
Regional Manager
Morgan Webb for
Chuck Raysbrook.





SCOPE

U.S. Army Corps of Engineers, Los Angeles District
Regulatory Branch – Ventura Field Office
ATTN: CESPL-CO—2004-00004-AOA
2151 Allesandro Drive, Suite 255
Ventura, California 93001
E: aaron.o.allen@usace.army.mil

VIA ELECTRONIC MAIL AND U.S. MAIL

Re: Comments on Public Notice/Application Number 2004-00004-AOA

December 15, 2003

Dear Mr. Allen:

The California Native Plant Society, Center for Biological Diversity, Environmental Defense Center, Environment Now, Friends of the Santa Clara River, Santa Clarita Organization for Planning and the Environment ("SCOPE"), San Fernando Valley Audubon Society, Audubon California, and Santa Clarita Sierra Club Group, VisualJourneys, and Ventura Coastkeeper (collectively referred to as the "Coalition") are all public interest organizations dedicated to water quality, air quality, habitat and open space conservation, as well and the quality of life for people who value these things. Our members and staff have long been concerned about the fate of the extremely significant biological resources of the Santa Clara River watershed. On behalf of our members, staff, and members of the public with an interest in protecting these resources, the Coalition submits the following comments on **Public Notice/Application Number 2004-00004-AOA** for the issuance of wetlands fill permit under Section 404 of the Clean

Water Act ("the Permit") for the Tapie and Spring Canyons east of Canyon Country, California ("Spring Canyon Project" or "Project").

I. Introduction

The Santa Clara River is southern California's last truly dynamic big river. It boasts one of the largest watersheds in the South Coast region at 1,600 miles, is the longest free-flowing river in Southern California, and is the only one that extends from the desert to the coast. The river is of critical biological importance linking several major ecoregions. It is also lined by riparian habitats so rare that they exist in only three to five percent of their original range in the western United States, and are home to twelve federally endangered species. Unfortunately, the Santa Clara River and its tributaries are within one of the most rapidly urbanizing watersheds in the state of California, making the area a high priority for monitoring and enforcing environmental regulations. Over twenty United States Army Corps of Engineers ("ACOE" or "Army Corps" or "Corps") permits have been issued in the area, paving the way for extensive urbanization and degradation of this pristine environment. Any alteration of this important area must be approached with the utmost caution so as not to destroy this ecologically and biologically important region.

Nevertheless, the Spring Canyon Project application, which proposes to discharge dredged or fill material into a tributary of the Santa Clara River, is supported by extremely limited substantive environmental analysis or documentation. Specifically, the application lacks an Environmental Impact Statement ("EIS"), a Least Environmentally Damaging Practicable Alternatives ("LEDPA") analysis, or a Cumulative Impacts ("CI") analysis. Furthermore, to the Coalition's knowledge, the Corps has not granted a hearing on this Permit application, or *any* other Section 404 permit application since at least 1998. As such, the Coalition strongly urges the Corps to extend or reopen the comment period once the necessary EIS, LEDPA, and CI analyses are completed and circulated to the public. Furthermore, the Coalition requests that the Corps grant a hearing to discuss the significant impacts associated with the Spring Canyon Project Permit and other proposed projects along the Santa Clara River.

II. Since the Application Materials Contain Insufficient Information for Meaningful Public Comment, the Public Comment Period Should be Extended and a Hearing Should be Granted

As discussed herein in further detail, there is insufficient information contained in the Public Notice/Application for the public to comment meaningfully on every aspect of the proposed Project. Environmental assessment documents referred to in the Permit application, which will eventually be submitted in support of the application, are not current, completed, or available for review. Specifically, the Permit application lacks an Environmental Assessment ("EA"), and a LEDPA analysis. Clearly the environmental impacts of the proposed Project and its alternatives need to be considered by the Army Corps, as well as commenting agencies and members of the affected public. In fact, the purpose of the public comment period is to provide the Corps with feedback on those

very assessments. Without the EA and LEDPA, the Corps' sister agencies and the public have little factual information about the Project on which to base substantive comments, and the comment period is rendered meaningless. Please note that while these and other deficiencies will be addressed in further detail below, it is impossible for the public to comment *fully* upon these issues at this point, given the incomplete information supplied by the application materials.

A. The Environmental Assessment is not Complete or Available for Review and Public Comment

Army Corps staff has indicated that an Environmental Assessment will be prepared for this Project pursuant to National Environmental Policy Act, 42 U.S.C. §§ 4321 et seq. ("NEPA") requirements. The EA will address more specific environmental impacts than those covered in the application. The Coalition asserts that an EA is insufficient for a project of this size and location, and that a full Environmental Impact Statement is required (*see* Section II below). Nevertheless, even the EA being conducted *pursuant to this Permit application* will not be completed during the comment period nor released to the public. As a result, no comments will be received on the Project's environmental impacts identified therein. The Corps has essentially denied the public any opportunity to provide feedback on the Project's environmental effects. If the Corps is to provide a meaningful chance for the public to comment on the entire Permit application, the EA must be made available for public comment when it is completed and incorporated into the Permit application.

Currently, the Permit application is incomplete; it contains virtually no assessment of the environmental effects of the proposed Project, provides no meaningful information on which to submit substantive comments, and fails to comply with the applicable laws. The application therefore must be denied.

B. The Required LEDPA Analysis is not Complete or Available for Review and Public Comment

The Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq. ("Clean Water Act" or "CWA"), requires each applicant for a Section 404 permit to conduct a LEDPA analysis. 33 U.S.C. 1344(b)(1); 40 C.F.R. 230.10(a); *see* Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material, 40 C.F.R. Part 230. Specifically, the CWA prohibits the discharge of dredged or fill material, and also the issuance of a Section 404 permit, if there is "a practicable alternative to the proposed discharge which would have a less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse impacts." 40 C.F.R. 230.10(a). The LEDPA analysis is a critical portion of the application process, which serves as a good faith attempt to find ways to reduce the Project's impacts. In order to receive a Section 404 permit, the applicant must "demonstrate that the proposed project design is the least environmentally damaging practicable alternative." PN, p. 4.

However, while ACOE staff has indicated that the Permit applicant is currently drafting a LEDPA analysis, that document, like the EA, will not be completed or made available to the public during the public comment period. The Permit application merely states, "less damaging alternative designs include a smaller development that reduces impacts to waters of the United States, alternative location for the proposed development and the no federal action alternative (environmental baseline)." PN, p. 4. These alternatives are sweeping generalizations that provide the public with virtually no specific information. As such, it is impossible to evaluate the impacts of these alternatives.

Because no LEDPA analysis is available for review, no comments can be received or considered on any proposed alternatives identified therein. The Corps has essentially denied the public any opportunity to provide feedback on the environmental effects of the proposed alternatives to determine whether they are less damaging than the initial proposal and/or do not have other significant impacts themselves. If the Corps is to provide a meaningful chance for the public to comment on the entire Permit issuance, the LEDPA, as part of the Project application, must be made available for public comment when it is completed. Until then, the current Permit application is incomplete; it contains virtually no assessment of the proposed Project's alternatives and their environmental effects, provides no meaningful information on which to submit substantive comments, and the application must be denied.

C. The Public Comment Period Must be Reopened and a Hearing Granted in order to Allow for Meaningful Public Comment

Public participation in the CWA permitting process is of primary importance. "Congress enacted public participation rules understanding that 'these regulations would do more than pay lip service to public participation; instead 'the public must have a genuine opportunity to speak on the issue of protection of its waters' on federal, state and local levels.'" *Natural Resources Defense Council, Inc. v. U.S. EPA,* 859 F.2d 156, 177 (D.C. Cir. 1988). By failing to release the LEDPA and EA for public comment, the Corps denies the public a genuine opportunity to submit substantive comments on the Permit application and the Project's potential environmental impacts. The public must therefore be afforded the opportunity to comment on the EA and LEDPA analysis submitted in support of the Project's Section 404 application. Without these analyses, the public cannot sufficiently comment on the protections of its waters, and the public participation requirements are rendered meaningless.

Furthermore, the Spring Canyon Project is proposed in an area where numerous other development projects are proposed or occurring. Based on information available to the Coalition, at least twenty (20) ACOE permitted projects are proposed or exist along the Santa Clara River or its tributaries. These projects affect well over 3,000 acres of land, 12 acres of waters of the U.S., and 2.25 acres of wetlands. Nevertheless, the Corps has not conducted a cumulative impacts analysis for the Spring Canyon Project or the Santa Clara River region as a whole. Instead of requiring a complete EIS with a detailed CI analysis, the Corps consistently determines that EAs are sufficient for each individual project. However, EAs lack the detailed CI analysis. As a result, cumulative impacts are

not initially identified as significant, and are essentially ignored throughout the remainder of the Permit process.

Moreover, it is the Coalition's understanding that despite evident public concern, the Corps has not granted a *single* hearing on any of these permits issued in the Santa Clara River region since the August 1998 EIS drafted for the Valencia Company's Natural River Management Plan ("NRMP") project. By failing to conduct sufficient environmental review and/or release it to the public, as well as failing to hold hearings, the Corps has consistently excluded the public from participating in the Permit process in any meaningful way.

Therefore, the Coalition urges the Army Corps to extend or reopen the comment period on this Project once the required analyses have been completed, made available to the public, and other application deficiencies have been corrected. Furthermore, the Coalition requests that the Army Corps grant a hearing on this Permit to address the significant public concern regarding this Project.

III. The Army Corps Must Prepare an EIS on the Issuance of the Permit

The Public Notice of the Permit application states that a "preliminary determination has been made that an environmental impact statement ["EIS"] is not required for the proposed work." PN, p.2. The cursory conclusion that this massive 548-acre/542-unit Project will not have a significant impact on the environment is nonsensical. It is clear at this juncture that the ACOE must prepare an EIS on the issuance of this Permit.

The National Environmental Policy Act requires that an EIS be prepared for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). Whether a significant effect on the environment exists at a project site requires the consideration of two broad factors: "context and intensity." *See* 40 C.F.R. § 1508.27; 42 U.S.C. § 4332(2)(C). These factors are discussed in turn below.

A. Context

In determining whether a federal action is "significant," NEPA's implementing regulations require the Corps to analyze the significance of an action "in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant." 40 CFR 1508.27(a).

It is indisputable that the issuance of a 404 Permit for this Project mandates the preparation of an EIS when viewed in the context of Los Angeles County, Ventura County, the Southern California region, and/or nationally. This Project, when combined with the other projects either permitted or completed, will turn one of the last pristine

areas in Southern California into dense urban development destroying one of the most important areas for the preservation of biological diversity and protection of water quality in the region. Additionally, the growth inducing and cumulative impacts of this Project, which will be discussed in further detail below, will be devastating to the environment and have not been adequately disclosed by the PN.

The Santa Clara River is southern California's last truly dynamic big river. It boasts one of the largest watersheds in the South Coast region at 1,600 miles, is the longest free-flowing river in Southern California, and is the only one that extends from the desert to the coast. The river is of critical biological importance linking several major ecoregions: Coastal Plain, Coast Ranges, Traverse Ranges, and Mojave Desert. The 116 mile-long river rises on the northern slope of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, lined by riparian habitat featuring willow, mulefat, and cottonwood forests – habitats so rare that they exist in only three to five percent of their original range in the western United States. These streamside habitats are home to twelve (12) federally endangered species among other sensitive wildlife habitat. Unfortunately, the Santa Clara River and its tributaries are within one of the most rapidly urbanizing watersheds in the state making the area a high priority for monitoring and enforcing environmental regulations.

In the context of both the Southern California region as well as nationally, any alternation of this important area, including the discharge dredged or fill material into a tributary of the Santa Clara River, must be approached with the utmost caution so as not to destroy this ecologically and biologically important area. The preparation of an EIS is therefore required to prevent further loss of important natural resources in Los Angeles County, benefiting both the Southern California region and the nation as a whole.

B. Intensity

An EIS is required for actions that threaten a severe or intense impact on the environment. 40 C.F.R. 1508.27 (b). The factors the Corps must consider in determining the intensity of the action are set forth at 40 C.F.R. § 1508.27(b). These include whether the action is related to other actions with individually insignificant but cumulatively significant impacts; the degree to which the proposed action affects public health or safety; unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas; the degree to which the effects on the quality of the human environment are likely to be highly controversial; the degree to which the possible effects on the human environment are highly uncertain; the degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act, and; other factors.

Furthermore, the Corps must consider the effects of the Permit *over the entire project area*, because it is clear that the project could not occur but for the issuance of this 404 Permit by the Corps. 33 C.F.R. § 325, Appendix B 7(b)(2). The factors the ACOE should consider in its determination to prepare an EIS are discussed below.

i. *The Issuance of the Section 404 Permit is "Significant" and Requires an EIS because the Proposed Project will have Significant Cumulative Impacts on the Santa Clara River*

A federal action is considered significant and thus requires an EIS when it is "reasonable to anticipate a cumulatively significant impact on the environment." 40 C.F.R. 1580.27(b)(7). NEPA regulations define cumulative impact as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 CFR § 1508.7.

Based on the information contained in the PN, the environmental impact of this Project can only be considered to be extremely intense. The Spring Canyon Project is proposed in an area where numerous other urbanization projects exist. While NEPA even recognizes the cumulative impact of numerous but minor actions, the projects proposed along the Santa Clara River are more than minor – they are large-scale housing developments. Furthermore, the impact of the 548-acre Spring Canyon Project combined with the other projects along the Santa Clara River is anything but minor. Together these urbanization projects constitute a major impact on the river – one that threatens to devastate the entire watershed. As noted above, collectively, the projects along the Santa Clara River affect well over 3,000 acres of land, 12 acres of waters of the U.S., and 2.25 acres of wetlands. However, the Project proposal virtually ignores any direct, indirect and cumulative effects.

The Army Corps is fully aware of the potential cumulative impacts of extensive development along the Santa Clara River as evidenced by their EIS for the NRMP project. That EIS identifies the following environmental impacts as unavoidable: degradation of ambient air quality, loss of native habitats and adverse effects on flora and fauna; potential reduction in the quality of natural surface and groundwaters, reduction in natural vistas and visual amenities. Draft Environmental Impact Statement/ Environmental Impact Report, 404 Permit and 1603 Streambed Alteration Agreement for Portions of the Santa Clara River and its Tributaries, applicant: Valencia Company, December 1997 ("Valencia Co. EIS"), Ch. 4, p. 4-2. However, the Corps also concludes that that project's impacts "could combine with the similar impacts associated with the continued development of the region outside land owned by Valencia Company. The combination of these impacts may elevate smaller, less significant impacts (e.g. impacts to water quality and habitat) to potentially significant cumulative impacts." Id. at Ch. 4, p.4-3. Specifically, the Corps asserts that

> potentially significant cumulative impacts could occur due to the combined impacts of the proposed 404 permit/1603 Agreement and the following nearby projects: Tesoro del Valle, Newhall Ranch Specific plan; Valencia Commerce Coalition, South Fork Channel Clearing;

> Circulation Element Amendment, and LA County Pre-EL Nino Channel Clearing. Impacts of grater concern include loss of riparian wildlife habitat due to nearby stormwater runoff, water quality changes due to urban stormwater runoff, and effects on habitat for the unarmored three-spined stickleback and least Bell's vireo.

Id. at Ch. ES p. ES-11. The ACOE further states that the issuance of a Section 404 permit "would facilitate, in part, the occurrence of these impacts, because the permit would allow the installation of the necessary infrastructure for continual development." Id. at Ch 4-3. Despite their clear awareness of the potential cumulative effects caused by their issuance of the 404 Permit, the Corps failed to require a cumulative impacts analysis for the Spring Canyon Project.

(a) The Effects of Urbanization on the Santa Clara River are Significant

The impacts of urbanization resulting from large-scale development such as that occurring along the Santa Clara River are devastating. The Spring Canyon Project proposes to temporarily or permanently disturb "265.6 acres of the upland habitat," almost fifty percent of the total 548-acre site. PN, p 3. Turning natural vegetated areas into impervious surfaces such as houses, driveways, sidewalks, and roads will cause much of this "disturbance" thus generating increased stormwater runoff.

Studies and research conducted by "Regional agencies, academic institutions, and universities have identified storm water and urban runoff as significant sources of pollutants to surface waters in Southern California... Development and urbanization increase pollutant load, volume, and discharge velocity" by converting natural pervious ground, which has the ability to absorb rainwater runoff and remove pollutants, to impervious surfaces such as roadways, which act as pollution highways. *California Regional Water Quality Control Board, Los Angeles Region, Order No. 01-182, NPDES Permit No. CAS004001, Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges Within the County of Los Angeles, December 13, 2001* ("LA County MSWP"), p. 4.

Furthermore, the "increased volume, increased velocity, and discharge duration of storm water runoff from developed areas has the potential to greatly accelerate downstream erosion and impair stream habitat in natural drainages. Studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving waters. Significant declines in the biological integrity and physical habitat of streams and other receiving waters have been found to occur with as little as 10 percent conversion from natural to impervious surfaces. Percentage impervious cover is a reliable indicator and predictor of potential water quality degradation expected from new development." LA County MSWP, p.5

Alone, this Project virtually guarantees watershed and water quality degradation of the Santa Clara River. However, when the Spring Canyon Project is considered together with the numerous other projects on the river, the fate of the river is set in stone. As a result of the combined development pressure along its edges, the last free-flowing pristine river in Southern California will suffer intense habitat and water quality degradation from urban and stormwater runoff. Therefore, the Corps must prepare an EIS to assess the cumulative impact of the Spring Canyon Project, combined with the other development projects in the area, on the Santa Clara River and the surrounding habitats. Additionally, it is notable that the Corps has *never* undertaken an assessment of the cumulative impacts of *all* development projects and proposals on Santa Clara River and its tributaries. The Coalition recommends the Corps conduct a region-wide cumulative impacts analysis. Such an analysis would better inform the Corps about the potential effects along the river, and reduce the amount repetitive analysis required by individual cumulative impact analyses.

ii. *The Issuance of the Section 404 Permit without Considering Cumulative Impacts or Conducting a Hearing is a "Significant" Action and Requires an EIS because it May Establish a Precedent of Lenient Environmental Review for Future Permits.*

A federal action is considered significant and thus requires an EIS when it "may establish a precedent for future actions with significant effects." 40 C.F.R. 1580.27(b)(6). Issuing the Spring Canyon Permit without considering the cumulative impacts of the Project or conducting a hearing on the environmental effects and Project alternatives threatens to set a precedent of lenient environmental review for future 404 permits.

The Corps' Section 404 permitting process is defective. Despite their clear awareness of the cumulative impacts of each additional project that proceeds as a result of their permitting authority, the Corps has failed to require EISs for most projects. With the sole exception of the NRMP project, the Corps habitually relies on less intensive EAs to assess project impacts; the Coalition understands that the Corps will utilize this same flawed process for the Spring Canyon Project. However, Environmental Assessments fail to adequately analyze cumulative impacts. Based on the EA's inadequate cumulative impact analysis, analyzers conclude that an EIS is unnecessary.

Furthermore, as noted above, the Coalition believes that the Corps has not granted a single hearing on any of the permits issued in the Santa Clara River region. When the Corps fails to conduct the appropriate environmental review, the public is unable to fully comment on substantive environmental concerns. A public hearing is their only recourse, their only opportunity to voice their concerns about the Project and the Corps' permitting process. As a result of consistently failing to conduct the appropriate environmental review or grant public hearings, the Corps continually ignores cumulative impacts in direct violation of NEPA.

The Corps has already established a precedent of conducting lenient EAs instead of the more comprehensive EIS, which includes a cumulative impacts analysis. By issuing Spring Canyon's Section 404 Permit, again without conducting the appropriate environmental review or a hearing, the Corps legitimates their flawed process and establishes a precedent for future permit applications. Therefore, they must break this pattern by conducting an EIS for this and future projects that adequately assess the cumulative impacts of each projects combined with other projects along the river.

iii. *The Issuance of the Section 404 Permit is "Significant" and Requires an EIS because the Proposed Project will have Significant Impacts on the Wild and Scenic Santa Clara River*

In determining whether an action is significant and an EIS is necessary, NEPA requires that the Corps consider the unique characteristics of the geographic area in which the action is proposed, including its proximity to wetlands, wild and scenic rivers, and ecologically critical areas. 40 C.F.R. 1508.27(b)(3). As noted above (Section II(A)), the Santa Clara River is Southern California's last truly wild river. Its watershed contains rare and important wetland and other habitats found in few other places in the nation. Furthermore, the river is on the edge of the vast urban metropolis of the City of Los Angeles, and provides one of the last natural scenic areas in the county. The river is lined by hiking trails enjoyed by California residents and visitors. The proposed Project will result in massive urbanization of this natural area thereby significantly affecting this unique geographic region. Therefore, the Corps must prepare an EIS to consider the impacts of the Project on this unique geographic area with its wild and scenic river.

iv. *The Issuance of the Section 404 Permit is "Significant" and Requires an EIS because the Proposed Project May Jeopardize Federally Listed Endangered or Threatened Species*

In order to legally issue the Permit, the Army Corps must make a finding that the Project will not jeopardize the continued existence or adversely modify the critical habitat of any federally listed species. 40 C.F.R. § 230.10(b). The Army Corps has an independent duty under Section 7 of the Endangered Species Act ("ESA") to insure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (16 U.S.C. § 1536).

Based on a 2001 survey for the San Fernando Valley spineflower and the slender-horned spineflower, the Corps determined that the Project would not impact these two federally listed endangered or threatened species. This single and outdated survey is a woefully inadequate basis on which to determine the non-existence of the spineflowers.

Furthermore, the application makes a general claim that no other federally listed endangered or threatened species would be affected by the Project, but fails to indicate the basis, if any, for this determination. It fails to acknowledge that a significant number of other federally listed endangered or threatened species exist in the Santa Clara River

watershed, such as the endangered southwestern willow flycatcher (*Empidonax trailii extimus*) and least Bell's vireo (*Vireo bellii pusillus*), the threatened Santa Ana sucker (*Catostomus santaanae*), the endangered arroyo toad (*Bufo microscaphus californicus*). Thus, the application does not address the effect of the proposed Project on those species.

The Corps has a duty to make diligent efforts to identify any endangered or threatened species affected by the issuance of the 404 Permit, and they have failed. They must prepare an EIS to ensure the proposed Project will not affect the spineflowers or any other endangered or threatened species, including but not limited to those mentioned in this letter.

(a) The Application Failed to Analyze the Potentially Significant Effects of the Spring Canyon Project on the Unarmored threespine stickleback

The proposed Project will result in the complete destruction of 265 acres of extremely valuable and sensitive wildlife habitat. Nevertheless, it lacks any discussion of the Project's effects on the endangered Unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*) ("stickleback" or "UTS"), which is present only in northwestern Los Angeles County and western Santa Barbara County. This fish subspecies was listed as Endangered on October 13, 1970 (35 FR 16047), and is protected under the provisions of the Endangered Species Act of 1973 as amended. The likelihood that the Spring Canyon Project will jeopardize the continued existence of this listed species alone necessitates the preparation of an EIS.

Unarmored threespine sticklebacks are small fish (up to 6 centimeters) inhabiting slow moving reaches or quiet water microhabitats of streams and rivers. Favorable habitats usually are shaded by dense and abundant vegetation but in more open reaches algal mats or barriers, such as rock or fallen wood, may provide refuge for the species. Sticklebacks feed on insects, small crustaceans, and snails, and to a lesser degree, on flat worms and nematodes. Sticklebacks reproduce throughout the year with a minimum of breeding activity occurring from October to January. Reproduction occurs in areas with adequate aquatic vegetation and gentle flow of water where males establish and vigorously defend territories. The male builds the nest of fine plant debris and algal strands and courts all females that enter his territory; a single nest may contain the eggs of several females. Following spawning, the male defends the nest and, after approximately six days, the newly hatched fry. Sticklebacks are believed to live for only one year.

The UTS is a highly imperiled species whose decline has been well documented for the past several decades. The 1980 proposed rule designating critical habitat for the species states the following "Research commissioned or conducted by the Unarmored Threespine Stickleback Recovery Team indicates that the present status of this fish is precarious. Negative impacts resulting in or contributing to complete elimination of populations in various river systems are documented from large-scale impoundments, stream channelization, increased water turbidity, introduction of non-native competitors

and predators, and from water pollution of several kinds. Many of these impacts are corollary to increased urbanization in the Los Angeles Basin area." Proposed critical habitat designation, 45 Federal Register 76012.

Pollutants contained from any runoff or wastewater discharge from the Project, including polluted storm water would cause a negative impact on any stickleback population present downstream from the Project, possibly resulting in death or injury to one or many individual fish. UTS are documented to be extremely sensitive to pollution impacts associated with the effects of urbanization as noted in the 1980 proposed rule designating critical habitat, "Their survival would be affected adversely by activities greatly modifying water current, depth or vegetation, such as large scale impoundment, and by any activities resulting in serious increase of turbidity or even moderate increase of chemical burden, such as the addition of chlorinated water or chemicals for the control of algae or weeds." *Id.*

As stated in the proposed critical habitat designation, the stickleback requires clear water for its mating rituals, any introduction of silt or other debris that would discolor the water, or increase its opacity, would interfere with, or even completely disrupt the stickleback's successful reproduction. Such debris discharge is essentially guaranteed if the Corps issues the applicants Section 404 Permit. Furthermore, continuous modification of the river channel and banks, introduction of pollutants associated with urbanization, such as chlorine from water treatment facilities, and pesticides and fertilizer from landscaping will have severe detrimental affect on the stickleback.

Accordingly, the discharge of dredged or fill material pursuant to the proposed 404 Permit, as well as the highly polluted runoff that can be expected from the Spring Canyon Project are likely to harm any stickleback in the Santa Clara River in the vicinity of the Project. Alone, the fact that the Corps failed to analyze the potential impacts of the Permit and the proposed Project on this species necessitates an EIS to conduct this critical analysis.

v. The Issuance of the Section 404 Permit is "Significant" and Requires an EIS because the Effects of the Proposed Project Are Highly Controversial

Much controversy exists in the Santa Clara River watershed over the extensive development as evidenced by the numerous comments letters submitted on various development projects in the area. Comments have been submitted on the Spring Canyon Project by numerous other organizations, including South Coast Wildlands and Santa Clarita Sierra Club Group, and members of the Coalition have submitted comments on the majority of the other projects along the Santa Clara River. Additionally, even litigation has surrounded the following projects: Newhall Ranch, West Creek, and Pony League Fields. It is clear that from the numerous comments and lawsuits that development projects along the Santa Clara River are highly contested and controversial.

As such, the Corps is required to prepare an EIS prior to determining whether to issue or deny this Section 404 Permit application.

vi. The Issuance of the Section 404 Permit is "Significant" and Requires an EIS because the Effects of the Proposed Project Are Uncertain

As discussed in detail in Section II, the Permit application is incomplete. The Corps has failed to provide the public with adequate documentation of the environmental impacts of this Project, including the LEDPA analysis, and the EA. Further, the application lacks the required endangered species and cumulative impacts analysis. As such, it is clear that the effects of the proposed Project remain uncertain. Because the impacts are the subject of disagreement and uncertainty, the ACOE must prepare an EIS and make it publicly available for comment prior to determining whether to issue or deny this Section 404 Permit application.

IV. The 404 Permit Must Be Denied Because The Proposed Project is Insufficient to Document Compliance with the 404(b)(1) Guidelines

The ACOE's level of environmental review of direct, indirect, and cumulative impacts to waters of the U.S. and biological resources is grossly insufficient to satisfy the requirements of the CWA's 404 (b)(1) Guidelines. It has not been demonstrated that the Project is the Least Environmentally Damaging Practicable Alternative as required by the CWA implementing regulations, nor has it been demonstrated that the Project will not cause or contribute to the violation of applicable water quality standards, violate any toxic effluent standard under 33 C.F.R. § 1317, or jeopardize the continued existence of any federally listed species or adversely modify critical habitat under 40 C.F.R. § 230.10(a-b). It also has not been demonstrated that the Project will not cause significant degradation to waters of the U.S. as required by 40 C.F.R. § 230.10(c). The specific and extensive factual findings required to make these determinations have not been made as required by 40 C.F.R. § 230.11. Therefore the Permit application must be denied.

A. The Proposed Project is Not the Least Environmentally Damaging Practicable Alternative (40 C.F.R. 230.10(a))

As discussed above, the application lacks a LEDPA analysis as required by the 404(b)(1) Guidelines. 40 C.F.R. 230.10(a). Nevertheless, it is clear that the proposed Project is clearly *not* the least environmentally damaging practicable alternative. Practicable alternatives include "activities that do not involve a discharge of dredged or fill material into the waters of the United States" or discharges "of dredged or fill material at other location in waters of the United States or ocean waters." 40 C.F.R. 230.10(a)(1).

The Spring Canyon Permit applicant has the option to build its Project in a less ecologically sensitive area, reduce the size of the Project and increase the amount of open space, increase mitigation measures, or forgo building altogether. Until these options are

considered, the Corps cannot make a determination that the proposed Project is the LEDPA, and therefore must deny the Permit.

i. Environmental Impacts have not been Avoided, Minimized, and Mitigated to the Maximum Extent Practicable

No serious effort has been made by the applicant to avoid, minimize, and mitigate the impacts of the Project to wetlands and wildlife.

(a) Wetlands

Although the application addresses wetland mitigation, the applicant has not adequately described the proposed wetland mitigation plan. The application merely states that "to compensate for permanent impacts to 2.39 acres of waters of the United States that supports alluvial scrub habitat, the applicant proposes to restore and enhance approximately 4.78 acres of waters of the United States and adjacent upland habitat in the proposed preservation areas in the project area." PN, p. 4. No further description is offered for how this mitigation measure was determined or why additional avoidance, minimization, and mitigation has not been required, especially in light of the applicant's planned effect on the waters of the United States. Such restoration efforts may be inadequate in size and/or location. Furthermore, the proposal to "restore and enhance approximately 4.78 acres of waters of the United States and adjacent upland habitat in the proposed preservation areas in the project area" provides no assurance that any mitigation will in fact be accomplished.

In 1994, U.S. Fish and Wildlife Service ("FWS") completed a report evaluating thirty wetland creation projects authorized through the Corps section 404 program (DeWeese 1994).[1] Twenty-two of these projects ranged in age from three to five years old, and eight projects were greater than five years old at the time of the study. FWS found that the value of the habitat created, which included the local wildlife species that would be expected to use the habitat, was low. This was especially the case for seasonal wetlands that had a habitat value of only 40 percent of what existed previously. The study concluded that, of the 600 acres of proposed mitigation, half were meeting less than 75 percent of the mitigation conditions. Thus, the evidence suggests that creating healthy and productive wetlands is not as facile and straightforward as the applicant asserts.

In 2001, the National Research Council released a report entitled "Compensating for Wetland Losses Under the Clean Water Act" (National Research Council 2001).[2] This study concludes that the goal of no net loss has not been achieved through the Corps

[1] DeWeese, J. 1994. An evaluation of selected wetland creation projects authorized through the Corps of Engineers section 404 program. U. S. Fish and Wildlife Service, Sacramento, California. 90 pp. plus appendices.

[2] National Research Counci 2001. Compensating for wetlands under the Clean Water Act. National Academy Press. Available at http://www.nap.edu/. This study is hereby incorporated by reference and a copy will be provided to the Army Corps upon request.

regulatory program. The study points out that created wetlands are almost universally less valuable as wildlife habitat than naturally occurring wetlands. Finally, the study concludes that wetlands restoration and mitigation proposals often fail or are never carried out because the Army Corps lacks any enforcement or monitoring mechanism, so applicants often do not follow through on promised mitigation packages. Between 1986 and 1997, the nation continued to lose approximately 60,000 acres of wetlands per year.[3]

In light of these disturbing facts, if the Army Corps is to even consider permitting the destruction of some of the most valuable remaining streams, drainages, and wetlands in the Santa Clara River basin, it must increase mitigation ratios. Equally as important, the Army Corps must specify an enforceable mitigation-monitoring plan, which will ensure compliance, and that success criteria are met. Until this occurs, the 404 Permit must not be issued because impacts have in fact not been avoided, minimized, and mitigated to the maximum extent practicable. In the alternative, if the Corps does not deny the Permit application outright, it must prepare an EIS on the effect of the Permit issuance.

(b) Wildlife

The Permit application addresses impacts to wildlife in a cursory and conclusory fashion. There is no analysis of or mitigation for proposed for impacts to wildlife. The Santa Clara River is an extremely important habitat for numerous plant and animal species, and analysis of the projects effects on the wildlife is crucial.

The Santa Clara River is a key wildlife corridor that connects the Los Padres and Angeles National Forests and the San Gabriel and Sierra Pelona Mountains. Continued and uncontrolled development in the area will result in habitat loss and fragmentation causing the disturbance or even decimation of numerous native species. Habitat fragmentation disturbs the natural movement of animals through the habitat corridors affecting the food chain as well as the herbivore-plant interactions.

The habitat along the Santa Clara River supports the largest community of riparian-obligate birds between the Santa Ynez River in Santa Barbara County and the Prado Basin in Riverside County. The Audubon Society designated this area as an Important Bird Area. Some of the sensitive bird species that occur within this stretch of the Santa Clara River include: least Bell's vireo, southwestern willow flycatcher, yellow-billed cuckoo, Cooper's hawk, sharp shin hawk, merlin, prairie falcon, yellow breasted chat, yellow warbler, common yellowthroat, mountain plover, western burrowing owl, long-eared owl, ferruginous hawk, white-tailed kite, tri-colored blackbirds, and many other sensitive raptors and songbirds.

Additionally, the Santa Clara River basin supports a diverse mammal population. Mammals observed or expected to inhabit in this area include: California leaf-nosed bat, small-footed myotis, long-eared myotis, fringed myotis, long-legged myotis, Yuma myotis, pale Townsend's big-eared bat, spotted bat, pallid bat, California mastiff bat, San

[3] Id.

Diego black-tailed jack rabbit, San Diego desert woodrat, Los Angeles pocket mouse, ringtail, mountain lion, bobcat, coyote, gray fox, American badger, and deer. Reptiles include: western pond turtle, San Diego horned lizard, California horned lizard, coastal western whiptail, silvery legless lizard, rosy boa, San Bernadino ringneck snake, and two-striped garter snake. Insects include: riverside fairy shrimp, and San Emigdio blue.

The river, itself, is home to various aquatic species including unarmored threespined stickleback, arroyo chub, Santa Ana sucker, and steelhead trout. Amphibians occurring include: arroyo toad, western spade-foot toad, and California red-legged frog. Many California native and rare plants are also present in the river habitat. The Santa Clara River area supports many plant communities that are recognized as "rare and worthy of consideration" (California Natural Diversity Database, 2002). They include: southern willow scrub, southern sycamore alder riparian woodland, southern cottonwood willow riparian forest, southern riparian scrub, southern coast live oak riparian forest, and Riversidean alluvial fan scrub. Additionally other rare plant species that have the potential to be present within the Santa Clara River floodplain include: Nevins barberry (*Berberis nevinii*) a federally and state listed endangered shrub and a California Native Plant Society list 1B species, the slender-horned spineflower (*Dodecahema leptoceras*), a federally and state listed endangered annual species and a CNPS list 1B species, and a potentially new taxa of sunflower (*Helianthus* sp. *nova*) has been discovered on the Newhall Ranch property along the Santa Clara River, but the species has yet to be described. The slender mariposa lily (*Calochortus clavatus* var. *gracilis*), and Mason's neststraw (*Stylocline masonii*) are all CNPS list 1B plants that have the potential to be present in the floodplain. Amphibians present in the river include: arroyo toad, western spade-foot toad, and the California red-legged frog. Many California native and rare plants are also present in the river habitat.

While the above list is not exhaustive of the incredible wildlife that inhabits the Santa Clara River area, it exhibits the rich diversity and importance of preserving habitat for these species. Nevertheless, despite the diverse wildlife populations present in the Project area and surrounding areas, apparently no comprehensive and current wildlife surveys have even been conducted. Surveys must be conducted according to USFWS or CDFG or other scientifically accepted protocols for all special-status species that may inhabit the Project area. This should be done pursuant to an EIS on the Army Corps' issuance of the Permit. However, this information should be part of the 404 application package, as the Army Corps has an independent duty to insure that impacts to wildlife have been avoided, minimized and mitigated to the maximum possible, and the public has a right and an interest in commenting upon the proposal. The comment period should be extended and/or reopened so that the public has a chance to comment upon the impacts to wildlife. Additionally, further mitigation must be proposed once additional information on impacts has been supplied through the EIS processes.

C. The Proposed Project has not Demonstrated that it will not Cause or Contribute to Violations of Water Quality Standards or Toxic Effluent Standards (40 C.F.R. 230.10(g)(1-2)

Section 404(b) Guidelines prohibit discharges from the proposed Project that cause or contribute to violations of water quality standards or toxic effluent standards. 40 C.F.R. 230.10(g)(1-2). However, the Permit application wholly fails to address proposed or potential discharges from the Project.

The Santa Clara River is listed as an impaired water body on the Clean Water Act 303(d) list for the following pollutants: (1) Ammonia, (2) Chloride, (3) Coliform, (4) Nitrate/Nitrite, and (5) Organic enrichment. The River is not achieving water quality standards for these pollutants, and thus, by definition, is not supporting its designated beneficial uses. Nevertheless, the Permit application fails to mention the river's 303(d) listing or analyze the Project's impact on water quality standards. These are pollutants that are potentially discharged from storm water runoff associated with industrial activities. The Corps' Permit may not legally authorize the discharge of these impairing pollutants above water quality standards and therefore the Permit application must assess the impacts of the Project on water quality. 40 CFR § 131.12.

While the Corps or the applicant may argue that compliance with California's Construction General Permit ("CGP") will insure the ***Project*** will not impair water quality, the 2003 CGP Guidance Document (attached hereto as Appendix 1) clearly states that "the best assurance of complying with receiving water limits is to prevent or limit runoff of all polluting substances from constriction sites through effective BMPs [Best Management Practices]." State Water Resources Control Board, *Construction Storm Water Sampling and Analysis Guidance Document*, August 2003 ("CGP Guidance Document"), Section 3.5, What are the Applicable Water Quality Standards. Furthermore, the State Water Resources Control Board notes that the monitoring program in the CGP cannot insure compliance with water quality standards at an individual site. The Guidance Documents states that "[w]hile sampling and analysis as required by the CGP may be a useful tool in pointing to areas of concern, it is also important to recognize the limitations of sampling in the storm water context and to use it as a diagnostic tool rather than as conclusive evidence of compliance or non-compliance with the CGP." *Id.* at Section 1.3, Purpose of Sampling and Analysis. Therefore the Army Corps cannot rely on a Section 404 permitees' compliance with the CGP to insure compliance with water quality standards. As demonstrated in Section III, extensive stormwater and urban runoff can be expected from the completed Project, which will almost certainly contribute to the violation of water quality standards and/or toxic effluent limits. (*See* Section III(B)(i)). Therefore, the application does not comply with 401(b)(1) Guidelines and must be denied.

D. The Proposed Project has not Demonstrated that it will not Impact the Endangered Unarmored Three Spine Stickleback, or other Federally Endangered or Listed Species (40 C.F.R. 230.10(g)(3))

As discussed above in Section III, the application fails to analyze the Project's effects on the endangered stickleback or other federally listed endangered or threatened species as required by NEPA. The CWA requires a similar analysis of the effects on

endangered species. Specifically, the Corps is prohibited from issuing a permit that jeopardizes threatened or endangered species. 40 C.F.R. 230.10(g)(3). The Corps has not demonstrated that the Project will not impact these species. Therefore, the application does not comply with 401(b)(1) Guidelines and must be denied.

E. The Proposed Project has not Demonstrated that its Discharges will not Cause or Contribute to Significant Degradation of the Waters of the US (40 C.F.R. 230.10(e))

Just as the application fails to include a LEDPA analysis, a discussion of water quality impacts, or impacts on numerous endangered or threatened species, it also fails to demonstrate that the Project's discharge of dredged or fill material will not cause or contribute to degradation of waters of the United States. CWA implementing regulations prohibit the Corps from issuing a permit where such degradation will occur. 40 C.F.R. 230.10(e). Until the applicant can demonstrate that the Project's discharges will not result in water quality degradation, the Corps may not issue this Section 404 Permit.

Furthermore, as discussed in the previous section, the impacts of urbanization are severe. If approved, this Section 404 Permit will essentially authorize the development of over two hundred acres of natural area and significantly increase the amount of impervious surfaces (streets, homes, driveways, etc.), and ultimately storm water and urban runoff into the Santa Clara River and its tributaries. This runoff, especially when combined with the runoff from other development projects along the river, has the potential to significantly degrade the Santa Clara River and/or its tributaries, all waters of the United States. Therefore, because they have not demonstrated the Project will not contribute to river degradation, the application does not comply with 401(b)(1) Guidelines and must be denied.

VI. The Proposed Project is Not in the Public Interest

In order to issue the Permit, the Army Corps must make a finding pursuant 33 C.F.R. § 320.4 that the issuance of a permit for this Project is in the public interest. Even if issuance of the Permit were otherwise lawful, which it is not, it is clear that the issuance this Permit is *not* in the public interest. The proposed Project would destroy one of the most important ecological areas in Los Angeles County, and essentially insure the build-out of the region. The applicant will profit economically, but the public will bear the burden of the destruction of our precious natural heritage.

On a more fundamental level, this Project represents suburban sprawl at its worst. Some may argue that growth is inevitable. Even so, the growth permitted by the Corps should be "smart growth" centered in already developed areas, where the environmental impacts are less severe and where public transportation and other public services can be provided. At any rate, the Corps cannot and should not rubber stamp permit applications that are inadequate, as is the case here. The ACOE as a trustee agency has discretionary permitting authority over the land and resources that are the subject of the 404 permit

application. The ACOE should exercise that authority in the public interest and deny the requested Permit.

VII. Conclusion

The Coalition thanks you for the opportunity to comment on this Permit and strongly urges the Corps to extend or reopen the comment period once the necessary EIS, LEDPA, and cumulative impacts analysis are completed and circulated to the public. Furthermore, the Coalition requests that the Corps grant a hearing to discuss the significant impacts associated with the Spring Canyon Permit and other proposed projects along the Santa Clara River.

Sincerely yours,

/s/
Illene Anderson
California Native Plant Society

/s/
Lynne Plambeck
SCOPE

/s/
Peter Galvin
Center for Biological Diversity

/s/
Daniel Cooper
Audubon California

/s/
John Buse
Environmental Defense Center

/s/
Henry Schutz
Santa Clarita Sierra Club Group

/s/
Dave Myerson
Environment Now

/s/
Kris Ohlenkamp
San Fernando Valley Audubon Society

/s/
Ron Bottoroff
Friends of the Santa Clara River

/s/
Damon Wing
Ventura Coastkeeper

/s/
Andrew Harvey
VisualJourney

Appendix 1: State Water Resources Control Board, *Construction Storm Water Sampling and Analysis Guidance Document*, August 2003.

Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001

to assist water suppliers, cities, and counties in integrating water and land use planning

Prepared by the California Department of Water Resources

October 8, 2003

Section 5 - Code Citations
Step One: Documenting wholesale water supplies

Water Code section 10910

(d)(1) The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts.

(2) An identification of existing water supply entitlements, water rights, or water service contracts held by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall be demonstrated by providing information related to all of the following:

(A) Written contracts or other proof of entitlement to an identified water supply.

(B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.

(C) Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.

(D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

(e) If no water has been received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts, the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall also include in its water assessment pursuant to subdivision (c), an identification of the other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has identified as a source of water supply within its water assessments.

Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001

to assist water suppliers, cities, and counties in integrating water and land use planning

Prepared by the California Department of Water Resources

October 8, 2003

Section 5 - Code Citations
Step One: Documenting wholesale water supplies

Water Code section 10910

(d)(1) The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts.

(2) An identification of existing water supply entitlements, water rights, or water service contracts held by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall be demonstrated by providing information related to all of the following:

(A) Written contracts or other proof of entitlement to an identified water supply.

(B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.

(C) Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.

(D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

(e) If no water has been received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts, the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall also include in its water assessment pursuant to subdivision (c), an identification of the other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has identified as a source of water supply within its water assessments.

SCAG: QUALITY OF LIFE IS DECLINING
NEWS

Cedric is back for more in 'Barbershop 2'

NFL MAY SEE YOUTH MOVEMENT
SPORTS

EXPANDED COVERAGE
Daily News

Published in the
Santa Clarita Valley
at 24800 Avenue Rockefeller, Valencia

6 04259 00002 8

SANTA CLARITA
EDITION

WEATHER
Mostly sunny
Highs: 66-73
Lows: 42-48
Air quality: Good
For details, see back of Business

Online: santaclarita.dailynews.com
FRIDAY, FEBRUARY 6, 2004
DESIGNATED AREAS HIGHER 50¢

Bermite cleanup slowed

Federal funds to fix munitions site dry up

By Susan Abram
Staff Writer

SANTA CLARITA — The flow of federal funding for studies of the contaminated soil and groundwater on the former Bermite site is uncertain this year, which means the U.S. Army Corps of Engineers might finish the work it has started and leave the actual cleanup to the landowners.

The announcement came Wednesday Group meeting in which Army Corps project engineer Larry Sievers said federal funding for further testing on the 996-acre property, including well drilling, seems questionable given the nation's budget constraints.

But a lack of funding will not impede on any cleanup plans, officials emphasized.

we're in line for a balance share of it, but because the budget is really tight this year, it doesn't look like we're going to get it," Sievers said.

About $1 million is left of the $4.8 million that has been allocated since 2001 for testing, Sievers said. Funding is provided by both federal and local agencies such as the Castaic Lake Water

Whittaker Corp., which operated the explosives factory until 1987, is finishing the work left after the current owner of the land in the center of Santa Clarita dropped its plans to build 2,911 homes.

Last year, engineers began drilling several wells near a suspected hot spot where the Army Corps discovered groundwater that contained 58,000 parts

rocket fuel propellant shown to be dangerous in concentrations as low as 1 part per billion, according to the federal Environmental Protection Agency.

The wells allow investigators to measure the size and scope of the pollution as well as help determine the best way to clean it up.

In addition, Whittacker began work on a pilot program designed to find the best way to rid the defunct factory's soil of perchlorate. State officials believe the

...ong@dailynews.com

Slow progress on site cleanup

BERMITE / From Page 1

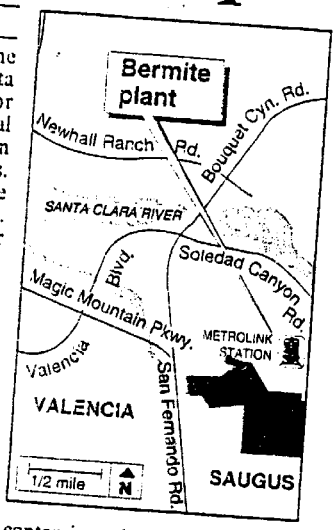
chemical has leaked into the ground and contaminated Santa Clarita's backup supply for drinking water. Five municipal wells have been shut down because of the perchlorate levels.

"The good news is we've done a lot of work," Sievers said. "We're beginning to assemble our conceptual model."

Sara Amir of the state Department of Toxic Substances Control agreed that the Army Corps has taken the project far enough so that other agencies can take over. She said the pace of the investigations and testing has been encouraging.

"The Army Corps has done a lot of work already," she said. "Whittaker will be doing a lot of groundwater monitoring and well installation. What (the Army Corps) had planned was to install some very deep monitoring wells, and it would have been good, but if they don't get it now, they can get to it later on."

The Santa Clarita City Council has said the city's best chance of quickly cleaning up Bermite and the city's water supply was if Cherokee Investment Partners, a North Carolina-based firm that specializes in working with contaminated properties, would come and build a mix of homes and commercial developments on the land.



However, Cherokee's bid for the land has stalled because of the $65 million worth of liens on the property. The company has been unable to come to terms with all the lien holders, Cherokee officials have said.

Susan Abram, (661) 257-5257
susan.abram@dailynews.com

OPERABLE UNIT SCHEDULE FOR THE FORMER WHITTAKER-BERMITE FACILITY
22116 WEST SOLEDAD CANYON ROAD
SANTA CLARITA

November 2003
(Reproduced from DTSC Original Schedule)

OPERABLE UNIT	WORKPLAN DUE	INVESTIGATION REPORT	FINAL RI REPORT DUE	FINAL FS REPORT DUE	DRAFT RAP DUE	FINAL RAP DUE	EXPECTED DATE OF CERTIFICATION
OU1	Complete	Complete	Dec. 2003	Dec. 2003	Jan 2004	Mar 2004	June 2005
OU2/OU6	Complete	Aug. 2003	Dec. 2003	May 2004	Sept 2004	Nov. 2004	Nov 2006
OU3	July 2003	Jan. 2004	May 2004	Sept. 2004	Jan. 2005	Mar. 2005	Mar 2007
OU4	Jan. 2004	July 2004	Jan. 2005	Mar. 2005	July 2005	Sept. 2005	Nov. 2006
OU5	Dec. 2003	May 2004	Sept. 2004	Dec. 2004	Mar. 2005	May 2005	May 2007
OU7 Alluvium	June 2003	Jan. 2004	June 2004	Dec. 2004	June 2005	Aug. 2005	Aug. 2010
OU7 Saugus	July 2003	Jan. 2004	June 2004	Dec. 2004	June 2005	Aug. 2005	Aug. 2010

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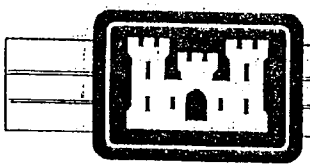
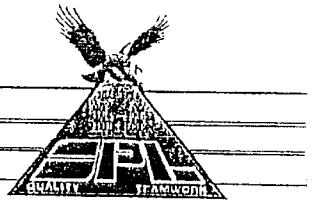


Los Angeles District



Citizens Advisory Group
Update on
City of Santa Clarita, CA

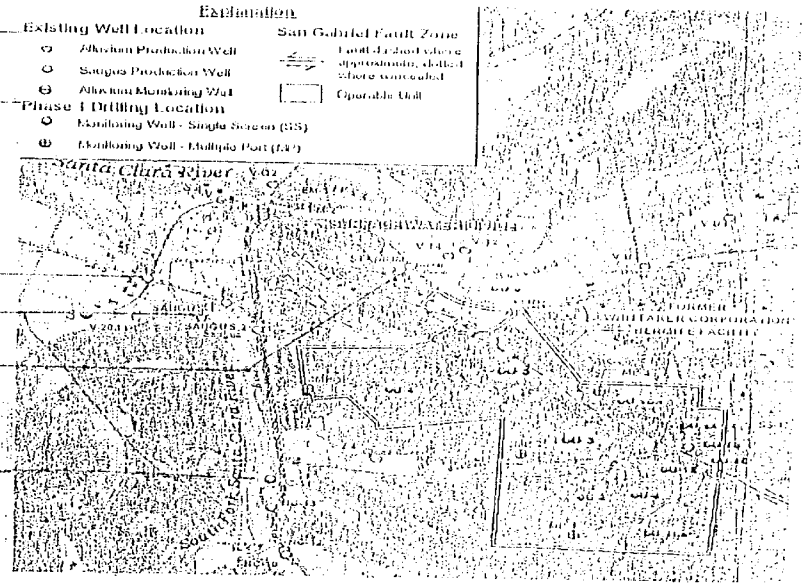
Eastern Santa Clara Subbasin
Groundwater Study

December 10, 2003
Larry Sievers
213 452 3989
Larry.A.Sievers@usace.army.mil

Los Angeles District

Impacted Production Wells

Well ID	Total Cased Depth (ft)	Formation Perforated	Maximum Concentration (µg/L)
Inactive since 1997/1998:			
V-157	2,014	Saugus	Perchlorate = 14 TCE = 3.8
Saugus-1	1,640	Saugus	Perchlorate = 42 TCE = 3.9
Saugus-2	1,612	Saugus	Perchlorate = 47 TCE = 1.3
NC-11	1,136	Saugus	Perchlorate = 23 TCE = ND
Recently on inactive status:			
Stadium	~450	Alluvium	Perchlorate = 5.9 TCE = ND

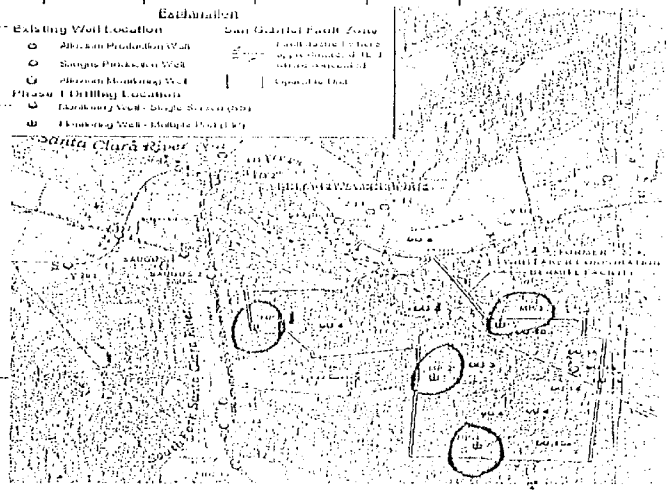


Los Angeles District

Perchlorate - MP Wells

Screen	MP-1			MP-2			MP-4			MP-3		
	Elev.	Rd. 1	Rd. 2	Elev.	Rd. 1	Rd. 2	Elev.	Rd. 1	Rd. 2	Elev.	Rd. 1	Rd. 2
1	935	20.9	23.7	1,101	58,200	64,500 J	1,022	3.5/ ND	ND/ ND	1,260	ND	ND
2	785	9.1/ 9.7	114/ 113	897	53,700/ 44,600	13,200 J	827	ND	ND	1,176	7.8	ND
3	645	14.9	29.9	827	21,400	72.2 J	485	ND	ND	997	18.7/ 23.6	ND
4	429	2 J	ND	657	99.6	ND/ 1.06 J	309	ND	ND	829	18.5	ND/ ND
5	344	2.5 J	ND	336	ND	4.5 J	209	ND	ND			
6	193	1.8 J	ND	201	267	33,400 J /23,800						
7	13	ND	ND									
8	-47	3.7 J	2 J									
9	-233	6.6	ND									
10	-363	ND	ND									

Concentration reported in µg/L
Elev. = MP port elevation in feet msl
J = Estimated value
ND = Not detected

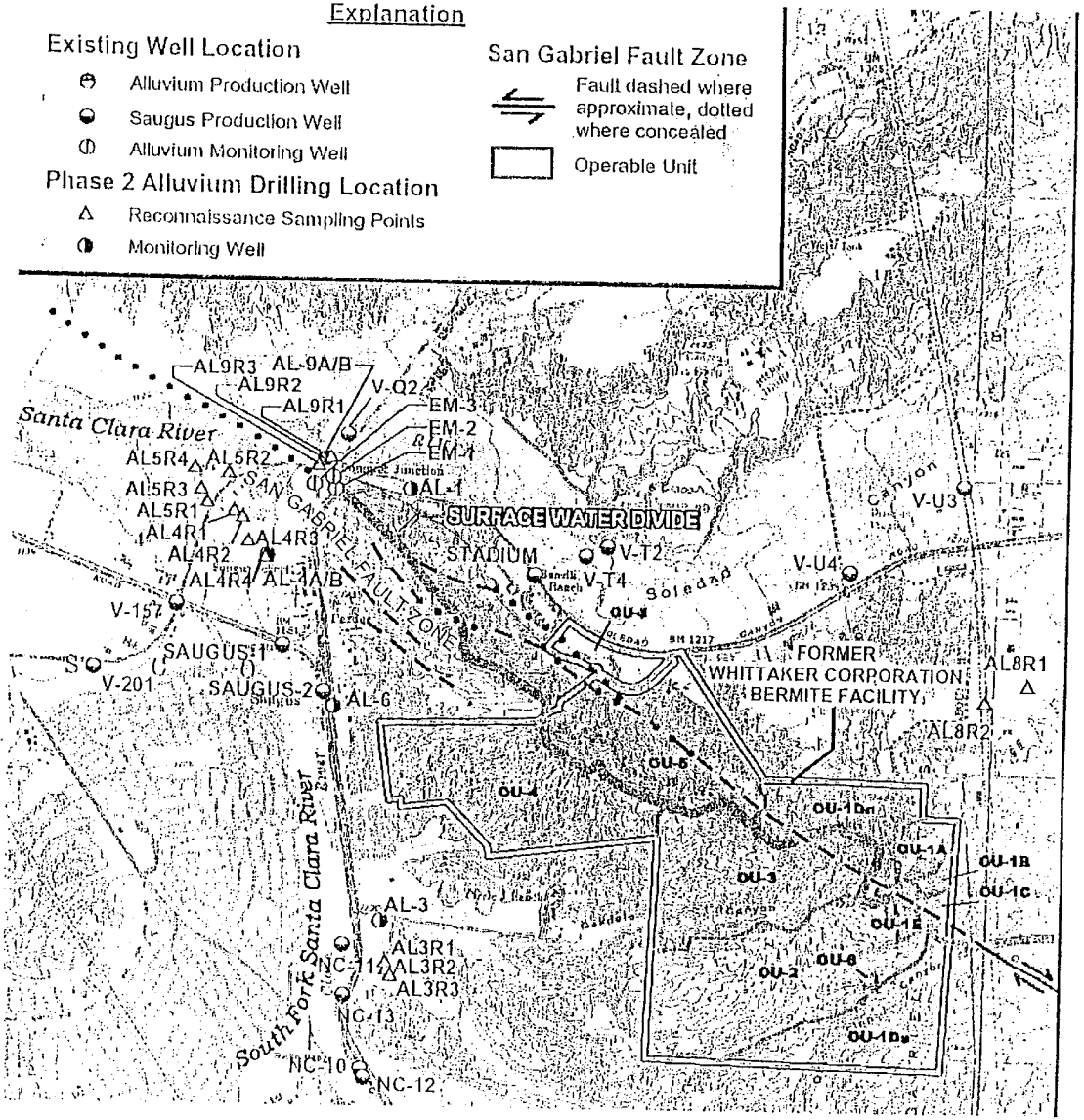


Los Angeles District

Perchlorate - AL Recon

Sampling Point	AL-4		AL-5		AL-9	
	Depth	Conc.	Depth	Conc.	Depth	Conc.
R1	56	3.6	46	2.9 J	40	30.3
R1	66	2.7 J	56	2.0 J	47	38.9
R2	56	6.9	46	ND	41	17.6/18.0
R2	81	2.0 J	56	ND	51	31.2
R2	-	-	76	ND	-	-
R3	56	8.8	46	ND	-	-
R3	66	4.9/4.6	56	ND	-	-
R4	56	12.9	46	ND	-	-
R4	77	2.6 J	56	ND	-	-

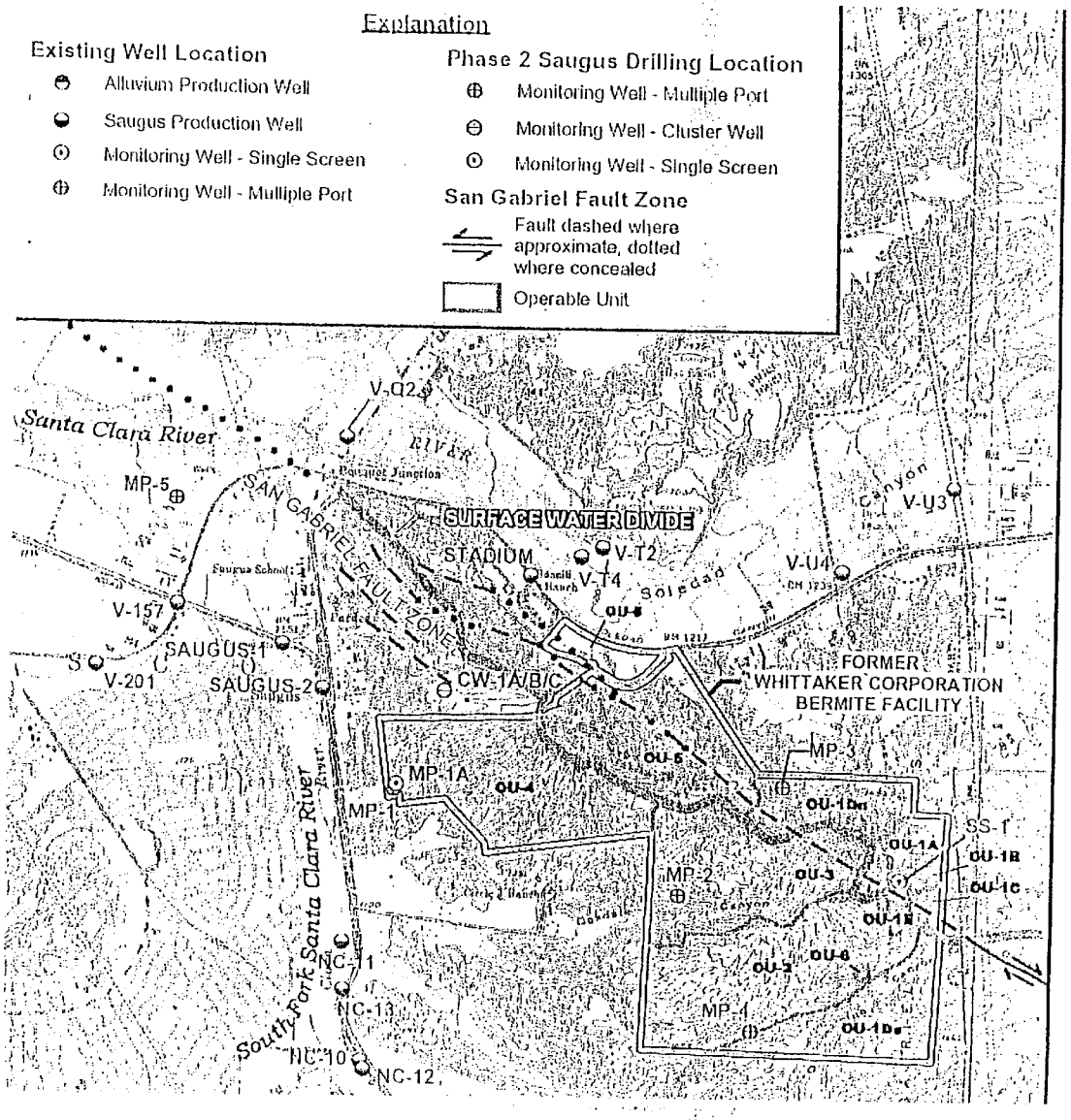
Conc. = reported in µg/L
Depth = in feet below ground surface
J = Estimated value
ND = Not detected



Alluvium

Phase 2 Monitoring Well Locations

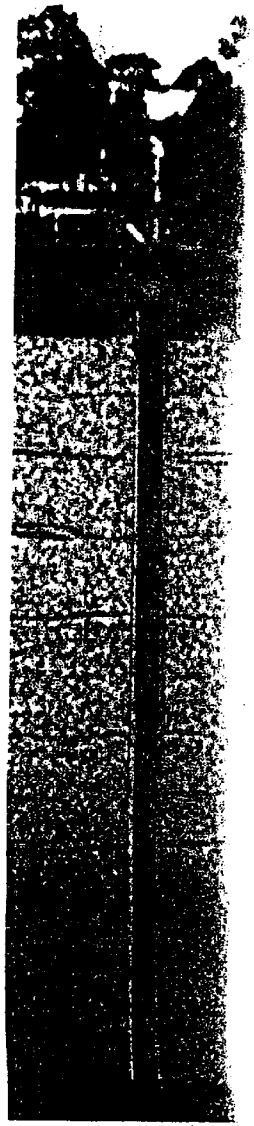
Will be sampled again in Jan 04



Saugus Formation

Phase 2 Monitoring Well Locations

Will be sampled again in Jan 04



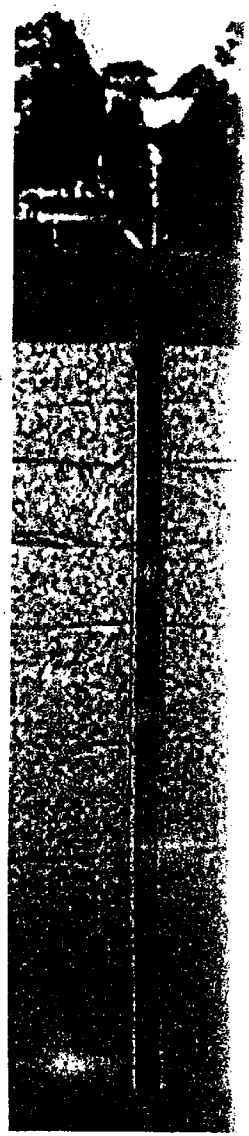
Groundwater Modeling Analysis
Upper Santa Clara River Basin

Restoring Impacted Water Supplies Near Whittaker-Bermite

presented by

John Porcello/CH2M HILL

December 10, 2003



Objectives and Methods

- Evaluate pumping strategies for impacted wells that meet specific goals
  - Restoring lost water supplies
    - Saugus: 4,000 AF/yr
    - Alluvium: 700-1,000 AF/yr
  - Protecting downgradient wells
- Develop and apply groundwater flow model

FREDERIC A. FUDACZ (SBN 050546)
ANDREW J. YAMAMOTO (SBN 138884)
BYRON P. GEE (SBN 190919)
Nossaman, Guthner, Knox & Elliott, LLP
445 S. Figueroa Street, 31st Floor
Los Angeles, California 90071-1602
Telephone: (213) 612-7800
Facsimile: (213) 612-7801

Attorneys for Plaintiffs and Counter-Defendants Castaic Lake Water Agency; Newhall County Water District; Santa Clarita Water Company; and Valencia Water Company

UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

CASTAIC LAKE WATER AGENCY; NEWHALL COUNTY WATER DISTRICT; SANTA CLARITA WATER COMPANY; and VALENCIA WATER COMPANY,

Plaintiffs,

vs.

WHITTAKER CORPORATION; SANTA CLARITA LLC; REMEDIATION FINANCIAL, INC.; and DOES 1-10, Inclusive,

Defendants.

SANTA CLARITA, L.L.C.,

Counter-Claimant,

vs.

CASTAIC LAKE WATER AGENCY; NEWHALL COUNTY WATER DISTRICT; SANTA CLARITA WATER COMPANY; and VALENCIA WATER COMPANY

Counter-Defendants.

Case No.: 00-12613AHM(RZx)

PLAINTIFFS' AND COUNTER-DEFENDANTS' CASE MANAGEMENT PROPOSAL; DECLARATION OF PROFESSOR E. JOHN LIST IN SUPPORT OF PLAINTIFFS' AND COUNTER-DEFENDANTS' CASE MANAGEMENT PROPOSAL; and DECLARATION OF ANDREW J. YAMAMOTO IN SUPPORT OF PLAINTIFFS' AND COUNTER-DEFENDANTS' CASE MANAGEMENT PROPOSAL ATTACHED

222638_2.DOC

WHITTAKER CORPORATION,

Counter-Claimant,

vs.

CASTAIC LAKE WATER AGENCY; NEWHALL COUNTY WATER DISTRICT; SANTA CLARITA WATER COMPANY; and VALENCIA WATER COMPANY

Counter-Defendants.

I, E. John List, Ph.D., P.E., declare as follows:

1. I received a Masters in Engineering from the University of Auckland, New Zealand. I received a Ph.D. in Applied Mechanics and Mathematics from of the California Institute of Technology.

2. After completing my doctorate, I spent three years on the faculty of the University of Auckland. In 1969, I moved to Caltech, serving as Professor of Environmental Engineering Science from 1978 to 1997 and as Executive Officer for Environmental Engineering Science from 1980 to 1985. Presently, I am Professor Emeritus of Environmental Engineering Science at Caltech. I am also President of Flow Science Incorporated and Principal Consultant of Environmental Defense Sciences.

3. I have consulted with more than 400 industrial organizations, consulting engineers, and government agencies. I have co-authored three books, including the award winning Handbook of Groundwater Development, and published over forty articles on fluid dynamics and environmental sciences. I have provided written, verbal or deposition testimony as an expert witness in over 10 cases. I am currently serving as a jointly designated independent peer review expert in the case entitled U.S. Environmental Protection Agency v. General Electric. A true and correct copy of my resume is attached as Exhibit "A" hereto.

4. I have reviewed many scientific reports and other documents related to the Whittaker Bermite Facility and the perchlorate problem in the groundwater found in the Saugus Formation in the Santa Clarita Valley. The documents that I reviewed include public documents on the former Whittaker Bermite Facility from the Department of Toxic Substances Control's Glendale Office and technical reports prepared by consultants hired by Santa Clarita LLC and/or the Whittaker Corporation. This

Bermite Facility from the Department of Toxic Substances Control's Glendale Office and technical reports prepared by consultants hired by Santa Clarita LLC and/or the Whittaker Corporation. This declaration is based on my review of the scientific evidence regarding the Whittaker Bermite Facility, and if called to testify as an expert witness in this action, I would and could competently testify to the following.

5. Reports on the Whittaker Bermite Facility prepared by consultants hired by Santa Clarita LLC and/or the Whittaker Corporation indicate that explosive products and rocket fuels were blended or used at the facility from 1934 to 1987. The explosive products and/or rocket fuels contained ammonium perchlorate and potassium perchlorate.

6. The available data show that the groundwater elevation in Saugus Formation at the former Whittaker Bermite Facility is higher than at the locations of Plaintiffs' impacted Saugus Formation groundwater wells: NC-11, Saugus 1 and 2, and VWC-157 (collectively, "Impacted Wells"). The Impacted Wells are located about one mile from the Whittaker Bermite Property.

7. Various reports, the majority prepared by consultants hired by Santa Clarita LLC or Whittaker Corporation, confirm that perchlorate is present in the soil, groundwater, and surface-water runoff at the former Whittaker Bermite Facility.

8. Subsurface water generally flows from regions of higher groundwater elevation to regions of lower groundwater elevation. The groundwater elevation at the former Whittaker Bermite Facility is higher than at the Impacted Wells making the Impacted Wells down gradient of the former Whittaker Bermite Facility. Water quality tests have also found perchlorate in the Impacted Wells west of the facility.

9. Large-scale use of perchlorate is generally associated with the manufacture or use of explosives and solid fuel propellants. I am aware of no evidence suggesting that the property between the former Whittaker Bermite Facility and the Plaintiffs' impacted wells was used to manufacture or use explosive or solid propulsion fuels.

10. Perchlorate is not a naturally occurring chemical in California. Perchlorate is very mobile in aqueous systems and can persist for many decades under typical groundwater and surface water conditions because it does not react in low concentrations with other available constituents.

11. Based on my review of the reports prepared by consultants hired by Santa Clarita LLC or Whittaker Corporation, it appears clear that perchlorate from the former Whittaker Bermite Facility is the source of the perchlorate found at the Plaintiffs' groundwater wells. Although I am aware that one might hypothesize that there are alternate sources of the perchlorate reaching the Impacted Wells, I am aware of no plausible source of the perchlorate in the Impacted Wells besides the Whittaker Bermite Facility.

12. Perchlorate naturally will continue its down-gradient migration and may spread to other groundwater wells until response actions are implemented to abate the spread of perchlorate.

13. It is my professional judgment that the pumping of groundwater from the Impacted Wells, and treatment of the water to remove perchlorate, should be implemented promptly to help retard the spread of the perchlorate plume(s) emanating from the Whittaker Bermite Facility. Delaying such a groundwater treatment program will likely allow the plume(s) to spread.

I declare under penalty of perjury that the foregoing is true and correct.

Executed within the United States on June 1, 2001

E. John List, Ph.D., P.E.

ERICSON JOHN LIST
President, Flow Science Incorporated
Professor *Emeritus* of Environmental Engineering Science
California Institute of Technology
Pasadena, California 91125
TEL: (626) 304-1134 FAX: (626) 304-9427
e-mail: ejlist@flowscience.com

PERSONAL

Citizenship:	U.S.A. Passport No. 031734111
Birthdate:	March 27, 1939
Place of Birth:	Whakatane, New Zealand
Home Address:	251 South Orange Grove Blvd., Pasadena, CA

EDUCATION

1965	Ph.D.	California Institute of Technology (Applied Mechanics and Mathematics)
1962	M.E. (Civil Eng.)	University of Auckland, N.Z.
1962	B.Sc. (Mathematics)	University of Auckland, N.Z.
1961	B.E. (First Class)	University of Auckland, N.Z.

POSITIONS HELD

Dr. List is currently President of Flow Science Incorporated and Principal Consultant at Environmental Defense Sciences. He was Professor of Environmental Engineering Science at the California Institute of Technology from 1978-1997. He joined the faculty at Caltech in 1969 as an Assistant Professor, after spending three years as a lecturer and senior lecturer at the University of Auckland. For the period 1980-1985, he was Executive Officer for Environmental Engineering Science at Caltech.

TEACHING EXPERIENCE

Fluid mechanics, turbulent diffusion, density-stratified flow, flow in porous media, introductory oceanography and meteorology, classical applied mathematics, singular perturbations, non-linear waves, mathematical programming and simulation, probability and statistics, solid mechanics, hydrologic transport processes, environmental fluid mechanics.

RESEARCH INTERESTS

Turbulent diffusion, buoyancy-modified flows, particle coagulation, coastal ocean and estuarine processes, transient flows, flow in porous media.

EXHIBIT A

INSTITUTE AFFAIRS

Professor List has served on sixteen different administrative and faculty committees, including a term as Vice-Chair of the Faculty (1979-81), and chair of the following Faculty Committees: Athletics and Physical Education (1975-79), Curriculum (1981-84), Membership and Bylaws (1979-81), and Nominating (1978-79). He served on the JPL Classified Research Oversight Committee for a period of six years.

EDITOR

Journal of Hydraulic Engineering, American Society of Civil Engineers, 1984-1989

MEMBERSHIP

Fellow of American Society of Civil Engineers
Chair, Hydrologic Transport and Dispersion Committee, 1983-84
Chair, Awards Committee, Hydraulics Division, 1994
Co-Chair, Third International Symposium on Stratified Flows, 1987
Consulting Engineers Association of California
Chair, Engineering Excellence Committee, 1989

AWARDS AND RECOGNITION

Fulbright Scholar, 1962
National Science Foundation Award for Special Creativity, 1982
Who's Who in America
Who's Who in Engineering
Who's Who in the West

REGISTRATION

Professional Civil Engineer No. 36791, State of California
Professional Engineer No. 20646, State of South Carolina

VISITING COMMITTEES

University of California, Irvine, School of Engineering, 1983, 1989
Stanford University, Palo Alto, Department of Civil Engineering, 1984
University of British Columbia, School of Engineering, 1990

BOARDS

Flow Science Incorporated, Pasadena, California (Chair) 1982-Present
City of Pasadena, Blue Ribbon Commission 1976-1978
Environmental Defense Sciences, Pasadena, California 1997-Present

CONSULTING

Professor List has consulted with more than 400 industrial organizations, consulting engineers and governmental agencies, including PetroBras, Southern California Edison, Chevron, IBM Corporation, Exxon, Cargill Corporation, City and County of San Francisco, City of Seattle, City of San Diego, City of Los Angeles, Los Angeles County, Sacramento County, U.S. Corps of Engineers, U.S. Navy, Metropolitan Water District of Southern California, City and County of Honolulu, Southern Nevada Water Agency. He has authored reports in the following areas of work: geothermal flows, river control modeling, power plant cooling systems, brine and wastewater diffusers, dredge spoil disposal, river dispersion, solar heat storage systems, reservoir destratification and mixing, well testing and failure, pulsation control and water hammer, pipeline failure, groundwater mass balance, ocean current and temperature analysis, acoustic resonance in piping systems, gas transfer, ocean dispersion, and biodegradation of organo-chlorines.

PUBLICATIONS

Professor List is co-author of the texts *Mixing in Inland and Coastal Waters* (Academic Press, 1979), *Turbulent Buoyant Jets and Plumes* (Pergamon Press, 1983), and *Handbook of Groundwater Development* (Wiley, 1990). In addition, he is the author or co-author of the following refereed publications :

[1] "Steady flow of precipitation to an infinite series of tile drains above an impervious layer," *J. Geophys. Res.*, **29**: 3371-3381, 1964.

[2] "A quasi-stable density-stratified flow in a saturated porous medium," *Proc. 2nd Aus. Conf. Fluid Mech.*, Auckland, N.Z., December 1965.

[3] "Lateral dispersion in saturated porous media," *J. Geophys. Res.*, **72**: 2531-2541, 1967 (with N.H. Brooks).

[4] "A two-dimensional sink in a density-stratified porous medium," *J. Fluid Mech.*, **33**: 529-543, 1968.

[5] "An exact solution for a diffusive flow in a porous medium," *J. Fluid Mech.*, **36**: 17-19, 1969.

[6] "Laminar momentum jets in a stratified fluid," *J. Fluid Mech.*, **45**: 461-574, 1971.

[7] "A technique for smoothing river flows during hydro-electric power production," *Water Resources Research*, 7(6): 1437-1447, 1971 (with R.B. Tattle).

[8] "Energy and the environment in Southern California," *Engineering and Science*, 35(2): 14-17, 1971.

[9] "A study on disposal of brine in an estuary," *J. Water Polln. Cont. Fed.*, **45**(11): 2335-2344, 1973 (with A.B. Pincince).

[10] "Turbulent entrainment in buoyant jets and plumes," *J. Hyd. Div.*, ASCE, **99**(HY9):1461-1474, September 1973 (with J. Imberger).

[11] "Turbulence measurements in a two-dimensional buoyant jet using laser-Doppler velocimetry," *Proc. LDA Symposium*, Tech. Univ. of Denmark, Copenhagen, August 1975 (with N.E. Kotsovinos).

[12] "Hydraulic modeling of thermal outfall diffusers - Interpretation of results," *Proc. XVI IAHR Congress*, Sao Paulo, Brazil, July 1975 (with R.C.Y. Koh).

[13] "Variations in coastal temperatures on the Southern and Central California coast," *J. Geophys. Res.*, **81**(12):1971-1979, April 1976 (with R.C.Y. Koh).

[14] "Spreading of buoyant discharges," *Proc. 9th Intern. Conf. Heat and Mass Transfer*, Int. Centre for Heat and Mass Transfer, Dubrovnik, Yugoslavia, 171-182, September 4, 1976 (with J.-C Chen).

[15] "Plane turbulent buoyant jets - Part 1: Integral properties," *J. Fluid Mech.*, **81**(1): 25-44, June 9, 1977 (with N.E. Kotsovinos).

[16] "Turbulent jets and plumes," *Ann. Rev. of Fluid Mech.*, **14**:189-212, 1982.

[17] "Formation of frontal waves in density-induced fluid spreading," *Symposium on Flows in Stratified Fluids*, ASME Winter Annual Meeting, Boston, MA,1983.

[18] "Monte Carlo simulation of particle coagulation in continuous size distributions, I: Brownian motion and fluid shearing," *J. Fluid Mech.*, **143**: 367-385, 1984 (with H.J. Pearson and I.A. Valioulis).

[19] "Monte Carlo simulation of particle coagulation in continuous size distributions, II: Interparticle forces and the quasi-equilibrium hypothesis," *J. Fluid Mech.*, **143**: 387-411, 1984 (with I.A. Valioulis and H.J. Pearson).

[20] "Numerical simulation of a sedimentation basin, I: Model development," *Env. Sci. Tech.*, **18**: 242-247, 1984 (with I.A. Valioulis).

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VOLUME I — REPORT TEXT

HYDROGEOLOGIC INVESTIGATION
PERENNIAL YIELD
and
ARTIFICIAL RECHARGE POTENTIAL
of the
ALLUVIAL SEDIMENTS
in the
SANTA CLARITA RIVER VALLEY
of
LOS ANGELES COUNTY, CALIFORNIA

FOR
UPPER SANTA CLARA WATER COMMITTEE
MEMBERS: LOS ANGELES COUNTY WATERWORKS
DISTRICT NO. 36 — VAL VERDE
NEWHALL COUNTY WATER DISTRICT
SANTA CLARITA WATER COMPANY
VALENCIA WATER COMPANY

AFFILIATE: CASTAIC LAKE WATER AGENCY

DECEMBER 1986

RICHARD C. SLADE
CONSULTING GROUNDWATER GEOLOGIST

a larger degree in the shallow wells of the alluvium compared to wells in the underlying Saugus Formation.

The Saugus Formation ranges in thickness between at least 1500 feet and at least 5000 feet from the northerly to the southerly sides of the San Gabriel fault, respectively. Little is known of the hydrogeology and water-yielding characteristics of the Saugus Formation.

2. Groundwater flows from east to west across the alluvium in the river valley; April 1945 represents the all-time water level high, while November 1965 represents the all-time water level low in much of the alluvium. In general, 1985 water levels are 10 to 30 feet lower than the 1945 levels. Water levels west of Castaic Junction have remained high throughout the period of record.

3. Groundwater in storage in the alluvium has ranged from a high in April 1945 of 201,000 ac-ft, to a low of 107,000 ac-ft in November 1965; at present (Fall 1985) groundwater in storage is approximately 176,400 ac-ft. Because the theoretical maximum storage capacity in the alluvium is 239,900 ac-ft, there is a theoretically available storage capacity of 63,500 ac-ft between the 1985 storage and the theoretically maximum possible storage.

4. Though historic groundwater extraction data are somewhat contradictory, groundwater production for 1985 was: 24,103 ac-ft from the alluvium, using 59 active wells; and 4892 ac-ft from the underlying Saugus Formation, using 8 active wells. The numbers, locations, and annual production from wells actively used by private homeowners, industries and/or commercial establishments are not known; it is probable that total annual production from these sources does not presently exceed a few hundred ac-ft/yr.

5. For our base period of study of 1957-58 through 1984-85, we calculate a practical perennial yield for the alluvium of 31,600 to 32,600 ac-ft per year.

6. Alluvial groundwater quality ranges from a natural calcium-bicarbonate character on the east near Lang to a degraded sodium-sulfate character west of Castaic Junction. Generally, TDS increases in the

their annual extractions are not metered. Because the cumulative total production by these private pumpers is not considered to be large, it has not been included in our perennial yield assessment.

Prior to 1954, alluvial groundwater production accounted for almost 100 percent of the total water production in the study area. However, in 1954, this percentage decreased to approximately 95 percent because in that year Newhall County Water District constructed the first of six wells which tap the Saugus Formation for domestic use. By 1985, production from the Saugus Formation approached 16 percent of total groundwater extractions (refer also to Table 2).

In recent years, there have been several shifts in the supply/demand usage of water in the region. Groundwater extractions from the Saugus Formation have gradually increased to about 15 percent of the total local production, while total extractions (alluvium plus Saugus Formation) have declined slightly. Water usage has shifted toward a greater proportion for urban uses, with a reduction for agricultural uses, as the region has become urbanized. In the future, it is projected that local alluvium production will remain relatively constant with more water going to urban uses as the agriculture is phased out, and there will be greater use of groundwater from the Saugus Formation.

Urbanization has had a rather startling impact on the availability of areas for recharge, however. All recharge to the aquifer system does not occur in the low-flow channels of the river and its tributaries, but infiltrates over much of the alluviated areas which are not within the flood channels of the Santa Clara River system. Paving of these areas has, and will continue to reduce the net effective area for natural recharge to the underlying groundwater system.

calculated values of average annual pumpage and average annual change in storage.

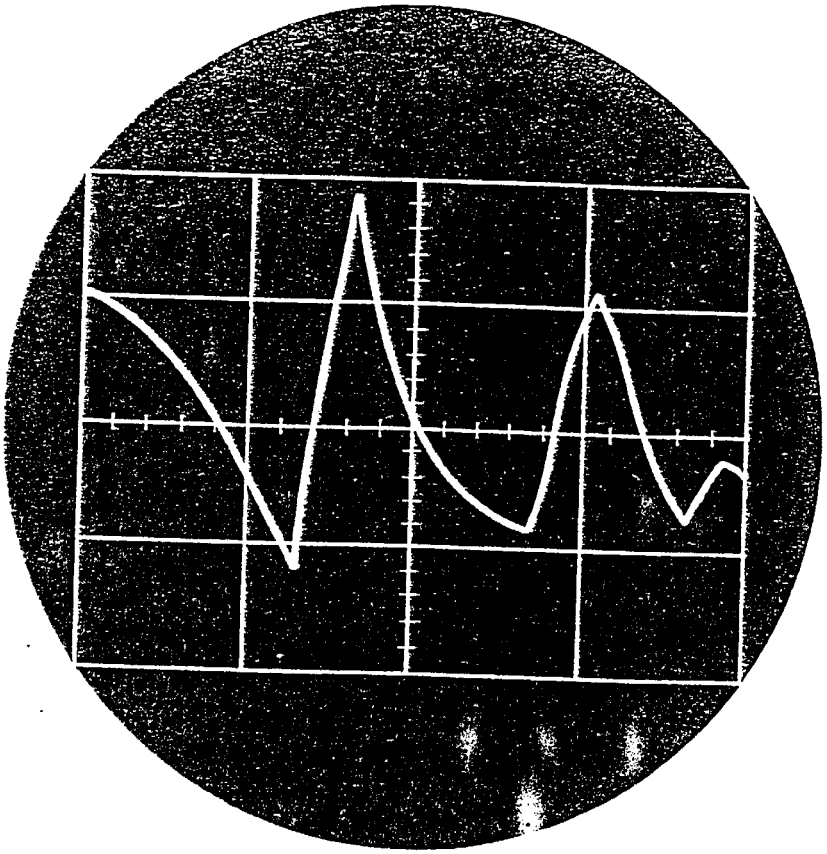
To determine the average annual groundwater production from the alluvial sediments in the Valley, files at the major water purveyors concerning present and historic production were obtained. These data vary widely in their apparent level of accuracy. For example, some of the data do not date back to 1957-58, other data are based on electrical consumption at the pump and not on actual metered gallonage, while other data are only estimates based on the number of persons using the water. Regardless, during the 28-year base period 1957-58 to 1984-85, we estimate the average annual groundwater production from the alluvial sediments in the Santa Clarita Valley to have been approximately in the range of 31,000 to 32,000 acre-feet per year.

In addition, at the beginning of the base period, the quantity of groundwater stored in the alluvial sediments was calculated to be approximately 159,688 acre-feet. By 1985, the quantity of groundwater in storage in the alluvium had been increased to 176,409 acre-feet (see Table 8). The increase in the quantity of water in storage in the alluvium is thus 16,721 acre-feet. This increase is the total quantity of groundwater added to storage during the 28-year Base Period as a result of excess precipitation. Hence, the average annual net change in groundwater in storage was determined by dividing the total quantity of water added to storage by the length of the Base Period, or +597 acre-feet per year.

The perennial yield is the quantity of groundwater what can be pumped annually without any change in groundwater levels or net change in groundwater in storage over the Base Period. This may be computed by determining the average annual pumping during the Base Period (31,000 to 32,000 acre-feet), and adding or subtracting from this value, that amount

WATER-RESOURCES INVESTIGATION USING ANALOG MODEL TECHNIQUES

IN THE SAUGUS-NEWHALL AREA LOS ANGELES COUNTY, CALIFORNIA



UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

OPEN-FILE REPORT
Menlo Park, California
1972

PREPARED IN COOPERATION WITH THE NEWHALL COUNTY WATER DISTRICT

Because of the lack of data only four short-term deep-well hydrographs were available to use in the non-steady-state verification of the Saugus aquifer (pl. 7). The measurements indicate that in the area south of the San Gabriel fault and east of Castaic Junction, the potentiometric surface produced by the model is too flat (pl. 7). This was also indicated by the steady-state run. The model-based heads shown on plate 7 are correct south of Castaic Junction but are about 70 feet low at Newhall. This is shown by the discrepancy between the two hydrographs for well 4N/16W-35L1 (pl. 7). Because there are no water-level measurements for the area north of the San Gabriel fault and Castaic Junction, it is not known whether or not the potentiometric surface shown for that area is correct.

In view of the lack of definitive data for the Saugus aquifer, it is felt that this layer of the model is adequately verified for present needs. The hydrologic parameters used to model the Saugus aquifer are initial estimates. Consequently, before more detailed information about the Saugus aquifer can be obtained from the model, additional studies of the hydrologic characteristics of the aquifer should be made. With present data only general information can be deduced regarding the ground-water flow network in the Saugus aquifer.

A comparison of the assumed steady-state potentiometric surface (pl. 6). with the 1963 potentiometric surface (pl. 7) shows that in the model the Saugus aquifer has undergone a decline in head over most of the area of the aquifer. This decline is due to pumping from the Saugus aquifer and to water-level declines in the overlying alluvial aquifer. The model-generated hydrographs on plate 7 indicate that the declines in the Saugus aquifer have been similar to those that occurred at adjacent points in the alluvial aquifer. This suggests that future pumping from or artificial recharge to one of the aquifers will have an effect on the head in the other aquifer. Head changes in the Saugus aquifer, however, are generally less than the corresponding changes in the alluvial aquifer. This is due to the low vertical component of permeability between the two aquifers and lesser quantities of pumping from the Saugus aquifer than from the alluvial aquifer.

WATER BUDGET

Table 5 shows the water budgets for the steady-state and the non-steady-state model. All quantities of inflow and outflow used in the model are shown. Under steady-state conditions the quantity of inflow to the model must equal the quantity of outflow. As shown, the total inflow and total outflow are both equal to about 25,000 acre-feet per year. Surface-water recharge and underflow are the major sources of inflow, and ground-water discharge is the principal outflow.

In the water budget for the non-steady-state condition the figures shown are the total quantities of inflow or outflow which occurred in each area during the 23-year study period. When the ground-water storage depletion is added to the inflow data, the total inflow must equal the total outflow within the limits of accuracy of the model. As shown, these totals agree within 5.2 percent or about 44,000 acre-feet. Surface-water recharge and underflow are still the main sources of inflow, but ground-water pumpage is by far the greatest source of outflow from the basin.

MODEL READOUTS

The major water purveyors in the Saugus-Newhall area are presently considering the effects of various water-resources management practices in order to arrive at management techniques that will make the best use of the existing and future water resources of the areas. The analog model was used to supply information about the response of the aquifers to each of the following conditions:

1. What are the effects of loss of natural floodwater recharge to the aquifers?

2. What are the effects on the aquifers of artificial recharge of imported water?

3. What are the effects on the aquifers of increased pumpage to meet future water requirements?

Effects of Loss of Floodflow

Because water levels in the alluvial aquifer respond to variations in surface-water recharge, information about the effects of an extended drought during which no floodflow recharge occurs is of value.

To simulate an extended drought, the model was run for the 1945-67 period under the following conditions:

1. The surface-water recharge to the model did not exceed steady-state surface-water recharge.

2. Loss of floodflow recharge to the aquifers will cause large water-level declines which will decrease the quantity of ground-water discharge in the Santa Clara River below Castaic Junction. This ground-water discharge cannot be decreased by more than the original steady-state ground-water discharge. To simulate this limit in the model, the induced recharge in the area was not allowed to exceed the value of the steady-state ground-water discharge.

3. The aquifers were assumed to be in steady-state conditions at the beginning of the drought.

4. All other hydrologic parameters were maintained at the values which were normally used in the non-steady-state model during the 1945-67 study period.

Under these conditions the model produced the hydrographs shown in figure 9. Because the transmissibility in the model does not vary as a function of head, these hydrographs represent the theoretical response of the basin to the conditions set forth above. Under actual field conditions the decrease in transmissibility with decline in head would cause the alluvial aquifer to be dewatered sooner than indicated by the hydrographs in figure 9. The hydrographs do indicate, however, that without the effects of floodflow recharge most of the alluvial aquifer could not support the modeled rate of ground-water pumpage for more than 14 to 18 years after steady-state conditions. The aquifer would support this pumpage for an even shorter perio of time if the basin were not at steady-state condition at the beginning of the drought. The benefit the basin receives from floodflow recharge can be seen by comparing the hydrographs produced by the model for the alluvial aquifer under 1945-67 historic conditions with the hydrographs for the no-floodflow condition.

The loss of floodflow recharge in the alluvial aquifer causes head declines in the Saugus aquifer. As shown by the hydrographs in figure 10, after 23 years the no-floodflow condition produces declines in the Saugus aquifer about 100 feet below those of the normal condition. These declines do not produce complete dewatering of the aquifer because of its large saturated thickness.

Effects of Artificial Recharge

The Upper Santa Clara Valley Water Agency has contracted with the State of California for delivery of northern California water to meet future water requirements in the study area. The quantities of imported water tentatively will range from 1,600 acre-feet per year in 1971 to 41,500 acre-feet per year in 1990 but could be increased somewhat if required (table 6). One management procedure under consideration proposes that all water imported between 1971 and 1980 be artificially recharged to defer the cost of treatment facilities. The channel of the Santa Clara River between Solemint and Saugus was chosen as a possible site for artificial recharge on the basis of the hydrology of this area and the proposed alinement of a 36-inch diameter pipeline. The analog model was used as an aid in determining the effects of the recharge on the aquifers.

CONCLUSIONS

A second model run was made to show the effects on the basin of the conditions imposed in the previous run without artificial recharge in the Santa Clara River. The hydrographs produced under these conditions are shown on plate 9.

The model indicated that the alluvial aquifer would be dewatered in the upper and lower Soledad Canyon areas prior to 1980. This is primarily due to the heavy pumping in the lower Soledad Canyon area between 1970 and 1980 which is not compensated for by artificial recharge as it was in the previous run. After 1980 the hydrographs for this run and the previous run are almost parallel with the previous run water levels between 10 and 30 feet higher than those for this run.

In the Saugus aquifer the hydrographs for this run are between 10 and 30 feet lower than the corresponding hydrographs for the previous run. In general the removal of the artificial recharge from the alluvial aquifer does not produce a significant change in water levels in the Saugus aquifer. The same management problems are produced by this set of conditions as were produced in the previous run, the major differences being that the problems occur as much as 10 years sooner. These model-generated readouts are subject to the same limitations as are the readouts from the previous run (page 54).

CONCLUSIONS

On the basis of the study of the hydrology of the area and the readouts from the analog model the following conclusions have been reached:

1. The alluvial aquifer has been the source of most of the ground water pumped in the area. The quality of water in this aquifer is readily affected by small quantities of inflow of either better or poorer quality water because of the relatively small quantity of ground water in storage in the aquifer. The water in this aquifer can in turn affect the chemical quality of the water in the Saugus aquifer. Urbanization will place additional stress on both aquifers by increasing the quantity of poor-quality sewage effluent and good-quality imported water available for recharge into the alluvial aquifer. In addition, heavy pumping from the Saugus aquifer to meet future water demands could drastically reduce the ground-water discharge from the basin. This could result in the buildup of salts within the basin because of the lost flushing action of the ground-water discharge.

These conditions substantiate the belief that a proper water-quality management program must be established within the basin. This should include the initiation and operation of a systematic periodic water-quality sampling program. These data can then be used to evaluate the effects on the basin of the above water-quality considerations.

2. The ability of the alluvial aquifer to accept artificial recharge is dependent on the storage space available within the aquifer. In the Saugus-Newhall area the space available for recharge in the alluvial aquifer varies widely depending on the quantity of surface-water recharge that occurs each year. To determine how much artificial recharge could take place each year, a water-level measuring program should be initiated in the lower Soledad Canyon area. Using these measurements and other data, estimates of the space available for the storage of water in the aquifer in the coming year could be made. This would facilitate obtaining the proper quantities of imported water for artificial recharge each year.

3. The model indicates that under historic pumping conditions the full entitlement of imported water to the year 1980 probably could not be artificially recharged in the 3.5-mile reach of the Santa Clara River below Solemint. This is due to the lack of storage in the alluvial aquifer. When an estimated maximum pumping rate to 1990 is distributed so the pumping near the artificial recharge reach is greatly increased, it seems possible to artificially recharge all the imported water to be delivered prior to 1980.

4. On the basis of readouts from the analog model it seems that the maximum quantities of pumping that might be demanded of the alluvial aquifer to 1990 cannot be supplied by that aquifer. To meet the maximum water requirements of the area, either more water must be imported than was used in the model run or pumping from the Saugus aquifer must be increased. However, the model indicates that increased pumping from the Saugus aquifer causes large head declines in that aquifer and induces declines in the alluvial aquifer. In the model declines were large enough to greatly diminish the ground-water discharge from the alluvial aquifer and to eliminate all natural outflow from the Saugus aquifer. If this condition were allowed to continue unchecked, water-quality problems could develop in the basin because of the imbalance of salts being carried in and out of the basin.

As a result, pumping in the Saugus aquifer cannot be increased indiscriminately without producing detrimental effects in both aquifers. A proper choice of pumping patterns in the Saugus and alluvial aquifers could minimize the adverse effects of increased pumpage. However, further interrogation of the model is required to determine whether or not the Saugus aquifer can support the proposed rate of pumping without dewatering the alluvial aquifer.

5. The Saugus aquifer is a potentially large source of ground water with an estimated maximum of 6 million acre-feet of recoverable water in storage. Further study of this aquifer is required to delineate the areas of poor water quality and to determine more accurately the transmissibility and storage coefficients of the aquifer. Future studies of the Saugus aquifer should give prime consideration to the area north of Castaic Junction and the San Gabriel fault because few hydrologic data are available for this area. With greater knowledge of this aquifer the ground-water basin model could be updated to give more precise information about the response of this aquifer to various ground-water management practices and to more accurately determine the potential for future utilization of the aquifer.

STUDY CODE NO. 1610-9-J-1

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES
Southern District
Water Projects Branch

PRELIMINARY EVALUATION OF STATE WATER PROJECT GROUND WATER STORAGE PROGRAM: SANTA CLARA RIVER VALLEY BASINS

-by-

Evelyn Tompkins
Graduate Student Assistant

This Technical Information Record (TIR) was prepared to document information developed during a reconnaissance-level investigation of the Santa Clara River Valley Ground Water Basins to determine if inclusion of these basins in the State Water Project Future Supply Program is feasible. Therefore, it should be considered as preliminary and subject to revision. This is primarily an internal office document with distribution limited to the cooperating agencies only.

February 1979

basins. Ground water is classed mainly as desirable for domestic and irrigation uses. TDS concentrations range from 260 mg/l to 500 mg/l.

Ground Water Use

The volume of ground water in storage is reduced by: pumped extractions, consumptive use of water by phreatophytes, and the outflow of rising water to Eastern Basin.

Currently, water demand is met entirely by pumped extractions; however, by 1980 imported water will be needed to meet the projected demands of an increasing population. Annual extractions were estimated to be 14.8 cubic hectometres (12,000 acre-feet) per year.

Storage Capacity

Ground water in storage between high and low water levels was estimated to be 19.7 cubic hectometres (16,000 acre-feet). Specific yield is approximately 20 percent.

The ground water level is often at or near the surface during storm flows. Therefore, the river channel alluvium has little capacity for further recharge immediately after heavy rains.

EASTERN BASIN

Description

Eastern Basin is downstream from Acton Basin and lies almost entirely within Los Angeles County. The basin is separated from Acton Basin by an impermeable bedrock constriction. Eastern Basin is composed of water-bearing deposits occurring along the Santa Clara River between the towns of Lang and Blue Cut and in the numerous canyons tributary to this area. The water-bearing deposits cover an approximate surface area of 11 655 hectares (29,000 acres).

The major aquifers in the basin are the Saugus Formation and the river channel alluvium. Only 1 067 metres (3,500 feet) of the Saugus Formation contribute to ground water development. This formation has been faulted, folded, and eroded. The river channel alluvium ranges from a few metres in thickness to about 61 metres (200 feet) thick near the town of Saugus.

Newhall-Saugus is the largest population center for the basin as well as for the whole Santa Clara River Valley.

Ground Water Occurrence

Ground water in the alluvium is unconfined, while ground water in the Saugus Formation is confined. Ground water moves westward. The San Gabriel and Holser Faults cross the water-bearing sediments and cause a water level differential of approximately 3 to 6 metres (10 to 20 feet).

No measurable subsurface inflow occurs from Acton Basin; inflow from Acton Basin occurs as rising water only. Outflow occurs either as subsurface outflow or as rising water. Rising water outflow was estimated to average 13 cubic hectometres (10,600 acre-feet) per year. The subsurface outflow was estimated to be 0.3 cubic hectometre (240 acre-feet) per year.

Percolation of precipitation, streamflow and the return flows of irrigation water recharge the basin. To a minor extent, inflow is derived from the semi-permeable formations which flank the main ground water basin. Other sources of recharge water for the basin are sewage and industrial waste effluents.

[redacted]ality

[redacted]dely ranging ground water conditions in this basin may cause localized variations [redacted]m the favorable water quality of the basin. Ground water quality for domestic [redacted] ranges from suitable in most areas of the basin to unsuitable in the western [redacted]ion. Ground water is generally suitable for irrigation of all but the most [redacted]tive crops.

TDS ranges from 600 mg/l to 1 800 mg/l. The concentration of mineral constituents in the ground water increases westward along the basin. Concentrations of chlorides and nitrates are generally lower than 100 mg/l and 45 mg/l respectively.

Ground Water Use

Wells tapping the alluvium are very productive with yields up to 7 570.8 litres (2,000 gallons) per minute. Well extractions from both the alluvium and the Saugus Formation average 28.7 cubic hectometres (23,300 acre-feet) per year. Near Blue Cut, the Newhall Land and Farming Company pumps and exports from 4.9 to 8 cubic hectometres (4,000 to 6,500 acre-feet) per year to Piru Basin for agricultural purposes.

Storage Capacity

No data is available for the total storage capacity of the basin or the current volume in storage; however, data does indicate the basin has an available capacity of 24.7 cubic hectometres (20,000 acre-feet). The safe yield was estimated at 28.5 cubic hectometres (23.100 acre-feet) per year.

PIRU BASIN

Description

Piru Basin is the easternmost basin lying entirely within Ventura County between the towns of Blue Cut and Fillmore. The ground water basin covers a surface area of about 2 843 hectares (7,025 acres).

Piru Basin is comprised of two principal aquifers: alluvium beneath the flood-plains and permeable freshwater-bearing zones in the San Pedro Formation. Over most of the basin the thickness of the alluvial aquifer ranges from 26 to 70 metres (85 to 200 feet). The alluvium consists of fluvial sand and gravel of Recent and

Conjunctive Use of the Saugus Aquifer

Castaic Lake Water Agency

January 1990
K/J/C 884605.00

Kennedy/Jenks/Chilton

CLWA. Consequently, the water is currently utilized for agricultural lease operations within the Devil's Den Water District.

The SWP release pattern from its storage reservoirs is based on maintaining a supply of water to satisfy demand in a drought. Consequently, SWP entitlements are subject to cutbacks at times. To assess potential future reductions, Reiter created a model of the SWP supply available for release using a Monte-Carlo iteration, a random analysis, to project precipitation. Historical hydrologic data are incorporated into the analysis. Because the State plans to develop additional sources of water in the future, the Reiter model includes scenarios for each projected yield increase. The expected increases are 60,000 acre-feet/year in 1991, 300,000 acre-feet/year in 1995 and 300,000 acre-feet/year in 2000. Based on the method of determining reductions discussed in Chapter 3, the potential reductions to CLWA's deliveries (assuming full entitlement amounts were requested), and thus the projected water available for CLWA's use, are calculated for each scenario.

The sources of groundwater available to users within CLWA's boundaries in the future will continue to be the alluvial and Saugus aquifers. From the alluvial aquifer the safe yield is anticipated to be 32,500 acre-feet/year, a portion of which will be used for agricultural purposes and, therefore, is not available for M&I use. The Saugus aquifer production is anticipated to be 11,000 to 22,000 acre-feet/year of which the assumption is made that 10,000 acre-feet/year is allocated for use by the water purveyors and 2,000 acre-feet/year is utilized by other water users.

In addition to groundwater and imported water, reclaimed water will be available for CLWA's use. A reclaimed water system with a maximum capacity of 8,600 acre-feet/year is planned for construction in a phased program. It is anticipated that reclamation will begin in 1992 and will increase until reaching the maximum in 1999. The reclaimed water will be used for landscape irrigation, and, therefore, will most likely be utilized from May through September.

From Table 4-1 and Figure 4-1, it can be seen that, based on Reiter's analysis, the supply does not meet the demand every year. The remaining 1,000 to 10,000 acre-feet/year of unused Saugus water is available for development by CLWA for use in the years of shortfall. Development of additional supplies in the Saugus aquifer will be considered in the following chapters.

Final Report

Reclaimed Water System Master Plan

Castaic Lake Water Agency

September 1993
K/J 894012.00

Kennedy/Jenks Consultants

CHAPTER 3

EXISTING AND PROJECTED WATER SUPPLY AND DEMAND

In order to evaluate the need for reclaimed water, water supplies and demands were projected into the future. This chapter describes the existing and future water supplies, demands, and facilities within the Castaic Lake Water Agency (CLWA) service area.

EXISTING WATER SUPPLY, DEMAND AND FACILITIES

Water Supply

Water demands in the Santa Clarita Valley are currently met by two sources: the State Water Project (SWP) and local groundwater supplies. The estimated average total supply available for municipal and industrial (M&I) and agricultural uses is 98,000 to 109,000 acre-feet per year, depending on the yield available from the local groundwater aquifers. CLWA purchases State water and wholesales it to four domestic water purveyors, these being the Los Angeles County Waterworks District No. 36, the Newhall County Water District, the Santa Clarita Water Company and the Valencia Water Company. The approximate boundaries of the water purveyors are shown on Figure 3-1. CLWA has SWP entitlements of 41,500 acre-feet per year for M&I uses. In addition, SWP agricultural entitlements of 12,700 acre-feet per year have been transferred to CLWA from the Devil's Den Water District in Kern and Kings Counties. To date, the Devil's Den entitlements have not been used within the CLWA service area.

In addition to imported water, local groundwater supplies have been developed by domestic water purveyors and by agricultural water users. Two fresh-water bearing aquifers, the alluvial and Saugus aquifers, underlie CLWA's boundaries and form the Eastern Groundwater Basin of the Santa Clara River Valley Basin.

The alluvial aquifer lies above the Saugus aquifer and is comprised of the alluvial sediments along the river and its major tributaries. The maximum thickness of the alluvium is about 200 feet. A large number of wells penetrate this upper aquifer, and, historically, most water extracted from the groundwater basin has been from the alluvial aquifer. The perennial yield of the aquifer is considered to be 32,500 acre-feet, a portion of which is used for agricultural purposes and is increasingly available for M&I uses as agricultural land is developed for urban use.

Much less information is known about the Saugus aquifer. Historically, few wells penetrated the Saugus aquifer. However, as water demands in the valley have increased, more wells have been drilled into the aquifer. The anticipated annual

VALENCIA WATER COMPANY

WATER MANAGEMENT PROGRAM

DECEMBER, 1995

TABLE III-1

WATER SOURCES FOR SANTA CLARITA VALLEY

SOURCE Acre-Feet per Year	Minimum	Maximum
Santa Clara River Alluvium	31,600	32,600
Saugus Formation Normal Pumping	11,000	22,000
Saugus Short Term Overdraft	20,300	None
State Project Water		
CLWA Table A Entitlement[1]	43,360	54,200
TOTAL CURRENT RESOURCES	106,260	108,800
Reclaimed Water Potential	10,000	10,000
TOTAL WATER RESOURCES AVAILABLE	116,260	118,800
NON DOMESTIC & OTHER		
Agricultural uses	12,000	5,000[3]
Pitchess Honor Rancho	2,000[2]	3,000[3]
NET WATER RESOURCES FOR M & I	102,260	110,800

[1] Entitlements are subject to drought related cutbacks. Maximum cutback on Table A is estimated to be 20%. CLWA plans a conjunctive use program to mitigate the effects of State Project Water cutbacks which are shown in the column designated as minimum. This requires Saugus Short Term Overdraft.

[2] Estimated current use.

[3] Estimated future use.

Castaic Lake Water Agency

Draft

Integrated Water Resources Plan
Water Demand and Supply Evaluation

February 1998

MONTGOMERY WATSON

BOOKMAN-EDMONSTON
ENGINEERING, INC.

Pumping from the Saugus Aquifer has varied from about 3,900 acre-ft/yr up to 14,800 acre-ft/yr. In 1996, Saugus pumping was about 8,200 acre-ft/yr. Installed pumping capacity can produce 15,000 to 16,000 acre-ft/yr from the Saugus Aquifer.

In 1991, groundwater was pumped into the CLWA distribution system because of SWP supply deficiencies and the cost of water was less than purchasing State Drought Bank water. By moving groundwater from areas of adequate supply into areas with limited groundwater, the local water community illustrated a major element of a conjunctive use program.

Estimated Dry Period Groundwater Production Capability

Slade (1984) reported that the perennial yield of the Alluvial Aquifer is about 32,000 acre-ft/yr. This yield is the historical annual production adjusted for a minor change in storage. Because of he limited storage capacity in the Alluvium, this groundwater source may be limited in dry periods. Wells in the Alluvium near the eastern reaches of the Santa Clara River are known to have groundwater levels which decline during consecutive dry years by as much as 100 feet, reducing pumping capacity. A series of winter storms recharge the aquifer and result in water level recovery.

The data reviewed for the Pardee area (located near Bouquet Canyon Road and the Santa Clara River) shows that in 1990 and 1991, groundwater levels did not decline as much as those in the easterly areas. In 1991, the Valencia Water Company increased its pumping to offset limited SWP water supplies. Valencia Water Company reported delivery of about 5,000 acre-ft/yr into the CLWA distribution system. Total pumping from the Alluvium by Valencia Water Company in 1991 was about 9,900 acre-ft/yr, as reported to the State Water Resources Control Board.

Based on historical data, the Alluvial Aquifer east of Castaic Junction can support production of at least 20,400 acre-ft/yr as shown in Table 3-2.

Table 3-2
1991 Alluvial Groundwater Production
East of Castaic Junction

Water Purveyor	Annual Production (acre-ft/yr)
Newhall CWD	1,900
Santa Clarita WC	5,900
Valencia WC [1]	10,400
Wayside Honor Rancho	2,200
Total	20,400

1. Includes 500 acre-ft pumped in 1991 by Newhall Land & Farming Co. east of Castaic Junction.

PROPOSED FINAL

Supplemental Water Project Environmental Impact Report

SCH # 98041127

FEBRUARY 1999

3.2 SURFACE WATER, WATER USE, GROUNDWATER

Surface Water. The primary drainage course in the CLWA area is the Santa Clara River. Principal tributaries to the Santa Clara River include Mint Canyon, Bouquet Canyon, San Francisquito Canyon, Castaic Creek Canyon, Oak Spring Canyon, Sand Canyon, and Potrero Canyon. Water flow in the stream canyons is ephemeral, and diminishes rapidly after most rainfall events. Surface water resources include the Santa Clara River, Bouquet Reservoir, and Castaic Lake. Water (both imported and naturally occurring) is diverted from Pyramid Lake located a few miles to the north, through hydroelectric power generation facilities, into Castaic Lake. Water quality in the Santa Clara River is generally poor due to high concentrations of total dissolved solids, however, water in Pyramid Lake, Castaic Lake, and Bouquet Reservoir is suitable for municipal use. Primary flood hazard areas occur in and along natural drainage channels, such as the Santa Clara River and its tributaries, and in areas where sheetflow may occur during high intensity rainfall (CLWA 1988, 1998; Slade 1986).

Water Supplies. The existing local water supply in the CLWA service area is groundwater extracted from the alluvial aquifer and from the underlying Saugus Formation aquifer. Historically, groundwater has been the primary source of water in the Santa Clarita Valley. Since 1980, local groundwater supplies have been supplemented with imported water from the SWP. From 1984 to 1996, historic SWP entitlement has averaged 24,568 acre-feet per year (AFY) (including deliveries to Devil's Den in Kern County and Kings County), which is 45 percent of the existing 54,200 AFY entitlement.

Groundwater. Large quantities of water are pumped from relatively shallow wells in the highly permeable alluvial aquifer. Although this alluvial aquifer is the smaller of the two-aquifer systems, as measured by storage capacity, most water wells within CLWA are drilled into the alluvial aquifer. Slade (1986) estimated the perennial yield of the alluvial aquifer to be from 31,600 AFY to 32,600 AFY. The maximum historic quantity of water stored in the alluvium has been estimated to be approximately 201,000 acre-feet, following substantial rainfall in 1945 (CLWA 1998). Recharge amounts are highly variable, depending on annual precipitation with documented annual water level recoveries of 70 feet or more. Dry years have resulted in water level drops of approximately 100 feet, particularly in Soledad Canyon. However, groundwater levels have remained near the ground surface in the vicinity of Castaic Junction, due to the east-

SANTA CLARITA VALLEY WATER REPORT
1999

Castaic Lake Water Agency

Los Angeles County Waterworks District #36

Newhall County Water District

Santa Clarita Water Company

Valencia Water Company

Prepared by: The Upper Santa Clara Valley Water Committee
February 2000

Executive Summary

Santa Clarita Valley Water Report 1998

This annual report provides factual information about the current water resources within the Santa Clarita Valley. The Upper Santa Clara Valley Water Committee, (Committee) whose members are responsible for ensuring that Valley residents have a safe, adequate and reliable water supply, prepared this report.

The Santa Clarita Valley is served by four retail water purveyors: Los Angeles County Waterworks District 36, Newhall County Water District, Santa Clarita Water Company and Valencia Water Company. The Castaic Lake Water Agency (CLWA) provides imported water from California's State Water Project to the four purveyors for distribution. These five entities meet regularly as the Upper Santa Clara Valley Water Committee to coordinate the beneficial use of water in the Valley.

This report provides information about the area's geology, the local groundwater basin, imported water supplies, water quality, precipitation, recycled water, existing and projected water demand and an overall outlook of water supply and demand.

In 1998, the Committee reports a total water supply of approximately 107,000 acre-feet per year and an existing water demand of 48,858 acre-feet. The Santa Clarita Valley currently has a surplus of supply of about 58,142 acre-feet over existing demand. The Committee projects this condition to continue for the foreseeable future given the overall availability of local and imported water supplies, the levels of precipitation both locally and regionally, the favorable operating condition of the groundwater basin and the existing facilities in place to deliver water throughout the valley.

Water Supplies include groundwater from the shallow Alluvial Aquifer and the underlying deeper Saugus Formation and imported water from the State Water Project. The following summarizes the water resources of the Valley in 1998:

Alluvial Aquifer

- The annual perennial yield for the Alluvial Aquifer is 32,500 acre-feet per year. This quantity of water represents an amount of water that can be pumped annually from the aquifer on a long-term basis and during dry year conditions without causing an undesirable result.

Section I

Introduction

Section I.A Background

For most residents of the Santa Clarita Valley (Valley), domestic water service is provided by four retail water purveyors. They are Los Angeles County Waterworks District 36, Newhall County Water District, Santa Clarita Water Company, and Valencia Water Company. The Castaic Lake Water Agency (CLWA) is a wholesaler that obtains water from California's State Water Project. CLWA draws water from Castaic Lake where it is filtered and disinfected at two treatment plants before distribution to the purveyors. These five entities meet regularly as the Upper Santa Clara Valley Water Committee (Committee) to coordinate the beneficial use of water in the Valley. Their respective service areas are shown in **Figure I-1**.

The Committee was officially formed in 1967 when its members requested the United States Geological Survey (USGS) to prepare a joint water resources study of the Santa Clara River Watershed. The purpose of the Committee was to consult with the USGS regarding the study, to assist with the accumulation of data, and to continue working toward coordinating water management programs for the area. The study was completed in 1972 by S. G. Robson of the USGS and provides the initial baseline information of the valley's groundwater resources.

Over the years, the Committee has continued to review and document the availability of water resources in the region. Past studies have assessed the condition of the local groundwater aquifers, their hydro-geologic character, aquifer storage capacity, perennial yield and recharge rate and the potential for conjunctive use of both groundwater and imported water resources.

Other efforts have included developing drought contingency plans, evaluating the impact of landfills on the groundwater basin, coordinating emergency response

Section II

Water Supplies

Historically, local groundwater extracted from the Alluvial and Saugus Aquifers has been the primary source of water in the Santa Clarita Valley. However, local groundwater supplies since 1980 have been supplemented with imported water from the State Water Project. This Section describes the geologic setting of the Santa Clarita Valley, the local and imported water supplies, water quality, precipitation records and recycled water programs.

Section II.A Eastern Groundwater Basin

Figure II-1 shows the approximate boundaries of the Eastern Groundwater Basin, which is the largest and most developed groundwater body of the Upper Santa Clara River HA. It is an alluvial-valley aquifer-stream system. The basin consists of Holocene Alluvium, Pleistocene terrace deposits, and the Plio-Pleistocene Saugus Formation.

Information on the hydrologic conditions of the groundwater basin comes from three previous studies. Robson (1972) evaluated the availability, quantity, and potential for development of the groundwater resources of the Saugus-Newhall area. Slade (1986) conducted an evaluation of the hydrologic conditions of the Alluvial Aquifer underlying the Santa Clarita Valley and its potential for artificial recharge. In 1988, Slade conducted a hydrologic evaluation of the Saugus Formation, its quantity, and potential for development.

Section II.A.1.a. Alluvial Aquifer - General

The Holocene Alluvium exists extensively on the valley floor and becomes restricted at the narrow channels of the river's tributaries in the upper reaches. The Alluvium is deepest along the center of the present river channel, with a

values where the alluvium is thickest in the center of the valley and generally west of Bouquet Canyon.

The amount of groundwater in storage in the Alluvium can vary considerably because of the effects of recharge and discharge from the aquifer. Based on an Alluvial area of 16,410 acres, variable thickness, and specific yield of 9 to 16 percent, it has been estimated that the theoretical maximum amount of groundwater that could be held and retrieved in usable storage is 240,000 acre-feet. Based on historical fluctuations in groundwater levels, calculated volumes of groundwater in storage in the Alluvium have ranged from a high of 201,000 acre-feet in April 1945 to a low of 107,000 acre-feet in November 1965.

Three of the four water companies pump local groundwater in addition to purchasing imported water from CLWA. The Los Angeles County Waterworks District 36 presently has no operating groundwater extraction facilities. Also, the County of Los Angeles and the Newhall Land and Farming Company pump from the Alluvial Aquifer to service their own lands.

In 1986, the Committee hired Richard C. Slade and Associates to study the Alluvial Aquifer and determine, among other things, the aquifer's hydrogeologic condition, perennial yield, storage capacity and potential for artificial recharge. Based on historical pumpage and hydrologic conditions over a 28 year base period (1957-58 through 1984-85), Slade estimated that the annual perennial yield for the Alluvial Aquifer is 31,600 acre-ft to 32,600 acre-ft per year (one acre-ft is +/- 325,900 gallons). Based on the results of that hydrogeologic report and the operating experience of its members, the Committee has adopted a perennial yield of 32,500 acre-ft per year. This quantity represents the amount of water that can be pumped annually from the aquifer on a long-term basis, including fluctuations above and below the perennial yield amount during wet and dry year conditions, without causing an undesirable result. Undesirable results could include long-term groundwater level decline (and associated decline in groundwater storage), degradation of water quality in the aquifer, or land

SANTA CLARITA VALLEY WATER REPORT
2002

PREPARED BY:

Castaic Lake Water Agency

Los Angeles County Waterworks District #36

Newhall County Water District

Valencia Water Company

April 2003

Table II-7
Total Water Supplies
(Acre-Feet)

Year	Sources of Supply									
	Water Retailors			Agriculture, Irrigation, & Miscellaneous Uses			Total Per Source			Total Per Year
	Alluvial Aquifer	Saugus Form.	SWP	Alluvial Aquifer	Saugus Form.	SWP	Alluvial Aquifer	Saugus Form.	SWP	All Sources
1980	16,625	4,569	1,125	14,831	20	0	31,456	4,589	1,125	37,170
1981	14,056	4,950	5,816	16,737	20	0	30,793	4,970	5,816	41,579
1982	8,684	3,569	9,659	13,184	521	0	21,868	4,090	9,659	35,617
1983	8,803	3,398	9,185	11,483	454	0	20,286	3,852	9,185	33,323
1984	12,581	3,809	10,996	14,737	640	0	27,318	4,449	10,996	42,763
1985	12,519	4,140	11,823	12,828	575	0	25,347	4,715	11,823	41,885
1986	12,418	4,975	13,759	11,787	510	0	24,205	5,485	13,759	43,449
1987	12,630	4,962	16,285	10,012	599	0	22,642	5,561	16,285	44,488
1988	12,197	6,404	19,033	9,451	524	0	21,648	6,928	19,033	47,609
1989	13,978	7,217	21,618	9,743	542	0	23,721	7,759	21,618	53,098
1990	13,151	8,302	21,613	10,725	559	0	23,876	8,861	21,613	54,350
1991	17,408	14,417	7,968	9,779	500	0	27,187	14,917	7,968	50,072
1992	16,897	10,458	13,911	10,694	466	987	27,591	10,924	14,898	53,413
1993	19,808	10,151	13,393	10,318	459	443	30,126	10,610	13,836	54,572
1994	20,068	11,531	14,389	13,065	494	311	33,133	12,025	14,700	59,858
1995	20,590	8,087	16,996	13,874	473	6	34,464	8,560	17,002	60,026
1996	24,681	7,373	18,093	13,757	813	780	38,438	8,186	18,873	65,497
1997	25,273	6,752	22,148	14,326	993	1,067	39,599	7,745	23,215	70,559
1998	23,898	4,706	20,254	12,750	849	12	36,648	5,555	20,266	62,469
1999	27,240	2,728	27,282	16,166	988	20	43,406	3,716	27,302	74,424
2000	25,216	3,193	32,579	14,433	887	3	39,649	4,080	32,582	76,311
2001	22,055	3,267	35,369	15,218	873	0	37,273	4,140	35,369	76,782
2002	22,097	4,360	41,768	16,006	800	0	38,103	5,160	41,768	85,031

NEWHALL COUNTY WATER DISTRICT

Summary of Annual Rainfall

October 1st Thru September 30th

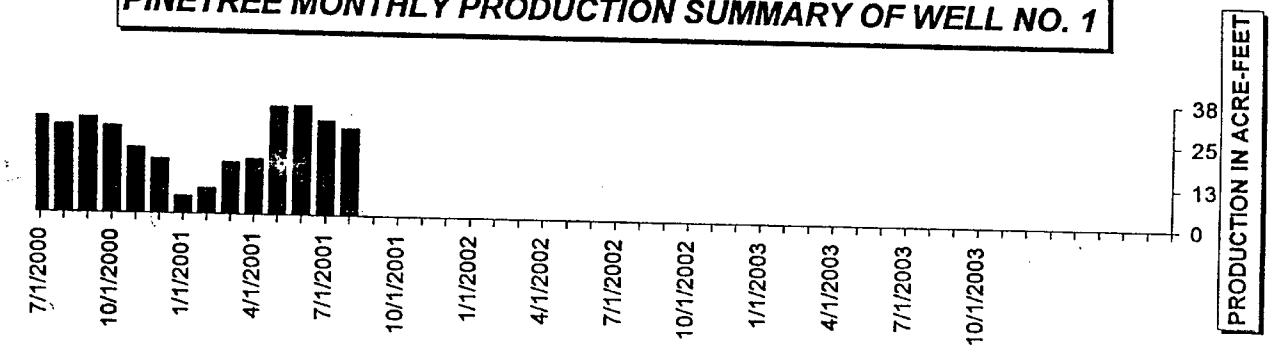
(Totals in inches)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Oct	0.68	3.47	0.00	0.86	0.00	0.50	1.55	0.57	0.78
Nov	1.55	1.25	0.92	0.37	0.63	0.00	0.00	0.75	0.71
Dec	0.24	4.80	6.74	0.00	0.01	5.59	7.25	1.76	1.94
Jan	2.11	3.37	0.89	2.89	1.11	3.28	17.11	0.48	21.98
Feb	0.62	3.49	4.13	4.23	5.72	16.64	11.73	5.31	1.93
Mar	1.69	1.16	1.30	0.22	11.33	9.73	4.27	2.33	8.30
Apr	0.14	3.98	0.30	0.48	0.00	0.15	0.00	0.42	0.72
May	0.10	0.09	0.00	0.88	0.00	0.34	0.00	0.00	0.26
Jun	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.76
Jul	0.09	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00
Aug	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sep	0.00	0.10	0.62	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	**7.24**	**21.71**	**14.90**	**9.93**	**18.80**	**36.53**	**42.56**	**11.62**	**37.38**

	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Oct	0.00	1.30	0.00	0.33	0.00	1.13	0.22	0.00	1.10
Nov	0.00	1.06	3.73	1.39	0.00	0.00	3.18	3.01	0.63
Dec	2.33	8.70	6.72	1.39	0.05	0.00	1.30	5.85	2.57
Jan	2.97	6.64	3.49	2.08	1.21	5.84	1.55	0.00	
Feb	6.73	0.23	22.00	0.65	9.43	10.76	0.51	9.03	
Mar	2.08	0.00	5.15	3.00	3.15	3.38	0.38	2.38	
Apr	0.13	0.00	2.28	3.78	2.10	2.56	0.05	2.35	
May	0.68	0.00	5.50	0.00	0.00	0.00	0.12	1.70	
Jun	0.00	0.00	0.06	0.48	0.00	0.00	0.01	0.00	
Jul	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.02	
Aug	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	
Sep	0.00	0.53	0.21	0.01	0.00	0.00	0.02	0.00	
TOTAL	**14.92**	**18.51**	**49.14**	**13.11**	**16.25**	**23.67**	**7.34**	**24.34**	**4.30**

Newhall County Water District

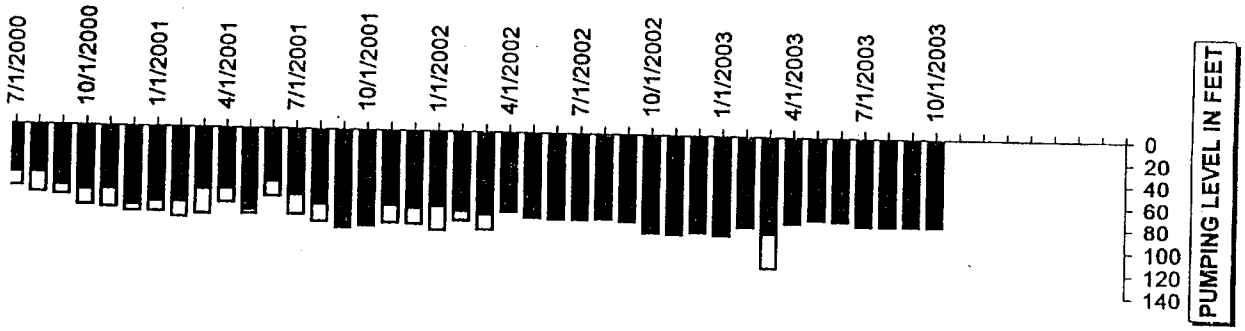
PINETREE MONTHLY PRODUCTION SUMMARY OF WELL NO. 1



For October 2003

Current Month's Production (AF):	**0.00**
AVG GPD	0
"July 1 Thru June 30"	
TOTAL TO DATE (AF)	0.00
PREVIOUS YEAR (AF)	0.00
Comparative Ratio	**0.0%**

WELL NO. 1



TIMED GPM	0
STATIC LEVEL	80
PUMPING LEVEL	0
TOP OF BOWLS	**160**
WEATHER:	
AVG HIGH	90.8
AVG LOW	57.3
PRECIPITATION	0.10
TOTAL PRECIPITATION SINCE OCT 1st	0.10

Newhail County Water District
PINETREE MONTHLY PRODUCTION SUMMARY OF WELL NO. 3
WELL NO. 3
PRODUCTION IN ACRE-FEET
90
60
30
0
10/1/2003
7/1/2003
4/1/2003
1/1/2003
10/1/2002
7/1/2002
4/1/2002
1/1/2002
10/1/2001
7/1/2001
4/1/2001
1/1/2001
10/1/2000
7/1/2000
PUMPING LEVEL IN FEET
0
20
40
60
80
100
120
140
10/1/2003
7/1/2003
4/1/2003
1/1/2003
10/1/2002
7/1/2002
4/1/2002
1/1/2002
10/1/2001
7/1/2001
4/1/2001
1/1/2001
10/1/2000
7/1/2000
For October 2003
Current Month's Production (AF): 14.84
AVG GPD 156,032
"July 1 Thru June 30"
TOTAL TO DATE (AF) 138.43
PREVIOUS YEAR (AF) 220.18
Comparative Ratio -37.1%
TIMED GPM 525
STATIC LEVEL 102
PUMPING LEVEL 113
TOP OF BOWLS 135
WEATHER:
AVG HIGH 90.8
AVG LOW 57.3
PRECIPITATION 0.10
TOTAL PRECIPITATION SINCE OCT 1st 0.10

Newhall County Water District

PINETREE MONTHLY PRODUCTION SUMMARY OF WELL NO. 4

WELL NO. 4

For October 2003

Current Month's Production (AF):	0.0
AVG GPD	0

"July 1 Thru June 30"

TOTAL TO DATE (AF)	0.00
PREVIOUS YEAR (AF)	0.00
Comparative Ratio	0.0%

TIMED GPM	0
STATIC LEVEL	104
PUMPING LEVEL	0
TOP OF BOWLS	165

WEATHER:

AVG HIGH	90.8
AVG LOW	57.3
PRECIPITATION	0.10

TOTAL PRECIPITATION SINCE OCT 1st 0.10

PRODUCTION IN ACRE-FEET

80 60 40 20 0

7/1/2000 10/1/2000 1/1/2001 4/1/2001 7/1/2001 10/1/2001 1/1/2002 4/1/2002 7/1/2002 10/1/2002 1/1/2003 4/1/2003 7/1/2003 10/1/2003

PUMPING LEVEL IN FEET

0 20 40 60 80 100 120

7/1/2000 10/1/2000 1/1/2001 4/1/2001 7/1/2001 10/1/2001 1/1/2002 4/1/2002 7/1/2002 10/1/2002 1/1/2003 4/1/2003 7/1/2003 10/1/2003

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WATER LEVEL GRAPH

Revised 12/1/03

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Valencia Water Company)		
(U342-W) seeking approval of its updated)		
Water Management Program as ordered in)		
Commission Resolution W-4154 dated)		
August 5, 1999)	Application No.	A-99-12-025

DIRECT TESTIMONY OF

STEVEN B. BACHMAN

IN SUPPORT OF THE PROTEST BY VENTURA COUNTY TO APPLICATION OF VALENCIA WATER COMPANY FOR APPROVAL OF ITS UPDATED WATER MANAGEMENT PROGRAM

DUE: April 10, 2000

TESTIMONY OF STEVEN B. BACHMAN

Q.: PLEASE STATE YOUR NAME.

A.: I am Steven B. Bachman.

Q.: DR. BACHMAN, WHAT IS YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND?

A.: I have a doctor of philosophy degree from the University of California, Davis in geological sciences. Prior to that, I earned a masters degree in geological sciences from the University of California, Los Angeles and a bachelor of science degree in aeronautical engineering from the University of Washington. I have worked professionally as a geologist for 26 years and am a registered geologist in California. After my Ph.D., I was an assistant professor at Cornell University for four years. I then formed a consulting group in San Diego for Nekton, Inc. and two years later started my own consulting company, Crouch, Bachman, and Associates, Inc. in Santa Barbara. In 1990 I joined Integrated Water Technologies, Inc. ("IWT") as vice president, where I subsequently became president.

I began working for myself four years ago, while continuing to consult for IWT. As part of my consulting, in 1993 I became Groundwater Manager for United Water Conservation District ("United Water") in Ventura County, a position I continue to hold. United Water oversees groundwater management for most of the groundwater basins of Ventura County. Last year. I was retained as groundwater consultant to Calleguas Municipal Water District ("Calleguas"), the major wholesaler of State Water Project water ("State water") to Ventura County. For Calleguas, I oversee groundwater management issues, including effects of their joint Aquifer Storage and Recovery program with the Metropolitan Water District of Southern California. As part of this work for United Water and Calleguas, I maintain and operate the U.S. Geological Survey numeric groundwater model used by Ventura County agencies to determine potential effects of future surface xvater and groundwater management strategies. In 2000, I became a director for Montecito Water District.

My experience in groundwater projects in California, Nevada, and Arizona includes artificial recharge planning and implementation, groundwater management, groundwater quality studies, aquifer studies, groundwater modeling, groundwater recharge studies, wetlands treatment, and expert witness on groundwater. I have authored/co-authored over 50 geologic articles, including the recent book California Groundwater Management, funded by the U.S.

Environmental Protection Agency ("U.S. EPA") and published by the Groundwater Resources Association, and I lecture statewide on groundwater management. I have been president of the Society of Sedimentary Geologists (SEPM) - Pacific Section, associate editor of the journal Geology of the Geological Society of America, and chair of the Subcommittee on Groundwater Management of the Association of California Water Agencies ("ACWA"). I am presently chair of ACWA's Groundwater Committee, for which I have been testifying and providing technical guidance to the California State Water Resources Control Board on differentiating surface water from groundwater.

My recent projects include planning new artificial recharge projects for the Oxnard Plain, working on solving the overdraft of the Las Posas basin, characterizing nitrate contamination in the Oxnard Plain Forebay, cooperating in a long-range weather prediction study by United States Geological Survey, National Oceanographic Atmospheric Administration and Scripps, providing technical guidance to Orange County Water District on implementing a new groundwater model, and providing expert testimony on groundwater issues.

Q.: HAVE YOU EVALUATED WHETHER THERE IS AN ADEQUATE WATER SUPPLY FOR USE BY VALENCIA WATER COMPANY IN THE FUTURE?

A.: Yes. I have taken demand projections used by Castaic Lake Water Agency ("CLWA"), the State Water Project Contractor for Valencia Water Company's ("Valencia") service area, and compared those projections to available supplies of local groundwater and imported State water.

Q.: HOW HAVE YOU DETERMINED FUTURE DEMAND?

A.: I used the mid-range demand curve that is in the CLWA Draft Integrated Water Resources Plan Water Demand and Supply Evaluation, dated February 1998 ("IWRP"), that shows steadily increasing demand for urban uses and decreasing demand for agricultural water. (Attached to this testimony, as Exhibit 1, is a true and correct copy of Figure 2-1 from the IWRP[1].)

Q.: WHAT VALUES ARE YOU USING FOR FUTURE SUPPLY?

---

[1] Only excerpts of the relevant pages from various reports are attached. Full reports are available upon request.

A.: The supply consists of State water from CLWA and local groundwater from both the Alluvial (shallower) Aquifer and the Saugus Aquifer. This includes:

1. for State water, a supply of CLWA's full entitlement of 95,200 acre-feet per year ("AFY") during wet and normal periods and a 50 percent entitlement of 47,600 AFY during dry years. (Exhibit 2, Valencia's Water Management Program, dated December 16, 1999 ("VWMP"), Figures III-1 and III-2.);
2. for the Alluvial Aquifer, 32,600 AFY of perennial yield (Exhibit 3, Hydrogeologic Investigation Perennial Yield and Artificial Recharge Potential of the Alluvial Sediments in the Santa Clarita River Valley of Los Angeles County, California, December 1986, published by hydrologist Richard Slade ("1986 Slade Report"), p. 91), with a maximum yield of 25,000 AFY in dry years (Exhibit 4, IWRP, pp. 3-7 and 3-8) and 40,000 AFY in wet or normal years. (Exhibit 2, VWMP, Figure III-2.) This dry year yield varies from Valencia's dry year yield of 32,500 AFY (Exhibit 2, VWMP, Figure III-2), because pumping of 40,000 AFY in wet years and 32,500 AFY in dry years exceeds the perennial yield, which must average 32,600 AFY. In addition, CLWA's IWRP reported Slade as saying that "the entire Alluvial Aquifer has the capability of yielding about 25,000 acre-ft/yr for multiple dry years." (Exhibit 4, IWRP, p. 3-8.);
3. 1,700 AFY of reclaimed water (Exhibit 2, VWMP, Figure III-2);
4. no State Drought Water Bank supply, as supported by Wallace G. Spinarski's testimony filed herein; and
5. the Saugus Aquifer supplies the remaining demand, as it is the only additional source.

Q.: ARE THE PROPOSED AQUIFER PUMPING LEVELS IN VWMP'S FIGURE III-2 REALISTIC?

A.: As stated in the previous answer, the pumping levels proposed in the Alluvial Aquifer of 40,000 AFY in wet years and 32,500 AFY in dry years exceed both the perennial yield and the capacity of the aquifer to supply water during dry years. Therefore, I believe that these pumping levels are too high. In my analysis, I used the rates of 40,000 AFY in wet years and 25,000 AFY in dry years, as did the IWRP. (Exhibit 5, IWRP, Table 3-7.)

The VWMP assumes production from the Saugus Aquifer of 20,000 AFY in wet years and 41,000 AFY in dry years, which includes 30,000 AFY of dry year firming supplies from the Saugus. (Exhibit 2, Figure III-2; and Exhibit 6, VWMP, p. 15.) These projections far exceed the wet year recharge of 21,000 AFY and

average dry year recharge of 12,000 AFY. (Exhibit 7, IWRP, pp. 3-2, 3-3 and Hydrogeologic Assessment of the Saugus Formation in the Santa Clarita Valley of Los Angeles County, California, February 1988 ("1988 Slade Report"), pp. 95-97, collectively.) Valencia's average Saugus pumping of 30,500 AFY compares to average recharge of 16,500 AFY. As I discuss later, pumping even at the recharge rate of 16,500 AFY may exceed the perennial yield of the aquifer.

Q.: HAVE YOU COMPARED THE SUPPLY AND DEMAND NUMBERS?

A.: Yes. Supply and demand must be compared over a series of wet and dry cycles to realistically examine the water supply. I used the climatic conditions from the 51-year period from 1944 to 1994 to test potential conditions for the water supply from 2000 to 2050. In other words, the actual climatic conditions from the year 1944 were applied to the year 2000, 1945 conditions to the year 2001, and so on. This is similar to the technique used by the U.S. Geological Survey when constructing their regional groundwater model for the Calleguas-Santa Clara area. For this analysis, northern California river runoff for each year was used as the indicator of State water availability, and local precipitation for each year was used as an indicator of wet or dry conditions for groundwater usage. (Exhibit 8, Santa Clarita Valley Water Report 1999 ("1999 Water Report"), Figure II-15.) Please see Appendix to this testimony for details of analysis.

For the analysis, it is assumed that: purveyors use 95,200 AFY of State water in wet or normal years and 47,600 AFY in dry years; recycled water supplies of 1,700 AFY are used every year; and the Alluvial Aquifer is pumped at its maximum rate of 40,000 AFY in wet years and 25,000 AFY in dry years. If there is a shortfall in supply, then it is assumed that the shortfall is pumped from the Saugus Aquifer.

Q.: WHAT IS THE RESULT OF YOUR COMPARISON OF SUPPLY AND DEMAND?

A.: The total demand for water in 2000 in the basin is approximately 70,500 AFY (Exhibit 1, IWRP, Figure 2-1.) This demand will grow to approximately 105,500 AFY by 2010 and 146,500 AFY by 2020. Supply matches demand until about 2011, when supply goes from a general surplus to a general deficit. After 2011, the general excess demand is met by increased pumping of the Saugus Aquifer. (Exhibit 9, Chart - Water Supply Sources Necessary to Meet Demand.) This increased pumping overdrafts the Saugus Aquifer by pumping at rates higher than the aquifer can be recharged. (Exhibit 10, Chart - Groundwater Pumping of Saugus Aquifer, 1980 to 2050.) I have used the years 2011 (onset of perpetual Saugus

overdraft) and 2020 (planning horizon of the VWMP) as illustrations in the following table. The complete analysis for all years is indicated in Exhibit 10.

Supply/Demand (AF)	2011		2020	
Demand	110,000		146,500	
State Water Project		47,600		47,600
Reclaimed Water		1,700		1,700
Pumping of Alluvial Aquifer		25,000		25,000
Required Pumping of Saugus Aquifer		35,700		72,200
Accumulated Overdraft of Saugus		23,700		249,664

With dry years in both northern and southern California in the year 2011, a reduced supply of 47,600 AFY of State water and 25,000 AFY of water from the Alluvial Aquifer would be available. In this case, 35,700 AFY would be pumped from the Saugus Aquifer, well above either the wet year or dry year recharge of 21,000 AFY and 12,000 AFY, respectively. By the year 2020, 72,200 AFY must be pumped from the Saugus Aquifer. These high production rates from the Saugus create an accumulated overdraft of 249,664 acre-feet by 2020.

I have summarized the results of this analysis in three diagrams. The required Saugus Aquifer pumping is shown in Exhibit 10. As indicated, the stress on the Saugus Aquifer increases as demand continues to increase. To meet this demand, the Saugus will have to be pumped at levels up to 85,000 AFY during wet years. (Exhibits 9 and 10.) Although the application to the Public Utilities Commission ("PUC") states that the Saugus Aquifer will be pumped up to 40,000 AFY during dry years, in fact, the Saugus will have to be pumped at rates up to 100,000 AFY in dry years. (Exhibit 10.) By the 2040s, the Saugus Aquifer will be pumped at an average rate of above 80,000 AFY. When this is compared to annual recharge rates in the Saugus of 12,000 (dry) to 21,000 (wet) AFY, it is clear that there will be substantial overdrafting of the Saugus Aquifer. If the aquifer is pumped at a higher rate than it can be recharged, water levels will drop. At some point, this dropping water level will cause problems.

Q.: WHAT TYPES OF PROBLEMS COULD OCCUR AS WATER LEVELS DROP?

A.: The first problem generally encountered is that other pumpers in the basin must pump groundwater from deeper depths, increasing pumping costs. Then, additional work must be performed to lower pumps in the wells. As water levels drop, wells may actually have to be redrilled to deeper depths. However, several additional problems may occur at the same time. (Exhibit 11, Steven Bachman, et al., California Groundwater Management (1997), pp. 6-7.) Poorer quality water from deeper parts of the aquifer may be pulled into the wells. The overdrafting wells will act as sinks in the basin, creating groundwater gradients that may allow toxic chemicals from nearby contamination sites to flow towards and enter the wells. Finally, dewatering of the aquifer may cause compaction in the aquifer and result in surface subsidence. Such subsidence occurs in some California basins, with a good example being only a few miles away near Lancaster. There is potential liability to water producers and their customers if overpumping causes surface rupture of streets, pipelines, and buildings.

Q.: WHAT IS THE POTENTIAL FOR SUBSTANTIAL OVERDRAFTING OF THE SAUGUS AQUIFER, GIVEN THE SUPPLY AND DEMAND IN THE SANTA CLARITA VALLEY?

A.: A systematic overdraft of the Saugus Aquifer begins in 2011. (Exhibits 9 and 10.) By the year 2050, the accumulated overdraft will exceed the purported 1.4 million AFY of groundwater stored in the Saugus Aquifer. (Exhibit 10-A, Chart - Overdraft of Saugus Aquifer.) The 1.4 million AFY is an estimate of all groundwater stored to a depth of approximately 2500 feet within the Saugus Aquifer. (Exhibit 12, 1988 Slade Report, p. 79.) In general, only a portion of an aquifer can be drained without causing deleterious impacts to the groundwater quality, aquifer, and the overlying lands. Clearly, there is the potential for serious overdraft of the Saugus Aquifer, with all its associated problems.

Q.: AT WHAT RATE IS IT SAFE TO PUMP THE SAUGUS AQUIFER?

A.: We do not presently know the safe yield of the Saugus Aquifer. I have been attempting to persuade the purveyors in the Santa Clarita area to construct a groundwater flow model to test various pumping scenarios -- a way to analyze the effects of changing pumping. Short of that approach, the effect on the aquifer of past pumping can be used to determine if *present* pumping rates are overpumping

the aquifer. For instance, if water quality degrades in the basin, the basin may already be pumped beyond a safe limit.

Q.: IS THERE ANY EVIDENCE THAT WATER QUALITY IN THE BASIN HAS DEGRADED FROM PAST PUMPING OF THE BASIN?

A.: The water quality of the Saugus Aquifer, as measured by total dissolved solids (TDS), has generally deteriorated with increased pumping. This trend suggests that the vastly increased pumping of the Saugus Aquifer proposed by Valencia and the other water purveyors in the Santa Clarita area will continue to degrade groundwater quality. The trend also suggests that water quality under heavy pumping may reach levels where the water cannot be used directly for drinking water purposes.

Q.: HOW DID YOU DETERMINE THAT WATER QUALITY IN THE SAUGUS AQUIFER HAS CHANGED?

A.: I looked at Saugus Aquifer water quality data obtained from the California Department of Health Services data on drinking water wells. In addition, I used field conductivity measurements from 1998 and 1999 provided by Valencia to bring the records current. I then plotted TDS and annual well production on time graphs for each well for which information was available to examine water quality trends. I then analyzed these trends.

Q.: HOW HAS THE WATER QUALITY CHANGED IN THE SAUGUS AQUIFER WITH INCREASED PUMPING?

A.: I first looked at trends from individual wells. TDS levels were generally in the range of 400 to 500 milligrams per liter (mg/l) in the early 1960s when much of the Saugus Aquifer pumping started. (Exhibit 13, Chart - Newhall County Water District (NCWD) Well No. 9; Exhibit 14, Chart - NCWD Well No. 10; Exhibit 15, Chart - Valencia (VWC) Well No. 157; and Exhibit 16, Chart - VWC Well No. 158.) As pumping increased in the 1960s to mid 1970s, several wells showed significant water quality deterioration during that time period, with well NCWD No. 9 changing from levels around 500 mg/l to nearly 1,200 mg/l (Exhibit 13) and well VWC No. 158 changing from just over 500 to 1,200 mg/l. (Exhibit 16.) As pumping decreased in the late 1970s and early 1980s, water quality improved in some wells. (Exhibits 13 and 16.) In other wells, there was a steady increase in TDS during this period. (Exhibits 14, 15; and Exhibit 17, Chart - VWC Well No. 160.)

It is also possible to look at TDS averages from all the wells and compare these averages to total Saugus Aquifer pumping during the period. First, I calculated a two-year average TDS for each well. If there were no samples taken during any two-year period, I interpolated between the preceding and following two-year averages. I then averaged the two-year value from each of the wells to arrive at an overall average for the period. Average TDS levels were then plotted with corresponding Saugus pumping rates. (Exhibit 18, Chart - Water Quality (TDS) vs Pumping, Saugus Aquifer.) Exhibit 18 shows the same trend as seen in many individual wells. Average TDS levels were between 450 and 500 mg/l in the 1961 to 1962 period. As overall pumping of the Saugus Aquifer increased in the 1960s to mid 1970s into the 6,000 to 8,000 AFY range, average TDS consequently increased into the 700 to 800 mg/l range. As Saugus pumping decreased back into the 4,000 AFY range in the late 1970s and early 1 980s, average TDS decreased back into the 500 mg/l range.

Q.: HAS THIS DETERIORATION IN SAUGUS AQUIFER WATER QUALITY OCCURRED AGAIN MORE RECENTLY?

A.: Yes. The trend of deteriorating water quality with increasing pumping reappeared in the late 1980s and 1990s as Saugus Aquifer pumping climbed to the 12,000 to

14,000 AFY range. (E.g., Exhibits 13, 14, 15 and 17.) At the same time, average TDS values rose to the 700 to 800 mg/i range during this increased pumping. (Exhibit 18.) TDS levels have improved slightly in two wells as pumping stopped in those wells in the last several years (Exhibits 13 and 14), but have increased rapidly in other wells. (Exhibits 15, 17; Exhibit 19, Chart - VWC Well No. 159; and Exhibit 20, Chart - VWC Well No. 201.) The average TDS shown on Exhibit 18 indicates the rapid deterioration in water quality in the 1990s.

Q.: CAN THESE PAST TRENDS BE USED TO PREDICT THE EFFECT OF INCREASED PUMPING OF THE SAUGUS AQUIFER IN THE FUTURE?

A.: Yes. Both the VWMP and my demand/supply analysis include pumping the Saugus Aquifer at rates several times higher than historic pumping. I have combined the projected Saugus pumping rates from Exhibit 10 with the TDS and pumping rates from Exhibit 18 into a new chart. (Exhibit 21, Chart - Water Quality (TDS) vs Projected Pumping, Saugus Aquifer, 1961 to 2050.) The left side of Exhibit 21 shows how TDS has changed with past pumping, whereas the right side of the chart shows increased pumping in the future. Although it is not possible to predict with accuracy how TDS levels would change with this increased pumping, extreme caution should be used with any scenario of increased Saugus pumping. Water quality deterioration in the 1 990s certainly indicates that the changes in water quality can occur rapidly, even in a significantly less stressful pumping scenario.

I believe that it would be imprudent to increase Saugus Aquifer pumping at rates so much higher than historic levels. With danger signs obvious, the prudent approach is a step-wise increase in pumping, at levels much less than proposed by Valencia Water Company and required by demand/supply analysis. Such a slow step-up in pumping is recommended in the CLWA Integrated Water Resources Plan, at a rate of about 1,000 AFY with an accompanying artificial recharge program (Exhibit 1 to Slivinski's declaration, page 5-3). Such a plan would not mitigate water quality or other problems, but could identify them before they reach unacceptable levels. If problems were identified, then pumping would be curtailed to lower levels.

However, the levels of Saugus Aquifer pumping required to meet the supply and demand that I have identified herein do not allow the luxury of a slow step- wise

approach to increased pumping. Instead, Saugus pumping would have to be increased from an average level of around 9,000 AFY in the 1 990s to 38,000 AFY in the 2010s to 82,000 AFY in the 2040s, a nearly ten-fold increase in pumping.

Q.: COULD PROBLEMS WITH THE SAUGUS AQUIFER AFFECT DOWNSTREAM USERS?

A.: Yes, they may. This analysis has shown the significant portion of future supplies that must come from the Saugus Aquifer. If the Saugus fails to yield these high pumping rates either because the yield of the aquifer is lower or there are water quality problems that curtail usage, Valencia and other purveyors would have to rely more heavily on the State Water Project or Alluvial Aquifer pumping. Since the VWMP assumes maximum State water deliveries already (Exhibit 2, Figure III-2), the Alluvial Aquifer would be a likely source. However, since the Alluvial Aquifer is being used at its perennial yield already, any additional pumping would "mine" the aquifer, lowering water levels in the aquifer. Any lowering of groundwater levels would affect the Santa Clara River, which flows directly over the Alluvial Aquifer and is the primary recharge source for the aquifer. Lowering of groundwater levels induces additional recharge from the river, decreasing the flow in the river to downstream users. Because the Santa Clara River is the primary recharge source for the aquifers in Ventura County, this could significantly reduce recharge in the Ventura County aquifers.

Q.: ARE THERE ANY OTHER PROBLEMS EVIDENT IN THE SAUGUS AQUIFER THAT COULD AFFECT USE OF THE AQUIFER FOR DRINKING WATER?

A.: There is a significant area of perchlorate contamination to the east of the wells that pump from the Saugus Aquifer. The perchlorate has seeped into the Saugus Aquifer and has flowed westward towards the wells, shutting down 25 percent of the total Saugus Aquifer wells.

Q.: WHAT IS THE STATUS OF THIS TOXIC RELEASE?

A.: The perchiorate contamination is coming from the Porta Bella property (former Whittaker-Bermite site) (testimony of Sayareh Amir ("Amir") and Richard

McJunkin ("McJunkin") filed herein), a former military ordinance manufacturing facility. The perchlorate is used in the manufacturing of solid rocket fuel. The perchlorate has contaminated a significant area of the soils that rest directly on the Saugus Aquifer. The perchlorate has penetrated the Saugus and has moved approximately 2 miles toward the Saugus production wells. (Exhibit 23, Map - Perchlorate Sources and Contaminated Wells.) The production wells encroached upon by the migrating contaminant have shown concentrations of perchlorate of between 9 micrograms per liter (µg/l) to 45 µg/l. The current provisional action level for drinking water for perchlorate is 18 µg/l. (Testimony Amir and McJunkin.)

The extent of the perchlorate contamination in the Saugus Aquifer is not yet known, largely because there is a lack of wells to monitor west of well VWC No. 157. (Exhibit 23; and testimony of Amir and McJunkin.) Perchlorate that is still in the soils at the contamination site will be "a long-term source of contamination" that will continue to reach the aquifers as rains and runoff push the contaminants in the soil into the groundwater system. (Testimony of Amir and McJunkin.)

Q.: HOW DOES THE PERCHLORATE PROBLEM AFFECT SAUGUS AQUIFER PRODUCTION?

A.: As of March 2000, the full extent and severity of the contamination of the groundwater by perchlorate has not been determined. Current studies may show that other wells of the Saugus Aquifer are vulnerable to the migrating perchlorate. A combination of natural groundwater quality and aquifer properties constrains the areas in which new Saugus wells might be sited away from the known areas of contamination. The better quality Saugus groundwater is generally restricted to an area that trends parallel to, and just east of Interstate 5. (Exhibit 24, Map - Areas of Good Quality Water in Saugus Aquifer.) It is this area, adjacent to the South Fork of the Santa Clara River and its confluence with the main branch of the Santa Clara River, that is being contaminated by perchlorate.

The contamination of the Saugus Aquifer with perchiorate raises a major problem for water purveyors in the Santa Clarita Valley. During the early and mid-i 990s, the Saugus Aquifer provided the purveyors between 7,400 to 11,500 AFY of groundwater. (Exhibit 25, 1999 Water Report, Table III-5.) In 1999, production

from the Saugus dropped to approximately 2,700 AFY, and wells were taken out of production. The areas that contain the good quality water in the Saugus (Exhibit 24) have been partially compromised by the contamination, and larger areas may also be eliminated from production as the perchiorate continues to migrate into the aquifer. The application to the PUC shows that the purveyors plan to pump the Saugus at 20,000 AFY during wet years, with pumping up to 40,000 AFY. (Exhibit 2, VWMP, Figure III-2; and Exhibit 6, VWMP, p. 15.) Because of the known contamination to the groundwater, both of these goals are problematic. The time required to characterize the extent of contamination, remediate the perchlorate in the soils that continue to pollute the aquifer, and then to remediate the aquifers themselves will likely be many years, especially since the technology to remediate the groundwater is only in a developmental stage. (Testimony of Amir and McJunkin.)

Q.: WHAT IS THE PROBABILITY FOR PERCHLORATE CONTAMINATION?

A.: The concentration of perchlorate in the production wells probably represents the leading edge of a much larger plume of higher concentrations of perchlorate. The total area of the Saugus Aquifer contaminated by the perchlorate has yet to be fully defined. We do know that the contaminant has migrated a minimum of 2 miles through the subsurface and over land to contaminate the vital pumping areas. (Exhibit 23.) Since the groundwater gradients in the contaminated area in the Saugus are towards the west, the contaminant is likely to continue to migrate further west and northwest. Time of travel from the soil contamination sites to the deep Saugus wells implies that the contaminant has been moving between 1 to 3 feet per day within the Saugus Aquifer. This implies that the perchlorate could impact Valencia's well No. 201 as early as next year. Further down gradient is Valencia's well No. 160.

APPENDIX TO TESTIMONY OF STEVE B. BACHMAN

This Appendix further explains Exhibit 2.

Exhibit 2: The years 1944 to 1994 were used in the demand/supply projections because the period represents an approximately zero cumulative departure with respect to the Santa Clarita Valley. (Exhibit 26, 1999 Water Report, Figure II-17.) This also avoids the dramatic 1929 to 1934 drought in northern California. Figure II-15 (Exhibit 8) provides data for local wet and dry conditions. The hydrology classification of wet, normal, or dry in northern California comes from Figure 3-4, Sacramento Four River Unimpaired Runoff (1906 to 1996), from Volume 1 of the California Water Plan Update Bulletin 160- 98, attached as Exhibit 27. This provides data for the years 1944 to 1994, which become the years 2000 to 2050 in the projection.

Agricultural pumping was reduced from 12,000 AFY to 5,000 AFY as per CLWA's IWRP, pages 2-5 and 2-6, attached as Exhibit 28. The fraction of Alluvial to total agricultural pumping was held constant through the analysis at 0.8, which was the average for the period 1980 to 1999.

The column "Purveyors GW Demand-Total" is calculated as total demand *less* agricultural GW demand *less* reclaimed water *less* State water available. (See Exhibit 9, p. 2.) If this number is less than zero, it is recorded as zero. The purveyors Alluvial pumping is calculated as all of the total purveyors GW demand up to the dry or wet limit of 25,000 AFY or 40,000 AFY *less* the agricultural Alluvial pumping (agricultural *plus* purveyors Alluvial cannot exceed 25,000 or 40,000, respectively). The purveyors Saugus GW demand equals the total purveyors GW demand *less* the purveyors Alluvial pumping.

The Saugus overdraft for each year is calculated by comparing Saugus pumping to Saugus recharge of 21,000 AFY (wet year) or 12,000 AFY (dry year). If Saugus pumping exceeds the recharge appropriate for that year, the excess pumping is added to the overdraft. If Saugus pumping is less than the recharge amount, the difference is subtracted from the overdraft. The "Saugus Overdraft" column is a running total of the annual overdrafts. The overdraft is never less than zero, because the aquifer is considered to be full at zero.

Exhibit 1

Castaic Lake Water Agency

Draft

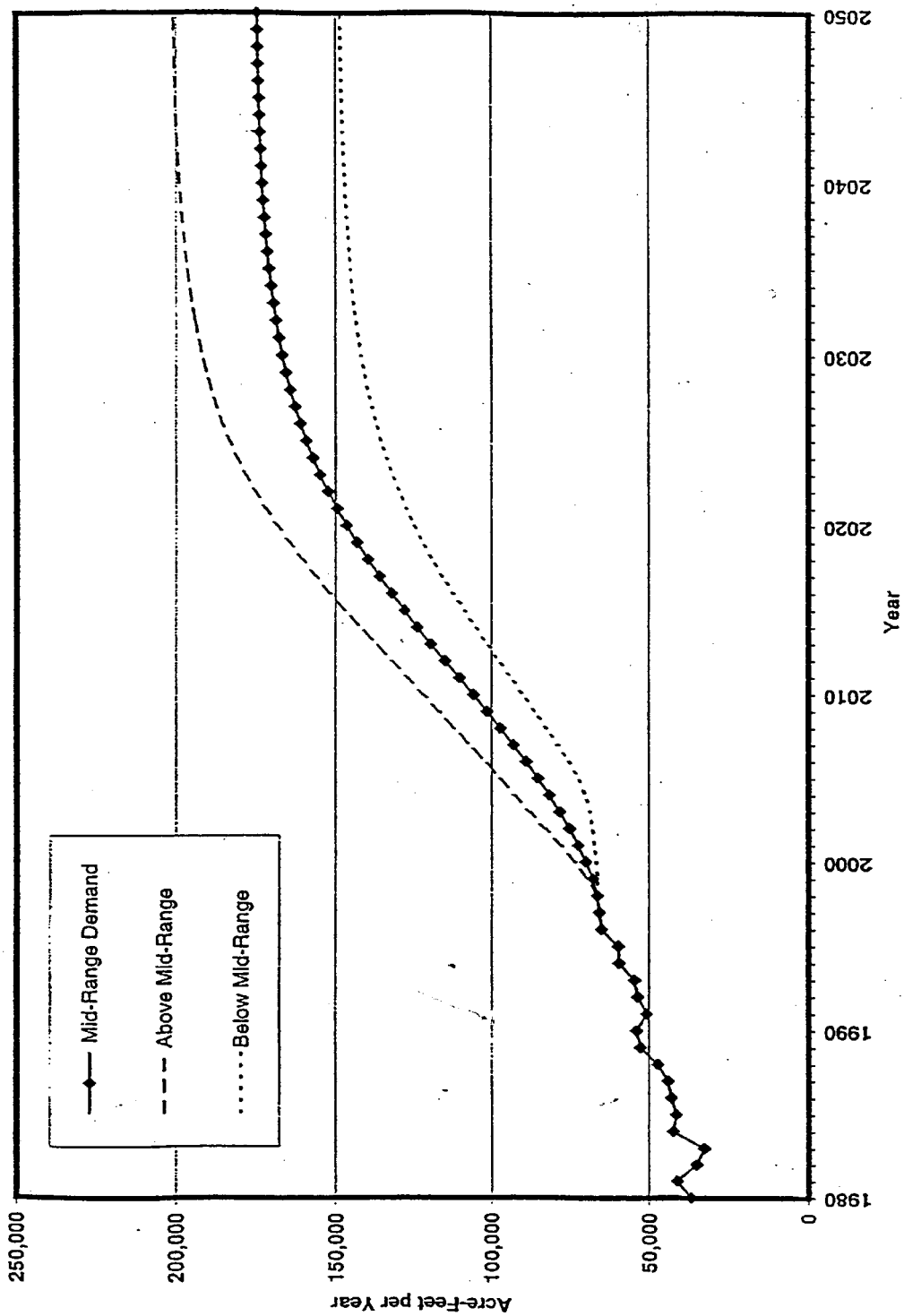
Integrated Water Resources Plan
Water Demand and Supply Evaluation

February 1998

MONTGOMERY WATSON

BOOKMAN-EDMONSTON
ENGINEERING, INC.

EXHIBIT 1, Page 1 of 2



Projected Water Demand
Figure 2-1

EXHIBIT 1, Page 2 of 2

Exhibit 2

VALENCIA WATER COMPANY

WATER MANAGEMENT PROGRAM

DECEMBER 16, 1999

Valencia Water Company

EXHIBIT 2, Page 1 of 3

SANTA CLARITA VALLEY WATER SUPPLIES

FIGURE III-1

FULL SUPPLY	
ALLUVIUM	40,000
SAUGUS	20,000
SWP	95,200
RECYCLED	1,700
	156,900 AF

DRY YEAR	
ALLUVIUM	32,500
SAUGUS	11,000
SWP	47,600
RECYCLED	1,700
	92,800 AF
FIRMING SUPPLIES	50,000
	142,800 AF

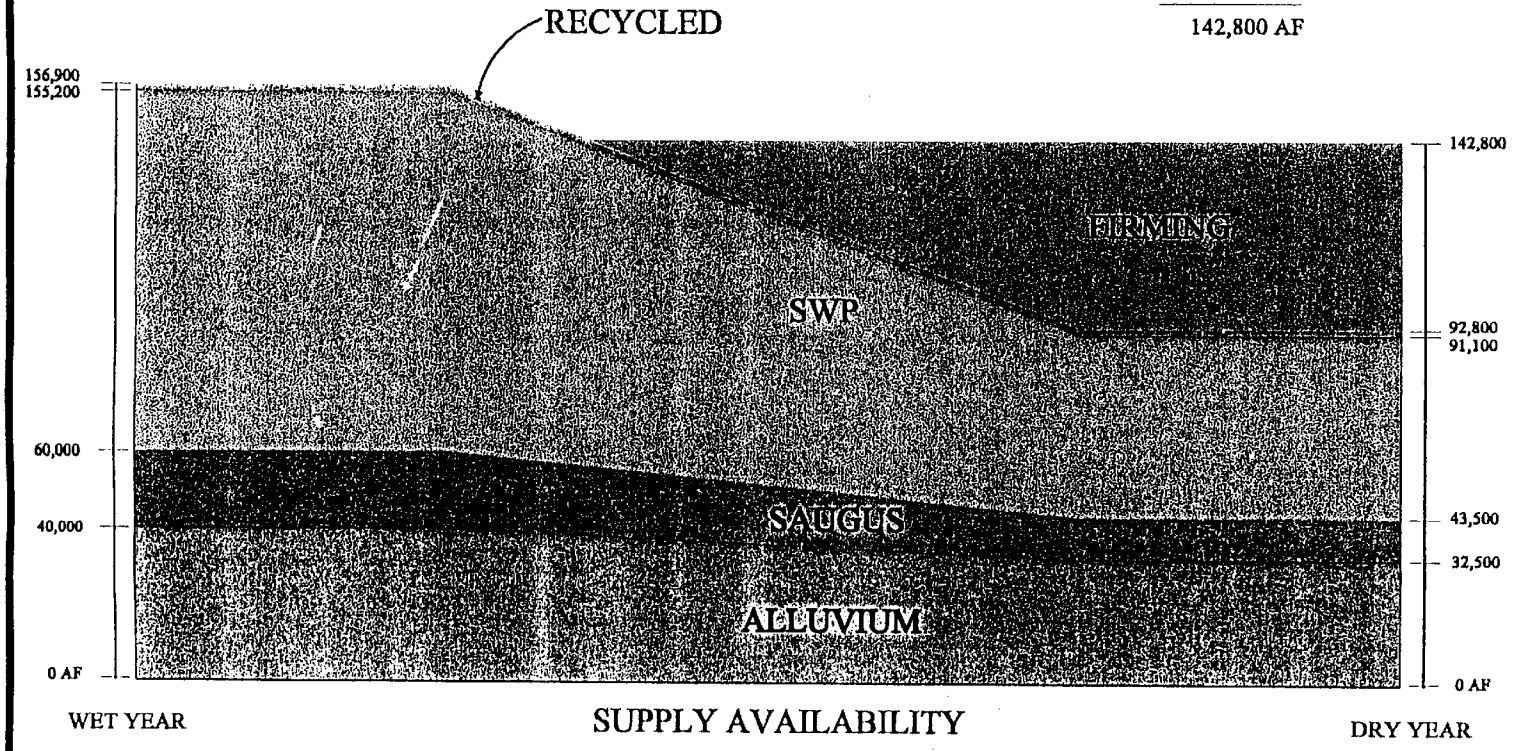


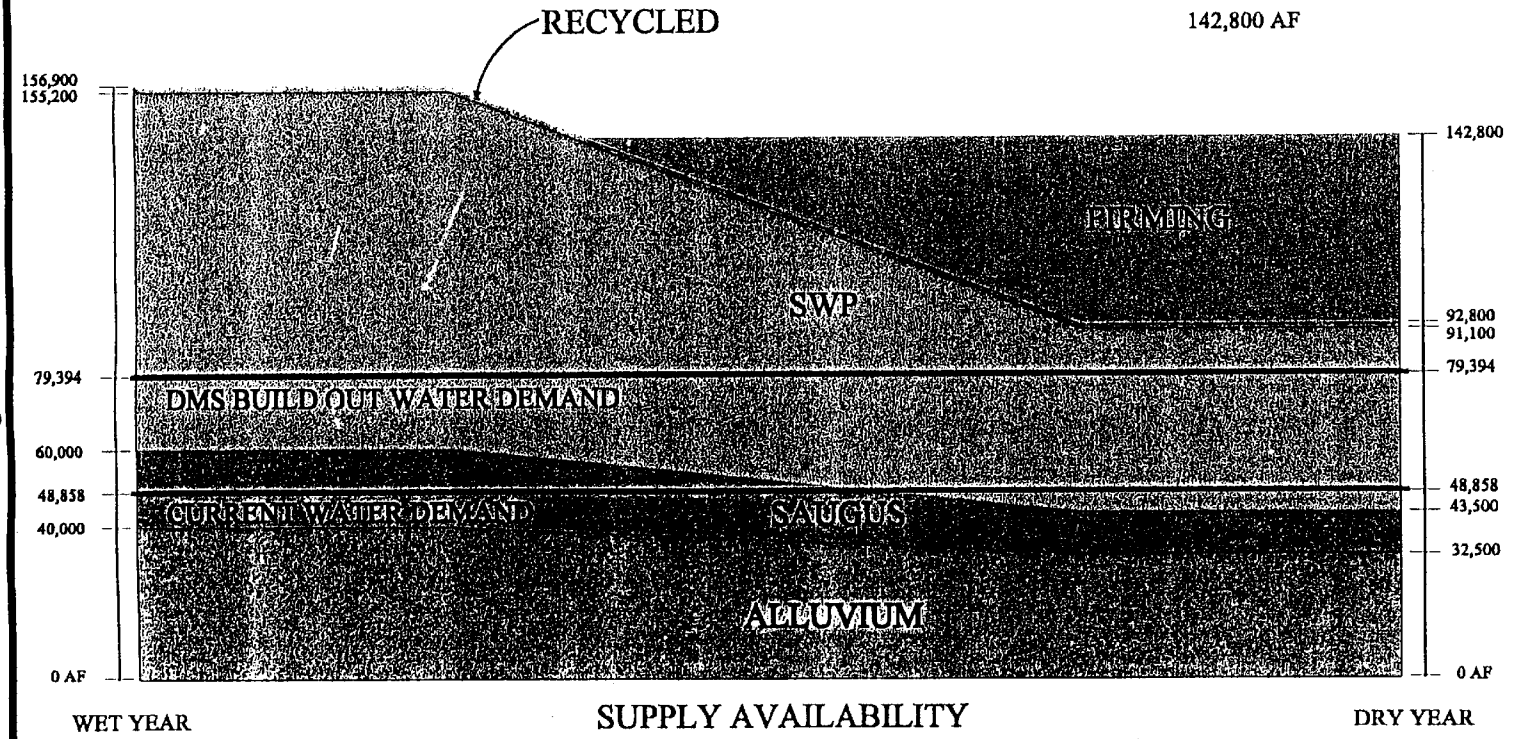
EXHIBIT 2, Page 2 of 3

SANTA CLARITA VALLEY WATER SUPPLIES

FIGURE III-2

FULL SUPPLY	
ALLUVIUM	40,000
SAUGUS	20,000
SWP	95,200
RECYCLED	1,700
	156,900 AF

DRY YEAR	
ALLUVIUM	32,500
SAUGUS	11,000
SWP	47,600
RECYCLED	1,700
	92,800 AF
FIRMING SUPPLIES	50,000
	142,800 AF



*Current water demand of 48,858 acre-feet as reported in Table III-5 of the 1998 Water Report.

EXHIBIT 2, Page 3 of 3

Exhibit 3

VOLUME I — REPORT TEXT

HYDROGEOLOGIC INVESTIGATION
PERENNIAL YIELD
and
ARTIFICIAL RECHARGE POTENTIAL
of the
ALLUVIAL SEDIMENTS
in the
SANTA CLARITA RIVER VALLEY
of
LOS ANGELES COUNTY, CALIFORNIA

FOR
UPPER SANTA CLARA WATER COMMITTEE
MEMBERS: LOS ANGELES COUNTY WATERWORKS
DISTRICT NO. 36 — VAL VERDE
NEWHALL COUNTY WATER DISTRICT
SANTA CLARITA WATER COMPANY
VALENCIA WATER COMPANY

AFFILIATE: CASTAIC LAKE WATER AGENCY

DECEMBER 1986

RICHARD C. SLADE
CONSULTING GROUNDWATER GEOLOGIST

EXHIBIT 3, Page 1 of 4

Change in Groundwater Storage. Change in groundwater storage is that amount of groundwater in the rock or sediments that increases or decreases over a specified length of time. During the drought years 1945 to 1977, water levels in the Santa Clarita Valley fell, and during the years of excessive precipitation, 1977-78 to 1982-83, water levels rose until the underground storage area was essentially filled and additional water flowed out of the basin. The difference in the elevation of the water table in the alluvium, or the amount of groundwater in storage at the beginning and at the end of the selected base period of study, reflects the surplus or the deficiency that occurred in the alluvium over the base period.

Computation of the change in groundwater stored in the alluvial aquifer at the beginning and at the end of the base period required a determination of several factors including the volume of sediments available, the saturated thickness of these sediments, and the specific yield of the alluvial materials which store, transmit, accept, and release groundwater to pumping wells. This has been provided previously in the report section discussing groundwater storage.

Computation of Perennial Yield. In summary, the steps required to compute the perennial yield of the Santa Clarita alluvial aquifer system are as follows:

1. Select the base and mean hydrologic periods.
2. Determine the average annual quantity of groundwater extracted by wells from the alluvial sediments.
3. Find the difference between the quantity of groundwater in storage at the beginning and at the end of the selected base period.
4. Find the average annual change in storage from the value found in Step 3.
5. The perennial yield is then the algebraic sum of the

EXHIBIT 3, Page 2 of 4

calculated values of average annual pumpage and average annual change in storage.

To determine the average annual groundwater production from the alluvial sediments in the Valley, files at the major water purveyors concerning present and historic production were obtained. These data vary widely in their apparent level of accuracy. For example, some of the data do not date back to 1957-58, other data are based on electrical consumption at the pump and not on actual metered gallonage, while other data are only estimates based on the number of persons using the water. Regardless, during the 28-year base period 1957-58 to 1984-85, we estimate the average annual groundwater production from the alluvial sediments in the Santa Clarita Valley to have been approximately in the range of 31,000 to 32,000 acre-feet per year.

In addition, at the beginning of the base period, the quantity of groundwater stored in the alluvial sediments was calculated to be approximately 159,688 acre-feet. By 1985, the quantity of groundwater in storage in the alluvium had been increased to 176,409 acre-feet (see Table 8). The increase in the quantity of water in storage in the alluvium is thus 16,721 acre-feet. This increase is the total quantity of groundwater added to storage during the 28-year Base Period as a result of excess precipitation. Hence, the average annual net change in groundwater in storage was determined by dividing the total quantity of water added to storage by the length of the Base Period, or +597 acre-feet per year.

The perennial yield is the quantity of groundwater what can be pumped annually without any change in groundwater levels or net change in groundwater in storage over the Base Period. This may be computed by determining the average annual pumping during the Base Period (31,000 to 32,000 acre-feet), and adding or subtracting from this value, that amount

EXHIBIT 3, Page 3 of 4

of groundwater which represented the average annual change in storage.

Because there was more water in storage at the end of the Base Period (1985) than at the beginning of the Base Period (1958), the annual net change in storage (+597 ac-ft) must be added to the average annual pumping (31,000 to 32,000 ac-ft). Thus, the practical or perennial yield of the alluvial sediments in the Santa Clarita Valley area is in the range of 31,600 to 32,600 ac-ft/yr.

Review of the literature indicates other values of perennial yield by different investigators. These other values include: a DWR (June 1964 and February 1979) value of 23,100 ac-ft/yr for the Eastern Basin, although they do not state whether this number is solely for the alluvium or for both the alluvium and the Saugus Formation; Hackel and Associates (1964), who reported a combined annual yield of 33,250 ac-ft/yr for both the alluvium and the Saugus Formation; and Bookman-Edmonston Engineering, Inc. (1976 and 1983) who report a value of 35,100 to 35,200 ac-ft/yr, as modified from USGS data, for the yield of the alluvium. Variations in these numbers relate to differences in total outcrop area of the alluvium being considered and to differences in the base period of study selected by each investigator.

SOILS CONDITIONS AND ARTIFICIAL RECHARGE

GENERAL RECHARGE METHODS

By definition, artificial recharge is the practice of deliberately augmenting the natural processes of infiltration of precipitation and streamflow through soils materials, thereby replenishing a groundwater reservoir via man-made

EXHIBIT 3, Page 4 of 4

Exhibit 4

Castaic Lake Water Agency

Draft

Integrated Water Resources Plan
Water Demand and Supply Evaluation

February 1998

MONTGOMERY WATSON

BOOKMAN-EDMONSTON
ENGINEERING, INC.

EXHIBIT 4, Page 1 of 3

Pumping from the Saugus Aquifer has varied from about 3,900 acre-ft/yr up to 14,800 acre-ft/yr. In 1996, Saugus pumping was about 8,200 acre-ft/yr. Installed pumping capacity can produce 15,000 to 16,000 acre-ft/yr from the Saugus Aquifer.

In 1991, groundwater was pumped into the CLWA distribution system because of SWP supply deficiencies and the cost of water was less than purchasing State Drought Bank water. By moving groundwater from areas of adequate supply into areas with limited groundwater, the local water community illustrated a major element of a conjunctive use program.

Estimated Dry Period Groundwater Production Capability

Slade (1984) reported that the perennial yield of the Alluvial Aquifer is about 32,000 acre-ft/yr. This yield is the historical annual production adjusted for a minor change in storage. Because of he limited storage capacity in the Alluvium, this groundwater source may be limited in dry periods. Wells in the Alluvium near the eastern reaches of the Santa Clara River are known to have groundwater levels which decline during consecutive dry years by as much as 100 feet, reducing pumping capacity. A series of winter storms recharge the aquifer and result in water level recovery.

The data reviewed for the Pardee area (located near Bouquet Canyon Road and the Santa Clara River) shows that in 1990 and 1991, groundwater levels did not decline as much as those in the easterly areas. In 1991, the Valencia Water Company increased its pumping to offset limited SWP water supplies. Valencia Water Company reported delivery of about 5,000 acre-ft/yr into the CLWA distribution system. Total pumping from the Alluvium by Valencia Water Company in 1991 was about 9,900 acre-ft/yr, as reported to the State Water Resources Control Board.

Based on historical data, the Alluvial Aquifer east of Castaic Junction can support production of at least 20,400 acre-ft/yr as shown in **Table 3-2.**

Table 3-2
1991 Alluvial Groundwater Production
East of Castaic Junction

Water Purveyor	Annual Production (acre-ft/yr)
Newhall CWD	1,900
Santa Clarita WC	5,900
Valencia WC [1]	10,400
Wayside Honor Rancho	2,200
Total	20,400

1. Includes 500 acre-ft pumped in 1991 by Newhall Land & Farming Co. east of Castaic Junction.

The area west of Castaic Junction has never been stressed by intense pumping but it is believed to be capable of producing at least 12,000 acre-ft/yr based on current production. The supply in this area is not greatly affected by drought because it is replenished from wastewater effluent, irrigation return flow and the westward movement of groundwater causing the basin water levels remain high. This water would require blending with other supplies to reduce the salinity of delivered water if used for potable purposes.

Discussions with Slade (1997) indicate that the entire Alluvial Aquifer has the capability of yielding about 25,000 acre-ft/yr for multiple dry years. A full aquifer with about 140,000 acre-ft of water in storage, pumped at this rate, would provide water for five to six years, assuming no inflow to the basin. Production at this level and duration would most likely reduce water levels in the upper portions of the basin in the vicinity of Soledad Canyon.

Saugus Formation production capability is less defined. Slade (1997) estimates that the Saugus Formation is capable of producing up to 40,000 acre-ft/yr over a period of five to six dry years. This production level is currently unproven because there are not sufficient wells to operate at this extraction rate. Since current production capabilities only allow about 15,000 to 16,000 acre-ft/yr of production, a significant number of new wells would be required to pump 40,000 acre-ft/yr. It is recommended that any program to construct additional Saugus Formation wells be implemented in stages and be fully evaluated before proceeding to subsequent stages.

IMPORTED WATER SUPPLIES

CLWA obtains imported water supplies from the State Water Project (SWP) which is managed by the Department of Water Resources (DWR). CLWA is one of 29 agencies holding a long-term contract with the State of California for SWP water. SWP water originates from rainfall and snowmelt in northern and central California. Runoff is stored in Lake Oroville, which is the project's largest storage facility. The water is then released down the Feather River to the Sacramento River and the Sacramento-San Joaquin Delta. Water is diverted from the Delta into the Clifton Court Forebay, and then pumped into the 444-mile-long California Aqueduct. SWP water is temporarily stored in San Luis Reservoir, which is jointly operated by the DWR and the U.S. Bureau of Reclamation. Prior to delivery to CLWA, SWP supplies are stored in Castaic Lake which is located at the end of the West Branch of the California Aqueduct. **Figure 3-6** shows the location of the primary water storage and delivery facilities of the SWP.

The following discussion of the SWP supply includes CLWA's contract entitlement, current supply planning activities including the CALFED Program, supply reliability, and water quality.

Water Supply Contract Entitlement

Each contracting agency is entitled to a maximum annual amount of SWP water as specified in Table A of the agency's SWP contract. Initially, 31 agencies contracted for SWP water with total combined entitlements of 4,230,000 acre-ft/yr. Contract amendments in the 1980s have reduced the number of contractors to 29 agencies with combined entitlements of 4,217,786 acre-ft/yr. The term of the contract is through the year 2035 and is renewable after that year.

Exhibit 5

Table 3-7
Current Water Supply Operating Plan
(acre-ft/yr)

Source	Wet Year	Average Year	Dry Year
Alluvial Aquifer Groundwater	40,000	32,000	25,000
Saugus Formation Groundwater	5,000	10,000	16,000 [1]
State Water Project Entitlement Deliveries	54,000	41,000	18,000
Water Bank and Transfers [2]	0	0	20,000
Water Conservation [3]	17,000	17,000	17,000
Total Supply	116,000	100,000	96,000

Notes:

1. Saugus Formation groundwater production is currently limited to about 16,000 acre-ft/yr by installed well capacity. The aquifer should be capable of producing up to 40,000 acre-ft/yr with additional wells.
2. Water Bank purchases and other dry year transfers are assumed to be about 20,000 acre-ft/yr. Actual amounts would depend on the amount of water made available to the Water Bank and other programs.
3. Water conservation is estimated to be ten percent of future mid-range demand.

Table 3-8
Future Water Supply Needs

Demand Condition	Future Demand [2]	Maximum Water Supply Needs [1] - (acre-ft/yr)		
		Wet Year	Average Year	Dry Year
Minimum	149,000	33,000	49,000	53,000
Mid-Range	175,000	59,000	75,000	79,000
Maximum	201,000	85,000	101,000	105,000

Note:

1. Water supply needs are the difference between future demands and available supplies from Table 3-7. The water supply needs incorporate the CLWA goal of 10 percent conservation as shown in Table 3-7.

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Exhibit 6

VALENCIA WATER COMPANY

WATER MANAGEMENT PROGRAM

DECEMBER 16, 1999

Valencia Water Company

EXHIBIT 6, Page 1 of 4

deliver up to 1,700 acre-feet of water for non-potable use. Valencia encourages the use of recycled water as an important program to maximize current supplies in meeting overall water needs for the Valley.

5) Firming Water: Firming water supplies are defined as alternate short term supplies (1 to 3 years) made available to the local purveyors to be used when imported water is reduced during drought conditions. For purposes of Valencia's WMP, three firming supply options are included in this report. They are: 1) acquiring additional SWP entitlement, 2) the Drought Water Bank, operated by the State of California, and 3) local supply augmentation.

In 1999, CLWA acquired 41,000 acre-feet of SWP Table A Entitlement (via a permanent transfer) from Kern County Water Agency and its member unit the Wheeler Ridge-Maricopa Water Storage District. This transfer was completed under the terms of the Monterey Agreement, in which agricultural SWP Contractors agreed, on a willing seller willing buyer basis, to make available 130,000 acre-feet of entitlement for permanent transfer to urban SWP Contractors. By this permanent transfer, CLWA SWP Table A Entitlement is 95,200 acre-feet per year. In CLWA's *IWRP*, additional imported water was identified as one component of an overall plan to increase the reliability and availability of water within its service area. For the foreseeable future, this transfer increases their total supply while providing a significant "drought buffer" even in times of shortage.

The State Drought Water Bank is implemented as needed by an executive order of the Governor or a finding by DWR's Director that water deliveries will be curtailed. The purpose of the Bank is to help California's urban, agricultural and environmental interests meet their water supply needs during water short years. This procedure was used successfully in 1991, 1992 and 1994 when DWR purchased water from willing sellers and sold the water to willing buyers under a set of allocation guidelines. Although CLWA's allocation of imported water was

reduced in 1991, it did not participate in the Drought Water Bank program because other alternate supplies were available to meet Valley water demands. For purposes of planning, CLWA's *IWRP* identified short-term deliveries of 20,000 acre-feet or more of water purchased from the state's Drought Water Bank in dry years if needed, to augment the Valley's water supplies.

It is important to note that there are several other state programs in place that CLWA can utilize to "firm up" SWP supplies when they are reduced. A partial listing of programs includes the Supplemental Water Purchase Program, the Interruptible Water Service Program and the SWP Turn-back Pool. These programs are discussed in detail in Section 3, page 3-16 of CLWA's *IWRP*. In summary, these programs provide substantial opportunity for CLWA to increase its water supply and effectively implement water management activities to enhance supply reliability.

Local supply augmentation includes demand management programs (voluntary and mandatory rationing programs) and conjunctive use of stored local groundwater. For planning purposes, the WMP assumes that Valencia customers could voluntarily conserve 10 percent from their normal usage. This is reasonable since Valencia customers, during the last drought in 1991, voluntarily conserved over 20 percent.

As discussed in item 2 above, the Saugus Formation could produce up to 40,000 acre-feet of water per year. This assumes approximately 30,000 acre-feet of water could be withdrawn on a short term basis from the Saugus Formation in addition to the dry year recharge rate of 11,000 acre-feet. In order to achieve this level of production, existing agricultural wells could be converted for domestic use and/or new wells could be constructed.

At the present time, the Valley's primary supplies of groundwater, imported water and recycled water are adequate to meet existing and projected demands for the

foreseeable future. As water demands increase, Valencia, CLWA and the other purveyors will analyze and determine the most beneficial mix of supply options available on a short term basis to meet customer demands. In summary, Valencia's WMP has identified approximately 50,000 acre-feet of firming water supplies (excluding 10 percent voluntary conservation) that is available to Valencia and the other purveyors to be used if and when SWP supplies are reduced.

6) Future Water Sources: Water supply and facilities for the Valley have increased incrementally over the years in order to keep pace with customer demands. It is not reasonable for service providers to build all that is necessary and acquire water rights to accommodate projected water demands twenty to thirty years in the future. CLWA and the local purveyors plan for new supplies and facilities a minimum of 3 to 5 years ahead of need. In its *IWRP*, CLWA addressed opportunities to increase the sources of both local and imported water supplies over time. These programs include:

Acquisition of Additional SWP Entitlements. CLWA has recently purchased under the Monterey Agreement an additional entitlement of 41,000 acre-feet. In the near term, this additional supply of water will provide added reliability to CLWA's base water supplies. At the present time, additional SWP entitlement is available and CLWA is evaluating the benefits of acquiring additional entitlement along with other programs such as water banking and other storage opportunities needed for planned growth within the Valley.

Devils Den Ranch Groundwater. CLWA is studying the potential to develop groundwater supplies from property it owns on the west side of the San Joaquin Valley near the Kings-Kern County line. Known as the Devil's Den Ranch, water from this groundwater basin could be pumped into the California Aqueduct and delivered to CLWA.

Water Conservation. CLWA will continue to develop and implement its comprehensive water conservation program in cooperation with the four retail agencies. The major emphasis will be on landscape water conservation activities. Based on empirical data on the impact of conservation measures in other cases, which range from 10 to 20 percent, a minimum 10 percent reduction in water demand through conservation is expected.

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Exhibit 7

Castaic Lake Water Agency

Draft

Integrated Water Resources Plan
Water Demand and Supply Evaluation

February 1998

MONTGOMERY WATSON

BOOKMAN-EDMONSTON
ENGINEERING, INC.

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CLWA service area, particularly portions of Soledad and Bouquet Canyons, are not underlain by the Saugus Formation and alluvial deposits are relatively thin.

Alluvial Aquifer

Large quantities of water are pumped from relatively shallow wells in the highly permeable Alluvial Aquifer. Although it is the smaller of the two aquifer systems as measured by storage capacity, most water wells within CLWA are drilled into the Alluvial Aquifer. The maximum historic quantity of water stored in the Alluvium has been estimated to be approximately 201,000 acre-ft following periods of substantial rainfall in 1945 (Slade, 1986). Over one-half of this storage is located along the Santa Clara River below Soledad Canyon. The remaining Alluvial storage is equally divided between Soledad Canyon and the other main tributaries (Castaic Valley, San Francisquito Canyon, and Bouquet Canyon).

Recharge to the Alluvial Aquifer is primarily from the percolation of streamflow in the Santa Clara River and its tributaries. The amounts of flow and streamflow recharge are highly variable. When large quantities of surface water are available during wet years, the Alluvial Aquifer system is readily recharged, with documented water level recoveries of 70 feet or more. A significant water level drop of up to 100 feet is experienced following a series of dry years. These water level declines are particularly significant in Soledad Canyon.

The groundwater levels in the vicinity of Castaic Junction have remained near the ground surface, even during periods of deficient rainfall. This is due to the east-to-west movement of groundwater, a possible restriction to groundwater movement, and a continual supply of water from the Valencia Water Reclamation Plant. The groundwater levels west of Castaic Junction remain near ground surface, even during dry years. Pumping has not stressed this part of the Alluvial Aquifer. Slade (1986) calculated a perennial yield from the Alluvial Aquifer based on a period from 1957-58 through 1984-85 to be from 31,600 acre-ft/yr to 32,600 acre-ft/yr.

Saugus Formation

The Saugus Formation contains much greater quantities of groundwater than does the Alluvial Aquifer. Slade (1988) reported that approximately 1.41 million acre-ft of potentially usable groundwater is contained from depths of 500 feet to 2,500 feet in the Saugus Formation. To date, few water wells have been drilled into the Saugus Formation and information on the characteristics of this aquifer is limited. Available data indicate that the highest yield potential of the Saugus Formation (based on aquifer depth, aquifer transmissibility, and water quality) are generally located along, and southerly of, the Santa Clara River, between its confluence with Bouquet Canyon Creek and Castaic Creek. The Saugus Formation appears shallower and exhibits a lower transmissivity north of the San Gabriel Fault, although water well data available in this area are limited.

Slade (1988) indicates that the principal source of recharge to the Saugus Formation is from precipitation on exposed outcrops and direct infiltration from the overlying saturated alluvium of the Santa Clara River channel. Preliminary estimates of the combined potential recharge from these two sources range from 20,000 to 22,000 acre-ft/yr in wet periods, and from 11,000 to

13,000 acre-ft/yr in dry periods. Slade (1988) further states that south of the San Gabriel Fault, wells with depths of 1,500 to 2,500 feet are anticipated to produce 1,500 to 2,000 gallons per minute (gpm). It was recommended that new wells be spaced at least 1,000 feet apart to minimize mutual interference. Wells north of this fault will be shallower and have lower yields.

Since a principal source of recharge to the Saugus is from the Alluvial Aquifer system, heavy pumping of the Saugus will eventually affect the Alluvium. The low vertical permeability between the two aquifer systems greatly restricts this interflow. Consequently, groundwater in the Saugus Aquifer is less readily replenished. Potential methods to improve recharge of the Saugus Aquifer are discussed in Section 4.

Groundwater Quality

Groundwater quality is, in part, dependent on the quality of surface water which recharges the groundwater basin. In the main stem of the Santa Clara River and its larger tributaries, surface flows generally rank fair in terms of water quality standards. Total dissolved solids (TDS) typically ranges from 400 to 700 milligrams per liter (mg/l).

Water in the Alluvial Aquifer generally increases in salinity as it moves westerly from recharge areas to the areas of rising groundwater downstream from Castaic Junction near Blue Cut. The TDS concentrations in these Alluvial Aquifers increase from approximately 400 mg/l in the upstream areas to approximately 1,000 mg/l or greater in the vicinity of Castaic Junction. Downstream from that point, groundwater quality is similar to the quality of rising groundwater discharged to the Santa Clara River, which contains TDS in the range of 1,000 mg/l to 3,000 mg/l. Near Castaic Creek, the groundwater quality is impacted by poor quality surface water flowing from Charlie Canyon.

Deep wells in the Saugus Aquifer typically have TDS concentrations ranging from about 400 mg/l in the upstream areas to approximately 1,000 mg/l in the vicinity of Interstate Highway 5. Extremely high salinities of 1,000 mg/l to over 3,000 mg/l TDS, are found in the southerly portion of the basin (generally southwest of Newhall near the Saugus Formation edge). Although insufficient data are available, similar high salinities may occur in other peripheral areas of the basin where there is inadequate flow to flush out accumulated salts.

Several new water quality problems have been observed in Southern California recently that could affect groundwater supply availability: MTBE and perchlorate. Methyl-tertiary-butyl-ether (MTBE) is a compound that is added to gasoline to improve air quality. Groundwater contamination is most commonly associated with leaking underground fuel tanks and petroleum product pipelines. Because MTBE is highly soluble in water, does not adsorb well to soil particles and is not readily biodegradable, it can percolate through the ground into underground aquifers at rates similar to that of water. The extent of contamination in the Santa Clarita Valley is not currently known; however, 36 leaking tank sites are under various stages of investigation or remediation according to recent Regional Board data. MTBE is likely to be a more significant issue in the future.

VOLUME I — REPORT TEXT

HYDROGEOLOGIC ASSESSMENT

OF THE

SAUGUS FORMATION
in the
SANTA CLARA VALLEY
of
LOS ANGELES COUNTY, CALIFORNIA

FOR

CASTAIC LAKE WATER AGENCY
LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 36 — VAL VERDE
NEWHALL COUNTY WATER DISTRICT
SANTA CLARITA WATER COMPANY
VALENCIA WATER COMPANY

FEBRUARY 1988

RICHARD C. SLADE
CONSULTING GROUNDWATER GEOLOGIST

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001

to be considered as usable, these potential aquifers were selected from electric logs and only between the depths of 500 ft (to preclude capturing groundwater from the alluvium) and: the base of fresh water in the Saugus Formation; or a maximum depth of 2500 ft (the deepest existing Saugus well is 2000 ft deep), whichever is shallower.

Current groundwater production (1986) represented only 0.40 percent of the total volume of usable storage in the Saugus Formtion.

6.0 POTENTIAL RECHARGE

Principal recharge sources to the Saugus for our calculations were deep percolation of direct precipitation solely on the outcrop area of the Saugus Formation and terrace deposits; and direct infiltration from saturated alluvium within only the Santa Clara River channel and only where this alluvium directly overlies Saugus strata. Such calculations provided an estimate of the minimum amount of recharge to the Saugus.

As a preliminary estimate, we believe the combined potential sources from these two sources ranges between approximately 20,000 and 22,000 ac-ft/yr in wet periods and 11,000 to 13,000 ac-ft/yr in dry periods.

Such potential recharge causes a re-pressurization of the confined Saugus aquifers. Historic extractions have caused no discernible or definitive trends in the piezometric levels of graphed wells since records began. Piezometric levels have been rising in wells since the late-1960's, possibly as a result of recharge from years of excess rainfall in this period.

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This preliminary assessment of the minimum amount of potential recharge to the Saugus Formation incorporates only portions of the two main forms of deep percolation and recharge into these strata. As such, this preliminary assessment should not be construed as a rigorous determination of the perennial yield of the Saugus, with such determination not being a part of the scope of work.

Furthermore, because so much of the Saugus Formation (both laterally and vertically) contains no active water wells and/or has never contained any water wells, the vast majority of the aquifer system has never been stressed; indeed, for much of the region, there are no definitive hydrogeologic data at all. A meaningful evaluation of the perennial yield of this formation must await, as yet unavailable, long-term water level and water quality data and a data base that includes actual data from wells northerly of the Holser and San Gabriel faults.

It is also noteworthy that the natural losses of groundwater via subsurface leakage from the alluvium into underlying strata, including the Saugus Formation, occur continuously and wherever there are relatively permeable strata underlying saturated alluvium; even in dry years, the lower portions of the alluvium still contain groundwater. The leakage losses are natural and cannot be terminated because it would require an infinite number of wells to totally dewater all of the alluvium on a permanent basis.

In our method of assessing the perennial yield of the overlying alluvium (Slade, December 1986), we considered only the change in water levels vs. groundwater extraction from the alluvium for a specific

time period. These water levels are known to change in response to many conditions, including rainfall, basin inflow, and basin outflow (losses). Thence, inherent to the perennial yield assessment of alluvium are the natural losses from the alluvium to the Saugus Formation.

7.0 NEW WELLS

7.1 Priority Locations. Plate 10 - Recommended Drilling Areas - has been prepared on a regional basis to show general locations, on a first-order priority, for new wells. Available data have been analyzed to provide these regional priority locations to be considered for future wells by the purveyors.

However, prior to drilling, it is recommended that a site-specific evaluation be provided of electric logs proximal to any prospective future well site in order to confirm the distribution and continuity of coarse-grained channel deposits. This is also important because zones of deposition of coarse grained Saugus strata are known to have varied widely in geologic time, both vertically and horizontally. Such site-specific subsurface data can be briefly reviewed and summarized in a letter to provide final details for test hole/final well specifications.

If more than one well is desired in a given area, construction should be conducted in phases, with the first well drilled, completed, developed, and thoroughly tested prior to selecting the final sites and design criteria for additional wells in that given area. New wells should be spaced at least 1000 ft apart, based on mutual drawdown interference criteria.

7.2 Anticipated Yields. New Saugus Formation water wells in the region southerly of the San Gabriel fault

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Exhibit 8

SANTA CLARITA VALLEY WATER REPORT
1999

Castaic Lake Water Agency

Los Angeles County Waterworks District #36

Newhall County Water District

Santa Clarita Water Company

Valencia Water Company

Prepared by: The Upper Santa Clara Valley Water Committee
February 2000

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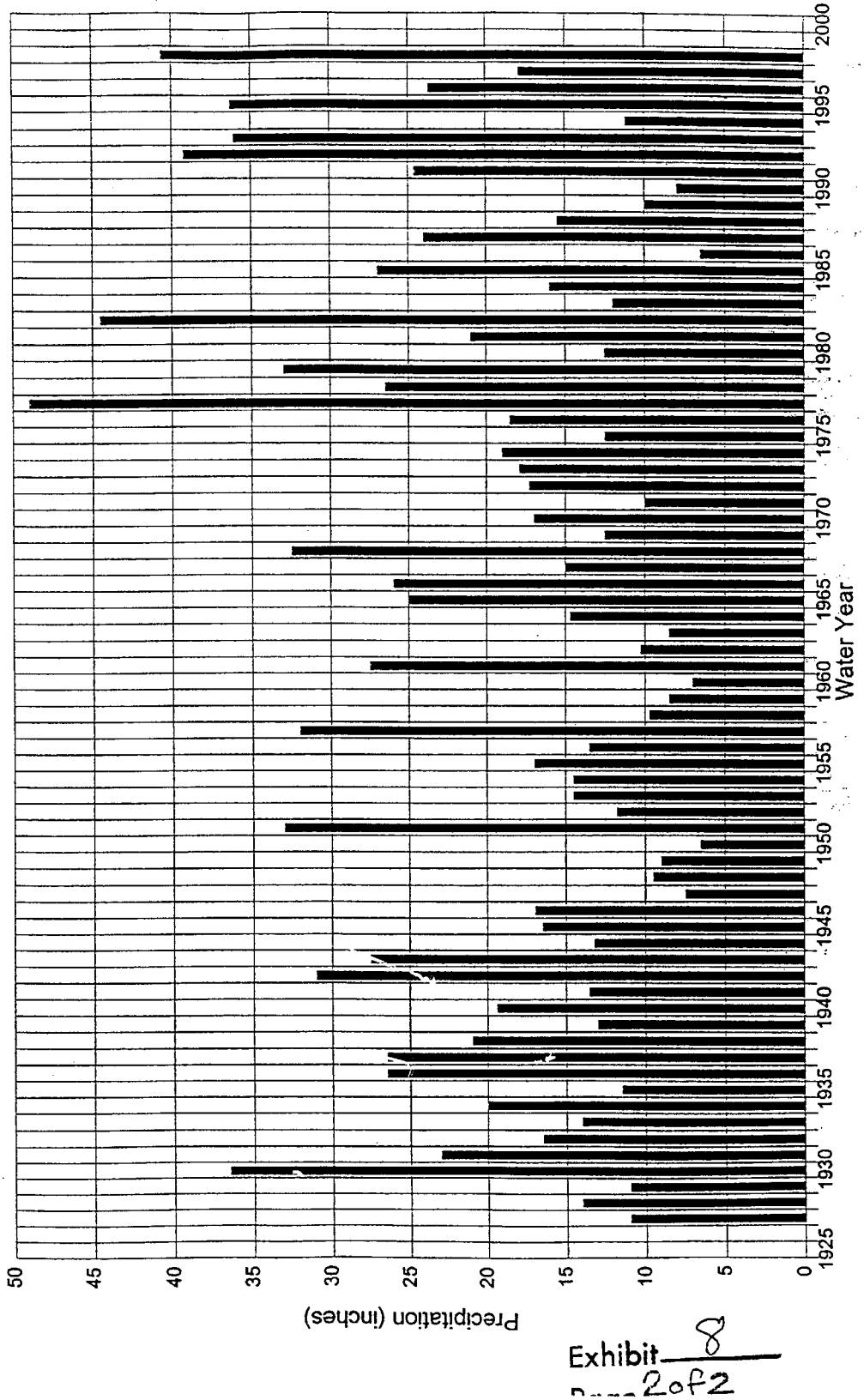
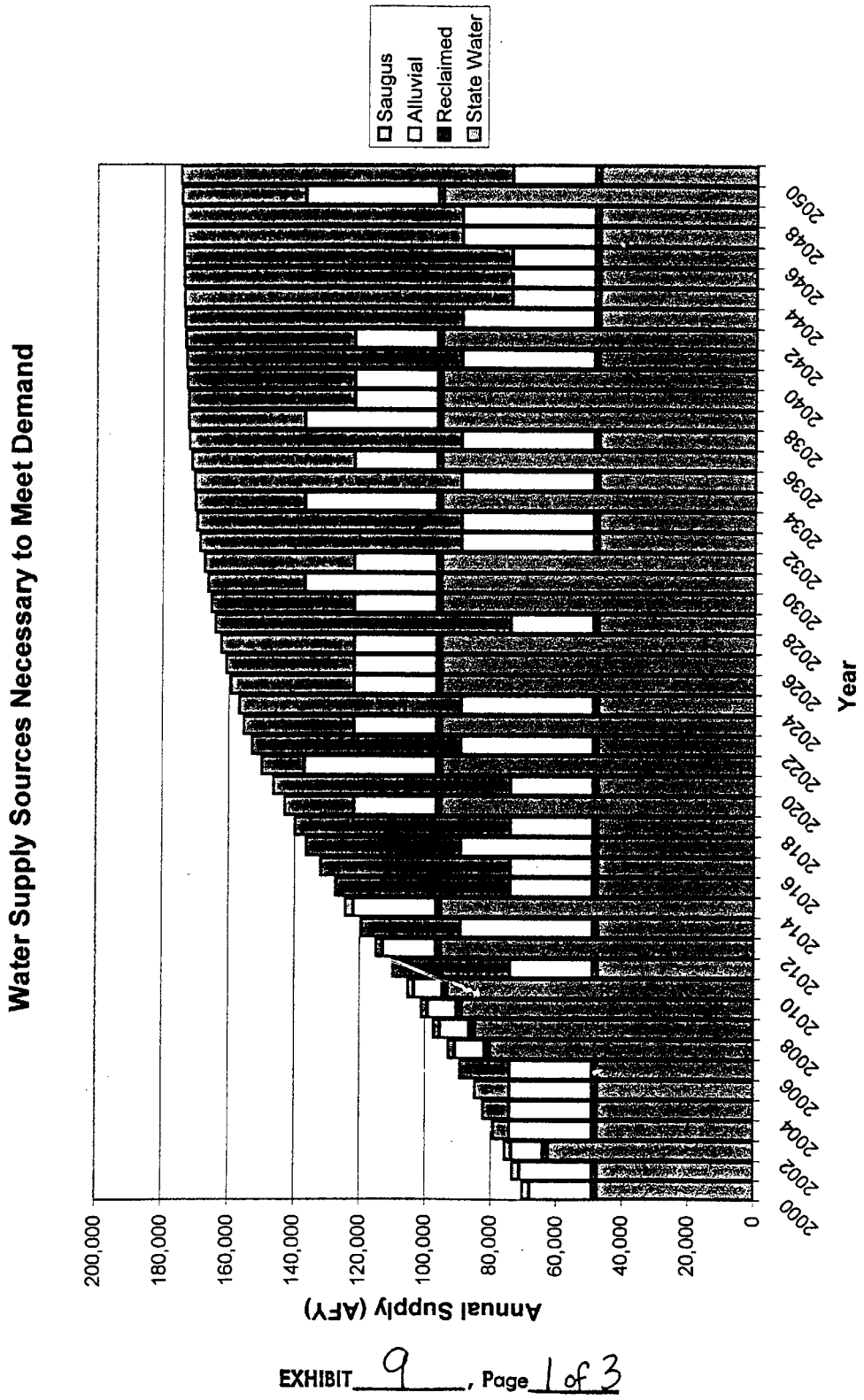


Figure II-15

Exhibit 8
Page 2 of 2

Exhibit 9



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Santa Clarita Area Demand vs Supply

Year	Hydrology N Calif	Hydrology Local	Total Demand	Agricultural GW Demand Total GW	Agricultural GW Demand Alluv Aq	Agricultural GW Demand Saugus Aq	Recl Water	State Water Proj Available	Purveyors GW Demand Total	Purveyors GW Demand Alluv	Purveyors GW Demand Saugus	Total Alluv Aq	Total Saugus Aq	Saugus Overdraft
2000	Dry	Dry	70,500	12,000	9,600	2,400	1,700	47,600	9,200	9,200	-	18,800	2,400	-
2001	Dry	Dry	73,500	11,860	9,488	2,372	1,700	47,600	12,340	12,340	-	21,828	2,372	-
2002	Normal	Dry	76,000	11,720	9,376	2,344	1,700	95,200	-	-	-	9,376	2,344	-
2003	Dry	Dry	79,500	11,580	9,264	2,316	1,700	47,600	16,620	15,736	2,884	25,000	5,200	-
2004	Dry	Dry	82,500	11,440	9,152	2,288	1,700	47,600	21,760	15,848	5,912	25,000	8,200	-
2005	Dry	Dry	85,000	11,300	9,040	2,260	1,700	47,600	24,400	15,960	8,440	25,000	10,700	-
2006	Dry	Dry	89,500	11,160	8,928	2,232	1,700	47,600	29,040	16,072	12,968	25,000	15,200	3,200
2007	Wet	Wet	93,000	11,020	8,816	2,204	1,700	95,200	-	-	-	8,816	2,204	-
2008	Wet	Dry	97,500	10,880	8,704	2,176	1,700	95,200	-	-	-	8,704	2,176	-
2009	Wet	Dry	101,250	10,740	8,592	2,148	1,700	95,200	-	-	-	8,592	2,148	-
2010	Normal	Dry	105,500	10,600	8,480	2,120	1,700	95,200	-	-	-	8,480	2,120	-
2011	Dry	Dry	110,000	10,460	8,368	2,092	1,700	47,600	50,240	16,632	33,608	25,000	35,700	23,700
2012	Wet	Dry	115,000	10,320	8,256	2,064	1,700	95,200	7,780	7,780	-	16,036	2,064	13,764
2013	Dry	Wet	119,500	10,180	8,144	2,036	1,700	47,600	60,020	31,856	28,164	40,000	30,200	22,964
2014	Wet	Dry	124,500	10,040	8,032	2,008	1,700	95,200	17,560	16,968	592	25,000	2,600	13,564
2015	Dry	Dry	127,500	9,900	7,920	1,980	1,700	47,600	68,300	17,080	51,220	25,000	53,200	54,764
2016	Dry	Dry	132,000	9,760	7,808	1,952	1,700	47,600	72,940	17,192	55,748	25,000	57,700	100,464
2017	Dry	Wet	136,500	9,620	7,696	1,924	1,700	47,600	77,580	32,304	45,276	40,000	47,200	126,664
2018	Dry	Dry	140,000	9,480	7,584	1,896	1,700	47,600	81,220	17,416	63,804	25,000	65,700	180,364
2019	Wet	Dry	143,000	9,340	7,472	1,868	1,700	95,200	36,760	17,528	19,232	25,000	21,100	189,464
2020	Dry	Dry	146,500	9,200	7,360	1,840	1,700	47,600	88,000	17,640	70,360	25,000	72,200	249,664
2021	Wet	Wet	150,000	9,060	7,248	1,812	1,700	95,200	44,040	32,752	11,288	40,000	13,100	241,764
2022	Dry	Wet	153,000	8,920	7,136	1,784	1,700	47,600	94,780	32,864	61,916	40,000	63,700	284,464
2023	Wet	Dry	155,500	8,780	7,024	1,756	1,700	95,200	49,820	17,976	31,844	25,000	33,600	306,064
2024	Dry	Wet	157,000	8,640	6,912	1,728	1,700	47,600	99,060	33,088	65,972	40,000	67,700	352,764
2025	Wet	Dry	159,500	8,500	6,800	1,700	1,700	95,200	54,100	18,200	35,900	25,000	37,600	378,364
2026	Wet	Dry	161,000	8,360	6,688	1,672	1,700	95,200	55,740	18,312	37,428	25,000	39,100	405,464
2027	Wet	Dry	162,500	8,220	6,576	1,644	1,700	95,200	57,380	18,424	38,956	25,000	40,600	434,064
2028	Dry	Dry	164,250	8,080	6,464	1,616	1,700	47,600	106,870	18,536	88,334	25,000	89,950	512,014
2029	Wet	Dry	165,500	7,940	6,352	1,588	1,700	95,200	60,660	18,648	42,012	25,000	43,600	543,614
2030	Wet	Normal	166,500	7,800	6,240	1,560	1,700	95,200	61,800	33,760	28,040	40,000	29,600	552,214
2031	Wet	Dry	167,800	7,660	6,128	1,532	1,700	95,200	63,040	18,872	44,168	25,000	45,700	585,914
2032	Dry	Normal	169,000	7,520	6,016	1,504	1,700	47,600	112,180	33,984	78,196	40,000	79,700	644,614
2033	Dry	Wet	170,000	7,380	5,904	1,476	1,700	47,600	113,320	34,096	79,224	40,000	80,700	704,314
2034	Wet	Wet	170,500	7,240	5,792	1,448	1,700	95,200	66,360	34,208	32,152	40,000	33,600	716,914
2035	Dry	Wet	170,750	7,100	5,680	1,420	1,700	47,600	114,350	34,320	80,030	40,000	81,450	777,364

EXHIBIT 9, Page 2 of 3

2036	Wet	Dry	171,500	6,960	5,568	1,392	1,700	95,200	67,840	19,432	48,208	25,000	49,600	814,964
2037	Dry	Wet	172,250	6,820	5,456	1,364	1,700	47,600	116,130	34,544	81,586	40,000	82,950	876,814
2038	Wet	Wet	172,500	6,660	5,344	1,336	1,700	95,200	68,920	34,656	34,264	40,000	35,600	891,514
2039	Wet	Dry	172,500	6,540	5,232	1,308	1,700	95,200	69,060	19,768	49,292	25,000	50,600	930,114
2040	Wet	Dry	173,000	6,400	5,120	1,280	1,700	95,200	69,700	19,880	49,820	25,000	51,100	969,214
2041	Dry	Wet	173,250	6,260	5,008	1,252	1,700	47,600	117,690	34,992	82,698	40,000	83,950	1,032,164
2042	Wet	Dry	173,500	6,120	4,896	1,224	1,700	95,200	70,480	20,104	50,376	25,000	51,600	1,071,764
2043	Dry	Wet	173,750	5,980	4,784	1,196	1,700	47,600	118,470	35,216	83,254	40,000	84,450	1,135,214
2044	Dry	Dry	174,000	5,840	4,672	1,168	1,700	47,600	118,860	20,328	98,532	25,000	99,700	1,222,914
2045	Dry	Dry	174,125	5,700	4,560	1,140	1,700	47,600	119,125	20,440	98,685	25,000	99,825	1,310,739
2046	Dry	Dry	174,250	5,560	4,448	1,112	1,700	47,600	119,390	20,552	98,838	25,000	99,950	1,398,689
2047	Dry	Wet	174,375	5,420	4,336	1,084	1,700	47,600	119,855	35,664	83,991	40,000	85,075	1,462,764
2048	Dry	Wet	174,500	5,280	4,224	1,056	1,700	47,600	119,920	35,776	84,144	40,000	85,200	1,526,964
2049	Wet	Wet	174,750	5,140	4,112	1,028	1,700	95,200	72,710	35,888	36,822	40,000	37,850	1,543,814
2050	Dry	Dry	175,000	5,000	4,000	1,000	1,700	47,600	120,700	21,000	99,700	25,000	100,700	1,632,514

EXHIBIT 9, Page 3 of 3

Exhibit 10

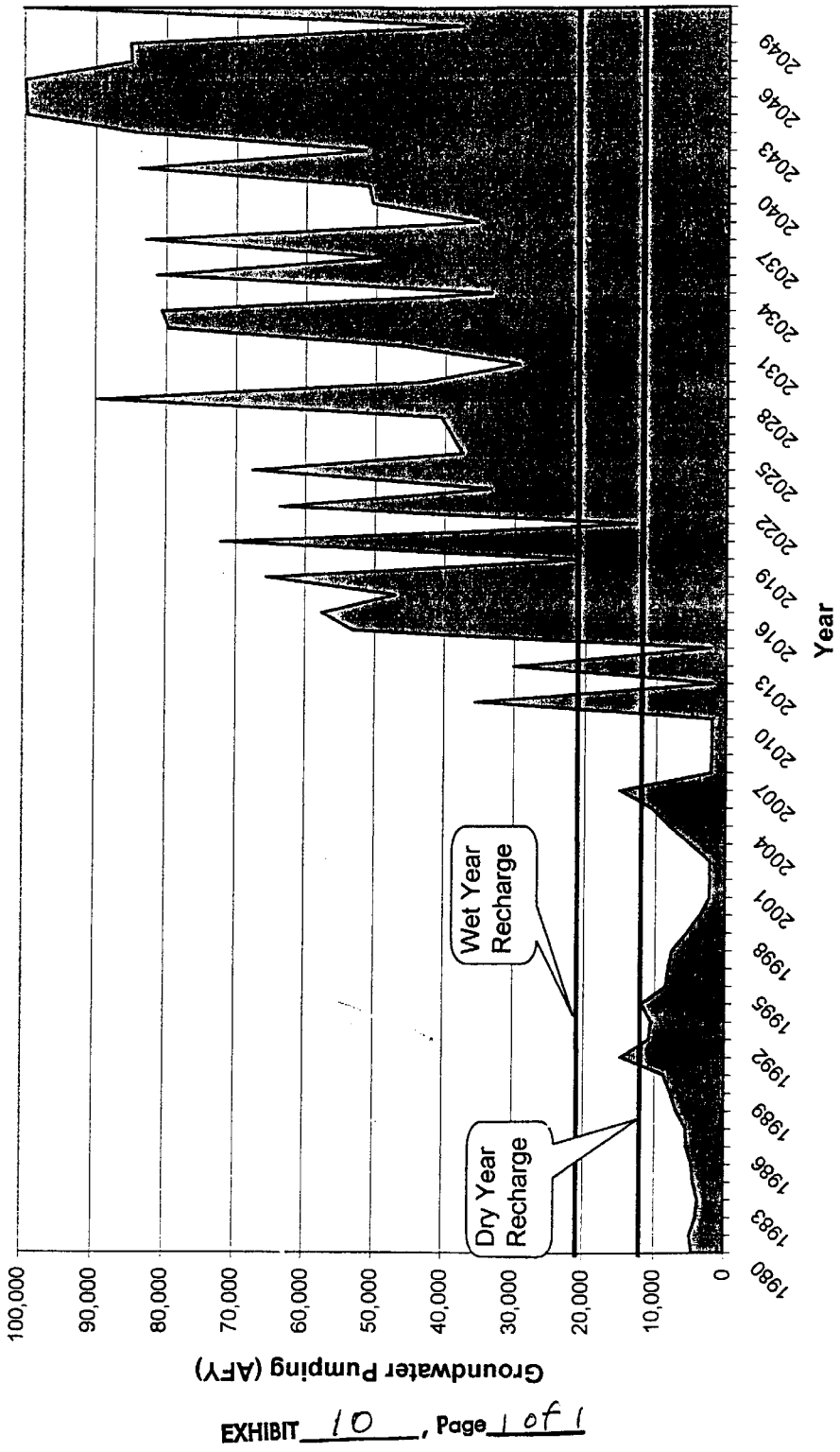

EXHIBIT _____, Page 1 of 1

Exhibit 10-A

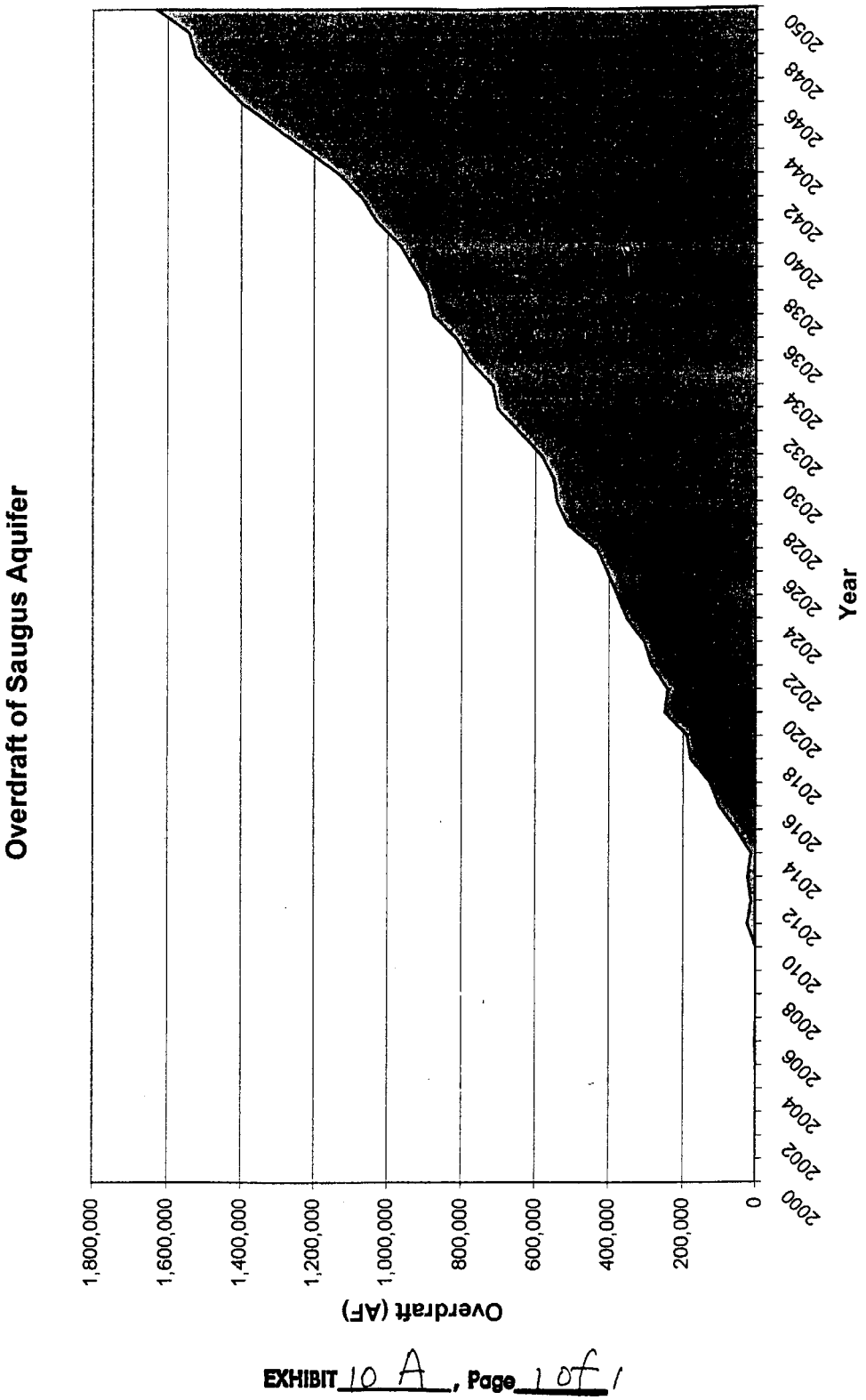
Overdraft of Saugus Aquifer
Overdraft (AF)
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
2024
2026
2028
2030
2032
2034
2036
2038
2040
2042
2044
2046
2048
2050
Year
EXHIBIT 10 A, Page 1 of 1
EXHIBIT _____, Page 1 of 1

Exhibit 11

Groundwater Resources Association of California

CALIFORNIA GROUNDWATER MANAGEMENT

Steve Bachman, Carl Hauge, Kevin Neese, Anthony Saracino

EXHIBIT 11, Page 1 of 3

If wells are too close to each other, their cones of depression can interfere with each other, causing reduced yields and possible legal consequences. The extent of the cone of depression of each well should be considered in any groundwater management plan.

Aquifer Tests

Aquifer tests are conducted to determine hydraulic characteristics of the aquifer materials. The characteristics are transmissivity and storativity (see "Technical Definitions," page 9). These values are then used to estimate the amount of groundwater that can be produced by a well. Aquifer tests are often called "pump tests," but a pump test actually is conducted by an electric company to determine pump efficiency.

During the most common type of aquifer test, the depths to groundwater in the pumping well and an observation well or wells are measured at frequent intervals. The difference in the water levels in the pumping well and the observation wells gives a good indication of the shape of the cone of depression. The data are then used to determine the storativity and transmissivity of the aquifer. Results of the calculations can then be used to estimate well yields and the effects of pumping the well on nearby wells.

Perennial Yield or Safe Yield

The terms "safe yield" and "perennial yield" have been used interchangeably in the past. Perennial yield is the average quantity of water that can be extracted from an aquifer or groundwater basin over a period of time without causing undesirable results. Undesirable results include permanently lowered groundwater levels, subsidence or degradation of water quality in the aquifer. If water management in the basin changes, the perennial yield of the basin may change.

The term "safe yield" is a technical definition of basin yield that has been adopted by the courts to define the legal rights to extract groundwater in a basin. In most of the adjudicated basins in California, safe yield is a fixed amount that is determined by the court and is characterized as being equivalent to net groundwater recharge. In one basin, "operational" safe yield includes whatever temporary surplus can be stored in the basin. In the San Gabriel, Chino and Mojave basins, it is not limited; pumpers simply pay to replace the extra amount of groundwater extracted.

Subsidence

Groundwater extraction from an aquifer can result in compaction of the fine sediments within the aquifer system (Figure 5). Compaction of these clays and silts leads to subsidence of the land surface that can change the gradients in rivers, streams, and canals

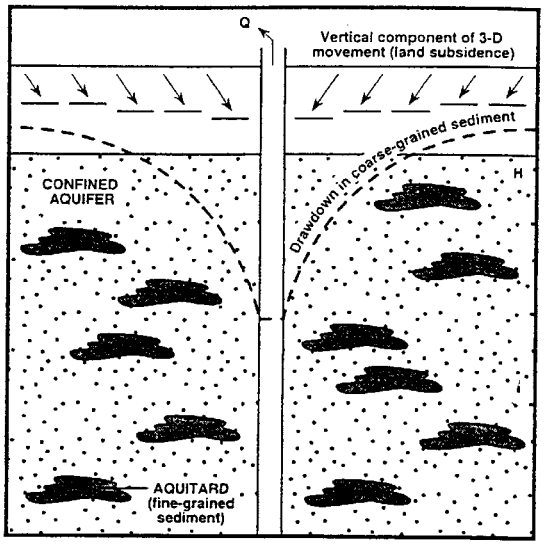

Figure 5: Land subsidence.

and cause structural damage to highways, bridges, and buildings. Compaction of these fine sediments reduces the total amount of groundwater stored in the aquifer system. That part of the aquifer system that yields water readily to wells, however, is not compacted. The coarser sediments, consisting of sands and gravels, are not compacted. These sediments continue to be usable as an aquifer that can be recharged and from which groundwater can be extracted by wells. Figure 6 shows areas of subsidence in the United States.

Groundwater management plans should include provisions to monitor for land subsidence. The simplest monitoring might include annual surveying of a network of benchmarks, either by spirit leveling or by use of global positioning system techniques. If subsidence is noted, the agency may decide to mitigate by some means, compensate for damages, reduce groundwater extractions, or cease entirely.

EXHIBIT 11, Page 2 of 3

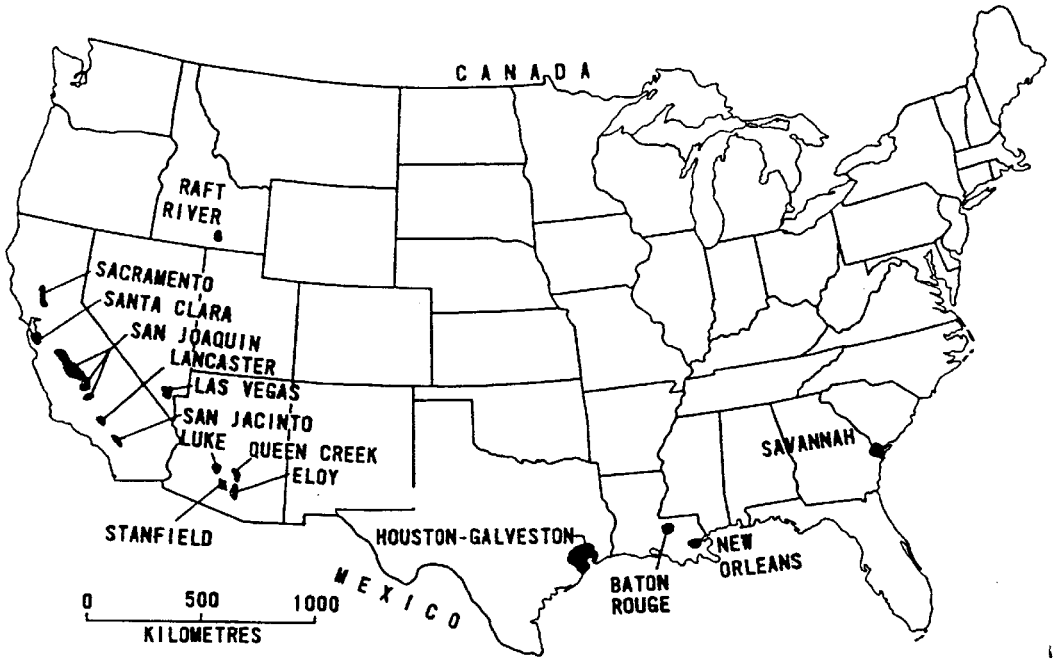

Figure 6: Areas of land subsidence from groundwater withdrawal in the United States.

Overdraft

Overdraft is the condition of a groundwater basin or aquifer in which the amount of water extracted exceeds the amount of water that recharges the basin over a period of years during which average precipitation and water management in the basin remain approximately the same.

Droughts or periods of abnormally low rainfall do not cause overdraft. Droughts lower the amount of water in storage in the groundwater reservoir, just as they lower the amount of water in storage behind dams. When the drought is over and all other conditions being equal, the water in storage behind the dam, as well as in the groundwater reservoir, returns to normal (Figure 7).

Overdraft is a term that should be used cautiously. In some areas of California, projections of water supply versus water demand show that if average conditions prevail, long-term water shortages will occur. Such long-term shortages may or may not be met by overdrafting groundwater basins.

EXHIBIT 11, Page 3 of 3

Exhibit 12

VOLUME I — REPORT TEXT

HYDROGEOLOGIC ASSESSMENT

OF THE

SAUGUS FORMATION
in the
SANTA CLARA VALLEY
of
LOS ANGELES COUNTY, CALIFORNIA

FOR

CASTAIC LAKE WATER AGENCY

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 36 — VAL VERDE

NEWHALL COUNTY WATER DISTRICT

SANTA CLARITA WATER COMPANY

VALENCIA WATER COMPANY

FEBRUARY 1988

RICHARD C. SLADE

CONSULTING GROUNDWATER GEOLOGIST

EXHIBIT 12, Page 1 of 3

comparison, our assignment of specific yield values for the alluvium which overlies the Saugus Formation ranged between 9 and 16 percent (Slade, December 1986).

USABLE GROUNDWATER IN STORAGE

This final step calculated the total estimated volume of usable groundwater in storage in the Saugus Formation by multiplying the total surface area of each storage unit, by the average sand thickness of each sand thickness interval within each of the subunits, by the specific yield value assigned to that sand thickness interval.

Table 6 - Summary of Usable Groundwater in Storage - presents the results of our computations. It identifies the usable quantity (volume) of groundwater in storage in the Saugus Formation between the depth limits of 500 feet and either: 2500 feet; or the base of fresh water within the Saugus Formation, whichever is shallower. As seen on Table 6, the total estimated amount of groundwater in storage in the sands and gravels which constitute the potential aquifers within the Saugus Formation is approximately 1.41 million acre-feet. Storage Unit No. 1 (northerly of the San Gabriel fault) has approximately 130,500 acre-feet of usable groundwater in storage (about 9 percent of the total); Unit No. 2 (between the two faults) and Unit No. 3 (southerly of the Holser fault) each has approximately 641,000 acre-feet of usable groundwater in storage (about 45 percent of the total for each).

In comparison to the calculated 1.41 million acre-feet of usable groundwater in storage in the sand and gravel aquifers of the Saugus, Robson (1972) for the U. S. Geological Survey reported a total storage capacity for the entire Saugus Formation of approximately 6 million acre-feet.

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TABLE 6 - SUMMARY OF USABLE GROUNDWATER IN STORAGE

STORAGE UNIT NO.	LOCATION OF STORAGE UNIT	STORAGE SUBUNIT DESIGNATIONS	TOTAL SURFACE AREA (acres)	RANGE OF SAND THICKNESS (ft)	RANGE OF SPECIFIC YIELDS (%)	USABLE GROUNDWATER IN STORAGE (ac-ft)
1	Northerly of San Gabriel fault	1A - 1Db	7,607	0 to 440	7	130,540
2	Between the two faults	2A - 2O	13,980	0 to 1400	5-8	641,330
3	Southerly of Holser fault	3A - 3H	16,501	0 to 1240	5-8	641,240
		TOTALS	39,088			1,413,110

EXHIBIT 12, Page 3 of 3

Exhibit 13

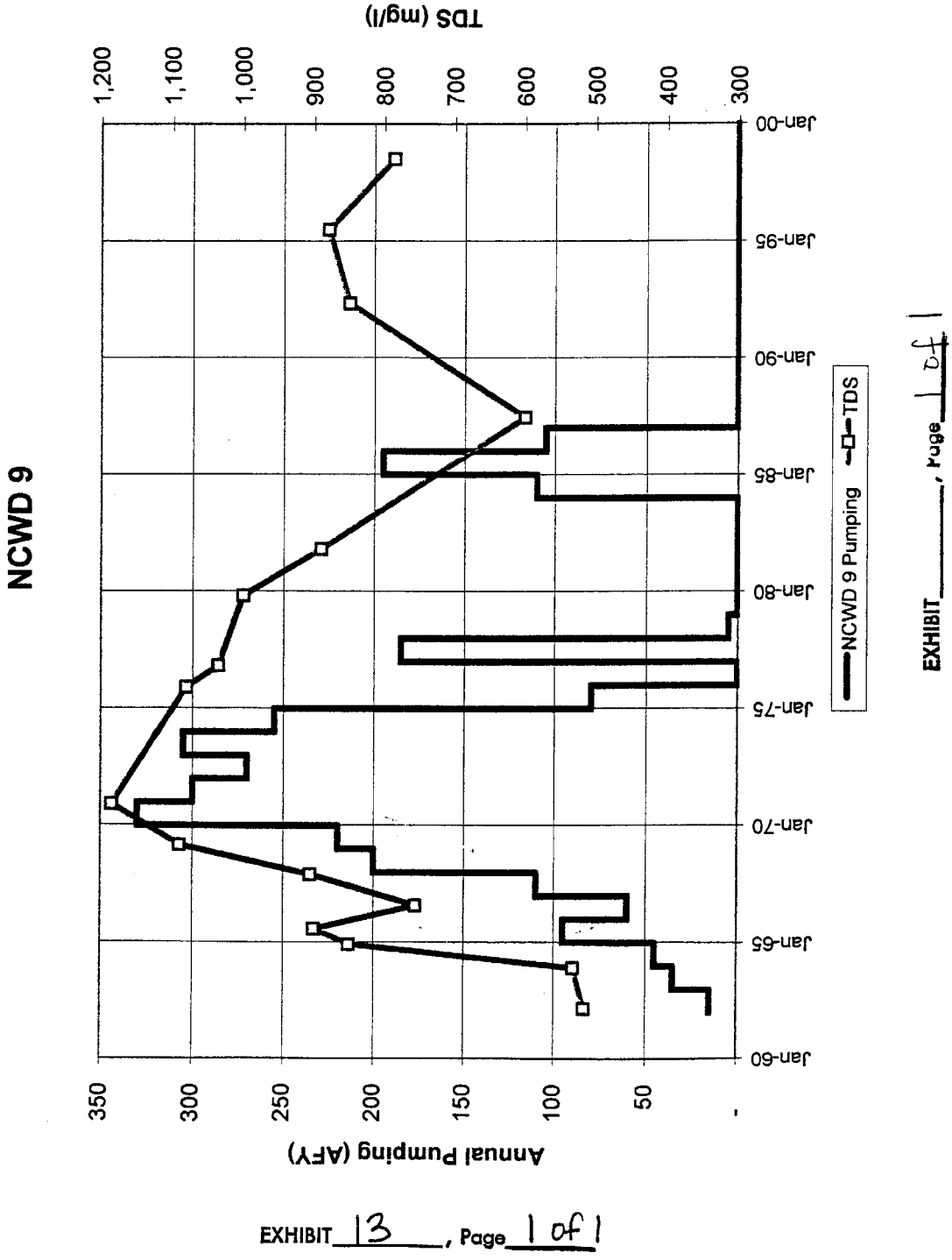

NCWD 9
Annual Pumping (AFY)
TDS (mg/l)
350
300
250
200
150
100
50
-
1,200
1,100
1,000
900
800
700
600
500
400
300
Jan-60
Jan-65
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
NCWD 9 Pumping
TDS
EXHIBIT 13 , Page 1 of 1

Exhibit 14

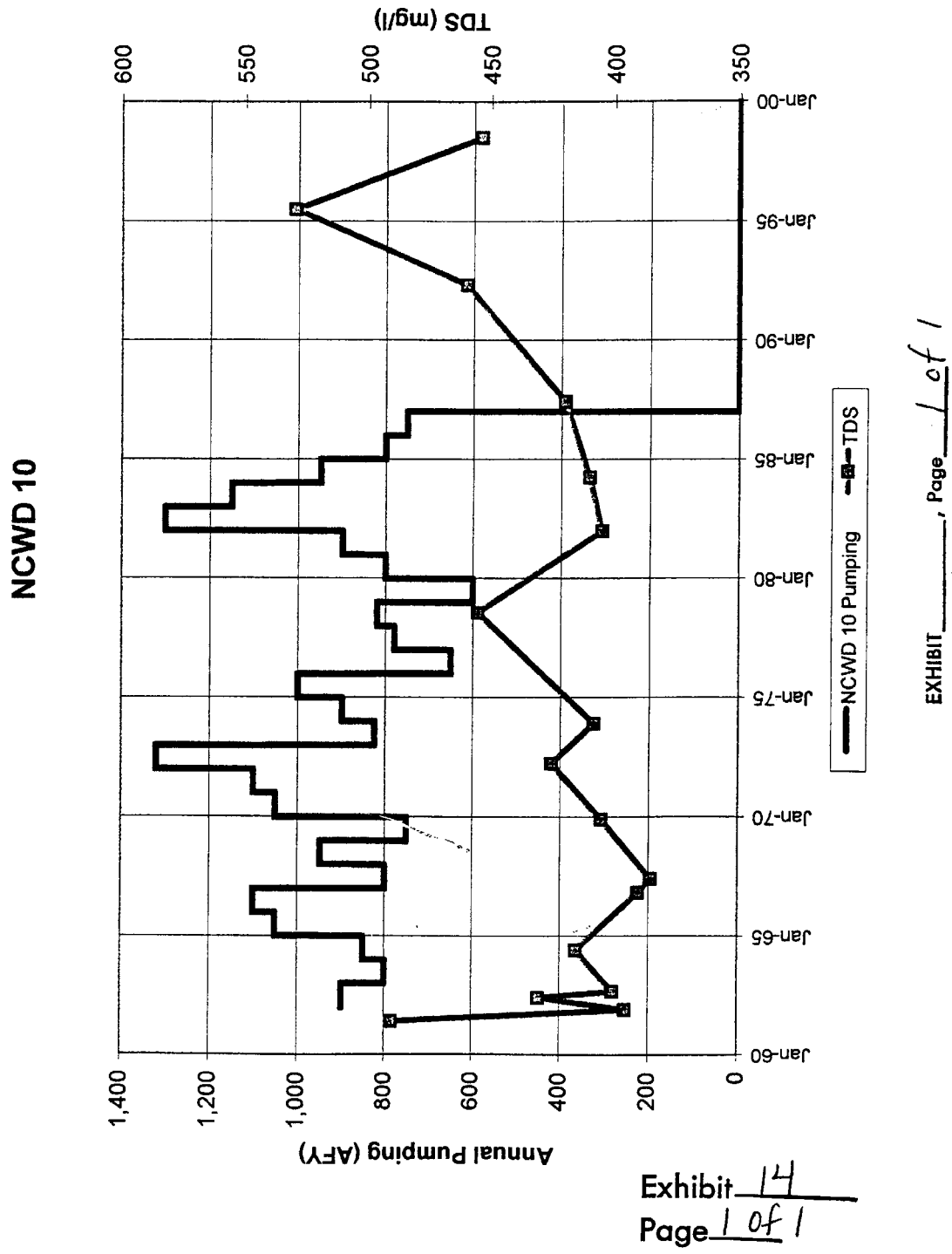

NCWD 10
Annual Pumping (AFY)
TDS (mg/l)
1,400
1,200
1,000
800
600
400
200
0
600
550
500
450
400
350
Jan-60
Jan-65
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
NCWD 10 Pumping
TDS
EXHIBIT ____, Page 1 of 1
Exhibit 14
Page 1 of 1

Exhibit 15

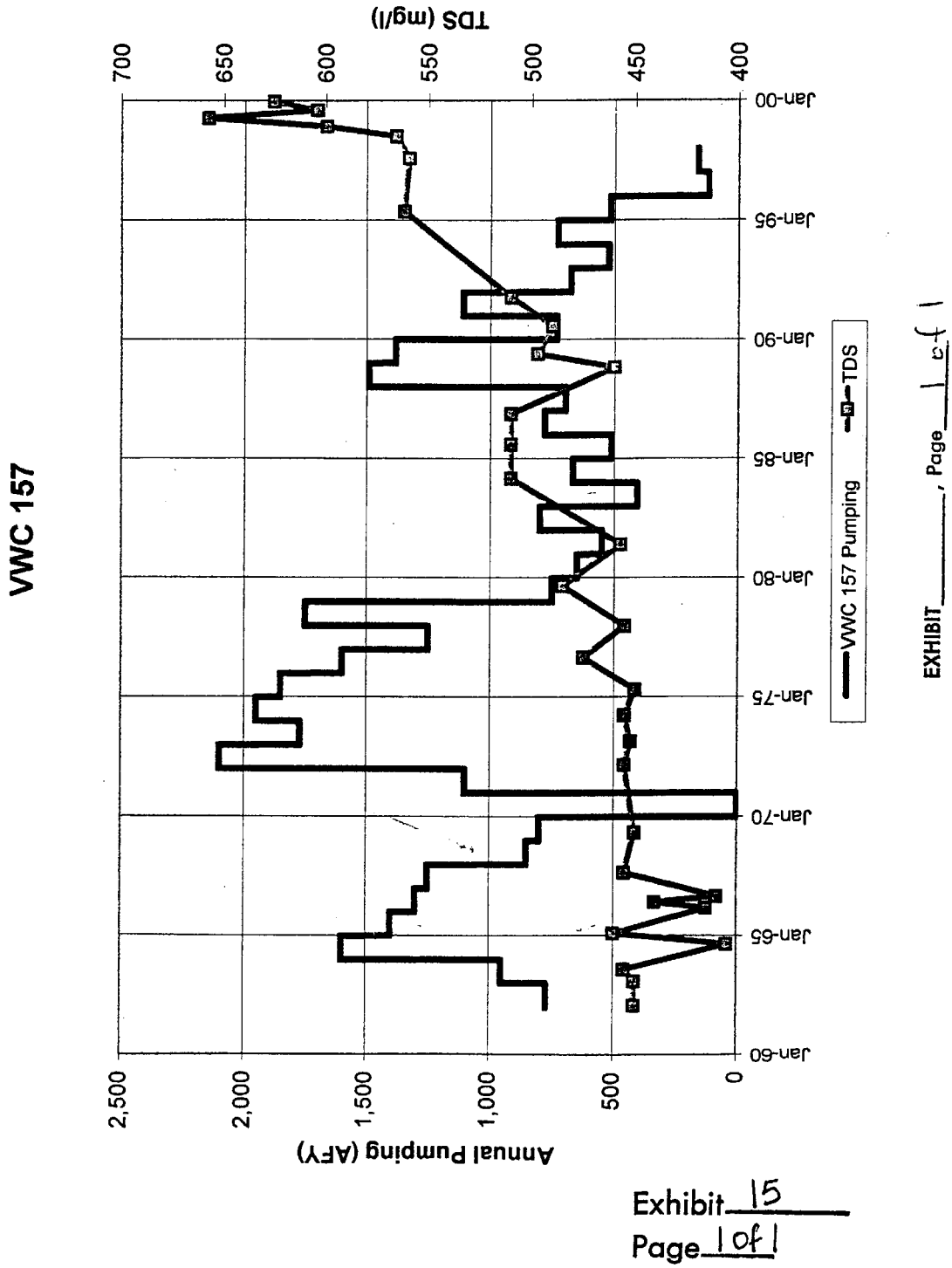

VWC 157
Annual Pumping (AFY)
TDS (mg/l)
2,500
2,000
1,500
1,000
500
0
700
650
600
550
500
450
400
Jan-60
Jan-65
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
VWC 157 Pumping
TDS
EXHIBIT _____, Page 1 of 1
Exhibit 15
Page 1 of 1

Exhibit 16

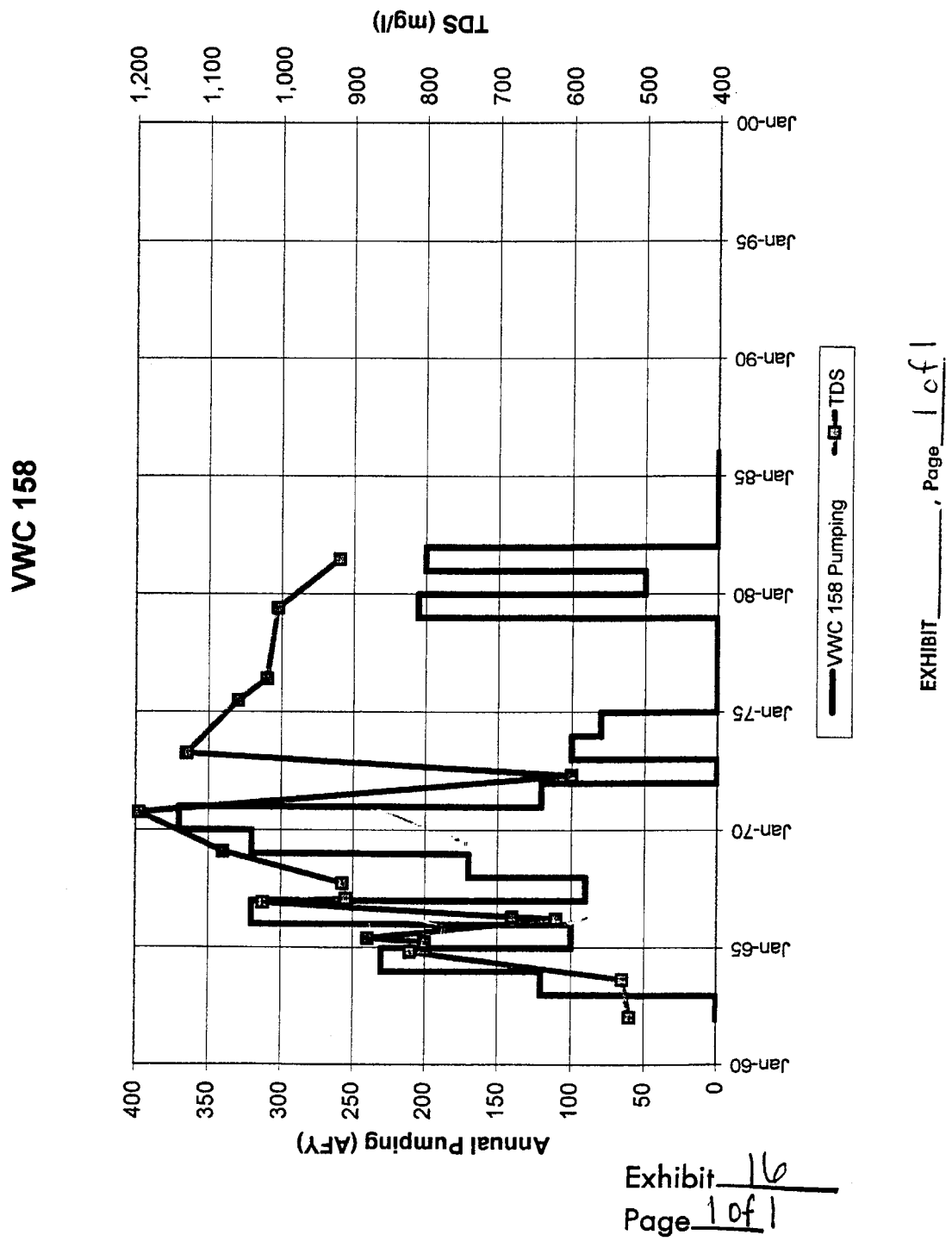

VWC 158
Annual Pumping (AFY)
TDS (mg/l)
VWC 158 Pumping
TDS
Jan-60
Jan-65
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
0
50
100
150
200
250
300
350
400
400
500
600
700
800
900
1,000
1,100
1,200
EXHIBIT_____, Page 1 of 1
Exhibit 16
Page 1 of 1

Exhibit 17

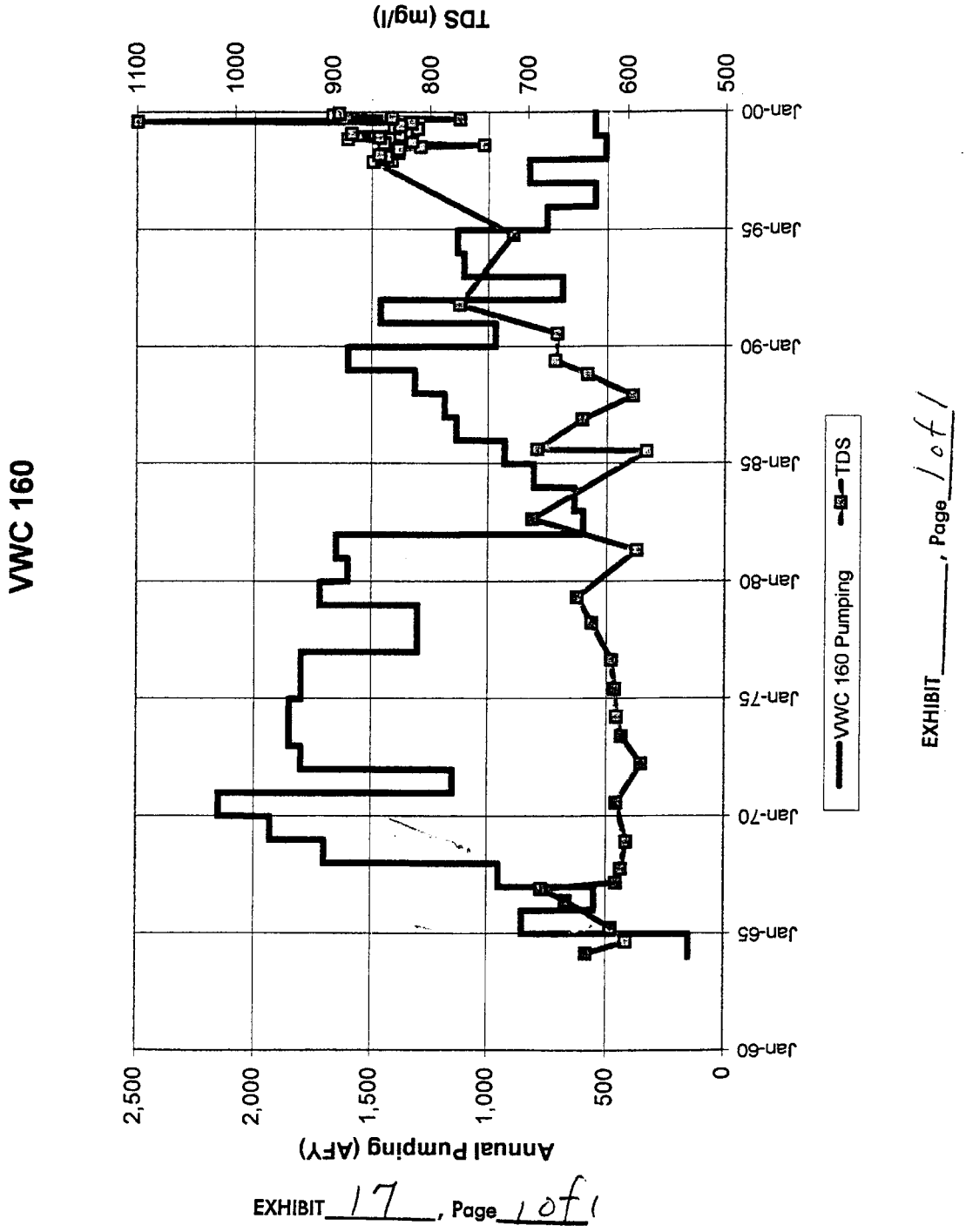

VWC 160
TDS (mg/l)
1100
1000
900
800
700
600
500
Jan-00
Jan-95
Jan-90
Jan-85
Jan-80
Jan-75
Jan-70
Jan-65
Jan-60
2,500
2,000
1,500
1,000
500
0
Annual Pumping (AFY)
VWC 160 Pumping
TDS
EXHIBIT 17, Page 1 of 1
EXHIBIT _____, Page 1 of 1

Exhibit 18

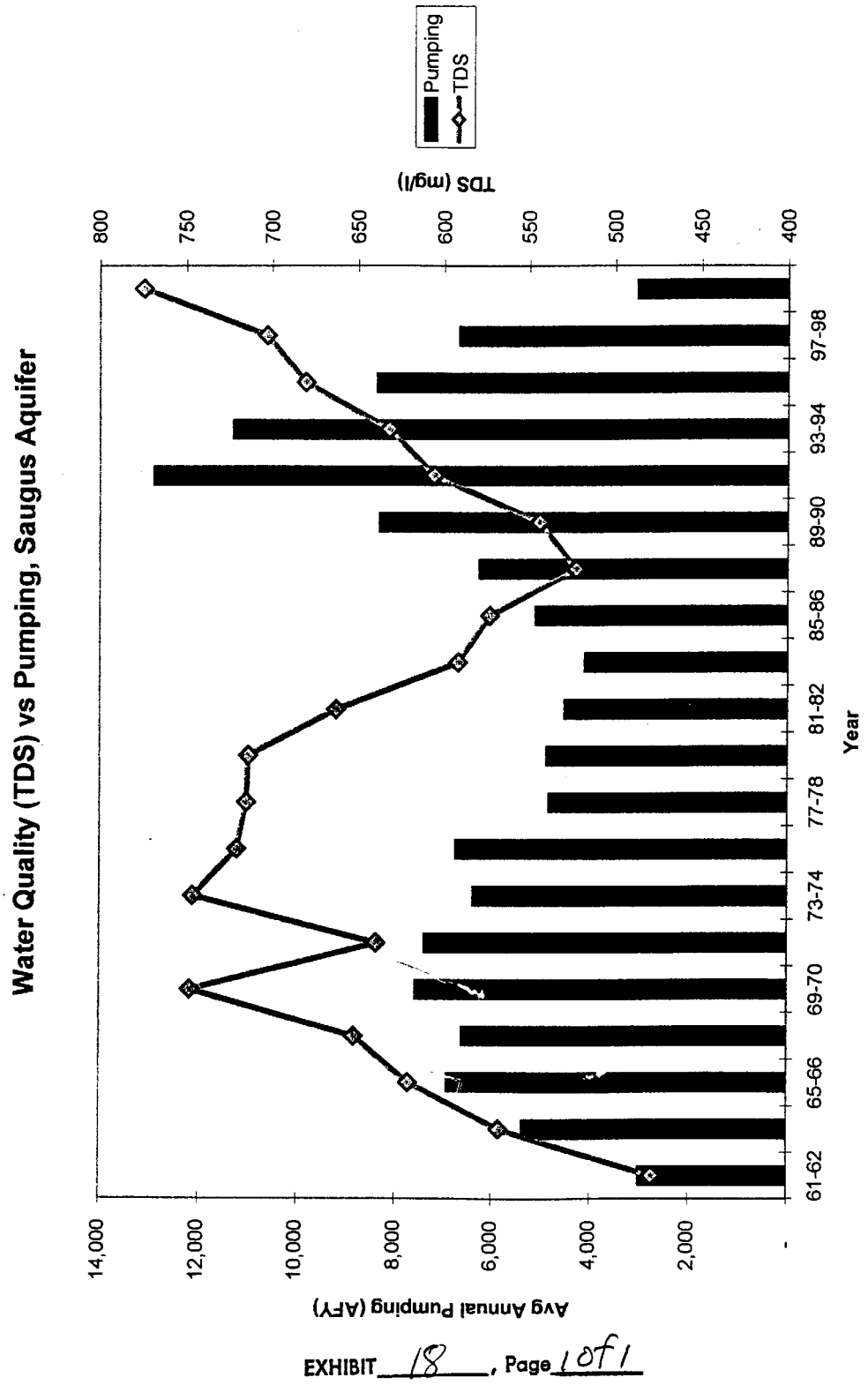


EXHIBIT _____, Page 1 of 1

Exhibit 19

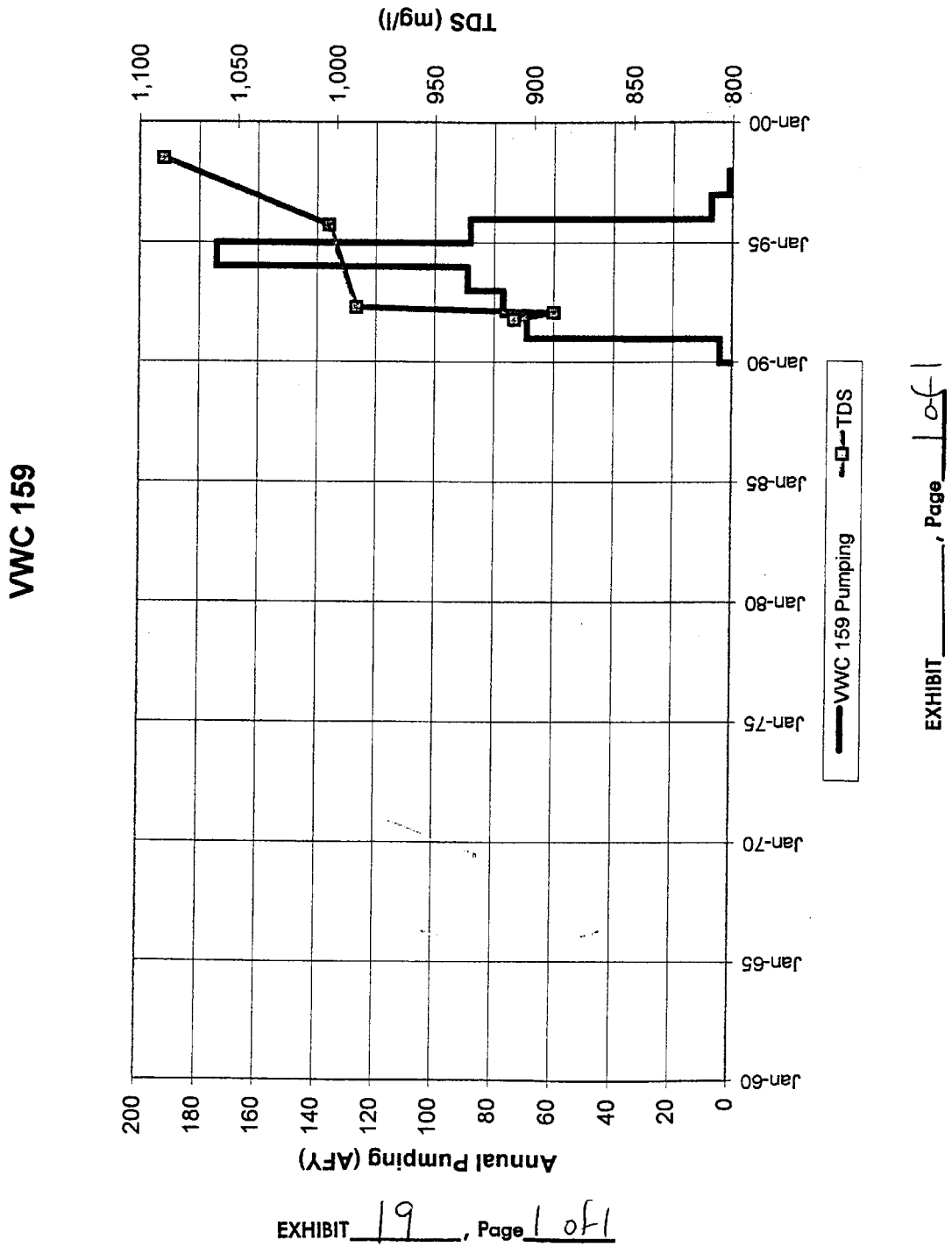

VWC 159
Annual Pumping (AFY)
TDS (mg/l)
0
20
40
60
80
100
120
140
160
180
200
800
850
900
950
1,000
1,050
1,100
Jan-60
Jan-65
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
VWC 159 Pumping
TDS
EXHIBIT 19, Page 1 of 1
EXHIBIT ____, Page 1 of 1

Exhibit 20

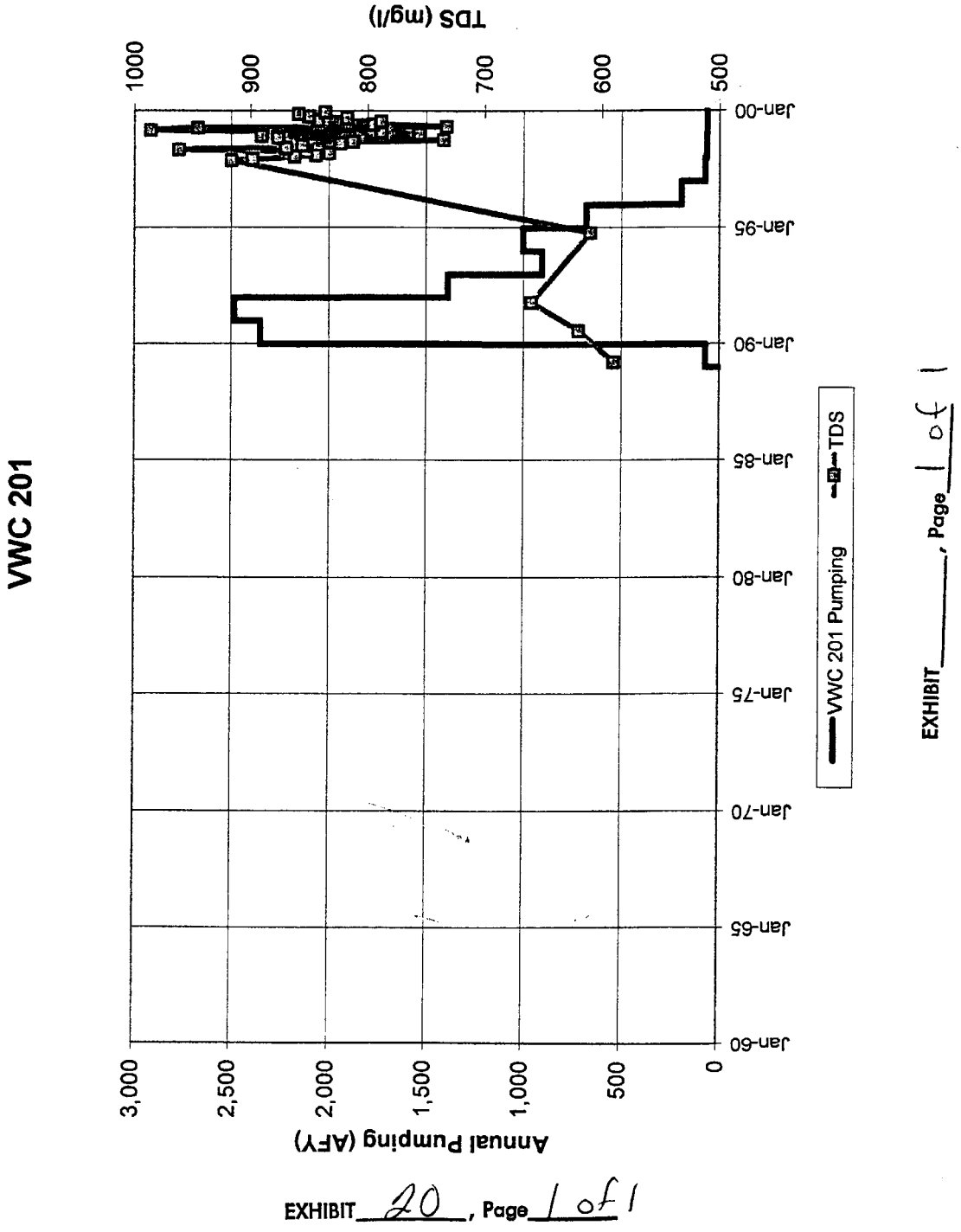

VWC 201
TDS (mg/l)
1000
900
800
700
600
500
Jan-00
Jan-95
Jan-90
Jan-85
Jan-80
Jan-75
Jan-70
Jan-65
Jan-60
3,000
2,500
2,000
1,500
1,000
500
0
Annual Pumping (AFY)
VWC 201 Pumping
TDS
EXHIBIT 20, Page 1 of 1
EXHIBIT _____, Page 1 of 1

Exhibit 21

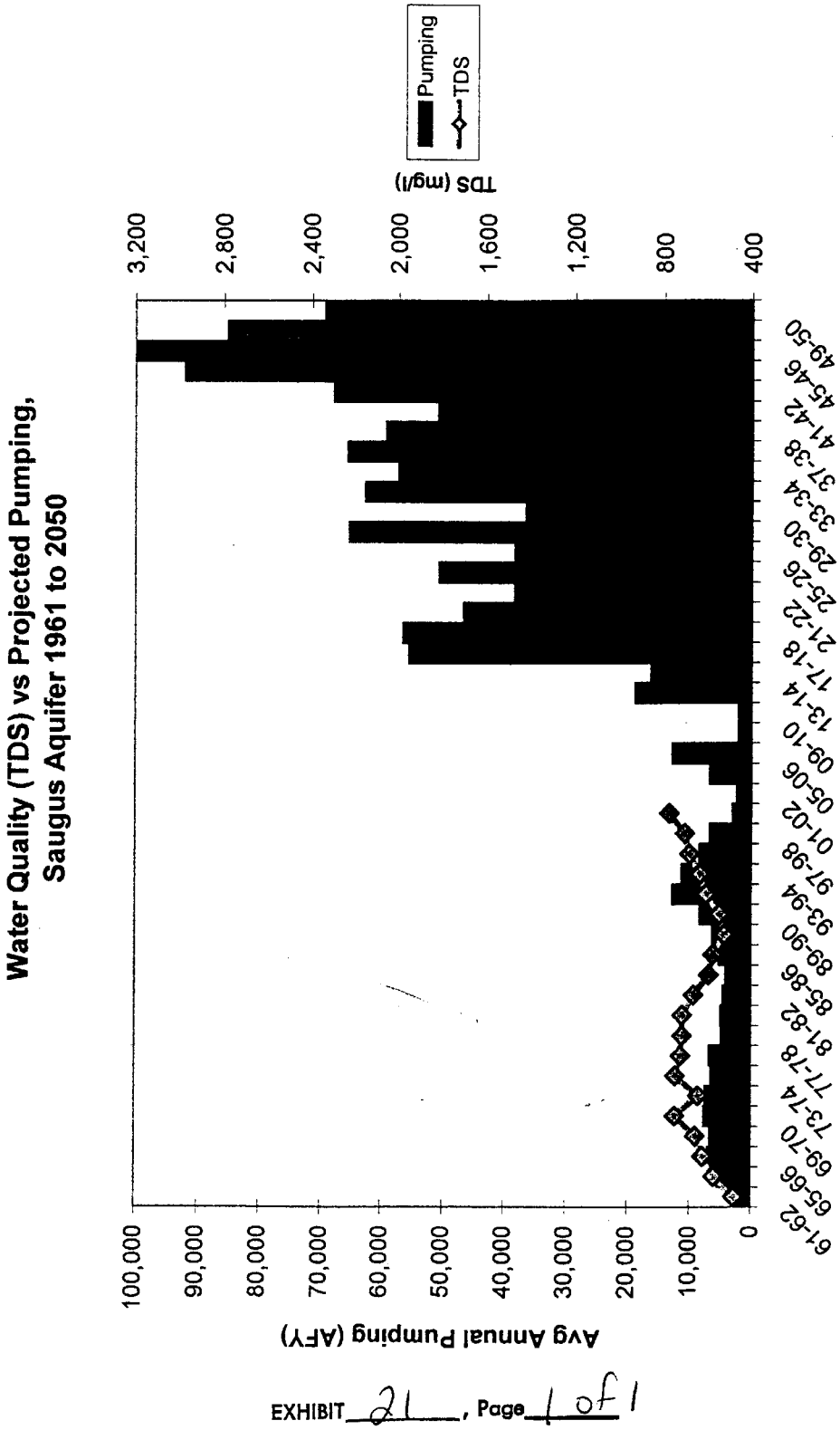

Water Quality (TDS) vs Projected Pumping,
Saugus Aquifer 1961 to 2050
Avg Annual Pumping (AFY)
TDS (mg/l)
Pumping
TDS
2-Year Period
EXHIBIT 21, Page 1 of 1
EXHIBIT _____, Page 1 of 1

Exhibit 22

Castaic Lake Water Agency

Draft

Integrated Water Resources Plan
Water Demand and Supply Evaluation

February 1998

MONTGOMERY WATSON

BOOKMAN-EDMONSTON
ENGINEERING, INC.

EXHIBIT 22, Page 1 of 3

Alluvial Aquifer

The Alluvial Aquifer system historically has provided the principal source of water supply in the CLWA service area, and will continue to be an important supply in the future. The Alluvial Aquifer, however, is limited in extent and depth and has a rather modest storage volume of about 200,000 acre-ft. Inspection of groundwater production and groundwater elevations in the Alluvial Aquifer indicates that with two or three years of reduced precipitation, groundwater production from the Alluvial Aquifer could be counted on to produce approximately 25,000 acre-ft/yr, of which 5,000-10,000 acre-ft/yr is higher salinity water located westerly of Castaic Junction. In normal and wet periods, production from the Alluvial Aquifer is estimated to be 32,000 acre-ft/yr and as much as 40,000 acre-ft/yr, respectively.

The three methods of increasing supply from this aquifer during these periods include: (1) modest over-pumping of the Alluvial Aquifer during wet years to create storage space so that the capture of runoff is increased; (2) increased recharge with Castaic Reservoir storm inflows; (3) groundwater recharge with imported SWP supplies. The existing recharge capability also needs to be maintained and the river bottoms in recharge areas should remain unpaved.

Increasing groundwater production to lower the water levels during wet periods increases the ability to capture storm water. However, it also increases the risk of having inadequate supplies in dry periods. Therefore, an evaluation should be performed to determine if the procedure is reasonable and to determine the quantities of water salvaged.

Increased urbanization in the CLWA area could have two effects on the Alluvial Aquifer. Increased urbanization of the hill and canyon area will result in an increase in runoff from these less permeable areas to the very permeable Santa Clara River. This could increase infiltration into the groundwater and prove beneficial. Additionally, urbanization can bring with it increased risk of contamination, and serious consideration should be given to a program to protect the quality of the groundwater resources.

Saugus Aquifer

The second source of groundwater production in the Santa Clarita Valley is from the Saugus Aquifer. The Saugus Aquifer is currently capable of producing about 16,000 acre-ft/yr in dry years based on current installed well capacity. During wet years, about 5,000 acre-ft/yr of water is produced to meet water demands in local areas that do not have access to other water supplies.

The Saugus Aquifer has not been fully developed, but available data indicates a strong possibility that it can provide a reliable local dry year supply, if managed properly. High yielding wells exist in the aquifer producing high flow rates of good quality water. Unsuccessful wells have also been constructed in the Saugus Aquifer and those unsuccessful wells help to define the areas of probable high production. Estimates of recharge to the Saugus prepared by Slade (1988) indicate that recharge may range between 11,000 - 13,000 acre-ft in dry years, increasing to 20,000 - 22,000 acre-ft/yr in wet periods. Therefore, a long-term sustained yield between those quantities appears possible. Slade (1997) has indicated that the Saugus should be capable of producing as much as 40,000 acre-ft/yr during an dry period of five to six years. However, since

there are currently not sufficient wells to produce this amount of water, staged construction of additional wells in conjunction with careful monitoring is recommended. The Saugus Aquifer has recently experienced some localized water quality problems (perchlorate) due to industrial discharges. These water quality problems could impact the future use of the Saugus Aquifer.

The best operation of the Saugus Aquifer would involve minimal use when other supplies (such as imported water) are plentiful, and increased pumping during dry periods. The water levels in the Saugus Aquifer will recover during wet periods when recharge is higher and pumping is reduced. Additional use of Saugus Aquifer storage could be developed by aquifer recharge through injection wells (or injection/extraction wells) during periods of surplus water supply.

For supply planning purposes in this study, it is assumed that dry year production from the Saugus Aquifer can be increased from its current 16,000 acre-ft/yr to 40,000 acre-ft/yr over the next twenty years. This would be accomplished through staged construction of new wells and related facilities. It is conservatively assumed that the maximum annual production from the Saugus would be increased at a rate of about 1,000 acre-ft/yr (the equivalent of about one 1,500 gpm well per year). This rate could be increased if the hydrogeologic response to increased pumping indicates a higher potential. Wet year production would likely increase from 5,000 to 10,000 acre-ft/yr over the same period. A recharge program would be essential for reaching this level of production from the Saugus Formation.

Recycled Water

Recycled water is available from two existing water reclamation plants and, in the future, a third plant could be constructed in conjunction with a proposed development. CLWA prepared a draft *Reclaimed Water System Master Plan* dated September 1993. This report recommended development of 9,100 acre-ft of recycled water from the Valencia plant. The major use is for irrigation of golf courses, parks, and schools. In addition, future development projects could include increase potential use by 6,500 acre-ft/yr. This additional use would be served by the proposed third reclamation plant.

Currently identified use indicates that a total of about 15,000 acre-ft of recycled water can be developed for use within the Agency. Based on anticipated downstream environmental considerations, this amount may represent approximately the maximum potential use of recycled water within CLWA. Additional recycled water is expected to be produced in the future but plans have not yet be prepared. It is assumed that recycled water use could increase to about 24,000 acre-ft/yr. To develop this level use is an ambitious program requiring a total commitment on the part of the Agency and local water purveyors. CLWA plans to begin construction of the initial phase of the recycling project in 1998.

State Project Water, Existing Contracts

As discussed in Section 3, CLWA has existing contract entitlement to 54,200 acre-ft/yr of SWP water. Current reliability estimates prepared by DWR indicate average deliveries of 41,000 acre-ft/yr based on use of 1922-1993 hydrology and current SWP facilities. In dry periods which occur about once in every 20 years, the yield of the SWP supplies is 18,000 acre-ft/yr. In

Exhibit 23

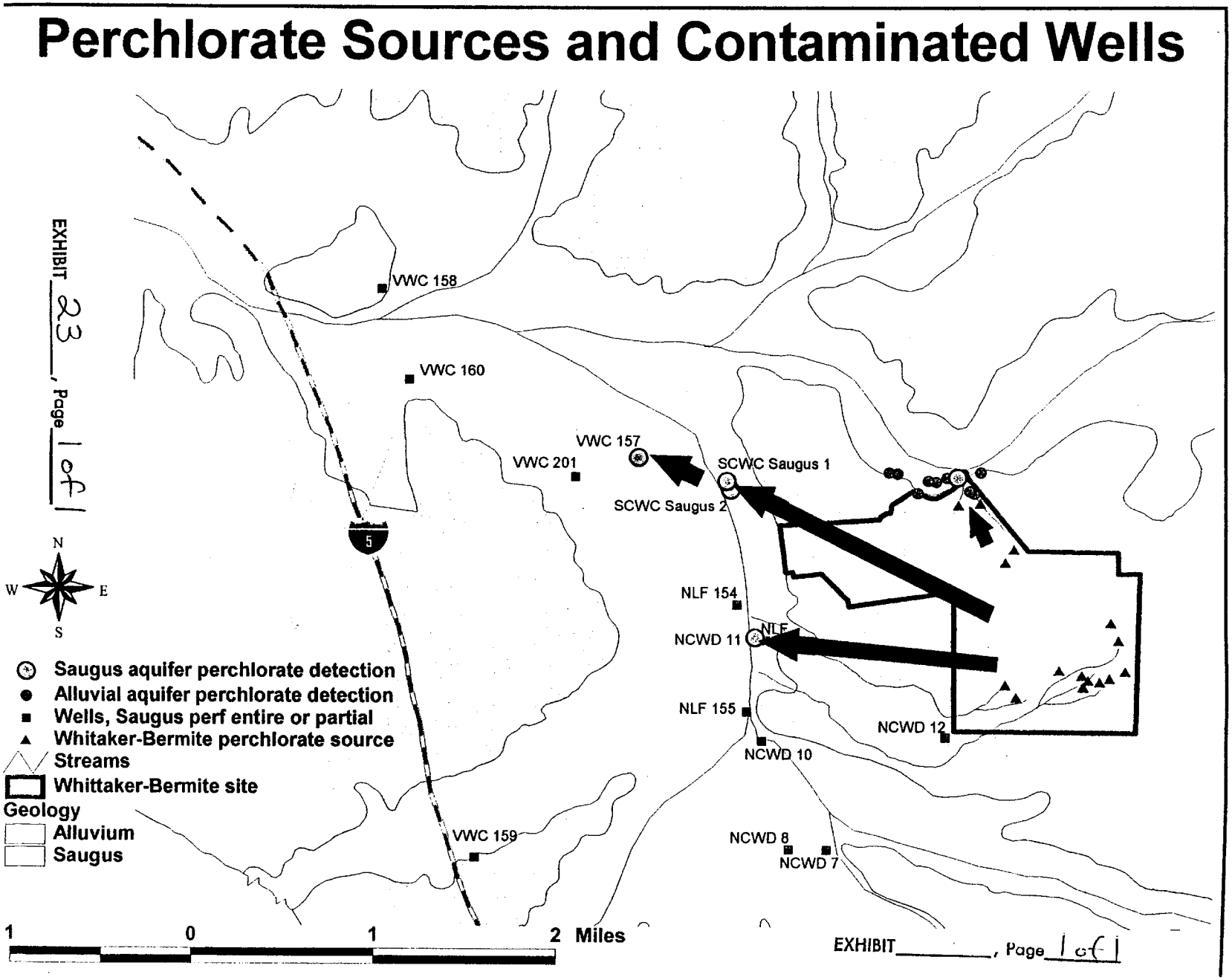

Perchlorate Sources and Contaminated Wells
EXHIBIT 23, Page 1 of 1
VWC 158
VWC 160
VWC 157
VWC 201
SCWC Saugus 1
SCWC Saugus 2
5
N
W
E
S
NLF 154
NCWD 11
NLF
NLF 155
NCWD 12
NCWD 10
NCWD 8
NCWD 7
VWC 159
Saugus aquifer perchlorate detection
Alluvial aquifer perchlorate detection
Wells, Saugus perf entire or partial
Whitaker-Bermite perchlorate source
Streams
Whittaker-Bermite site
Geology
Alluvium
Saugus
1 0 1 2 Miles
EXHIBIT _____, Page 1 of 1

Exhibit 24

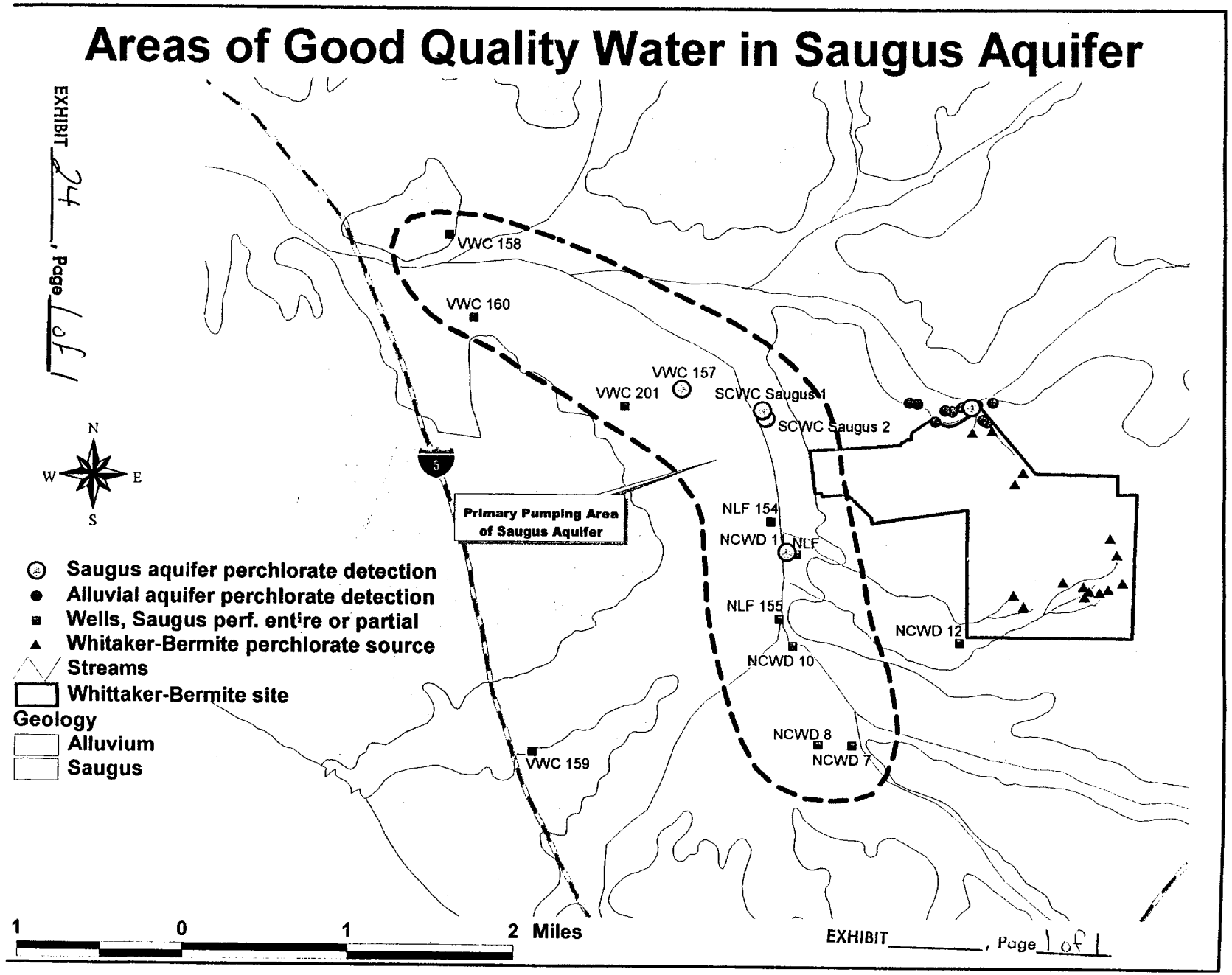

Areas of Good Quality Water in Saugus Aquifer
EXHIBIT 24, Page 1 of 1
VWC 158
VWC 160
VWC 157
VWC 201
SCWC Saugus 1
SCWC Saugus 2
5
N
W
E
S
Primary Pumping Area of Saugus Aquifer
NLF 154
NCWD 11
NLF
NLF 155
NCWD 12
NCWD 10
NCWD 8
NCWD 7
VWC 159
Saugus aquifer perchlorate detection
Alluvial aquifer perchlorate detection
Wells, Saugus perf. entire or partial
Whitaker-Bermite perchlorate source
Streams
Whittaker-Bermite site
Geology
Alluvium
Saugus
1 0 1 2 Miles
EXHIBIT _____, Page 1 of 1

Exhibit 25

SANTA CLARITA VALLEY WATER REPORT
1999

Castaic Lake Water Agency

Los Angeles County Waterworks District #36

Newhall County Water District

Santa Clarita Water Company

Valencia Water Company

Prepared by: The Upper Santa Clara Valley Water Committee
February 2000

EXHIBIT 25, Page 1 of 2

Total Water Production
Water Purveyors (a)
Acre-Feet Per Year

	Sources of Supply						
Year	Alluvial Aquifer	% of Total	Saugus Formation	Saugus % of Total	State Project Water	State Project % of Total	Total
1980	16,625	74%	4,569	20%	1,125	5%	22,319
1981	14,056	57%	4,950	20%	5,816	23%	24,822
1982	8,684	40%	3,569	16%	9,659	44%	21,912
1983	8,803	41%	3,398	16%	9,185	43%	21,386
1984	12,581	46%	3,809	14%	10,996	40%	27,386
1985	12,519	44%	4,140	15%	11,823	42%	28,482
1986	12,418	40%	4,975	16%	13,759	44%	31,152
1987	12,630	37%	4,962	15%	16,285	48%	33,877
1988	12,197	32%	6,404	17%	19,033	51%	37,634
1989	13,978	33%	7,217	17%	21,618	50%	42,813
1990	13,151	31%	8,302	19%	21,613	50%	43,066
1991	17,408	44%	14,417	36%	7,968	20%	39,793
1992	16,897	41%	10,458	25%	13,911	34%	41,266
1993	19,808	46%	10,151	23%	13,393	31%	43,352
1994	20,068	44%	11,531	25%	14,389	31%	45,988
1995	20,590	45%	8,087	18%	16,996	37%	45,673
1996	24,681	49%	7,373	15%	18,093	36%	50,147
1997	25,273	47%	6,752	12%	22,148	41%	54,173
1998	23,898	49%	4,706	10%	20,254	41%	48,858
1999	27,240	48%	2,728	5%	27,282	48%	57,250

(a) Includes LACWD 36, NCWD, SCWD, VWC

EXHIBIT 25, Page 2 of 2

Table III - 5

Exhibit 26

SANTA CLARITA VALLEY WATER REPORT
1999

Castaic Lake Water Agency

Los Angeles County Waterworks District #36

Newhall County Water District

Santa Clarita Water Company

Valencia Water Company

Prepared by: The Upper Santa Clara Valley Water Committee
February 2000

EXHIBIT 26, Page 1 of 2

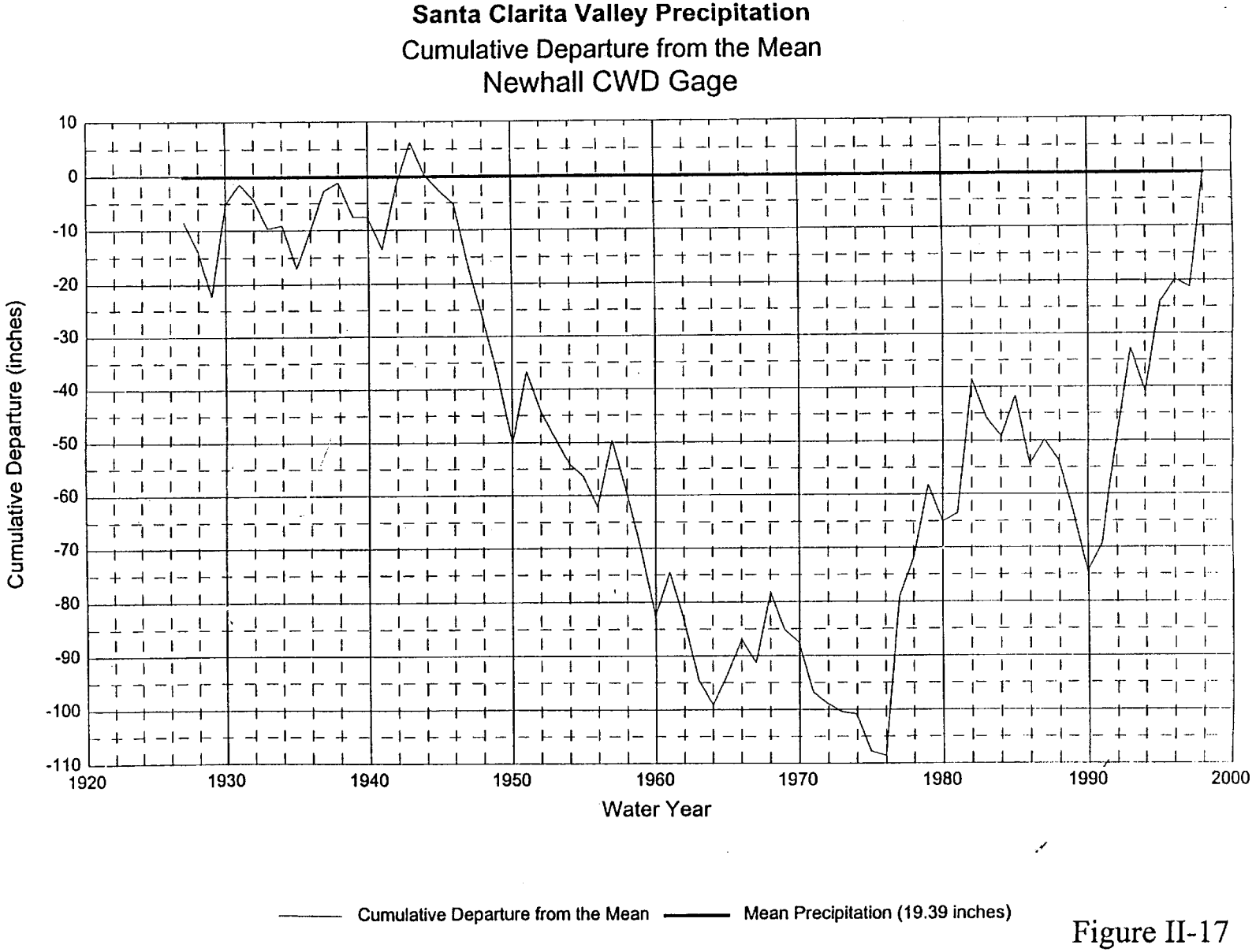
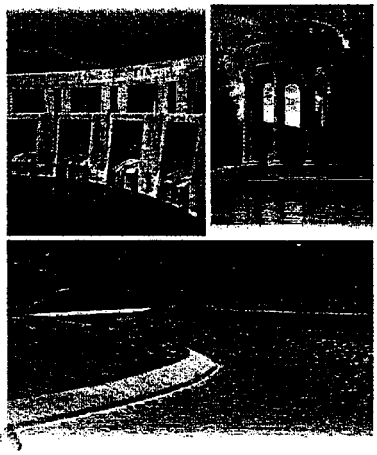


EXHIBIT 26, Page 2 of 2

C:\LSCE\Projects\Valencia\ValPrcpFromCompany.wb3

Figure II-17

Exhibit 27



California Water Plan Update Bulletin 160-98

Volume 1

November 1998

Pete Wilson
Governor

Douglas P. Wheeler
Secretary for Resources
The Resources Agency

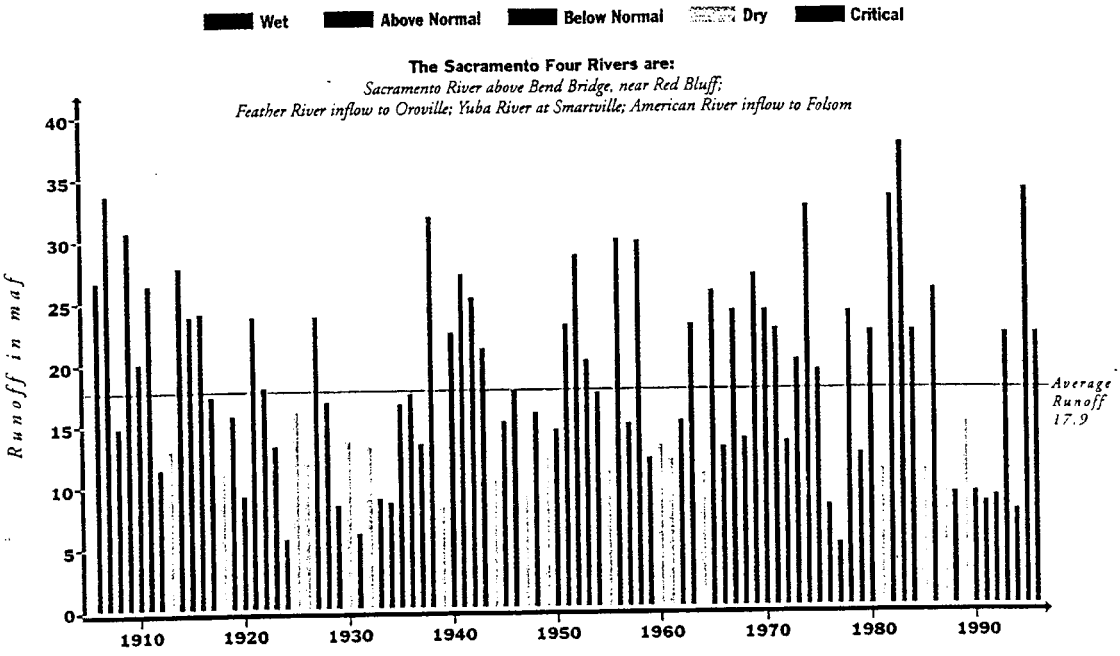
David N. Kennedy
Director
Department of Water Resources

EXHIBIT 27, Page 1 of 2

FIGURE 3-4

Sacramento Four Rivers Unimpared Runoff

The WR 95-6 year types are:



Climatic Variability

California's water development has generally been dictated by extremes of droughts and floods. The six-year drought of 1929-34 established the criteria commonly used to plan storage capacity or water yield of large Northern California reservoirs.

The influence of climatic variability on California's water supplies is much less predictable than the influences of geographic and seasonal variability, as evidenced by the recent historical record of precipitation and runoff. For example, the State's average annual runoff of 71 maf includes the all-time low of 15 maf in 1977 and the all-time high (exceeding 135 maf) in 1983. Floods and droughts occur often, sometimes in the same year. The January 1997 flood was followed by a record-setting dry period from February through June and the flooding of 1986 was followed by six years of drought (1987-92).

Figures 3-4 and 3-5 show the estimated annual unimpaired runoff from the Sacramento and San Joaquin River basins to illustrate climatic variability. Because these basins provide much of the State's water supply, their hydrologies are often used as indices of water year classification systems (see sidebar, page 3-8).

Droughts of Recent Record. Numerous multi-year droughts have occurred in California this century: 1912-13, 1918-20, 1922-24, 1929-34, 1947-50, 1959-61, 1976-77, and 1987-92. In order to provide water supply reliability, major reservoirs are designed to maintain and deliver carryover storage through several years of drought. The 1929-34 drought established the criteria commonly used to design the storage capacity and water yield of large Northern California reservoirs. Many reservoirs built since this drought were sized to maintain a reliable level of deliveries should a repeat of the 1929-34 hydrology occur. Even a single critical runoff year such as 1977 can be devastating to water users with limited storage reserves, who are more dependent

EXHIBIT 27, Page 2 of 2

Exhibit 28

$2 Billion Ecosystem Program: Gains and Losses, Too

Ten years ago, the Sacramento-San Joaquin Delta ecosystem was on the verge of collapse. Several fish were placed on the endangered species list, and others were being considered for listing.

Today, the Delta watershed is the focal point of the nation's largest ecosystem restoration program. More than 1.4 million acre-feet of water — equivalent to the annual needs of 7 million people — has been shifted from farms and cities to the environment. Also, $2 billion has been committed to restore and rehabilitate fishery habitat.

This unprecedented commitment is already paying off. Populations of native fish species at risk from water project operations have stabilized or increased.

- The return rate of fall-run Chinook salmon on the Sacramento River is among the highest in 30 years. Winter-run have experienced a nine-fold increase since 1991. Spring-run salmon, which numbered 500 to 1000 in the mid-90's, increased to twenty-four-thousand in 1998.

- The $2 billion committed to ecosystem restoration will develop hundreds of habitat improvement programs. More than 250 such projects are in various stages of implementation and hundreds more are in the planning stages.

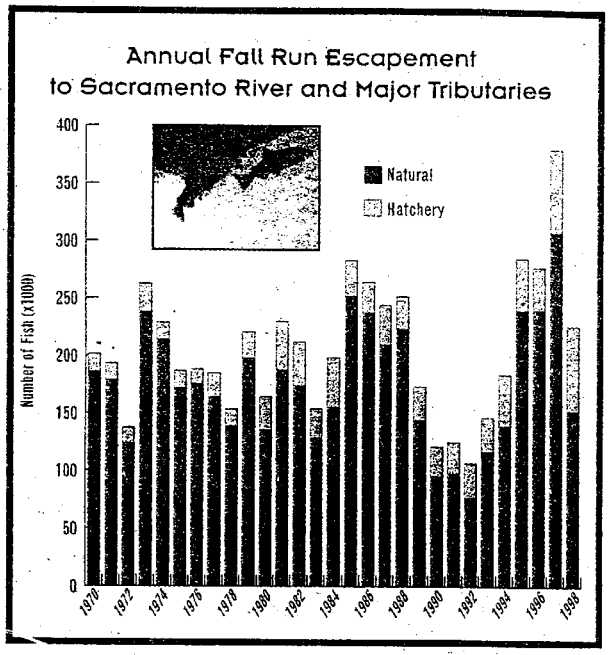
Now it's the people who rely on the Delta for their water who face crisis.

- California water policy has become a zero-sum game due to federal regulatory actions. Water gains for the fish are water losses for the economy. Cities and farms already have lost about one-third of their drought-year supplies. New federal regulations may double those losses.

- The economy is now increasingly vulnerable to water shortages. If the drought of 1987-92 were to recur, under current conditions farmers south of the Delta dependent on federal water supplies could face three straight years without any water deliveries.

- Industries from San Diego to the Silicon Valley could face sizable water shortages. Urban areas dependent on state and federal water supplies could face cuts of 55% from the state and 65% shortfalls from the federal government.

- California's irrigated agriculture will suffer. For example, Kern County, the nation's fourth-largest agricultural economy, could lose 1.5 million acre-feet of its state water supply over the course of a six-year drought due to the new regulatory restrictions.



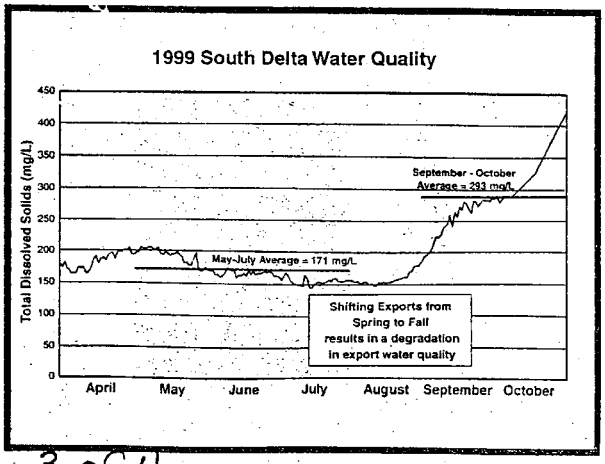


EXHIBIT 4, Page 3 of 4

The Time for Action is Now

The 1987-92 drought was the most severe and sustained water shortage in more than 50 years. It highlighted the state's vulnerability to recurring dry periods. The more recent Delta smelt crisis underscored the water system's vulnerability even in wet periods.

Despite growing evidence of the severity of California's water supply and water quality crisis, recent responses to the problem have not been encouraging.

The CALFED Bay-Delta Program's draft plan does not balance the needs of people and the ecosystem. It fails to pursue realistic solutions aggressively. Federal regulators continue their single-minded pursuit of environmental programs at the expense of Californians' water user needs.

Californians need to persuade state and federal leaders to address these critical water issues. We must:

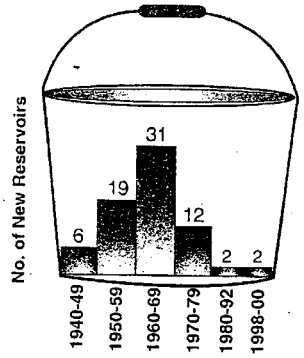
- Approve Proposition 13, the $1.97 billion water bond on the March 2000 ballot. This measure would restore 1 million acre-feet of water to cities and farms during a dry year.

- Restore balance to the CALFED Bay-Delta plan, so that both economic and environmental water needs are met fairly.

- Aggressively support programs to identify and construct additional water storage facilities, both in aquifers and new off-stream reservoirs. New supplies not only meet the needs of people and fish, but provide needed flexibility to our water system.

- Construct facilities necessary to make our water supplies reliable once again. Reservoirs north of the Delta were full during the Delta smelt crisis but the water could not be delivered to areas of need.

- Move from a water supply system driven by regulations to one that is flexible and provides multiple benefits for the environment and the economy.



Californians traditionally have acted to provide the necessary water supplies for their state. But such actions have declined sharply in recent years. Existing water supplies are insufficient to reliably meet present needs, much less those projected for the future.

Prepared by the
Association of California Water Agencies
JANUARY 2000

EXHIBIT 4, Page 4 of 4

CERTIFICATE OF SERVICE

STATE OF CALIFORNIA, COUNTY OF VENTURA

I hereby certify that I have this day served a copy of the **DIRECT TESTIMONY OF STEVEN B. BACHMAN IN SUPPORT OF THE PROTEST BY VENTURA COUNTY TO APPLICATION OF VALENCIA WATER COMPANY FOR APPROVAL OF ITS UPDATED WATER MANAGEMENT PROGRAM** on all known parties to Application No. A-99-12-025 by mailing a properly addressed copy by first-class mail, with postage prepaid, to each party named below in the service list.

Executed on April 7, 2000, at Ventura, California.

SHEILA L. DELEO

SERVICE LIST

Bertram D. Patrick
California Public Utilities Commission
Division of Administrative Law Judges
505 Van Ness Avenue, Room 5110
San Francisco, California 94102-3214
(Two copies)

Daniel R. Paige
California Public Utilities Commission
Water Advisory Branch
320 West Fourth Street, Suite 500
Los Angeles, California 90013

Barbara Ortega
California Public Utilities Commission
Executive Division
320 West Fourth Street, Suite 500
Los Angeles, California 90013

Sandra Graham
California Public Utilities Commission
Public Advisor Office
320 West Fourth Street, Suite 500
Los Angeles, California 90013

Fred L. Curry
California Public Utilities Commission
Water Advisory Branch
505 Van Ness Avenue, Room 3106
San Francisco, California 94102-3214

Robert J. DiPrimio, President
Valencia Water Company
24631 Avenue Rockefeller
Valencia, CA 91355

Science Times 7/20/9

The New York Times

The High Risks of Denying Rivers Their Flood Plains

Losing trust in levees, experts now favor more natural flood controls.

By WILLIAM K. STEVENS

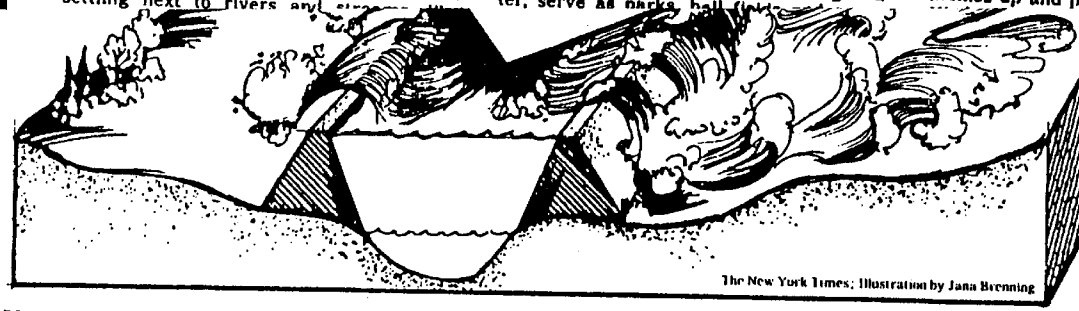
For decades Americans have insisted on settling next to rivers and [illegible]

serving or restoring its ecosystems and letting water flow as freely as possible so that natural flood-control mechanisms can work.

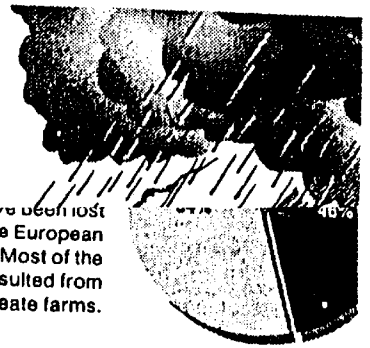
Across the country, states and communities are exploring alternatives to dikes, levees and flood walls. They are acquiring wetlands to serve as natural flood basins. They are sculpturing the plain to create detention areas for flood waters. They are preserving stretches of flood plain in urban areas which, in between periods of high water, serve as parks, ball fields [illegible]

Sometimes, he said, this means that developed areas "need to be cleared out so the river can flood, as we know it will, without damaging property." In other instances less drastic measures can suffice.

One obvious limitation to the new strategy is that many communities have long since committed themselves to living on the flood plain, and with traditional structural methods of flood control. "We can't pick Des Moines up and put it on a hill," [illegible]



The New York Times; Illustration by Jana Brenning



Massive loss since European settlement. Most of the loss resulted from drainage to create farms.

Source: The Natural Hazards Research and Applications Information Center, University Colorado at Boulder

[illegible] AT WORK

3355

Letter No. 19

May 3, 2004

City of Santa Clarita
Planning Department
Attn: Jeff Hogan
via hand delivery

Subject: Comments on Riverpark DEIR SCH 2002091081

Mr. Hogan and interested parties:

Listed below are comments from the Santa Clarita Chapter of the Los Angeles County Bike Coalition on the DEIR for Riverpark.

1. P. 2.0-33 any many other sections imply that because trails are provided, cycling will be encouraged. I am attaching a guidance document on the proper design of cycling facilities. Trails are generally for recreational use and without adequate on-street bike lanes to access locations away from trails, the use of bicycles for transportation is hindered. Trails are more dangerous from a both a bike vs. pedestrian or bike standpoint and a car vs. bike standpoint. The use of the "wide sidewalk" type of trail is particularly dangerous and also, we believe, is a liability issue because bicycles are not legally allowed on sidewalks. See attached suggestions for proper bicycle facilities. (1)

2. p. 4.7-19 policies 2.3-2.4, p. 4.7-53 to 54 policies 3.6-3.8, 4.7-63, policy 6.3, p. 4.7-76, policy 7.10 : Regarding consistency with policies on cycling and alternative transportation – by reliance on trails and not providing for bike lanes on surrounding roads leading to the trails, the city and this project in fact limit bicycling to recreational uses from trailheads rather than transportation uses into surrounding areas off site. The City should implement a Bicycle Master Plan. Short segments of trail on one side of the road limit bicycle movement and encourage unsafe travel. Bike lanes are preferable except for long uninterrupted stretches. The EIR makes incorrect findings of consistency as the project is NOT consistent with promoting cycling as alternative transportation. The proponent's (and City's) preference for trails, without steps towards Bicycle Master Planning, is not a substitute for providing facilities that are documented as being safer and more adequate for bike transportation purposes. On p. 4.7-77 the EIR makes an INCORRECT finding regarding consistency with safety requirements for bike routes. Due to the short segments of bike trails along one side the sidewalk areas on Newhall Ranch Road and another short leg on one side of the roadway, users in these areas will have to travel contrary to normal vehicular travel patterns and will be at greater risk than if there were on-street bike lanes on both sides of the road in this area. In addition, multi-use trails are generally less safe due to more car accidents at intersections and more accidents between bikes and walkers/dogs/skaters in other areas. Where trails are used, a separate gravel/dirt area to encourage walkers to stay off the pavement is preferable, and at-grade intersections must be minimized, Again, refer to handout on bikes. (2) (3) (4)

3. p.4.7-22 Policy 5.4. This policy, if stated correctly, conflicts with the circulation element of the General Plan which provides for either bike lanes or bike trails. The right of way for bike trails is identical to the right of way for on-street bike lanes, so no added room for traffic is accomplished by using bike trails. This policy also conflicts with City Resolution 92-102 which allows for bike lanes AND bike trails. See attached resolution and bicycling information. (5)

4. p. 4.12-3. paragraph 4 states that the City "requires parallel class I bike trails adjacent to new major and secondary highways." The circulation element states that EITHER on street bike lanes (6)

or parallel bike trails are allowed. For safety and access reasons, on-street bike lanes are preferable. See bike information packet attached. 6

As of this date we have not had an opportunity to review all trail alignments and crossings/intersections for this project. We reserve the right to comment on and suggest minor changes to them in future submittals. 7

At this time, we would like to emphasize the following points:

a. As pointed out in the attached materials, trails are not the ideal solution for bicycle transportation.

b. Short segments of trail should be discouraged. On short stretches of trail, riders will just stay on the street rather than "cross over" and this is why lanes are preferable in that situation.

c. Street crossings should be grade-separated or there should be loop detectors that pick up bikes and change the signal or there should be a push-button accessible to cyclists traveling in the standard directions. At cross walks, there should NOT be signs that say "stop and walk bike." If a trail uses the cross walk, it should be considered part of the trail and cyclists should be allowed to ride. Both on such crossings and on "sidewalk" type trails, it is important to designate this as a BIKE PATH because bikes are not allowed to ride on sidewalks in California. This is a liability issue if a rider is hit by a car – and – as pointed out in the attachment – cyclists are in danger from cars on such side paths. 8

d. Wherever possible, walkers and horses should be separated from bike lanes by providing a side path for those uses.

e. Though not specifically called out as a project issue, Bouquet Canyon road is the only northbound bike route in the area of the project. Currently this road is served by on street bike lanes to the north. We ask that those bike lanes not be removed to accommodate car traffic until other parallel routes are provided for bicycle transpiration. Also, a serious gap in accommodation for bikes exists in front of the Best Buy/Vons shopping centers near the project. We encourage the City to implement a Bicycle Master Plan to address these and other gap issues so that bicycle routes and trails can be linked and bikes can safely be used as alternative transportation.

Thank you for your consideration of these comments. If you have any questions, call me at 661-670-0332. Please send a reply to me at the address below.

Sincerely,

Maria Gutzeit
Santa Clarita Coordinator
Los Angeles County Bike Coalition
23404 W. Lyons Ave. #257
Newhall, CA 91321

Attachments:
City Resolution 92-102
Bicycle Development Guidelines Packet by Maria Gutzeit (dated 3/9/04)

ATTACH #3

RESOLUTION NO. 92-102

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA CLARITA, CALIFORNIA SUPPORTING BIKEWAYS AND BIKE LANES WITHIN THE CITY OF SANTA CLARITA

WHEREAS, the City of Santa Clarita has previously adopted and given support to the Santa Clara River Recreation and Water Feature Study which includes an off highway bicycle path; and

WHEREAS, the City of Santa Clarita's Adopted General Plan contains numerous policies and references supporting the incorporation and installation of an integrated bikeway network, both on street and off street, throughout the City; and

WHEREAS, all bicyclists are given certain and specific roadway use opportunities by the State Highways Code and other state and municipal law; and

WHEREAS, the City of Santa Clarita is committed to providing safety and access to all bicyclists and motorized roadway users; and

WHEREAS, the City of Santa Clarita by providing Class I bikeways whenever possible for the bicyclists, does not intent to limit or restrict bicycle users legal and legitimate use on its roadways.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Santa Clarita, as follows: that the Santa Clarita City Council hereby reaffirms its commitment to vigorously support bicycle use within the City limits on both on road and off road bikeways.

Key Points for Bicycle Planning
Maria Gutzeit, Santa Clarita Coordinator for the Los Angeles County Bicycle Coalition. 3/9/04

- Bicycles are not just for recreation. Cyclists need to travel everywhere someone in a car would go – to work, school, shopping, coffee shops, and to other towns.
- Multi-use trails, on-street bike lanes, and bike-friendly side streets need to link together in a network. Regions should adopt Bicycle Master Plans to ensure bicycle transportation is addressed and allow for grant funding of projects.
- Housing and shopping areas isolated by multi-lane high speed roads either deter cyclists all together or force most cyclists to ride on the sidewalk, which is illegal and has a high rate of collisions.
- If used as a substitute for loss of access on the road – trails must be installed before roadway access is lost. This would be the case when road with wide shoulders or bike lanes are restriped to add car lanes. Currently trails are promised but not built, resulting in loss of access for cyclists.
- On-street bike lanes and streets with wide shoulders where bikes can travel are preferred by experienced cyclists because they allow more access to different areas, you can generally travel farther, and it is safer. This arrangement is also much more affordable to build than separate multi-use paths.
- Multi-use trails are less safe than bike lanes on the road. Dogs, joggers with headphones, and young children are some reasons why experienced cyclists have MORE crashes on a trail than on the road.
- Multi-use trails have a HIGHER incidence of car-bike collisions than roadways. The reason for this is that car drivers are not expecting to see bikes on a "sidewalk" and collisions occur at intersection between the trail and roads.
- If multi-use trails are the ONLY option, intersections with roadways must be kept to a bare minimum. At intersections, ramps should be trail width, and bold signage warning both cars and cyclists is important. We STRONGLY dislike signs recommending "walk your bike" in crosswalks because cyclists NEVER do that and it is a potential liability issue whereby a car driver who hits a bike in a crosswalk could argue the cyclist was at fault. Ventura County does NOT use those signs on their Ojai Valley trail, and rather uses signage for car drivers saying "yield to bikes."
- Trails must be wide enough to allow cyclists traveling in both directions, plus joggers and walkers. A separate compacted DG trail is often incentive for walkers to stay separated from the bike lanes.
- Trails intended to accommodate bicycles MUST be paved and maintained.
- For short distances (under 3-5 miles or so) cyclists will generally NOT cross a major thoroughfare to ride on a short stretch of trail located on the opposite side of the street from their direction of travel, particularly if it doesn't link up with where they want to go. It is preferable to have a trail or bike lane on BOTH sides of the road. If it can only be on one side, it should be on the UPHILL side, as cyclists going downhill will likely take their chances with cars rather than cross over to a short trail.
- Bike lanes are a better option than trails in steep areas because there will be a big speed differential between experienced cyclists and walkers/small children. This speed could be very dangerous, and riders would be better off on the road.
- Traffic signal sensors (detector loops in roadway) in right lanes and outside left turn lanes should be the kind specified by CalTrans as being acceptable for picking up bikes. Sensitivity should be adjusted properly and painted indicators on the road help bikes position themselves to make the signal change.

Attachments and references– see following sheet

Bicycle Planning Guidance

"The One True Path" Bicycling Magazine, 7/95

"Meeting the Bike Path Challenge" Bicycle USA, May/June 1995

"Technical Issues with Sidewalks and Sidepaths" John Allen, 2002

CalTrans Traffic Sensor Loop Guidance

"Detection of Bicycles by Quadrupole Loops at Demand-Actuated Traffic Signals" Steven Goodridge

the one true path?

Off-street bikeways aren't a transportation solution

I recently returned from Seattle—the only place I know where cyclists prefer Neoprene to Lycra, and even the racers use fenders.

Several of my aquatic forays took me along one of the nation's first and most prominent rail/trail conversions: The Burke-Gilman, which follows the shore of Lake Washington. Years ago I commuted the length of the BGT daily, and it is no less popular now than it was then. Day and night, this off-street path teems with cyclists, skaters, walkers, and runners. To the casual observer, it is a monument to self-propulsion. A bike advocate's dream.

Or is it? At the risk of being politically incorrect, I must say that off-street bike paths scare the hell out of me. Despite the allure of the mist-bound lake and the quietude that comes in the absence of internal combustion, I could not relax for a second on that path. The experience can only be compared to that of Luke Skywalker dodging alien spacecraft in *Star Wars*. In other words, best not to let your mind drift, even for a moment, or you will end up: (1) having someone's bar-end or skate wheel surgically removed from your anatomy; (2) being the hopelessly outgunned litigant in a suit filed by the mother of the 3-year-old you just ran over; or (3) becoming entangled with the local step aerobics instructor, who decided to do a spontaneous 360-degree spin in the middle of the path in response to a particularly spirited riff on a Kenny G tape.

"BIKE PATHS ARE places of lawlessness. Chaos reigns."

Unfortunately, the BGT is not unique in this way. Although off-street paths are promoted as a pedaler's panacea, they suffer from a host of flaws. For instance:

▷ *Paths are places of general lawlessness.* Because trails are separate from the normal traffic flow (and any means of law enforcement), chaos reigns. Cyclists routinely pedal on the wrong side of the path, wear no helmet, pull U-turns without warning, allow themselves to be towed by German shepherds, etc.

▷ *Paths do not mesh with regular traffic.* Places where bike paths cross normal surface streets are notoriously dangerous. The cyclist generally comes from an unexpected direction, or via a crosswalk. And mentally, the bike-path rider is ill-equipped for the sudden harsh reality of traffic and 2-ton rolling behemoths. Look out.

▷ *Paths go nowhere.* Only through a stroke of luck will an off-street bike path connect you to your destination. Let's face it, unlike supposedly model European cities such as Amsterdam, none of today's cash-strapped U.S. cities have enough resources to build a network of paths that will take you to work, school, the market, or your kid's day care.

I would gladly throw my support behind off-street paths if it could be shown that they have a superior safety record. Unfortunately, statistics dating to the '70s show just the opposite: Bike paths have a higher accident rate per mile than the general roadway. Nonetheless, well-meaning "advocates" across the country continue to lobby, zombielike, for their inclusion on the streets of Gotham.

OK, I can hear the hue and cry building already. But before you rip out the page and wield a pen in anger, let me say this: There is no question that bike paths have played a useful role in the promotion of cycling in this country. Thousands of people are riding today only because they served an auto-free apprenticeship on a bike path.

Without being coddled in this manner, they would never have taken up cycling in the first place. Overall, I support rail/trail conversions for recreational purposes. But let's not confuse this concept with a transportation solution.

And one must also ask the question: What percentage of these bike-path riders graduate to safe cycling on surface streets? What percentage become commuters? Very few, I venture. Because they have been effectively reared in a rubber room, bike-path riders regard the *real world* with fear and loathing. And when they do venture forth into the traffic mix, insular habits take over: cowering at the roadside, using pedestrian crosswalks instead of vehicular turning lanes, or turning left from the right-hand side of the road. In short, they exist in a world apart from normal traffic flow.

Or, you might say they exist in the world of Kenny G.

Editor
GDrake@aol.com

Meeting the "Bike Path" Challenge

Five Steps for Making the Multi-Use Trail Movement Work for Road Cyclists

By Noel Weyrich

In the next three or four years, nearly $1 billion in federal transportation dollars will be spent throughout the U.S. on the construction of "multi-use trails," the familiar 10- to 12-foot wide paved or gravel facilities that are often mislabeled "bike paths."

Developed largely by recreational planners, many of these projects have secured funding with ample support from bicyclists. Now, those of us accustomed to road riding must deal with the threats and opportunities that the coming trail-building binge will bring.

On the positive side, more trails will almost certainly turn some non-cyclists into cyclists, giving us a larger constituency for all cycling issues—improved bike parking, better public education and promotion, etc. Some of these born-again bicyclists may well become fresh troops for growing state and local advocacy groups.

Multi-Use Trails Are Not "Bike Paths"

On the downside, multi-use trails, especially when they're erroneously called bike paths, can poison the minds of planners, politicians, and other citizens in strange and dangerous ways. Planners, for instance, increasingly tend to conflate the terms "bicycling" and "trails." As a result, many counties have put together their "comprehensive bike plans" by merely compiling lists of planned trail rights-of-way, ignoring potential on-road accommodations entirely. City councils, having provided a place for bicyclists on a trail, will feel less guilty about banning cyclists from nearby "dangerous" roads. And there is bountiful anecdotal evidence that road cyclists suffer the worst abuse and harassment from motorists while on roads adjacent to sidepaths. Motorists want cyclists out of the way—off the road and on the path, even if the path is jammed with strollers, joggers, and in-line skaters.

These are the pitfalls of the multi-use trail trend. Some hardcore road cyclists may find it hard to swallow, but these thousands of miles of new facilities will have a tremendous impact on conditions for bicycling for many years. It's up to us to make that impact a positive one.

Build a sidepath and they will come: ***signs banning bicyclists from the road.*** *Photo by League member Jan Rosenthal, Stillwater, Minn. Jan and Brian Rosenthal are part of the Minnesota Bicycle Coalition, which works to correct this problem.*

In other words, even if you believe that trails are absolute lemons, now is the time to start working to turn them into lemonade.

How to begin? Here's a five-step program for responding locally to the challenge of multi-use trail construction:

1. Watch your language. Never use the word "bike path," and never let anyone use it in your presence! With the rarest of exceptions, none of the new generation of trails will be designed for the exclusive use of cyclists. Almost all of them will be multi-use trails, and, according to The AASHTO Guide for the Development Bicycle Facilities (the engineering profession's "bible" of bikeway design), "In general, multi-use paths are undesirable: bicycles and pedestrians do not mix well." The guide, last revised in 1991, doesn't even mention in-line skaters!

2. Get the story straight. Before opening your mouth on the subject, it's wise to be absolutely clear about the single inherent limitation of multi-use trails: they simply can't accommodate all cyclists at all times, and therefore they are at best a supplement—never a substitute—to on-road bicycle access. Most trails aren't lit in the evening, don't drain well in the rain, and aren't plowed when it snows. Multi-use trails can be impossibly crowded during peak usage hours and can provide a security risk at off-peak times. The paved ones are increasingly dominated by in-line skaters, and the unpaved ones aren't suitable for touring and racing tires.

Research has shown that bicycle crash rates are higher on trails than on roads. Few decisionmakers, however, are willing to believe that trails are "more dangerous" than roads, because cyclists die overwhelmingly from collisions with cars, and there are no cars on trails. There is, however, a very effective way to stand this argument on its head, a tactic I've used successfully in my hometown of Philadelphia. To wit: "If high-speed cyclists are *forced* to use the trail, sooner or later, one of them is going to collide with a baby carriage, a toddler on a trike, or someone's grandmother. We need to improve cycling conditions on the adjacent roads to lure the serious cyclists away from the trail. How can we work together on that?"

3. Protect your rights to the road near trail projects. If a trail is being planned or under construction near where you ride, you want to make sure it won't degrade your road-riding experience once it's completed. One tactic is to meet with the group or agency sponsoring the trail and go over some of the above arguments. Explain how trails can create truly dangerous levels of motorist antagonism toward cyclists riding on nearby roads. Request that "Share the Road with Bicycles" signage goes up on parallel roads as a part of the trail project. If sidepath construction involves also changing a roadway's width, ask for their help in pushing for wide outside right lanes or paved shoulders.

See ***Bike Path*** *on next page*

Amtrak from p. 19

League to provide legislative language and to support it with cost and demand estimates. The League called Morrison Knudsen Corporation, the California Car manufacturer, and found the costs of building in bicycle accommodations to be "relatively inexpensive" but difficult to quantify. The League also cited its own study, "Linking Bicycles with Trains: Opportunities for Amtrak to Increase Ridership and Revenues by Increasing Bicycle Access" to estimate that, if substantial portions of Amtrak's fleet would accommodate bicycles on-board, from nine to 29 million additional trips would be taken annually with resulting revenue gains of $3 to $12 million per year for Amtrak.

The League's position has also been well received by Transportation and Infrastructure Railroad Subcommittee staff on both sides of the aisle. The League is now providing more information in response to staff requests.

The League is positioning its remedy as "all gain, no pain." The many letters that League members have sent to Amtrak and copied to the League have provided important ammunition for bicycle-friendly Amtrak legislation. So to has the League's cry that Amtrak provides the worst bicycling accommodations of any national passenger rail service provider in the developed world. Additionally, Amtrak's customer service ratings have declined precipitously in recent years, including a record 70,000 complaints logged in 1994 at the same time that long-distance train ridership fell by six percent.

What You Can Do

In today's fiscal climate, it's tough for Congress to find opportunities to provide their constituents real benefits for little cost. League members should write or call their congressmen (U.S. House of Representatives, Washington, D.C. 20515, (202) 225-3121) and senators (U.S. Senate, Washington, D.C. 20510) to send this "all gain, no pain" message, particularly those represented by the following congressmen: Bud Shuster (R-PA), Susan Molinari (R-NY), Sue Kelly (R-NY), Sherwood Boehlert (R-NY), Jay Kin (R-CA), Bob Franks (R-NJ), John Mica (R-FL), Jack Quinn (R-NY), Spencer Bachus (R-AL), Norm Mineta (D-CA), Bill Lipinski (D-IL), Jerrold Nadler (D-NY), Nick Rahall (D-WV), Bob Borski (D-PA), and Bud Cramer, Jr. (D-AL).

Amtrak: Steep Grade Ahead

Amtrak's re-authorization takes place within the context of widely reported changes, including route and service consolidations and efforts to fundamentally restructure Amtrak's relationship with the federal government. Responding to pressure to reduce federal operating subsidies and anticipating Congressional action, the Amtrak board and the Clinton Administration have set a goal of eliminating all Amtrak operating subsidies by the year 2002, a feat no national rail passenger system in the world has achieved. Amtrak President and CEO Tom Downs has agreed to this goal but says if Congress expects Amtrak to operate like a private corporation, it must free the railroad from many of the operating constraints Congress has placed upon it and provide the capital to upgrade and modernize the system. If Congressional rhetoric is any indication, Downs will get his first of these two wishes.

Understanding the prevailing Congressional sentiment to reduce the legislative burdens that have been placed on Amtrak, the League is not attempting to use this federal legislation to dictate Amtrak's operating procedures (such as by forbidding bicycle transport charges).

Instead, the League is seeking to bring more paying passengers onto the system by constraining federal Amtrak investments for new coach passenger railcars and overhauling existing cars to ensure on-board bicycle accommodations. (Despite its downsizing, Amtrak still buys new railcars to replace its aging rolling stock and is currently adding 195 new Superliner cars.) Although the League's legislative goals are modest and would clearly benefit Amtrak financially, they still may be very difficult to achieve in this anti-mandates Congressional climate.

—*A. G.*

Bike Path from page 25

4. Use trails and trail plans to advance the on-road cause. The very existence of multi-use trails and long-range trail plans can provide an effective argument that bicycle-friendly road improvements should be made on surrounding roads. Since few trailheads have adequate parking for all trail users on a summer Sunday, trail planners are likely to lend support for on-road bicycle accommodations to ease trail access. And petitioning at a trailhead for this kind of improved on-road access is a much more effective way to organize cyclists than the traditional tactic of leaving literature at bike shops.

5. Push on-road projects before off-road projects in bike planning. Federal transportation law mandates a planning process for bike-ped facilities in every metropolitan region in the U.S. Thanks to the superior resources of recreation and parks planners, many areas are evolving "bike plans" that focus first on trail rights-of-way, and then add tenuous on-road connections from trail to trail. In fact, an ideal bicycle transportation plan is designed in the precisely opposite way. First, an integrated network of on-road bike lanes and/or bike routes is laid out, and then connections to trail rights-of-way are appended. Cyclists in every metropolitan area need to inform planners that a true bicycle *transportation* plan must be organized around the existing on-road transportation infrastructure, rather than a set of off-road recreation facilities.

Trails Shouldn't Spell Our Doom

Politicians and planners got where they are by being reasonable and listening to constituents, and we are fortunate to live in a society with a basic level of respect for personal freedom of choice. For these reasons, trail construction should not spell doom for road riding in any region, but instead should provide new opportunities for non-cyclists to join our ranks and evolve into the next generation of road cyclists.

But road riders who fear the effects of trail construction must get involved in the planning process and register these concerns. Our perspective is not a self-evident one, and nobody will stand up for us if we are not there to stand up for ourselves.

Sidewalk of Revere Beach Parkway, Lynn, Massachusetts. Signs have been posted on the parkway prohibiting bicyclists from riding in the roadway, though Massachusetts law does not permit such a prohibition.

Doug Mink photo

Technical issues with sidewalks and sidepaths

Sidewalk-type bicycle facilities were first built in Europe before the Second World War, when no research base existed. Research dating as far back as 1938 has shown that sidewalk-type facilities have serious civil engineering, safety, operational and liability problems, and that it is far preferable for bicyclists to travel either on the roadway, or on separated paths which are entirely away from roadways.

Europe has many more sidewalk-type facilities than the U.S., having gotten into the habit of building them before there were research results to warn against them. A strong backlash against them has occurred there in recent years in response to crash studies, and to the observation that these facilities are often poorly maintained and allow only for slow travel. A press release by the ADFC (the national German bicyclists' organization) gives an example of the tone of the discussion occurring at present.

Elevated crash risk

Sidepaths have a higher rate of bicycle-motor vehicle collisions than streets have. The research literature overwhelmingly demonstrates this conclusion. [See other Web page with links to research reports] This conclusion may seem surprising at first to people who are not familiar with the research literature. However, the overwhelming majority of car-bicycle collisions-- approximately 90% --involve turning and crossing movements. Sidepaths complicate these movements by placing the bicyclist and motorist out of sight of each other and on conflicting paths at junctions with streets and with driveways.

Bicycle crashes which do not involve motor vehicles are rarely reported to police. However, as shown in all studies which are population-based, bicycle/motor vehicle collisions are only 10% to 20% of injury-producing bicycle crashes. The comparison between sidepaths and roads for crashes which do not involve motor vehicles is extremely unfavorable to sidepaths. In particular, the more restrictive geometrics of sidepaths lead to more single-bike crashes; also, bicyclists can not travel safely at normal speeds in the presence of pedestrians, because pedestrians suddenly and unpredictably change direction. In a collision between a bicyclist and a pedestrian, both are vulnerable, and so pedestrian injury rates also increase greatly from the placing of bicycles on sidewalks.

As first demonstrated in the Cross and Fisher study conducted in the 1970s, and as confirmed for the Boston area in the 1984 Metropolitan Area Planning Commission study posted on this Web site, only a small percentage of car-bicycle collisions on roadways is overtaking collisions. The false belief that car-overtaking-bicycle collisions are the predominant car-bicycle collision type is in large part responsible for the excessive fear of that type of collisions, and the false idea that placing bicyclists on sidewalks will increase safety.

Would any traffic engineer design a divided highway, with two-way traffic on each of two or three parallel roadways? The problem of conflicts at junctions with sidepaths can be reduced only by measures that substantially slow or delay bicyclists, motorists or both. Even the most advanced measures of this type do not succeed in reducing the crash rate to that for riding on streets.

Civil engineering issues

Root damage

Tree roots heave up pavement as they grow. This problem is especially serious for sidepaths because trees will find water more abundant beyond a sidepath than on the street side.

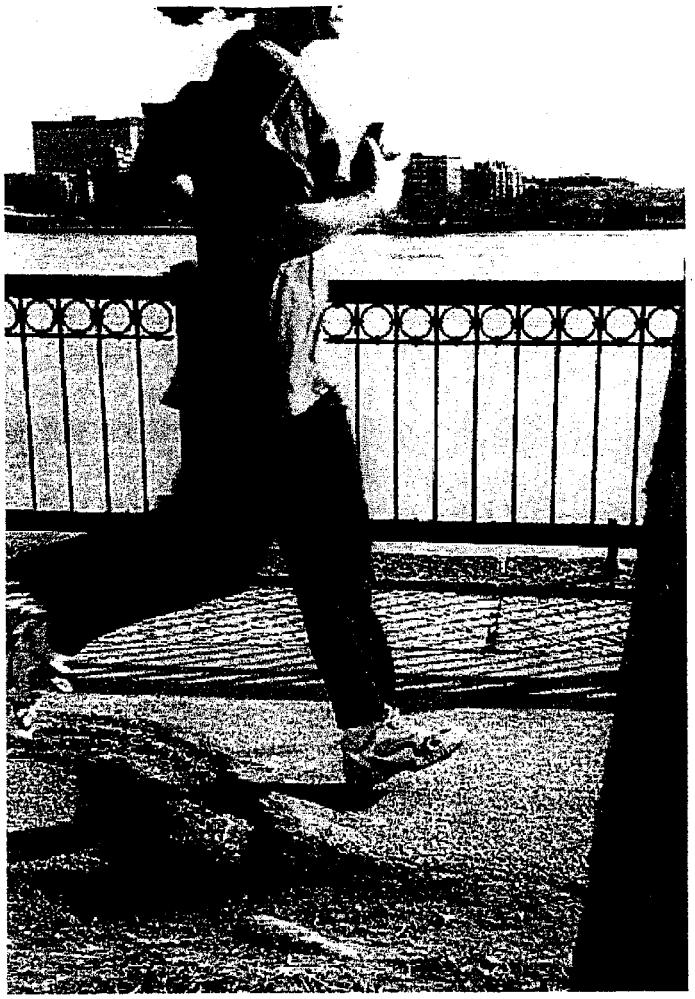
Root damage is an endemic problem on bicycle paths but only rarely a problem in streets. That is because streets are wide enough to shield the soil beneath them from water percolation, and are bordered by deep curbstones which serve as root barriers.

Pedestrians can tolerate pavement heaved up by roots, but for bicyclists it is a serious hazard. A root across the bicyclist's line of travel causes a jolt and possible loss of control. A root that is more nearly parallel to the bicyclist's line of travel can sweep the bicyclist's front wheel to the side, causing a "diversion-type fall" which typically results in injury to the hip, shoulder or head.

An example of root damage on a bicycle sidepath is shown in the photographs below.

Root damage can be prevented by installing root barriers or by removing trees, but these measures are usually not taken.

Root damage on Paul Dudley White bicycle path near MIT's Pierce Boathouse, Cambridge, Massachusetts



Drainage.

Streets are crowned to facilitate water runoff, and are provided with storm grates, catchbasins and storm sewers. Even if a sidepath is sloped to facilitate drainage toward the street, puddling will occur increasingly over the years as the soil settles and as roots heave up the path. When plowed snow blocks drainage to the street, drainage will be completely blocked over long segments of the path.

Snow and ice.

Snow removal from a sidepath is never a successful as from a street. On a street, motor vehicle tires wear away snow, and quickly open up patches of pavement, which facilitate heating by sunlight to complete the melting.

In addition, a more aggressive use of snow-melting chemicals is practical on streets,

where they are carried away in the storm drain system and do not pose a substantial risk of damage to roadside vegetation.

Particularly when drainage is blocked by plowed snow and by heaving up due to tree roots, puddles on the path refreeze into ice, making the path unsafe for bicycle travel. Ice puddles are a far less serious problem in a street, because it is crowned and because of its drainage provisions.

Plowed snow from driveways blocks a path until cleared from the path. No such problem occurs with streets.

All in all: Pedestrians can tolerate heaving by roots and imperfect snow clearance, and can even beat a path for themselves where there is no snow clearance. Bicyclists cannot. After a snowfall, sidepaths remain unusable, and then unsafe, for bicycle travel far longer than streets. An important advantage of on-roadway facilities, aside from greater safety, is that they are relatively inexpensive to construct, and much easier to maintain.

Operational issues

Inevitability of two-way bicycle travel

Many sidepaths or "cycle tracks" are designed based on the faulty assumption that they will carry only one-way traffic on each side of the street. This assumption is highly unrealistic because, with paths behind curbs and sometimes behind parked cars, it is inconvenient to cross the street to enter the path on the other side.

Easy crossing can be accomplished only where there is a curb cut or driveway. Getting to the nearest entry point for the opposite sidepath requires either riding away from the intended destination and then making a U-turn, or riding the wrong way on the sidepath -- the more likely choice. Many of the entry points for the two sides are not opposite one another, and so it will often be necessary to lift the bicycle over a curb, or else ride along the narrowed street to get from one sidepath to the other -- the more likely choice.

Crossing to a street-level bike lane or the opposite travel lane of a normal street poses no such problems.

Bicyclists riding opposite the traffic flow will be subject to the very high risk associated with crossing intersections on the left crosswalk, as described in the studies cited above.

Are pedestrians separated from bicyclists?

When pedestrians share space with bicyclists, there are no reliable rules for overtaking. This is true even if separate parts of the sidepath's width are designated for bicycles and pedestrians.

Consider, for example, the common European practice of striping a sidewalk so the part nearest the street is designated for bicycles. When one bicyclist is overtaking another traveling in the intended direction, the tendency will be for the slower bicyclist to remain in the bikeway, while the faster bicyclist merges to the right -- not to the left as with normal overtaking -- and into the sidewalk area. This confusion puts both of the bicyclists at risk, as well as pedestrians.

A very confusing situation occurs when a "wrong-way" and "right-way" bicyclist approach one another. One or the other bicyclist will have to merge into the area designated for pedestrians. Which bicyclist? The "right-way" bicyclist may feel justified in keeping a straight course on the designated bikeway, but then the "wrong-way" bicyclist will have to pass to the *right* of the "right-way" bicyclist, contrary to the usual traffic rules. Suppose that the "right-way" bicyclist yields to the right as is normal, and the "wrong-way" bicyclist yields to the left, assuming that the "right-way" bicyclist will stay in the designated bikeway? Then they collide head-on. Confusions become far more complicated when bicycle and pedestrian traffic is heavy, and they lead to bicycle-pedestrian collisions as well as bicycle-bicycle-collisions.

By way of comparison, the standard overtaking rules on the roadway are simple and clear: slower traffic keeps right and faster traffic overtakes on the left after looking back to check that there is not another vehicle (bicycle or motor vehicle) already overtaking.

Confused yielding rules, sight obstructions

On the street, through traffic has the right of way over turning traffic. On the sidepath, because of sight line problems, both through bicycle traffic and crossing motor traffic must slow and be prepared to yield, since neither the bicyclist nor the motorist can be sure to see the other in time. The problem occurs because the bicyclist is hidden behind parked cars, or in the right rear blind spot of a motor vehicle which has slowed to turn. It is typical in this situation to install stop signs for the path as well as the road. The example below is from the Route 28 bicycle path in Hyannis. Bicyclists on the path must yield at the stop sign, and turning vehicles must yield at the crosswalk marking.

Sight obstruction by tree, bicyclist in camera position would be in motorist's right rear blind spot; also right-of-way confusion, Route 28 bike path, Hyannis.

Blocking of street by vehicles backed up to exit driveways, and blocking of path by vehicles backed up to enter driveways.

Placing multiple two-way rights of way adjacent to one another creates crossing and turning conflicts like the one illustrated below. To yield to traffic in the roadway, the motorist entering from the left must block the bikeway. To yield to traffic in the bikeway, the motorist coming from the right rear must block the roadway. The standard traffic pattern, with slower traffic on the right and faster traffic in the middle avoids this problem.

On streets, bicyclists can usually safely travel at the speed their legs can propel them, except when required to yield at intersections or under congested conditions. On a sidepath, every driveway and cross street becomes an intersection and bicyclists must slow or stop much more often. The sidepath promotes a false sense of security and bicyclists often do not use appropriate caution.

Car blocking path, Route 28 bike path, Hyannis

Bicyclists will still use the street.

Sidepaths do not eliminate the need or desire of bicyclists to ride in the roadway, for several reasons, some already stated

- the sidepath will not be usable at all times;
- It will not allow fast, uninterrupted travel
- because of the limited number of entry points, bicyclists will often have to ride along the roadway to cross over to the opposite sidepath.
- In many cases, bicyclists preparing turns onto cross streets and driveways will be able to do so much more quickly and with fewer conflicts in the normal traffic flow than from the sidepath.

Bicyclists do not belong on sidewalks

Walking a bicycle in order to avoid challenging traffic conditions is sometimes appropriate, especially for children and novice bicyclists. Without sidepaths, bicyclists still have the option to ride slowly, or walk their bicycles, on sidewalks and to cross intersections as pedestrians if they wish to do so. However, riding in the street is much faster, and adult bicyclists do not put up with slower travel except under unusually difficult conditions.

Pedestrian-type facilities are a hindrance rather than an aid to bicyclists who expect to be able to get to their destinations quickly. These facilities create a chaotic, disorganized traffic pattern and increased risk of crashes.

Appropriate and inappropriate arguments for sidepaths:

Bicycle routing on a sidewalk or sidepath can make sense where traffic conditions are extreme and there is no cross traffic: for example on a highway bridge with high-speed traffic, narrow lanes and no shoulders.

The two most common arguments that have been made for sidepaths are that they are safer, which is incorrect except under unusual conditions, and that people think they are safer. The latter argument, sometimes made naively and sometimes not, frequently becomes a basis for political action, on grounds that people should be encouraged to abandon motorized transportation for bicycling and walking. But construction of facilities that make bicycling more dangerous and slower amounts to shooting oneself in the foot on the encouragement issue, and is unethical.

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Up: Bicycle sidepaths

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Contact John S. Allen by e-mail

STATE OF CALIFORNIA

Donald E. Howe, P.E., Delineation Branch
Department of Transportation
Traffic Operations, MS 36
Office of Signs and Delineation
1120 N Street, Sacramento, CA 95814
Mail: P.O. Box 942873
Sacramento, CA 94273-0001

(916) 654-2634 FAX (916) 653-3055
don_howe@dot.ca.gov CALNET 464-2634

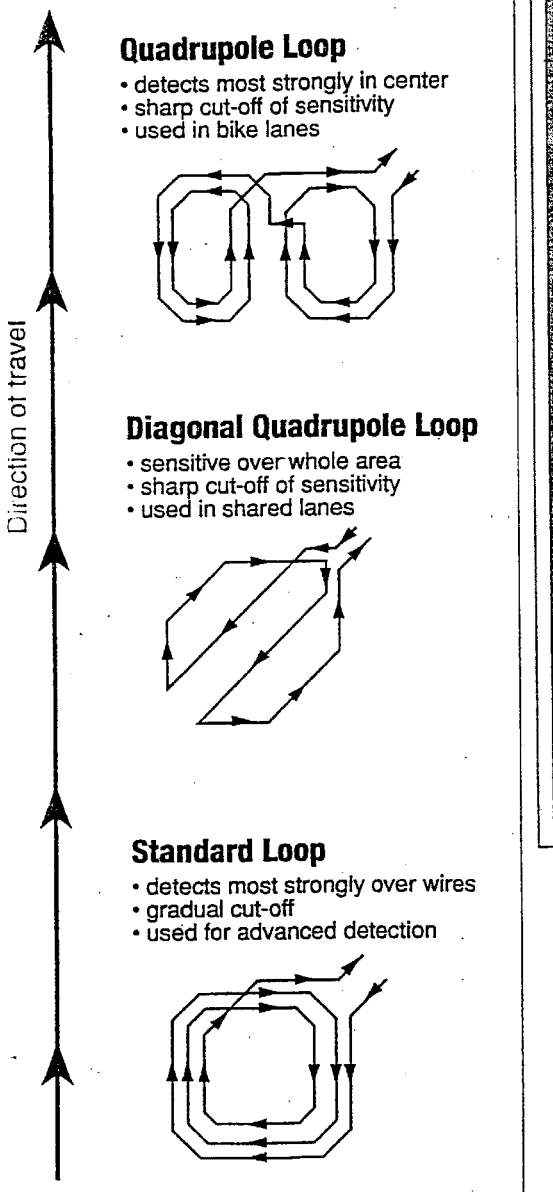
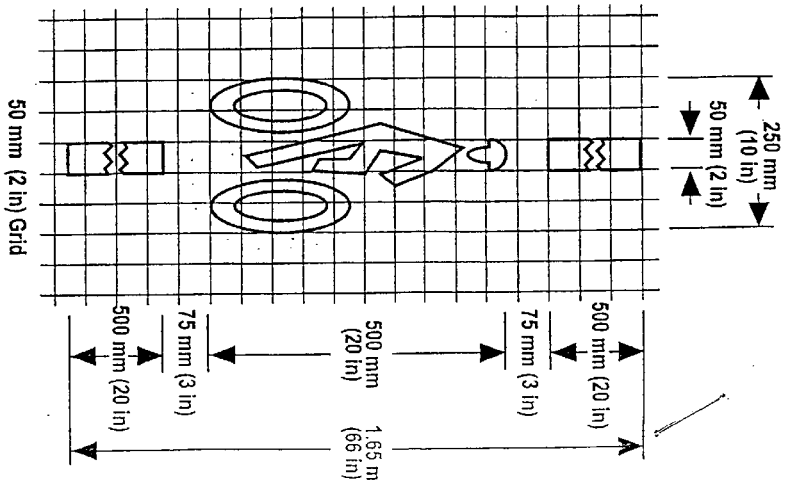


Figure 4-5: Recommended loop types for bicycle detection. In most shared-road situations, the diagonal quadrupole is preferred.

Source: Traffic Signal Bicycle Detection Study; City of San Diego, 1985

BICYCLE LOOP DETECTOR SYMBOL



Signal actuation: Detectors for traffic-actuated signals should be sensitive to bicycles and should be located in the bicyclist's expected path, including left turn lanes. The preferred options for loop detectors are as follows (see figure 4-5):

(1) In shared roadway situations, where the exact location of the bicycle cannot be easily predicted, the diagonal quadrupole loop [TYPE D] is best, since it is bicycle-sensitive over its entire width while being relatively immune to false calls caused by motor vehicles in adjacent lanes.

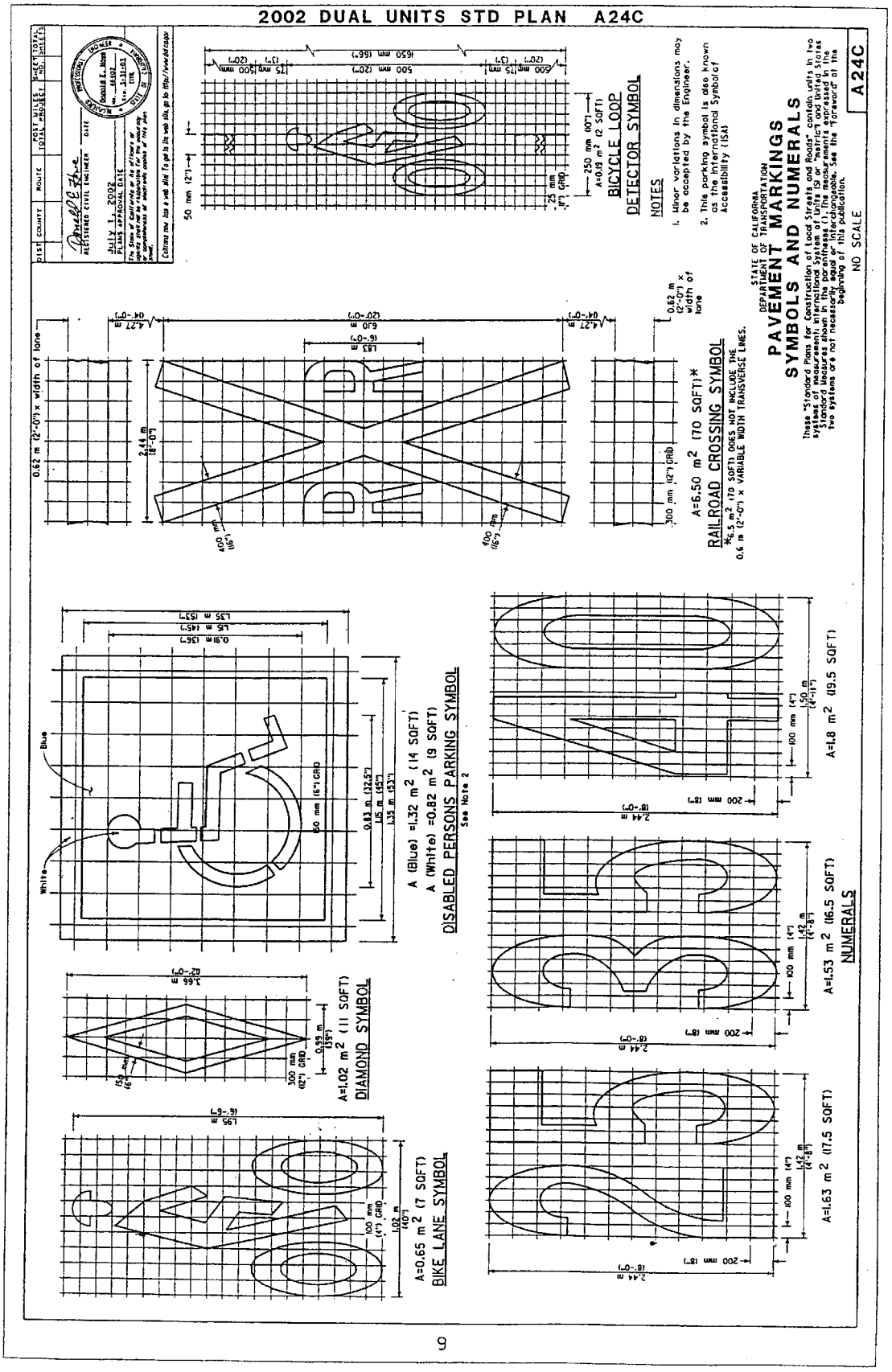
(2) In bicycle lane or bicycle path situations, where the location of the bicycle can be easily predicted, a quadrupole detector [TYPE C or Q] works well, the quadrupole loop is highly sensitive over the center wires, less sensitive over the outer wires and relatively insensitive to motor vehicles in adjacent lanes.

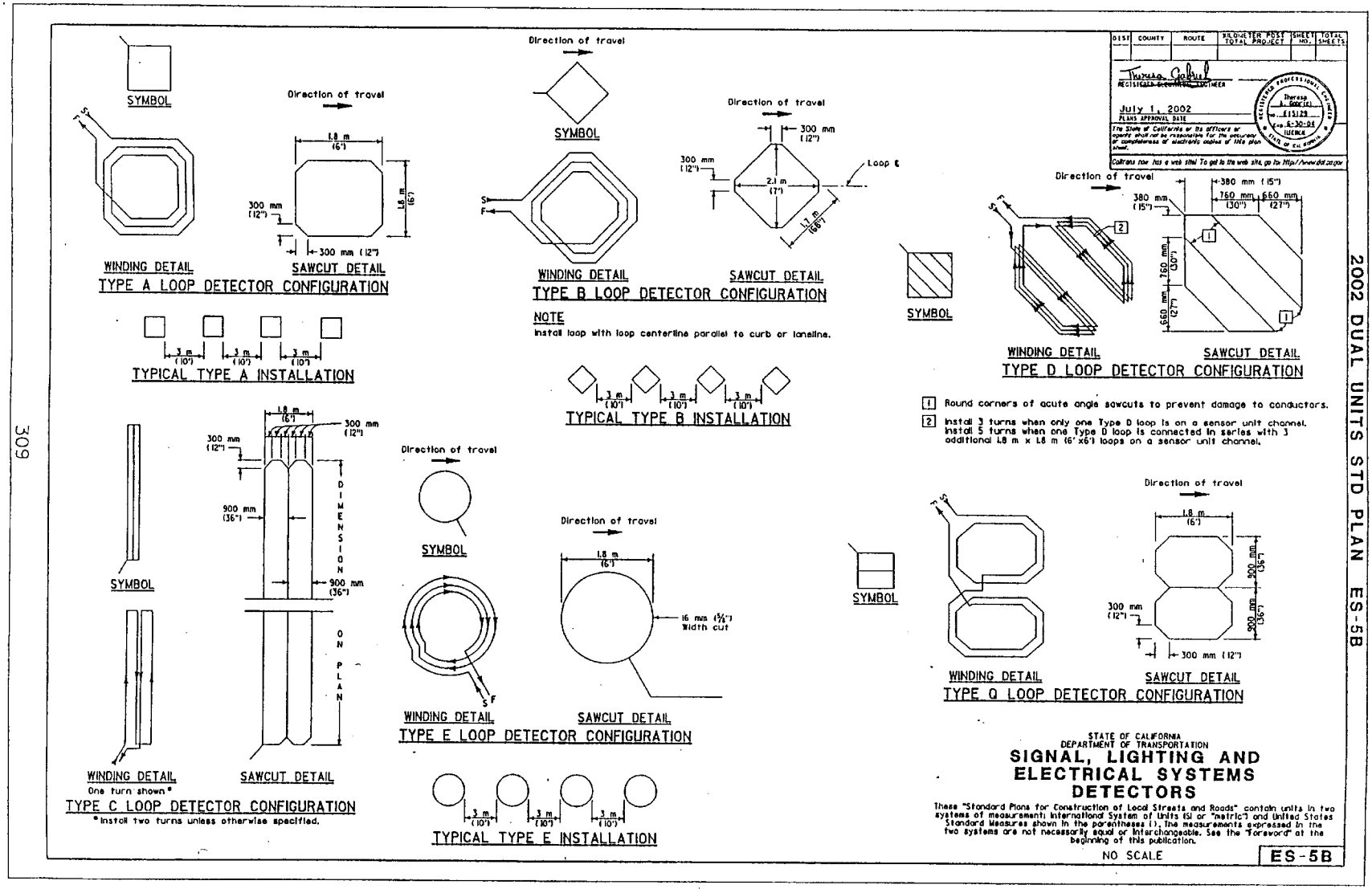
(3) Standard loops [TYPE A] are the least desirable for sensing bicycles. These loops are square or rectangular in shape and are most sensitive over the wires that form the outer boundary of the loop. While some are sensitive enough directly over the wires to detect bicycles, the bicyclist must know just where to stop, and why it's important to stop there.

For this reason, standard loops are the least desirable and should be used only in locations where bicycle traffic is not expected. Some standard loop/amplifier combinations cannot be adjusted to reliably detect bicycles without detecting motor vehicles in adjacent traffic lanes. These loops should be replaced with bicycle-sensitive models.

In special cases, pedestrian activated buttons may be mounted near the curb for bicycle use. This approach may be useful where a bicycle path crosses a highway, for example. However, in most roadway situations, the need for bicyclists to position themselves at intersections according to their destinations (e.g., in left-turn lanes or to the left of a right-turn-only lane) makes such push buttons the least desirable option.

References: Jan 1994 North Carolina DOT "North Carolina Bicycle Facilities Planning and Design Guidelines & Traffic Signal Bicycle Detection Study; City of San Diego, 1985


2002 DUAL UNITS STD PLAN A24C
BICYCLE LOOP DETECTOR SYMBOL
NOTES
1. Minor variations in dimensions may be accepted by the Engineer.
2. This parking symbol is also known as the International Symbol of Accessibility (ISA)
RAILROAD CROSSING SYMBOL
A=6.50 m² (70 SQFT)*
*6.5 m² (70 SQFT) DOES NOT INCLUDE THE 0.6 m (2'-0") x VARIABLE WIDTH TRANSVERSE LINES.
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS
SYMBOLS AND NUMERALS
A24C
NO SCALE
DISABLED PERSONS PARKING SYMBOL
See Note 2
A (Blue) =1.32 m² (14 SQFT)
A (White) =0.82 m² (9 SQFT)
DIAMOND SYMBOL
A=1.02 m² (11 SQFT)
BIKE LANE SYMBOL
A=0.65 m² (7 SQFT)
NUMERALS
A=1.8 m² (19.5 SQFT)
A=1.53 m² (16.5 SQFT)
A=1.63 m² (17.5 SQFT)


SYMBOL
Direction of travel
1.8 m (6')
300 mm (12")
1.8 m (6')
300 mm (12")
WINDING DETAIL
SAWCUT DETAIL
TYPE A LOOP DETECTOR CONFIGURATION
3 m (10')
TYPICAL TYPE A INSTALLATION
SYMBOL
Direction of travel
300 mm (12")
2.1 m (7')
1.7 m (5.6')
Loop ℄
WINDING DETAIL
SAWCUT DETAIL
TYPE B LOOP DETECTOR CONFIGURATION
NOTE
Install loop with loop centerline parallel to curb or lanaline.
TYPICAL TYPE B INSTALLATION
SYMBOL
Direction of travel
380 mm (15")
760 mm (30")
660 mm (27")
WINDING DETAIL
SAWCUT DETAIL
TYPE D LOOP DETECTOR CONFIGURATION
1 Round corners of acute angle sawcuts to prevent damage to conductors.
2 Install 3 turns when only one Type D loop is on a sensor unit channel. Install 5 turns when one Type D loop is connected in series with 3 additional 1.8 m x 1.8 m (6' x 6') loops on a sensor unit channel.
SYMBOL
1.8 m (6')
300 mm (12")
900 mm (36")
DIMENSION ON PLAN
WINDING DETAIL
One turn shown*
SAWCUT DETAIL
TYPE C LOOP DETECTOR CONFIGURATION
* Install two turns unless otherwise specified.
SYMBOL
Direction of travel
1.8 m (6')
16 mm (5/8") Width cut
WINDING DETAIL
SAWCUT DETAIL
TYPE E LOOP DETECTOR CONFIGURATION
3 m (10')
TYPICAL TYPE E INSTALLATION
SYMBOL
Direction of travel
1.8 m (6')
300 mm (12")
900 mm (36")
WINDING DETAIL
SAWCUT DETAIL
TYPE Q LOOP DETECTOR CONFIGURATION
DIST
COUNTY
ROUTE
KILOMETER POST / TOTAL PROJECT
SHEET NO.
TOTAL SHEETS
Theresa A. Sadoski
REGISTERED ELECTRICAL ENGINEER
July 1, 2002
PLANS APPROVAL DATE
E15128
REGISTERED PROFESSIONAL ENGINEER
Theresa A. Sadoski
No. E15128
Exp. 6-30-04
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DEPARTMENT OF TRANSPORTATION
SIGNAL, LIGHTING AND ELECTRICAL SYSTEMS
DETECTORS
These "Standard Plans for Construction of Local Streets and Roads" contain units in two systems of measurement: International System of Units (SI or "metric") and United States Standard Measures shown in the parentheses ( ). The measurements expressed in the two systems are not necessarily equal or interchangeable. See the "Foreword" at the beginning of this publication.
NO SCALE
ES-5B
2002 DUAL UNITS STD PLAN ES-5B

Detection of Bicycles by Quadrupole Loops at Demand-Actuated Traffic Signals

Steven G. Goodridge, Ph.D.
Member, IEEE

Abstract

Inductive loop sensors, commonly used for detection of traffic at demand-actuated traffic signals, can be configured and adjusted to detect bicycles with metal rims. This article describes how to provide reliable detection of bicycles via inductive loop sensors without generating unacceptable false-positive detection of large vehicles in adjacent lanes.

Introduction

Demand-actuated traffic signals sense the presence of traffic before changing signal phases in order to optimize traffic flow. The main disadvantage of such systems is that a defect in the sensor system can cause it to fail to detect users waiting at a left-turn lane or cross-street. Such failure can cause substantial, indeterminate delay to road users and encourages non-compliance with the signal, which affects safety. Functional operation of the traffic control devices in use is fundamental to protection of individuals' safe and legal passage. Fortunately, good engineering of traffic signal sensors allows virtually all legal vehicle traffic, including bicycles, to be detected reliably using existing technology. Although a number of advanced non-intrusive sensor systems such as video and microwave devices are beginning to be employed for vehicle detection, at the time of this writing (2003) the most reliable and cost-effective method for detecting metal vehicles is the use of inductive loop sensors in the roadway pavement. Inductive loop sensors can reliably detect bicycles with metal rims if they are properly configured and adjusted. A number of communities in the United States, including Bakersfield, California, Santa Cruz, California and Santa Clara County, California, have adopted policies to design and adjust all traffic signal sensors to detect bicycles.

Theory of Operation

Inductive-loop traffic detector systems operate by sensing disturbances to the electromagnetic field over a coil of wire built into the roadway (Figure 1). When a conductive object (typically made of metal) enters the area over the wire loop, the magnetic field generated by alternating electrical current in the signal detector circuit induces weak electrical currents in the conductive object. (The AC frequency may be between 10,000 and 200,000 Hz, typically around 20,000 - 30,000 Hz.) The electrical currents induced in the object generate their own magnetic field that works in opposition to the magnetic field generated by the sensor coil (due to Lenz's Law). This opposition changes the resonant frequency of the sensor circuit by reducing the effective inductance of the sensor coil. This change in resonant frequency (an increase in frequency as the inductance decreases) is detected by the circuit instrumentation in the signal controller cabinet, which then tells the signal control electronics that a vehicle is present.

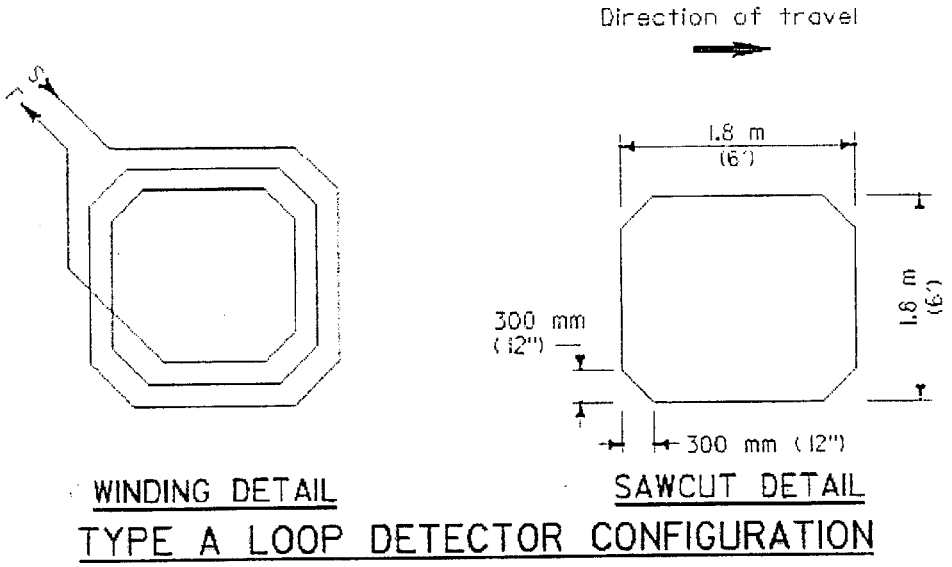


Figure 1: Basic dipole inductive loop sensor. (Source: California DOT)

A number of variables affect the degree to which the introduction of a conductive object will change the inductance of the sensor loop. These variables include:

- The size, shape, and conductivity of the object
- The 3-D orientation of the object with respect to the wires in the loop
- The 3-D position of the object over the loop
- The size and shape of the sensor loop

The combination of these variables create the potential for public confusion about the feasibility and reliability of bicycle detection via inductive loop sensors. Experiments that fail to control for some of these variables often create unreliable results, and have sometimes frustrated efforts to select reliable detection systems for cyclists by leading the engineers and facilities designers to false conclusions. Since bicycles are small vehicles and have less conductive material in them than do automobiles, they are harder to detect with inductive loops. Often the sensor loop is very large or the detector circuitry is not sensitive enough to detect the slight inductance decrease caused by the bicycle. The bicycle may not be aligned for maximum effect, or the loop may be shaped (as in Figure 1) such that large vehicles in adjacent lanes may be detected at the level of circuit sensitivity required to register a bike. Since the time and money invested by most states and municipalities toward bicycle transportation issues is very limited, traffic signal engineers often give up on the problem of bicycle detection before it is fully understood. However, this article will show that careful application of the operational theory allows optimization of inductive loop sensing systems for reliable detection of conductive (including aluminum, steel, and titanium) bicycle rims, without false detections caused by adjacent traffic.

There is a common misconception that an object must be ferrous (include iron) to activate a traffic signal loop sensor, or that a ferrous object will perform better. This misconception is fed by the observation that steel cars are detected by standard loop detectors but small aluminum bicycles (often, but not always) are not. The rationale behind this misconception is rooted in the observation that placing a ferrous core into the center of an inductor coil (such as inside an electromagnet or transformer)

affects the inductance of the coil. But in such ferrous-core coil applications, the inductance of the coil is *increased* by the ferromagnetic effect of the iron, while the typical inductive-loop signal sensors used for traffic signal actuation require the vehicle to cause a *decrease* in inductance. Given the high frequencies at which signal detectors operate and the large conductive silhouette of the car, any effect the iron's properties might have to increase the inductance of the coil are overpowered by the induced electrical eddy currents in the vehicle which serve to reduce the inductance of the coil. There are some rare cases where a steel vehicle wheel positioned in the center of a loop can create a net increase in loop inductance, but most traffic signal sensor circuits will either ignore this increase or treat it as an error condition. It is simply the size and net conductivity of an automobile that makes it easier to detect than a bicycle.

There is another common misconception that because bicycles are smaller than cars, inductive detector loops cannot be designed to detect bicycles. This is absolutely incorrect; simply making the loop smaller puts the loop on a scale that allows easy detection of bicycles. Communities that design inductive loops to detect bicycles make them about six to ten feet long. Unfortunately, the North Carolina Department of Transportation has currently adopted a bicyclist-unfriendly standard loop design that is 60 feet long. This standard needs to be revised in order to allow bicycle detection. If a larger detection area is needed to bridge gaps between cars approaching a signal, the traffic engineer can instead install a second, longer loop behind the small bicycle-sensitive one, and run it on a separate detector circuit. This is standard practice in bicycle-driver-friendly communities.

Inducing Current in Bicycle Rims

Bicycle rims lend themselves well to detection by inductive loop detectors because they provide an excellent conductive loop and are located close to the ground where the loop wires are. By positioning the rims over a straight leg of the loop wire pointed in the same direction (as shown in Figure 2), the magnetic field lines around the wire pass through the profile of the wheels. The integral sum of the magnetic flux density across each wheel's profile determines the induced current around the rim loop and the opposing magnetic field it generates. The larger the area of the wheels in comparison to the area of the sensor loop, and the better the positioning of the wheels to intercept the maximum magnetic flux, the greater the percentage reduction in the sensor loop's inductance. Note that positioning the wheels at a different angle or moving them to either side from the wire reduces their effectiveness.

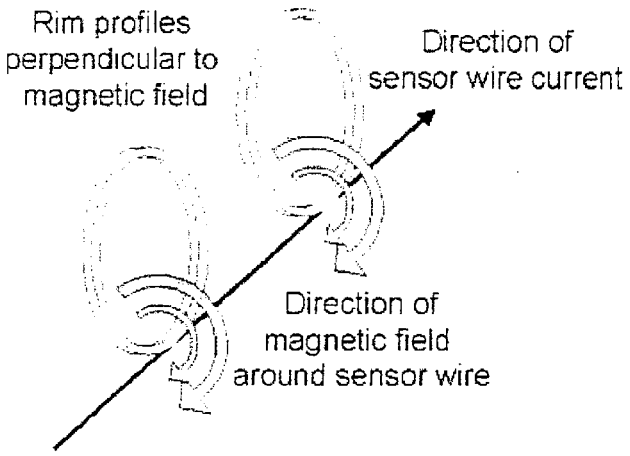


Figure 2: Magnetic field reception by bicycle rims

Improved Loop Design

Bicycles are not the only vehicles that may not be detected by an insensitive loop detector system. Oftentimes a simple dipole loop sensor, especially a large one, will not detect a small car or a motorcycle. But if the traffic signal technician turns up the sensitivity of the detector circuit to detect the small vehicle, it may also detect a large vehicle in an adjacent lane when the sensor's lane is empty. The sensitivity of the dipole loop is actually weakest at its center, and strongest over its perimeter wires, the longest stretches of which are often routed near the lane edges. This makes the dipole loop configuration vulnerable to false positive detection when adjusted to detect small vehicles.

In order to address this reliability problem, many state and local DOTs have switched to a different loop configuration, called a quadrupole loop, as shown in Figure 3. A quadrupole loop is actually two loops wired in a figure-8 pattern side-by-side, in series with a single wire. Because each loop has two magnetic poles, the sensor has a total of four poles, hence the name quadrupole. The two poles are wound in opposite directions, such that whenever the magnetic North is pointing up out of one loop, it is pointing down into the adjacent loop. This creates a tight channelization of magnetic flux from one loop over into the other, resulting in maximum sensitivity over the center of the sensor footprint with much less spillover around the sides. Also note that the center sawcut in the loop, which runs parallel to the direction of vehicle travel, has twice as many conductors in it as the edge sawcuts, and the current runs in the same direction for all of the center-sawcut conductors. This makes the center sawcut the most sensitive place over which to position the bicycle's wheels. The magnetic flux lines around the center wire cut, moving from one coil into the other, will pass through the profile of the bicycle wheels for maximum effect.

From personal experience reported by various cyclists, dipole loops that are successful in detecting bicycles have a very small "sweet spot" (only about 20 mm each side of the wire loop). Quadrapole loops have a sweet spot about four times larger. Even this is smaller than desirable. The quadrapole loop offers at least four significant advantages over the dipole: 1. Improved sensitivity; 2. Lower false positive detection; 3. A larger "sweet spot" over the center wires; 4. More logical placement of the sweet spot (in the center of the lane).

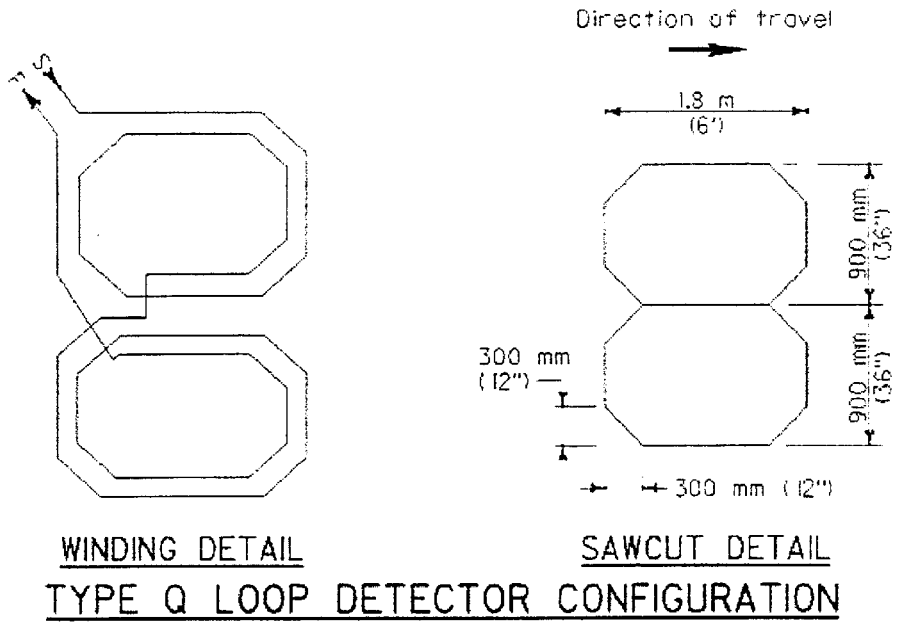


Figure 3: Small quadrupole loop sensor. (Source: California DOT)

The size of the quadrupole loop installation still has an impact on the ability of the sensor system to detect a bicycle. If the loop footprint is very long, such as the NCDOT standard of sixty feet, then the relatively small bicycle wheels will intercept a very small percentage of the magnetic flux generated by the loop. If the loop footprint is a more modest length, (for example six feet as in Figure 3) the larger relative size of the bicycle wheels in the path of the magnetic field will make them easier to detect. In fact, a small quadrupole loop at high sensitivity can usually detect a bicycle anywhere over the detector, not just over the center wire. This is the preferred performance for cyclists. As a compromise, detector circuits for loops as long as 25 feet or more can also be adjusted to detect bicycles over the center wire. If the loop is very much larger, however, there is an increased chance of false detection due to large vehicles in adjacent lanes.

In order to detect a bicycle waiting alone at a signal, the loop should be installed just behind the stop line. Note that it is important not to wire the small-footprint quadrupole in series with another loop sensor, as this will defeat the purpose of using the small loop for sensitivity. If additional, longer loop sensors are to be installed in the traffic lane behind the first one to bridge gaps between vehicles, these loops should be wired to separate detector channels.

Empirical Data

Cyclists' real-world experience with modestly-sized quadrupole (and dipole) loop detectors demonstrates that detection of bicycles with aluminum rims and frames not only is possible, but is no more difficult than with steel components. As an experiment, the author found a pair of quadrupole loop detectors in Cary, North Carolina (at the intersection of Cary Parkway and Two Creeks Drive) that happened to be adjusted sensitive enough to detect a lightweight steel-framed road bicycle (2002 Lemond Zurich) with 700c aluminum wheels positioned over the center sawcut. The author observed the

signal operation to ensure it was working properly on demand, rather than on a timer, and approached the intersection repeatedly from the cross streets when no other traffic was coming, after the signal had been green for the arterial for more than 30 seconds. The signal detected the bicycle and changed the signal phase for the arterial to yellow immediately. Detection reliability was 100%. The author then repeated the experiment with a lightweight aluminum-framed soft-tail suspension mountain bicycle (1999 Gary Fisher Sugar) with 26" aluminum rims. Detection was again 100% reliable.

In cities where signal technicians regularly adjust loop sensors to detect bicycles, the technicians will often use just aluminum rims, without the rest of the bicycle, to test the sensitivity of the sensor. This is more convenient for the technicians than carrying a bicycle just for this purpose. Since the sensors can be set to detect just the aluminum rims minus the frame, the sensors can also detect bicycles with frames that are made from more exotic materials that have little or no electrical conductivity, or have shapes that do not provide a wide loop profile for interception of magnetic flux. Cyclists with carbon-fiber bicycle frames but aluminum wheels have reported being detected by sensitive quadrupole loops.

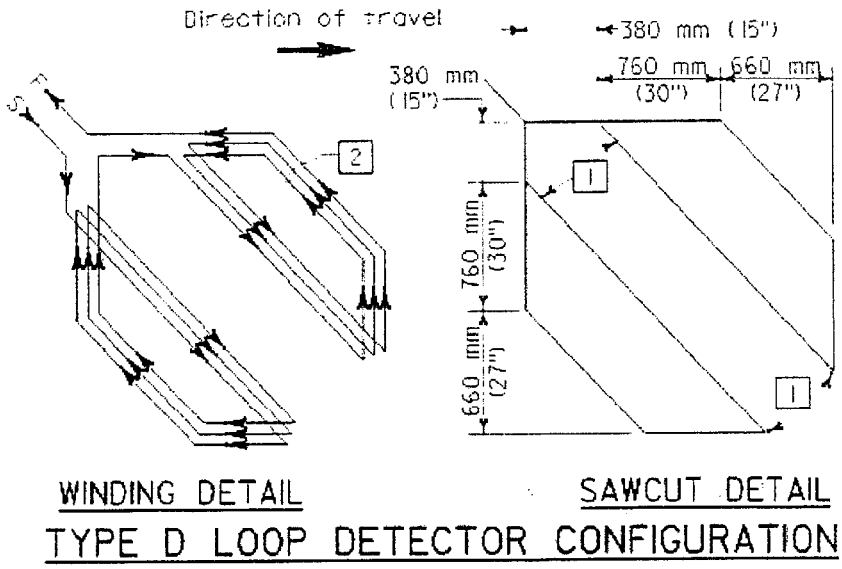
Common Rim Materials

Most quality adult bicycles feature aluminum rims, which are excellent conductors. Lower quality bicycles and some older bicycles feature steel rims. Steel rims have lower conductivity than aluminum rims, per pound, but perform adequately for detection over a properly adjusted quadrupole loop sensor. Extremely low-weight wheels constructed of carbon fiber with no metal in the rim are sometimes used by racing cyclists for competitions. Carbon fiber is a conductor, but the loop conductivity of the wheel is affected by the materials used to bond it into shape. Very few cyclists use carbon fiber wheels for general utilitarian or recreational use on public roadways, however, because of their very high cost and somewhat lower durability than metal wheels.

The Diagonal Quadrupole

A disadvantage of the conventional quadrupole loop design shown in Figure 3 is that it under marginal operating conditions (a low-conductance bicycle, a low-sensitivity setting, or a large loop footprint) it requires the bicycle wheels to be positioned in a precise location (over the center wire) for detection to occur reliably. To eliminate this requirement, the diagonal quadrupole loop (Figure 4) was developed for better detection of narrow vehicles. This loop is designed with the poles farther apart and the loops at an angle to provide fairly uniform sensitivity across the width of the sensor, making it easier for cyclists to be detected. The way the sweet spot between the two loops sweeps diagonally across the footprint of the detector virtually guarantees that either the front or back wheel will cut across the magnetic field and be detected regardless of the bicyclist's lateral position over the loop.

There are two potential disadvantages to the diagonal quadrupole. First, it can be less sensitive than the conventional quadrupole to motor vehicles with a high undercarriage, such as tractor-trailers, but this may be rectified by placing a conventional quadrupole behind the diagonal quadrupole. Second, the sawcuts are more complex and acute, and may result in faster deterioration of the pavement surface by weakening it more than the would standard quadrupole cuts, but liberal application of pavement sealant can mitigate this. The diagonal quadrupole is desirable in places where bicycle position will be laterally distributed.



TYPE D LOOP DETECTOR CONFIGURATION

NOTES

1. Round corners of acute angle sawcuts to prevent damage to conductors.
2. Install 3 turns when only one Type D loop is on a sensor unit channel. Install 5 turns when one Type D loop is connected in series with 3 additional 1.8 m x 1.8 m (6' x6') loops on a sensor unit channel.

Figure 4: Diagonal quadrupole pattern (Source: California DOT)

Assistive Markings for Quadrupole Loops

When a roadway is repaved over the loop sawcuts, a cyclist cannot determine the location of the conventional quadrupole sensor's center wires, and as a result may not be able to position the bicycle's rims for detection. Some cyclists may not be aware of the best part of the loop for detection, or may not be aware of the function of inductive sensors in the first place. In order to address this problem, proposed Revision 2 of the 2000 edition of MUTCD specifies roadway markings to identify the center of the loop to cyclists (Figure 5), and specifies a road sign (Figure 6) to educate road users about the purpose of the markings.

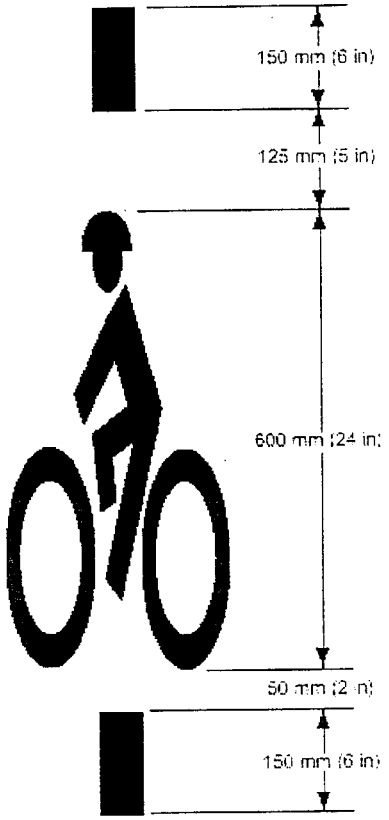
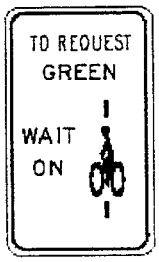


Figure 5: Stencil for marking location of most sensitive portion of traffic sensor (Source: 2000 MUTCD, Rev. 2)



R10-15

Figure 6: Informational sign describing optimum use of traffic sensor (Source: 2000 MUTCD, Rev. 2)

Detector Circuit Sensitivity

Detection of a bicycle over a well-designed quadrupole loop requires that the detector circuit be adjusted more sensitive than what is typically required for automobile detection. A bicycle can generate as little as 1% as much change in the loop inductance as an automobile does, especially for a poorly designed loop, because the car covers so much more area of magnetic flux, and has a high net conductivity. However, many commercially available detectors provide adequate sensitivity to accomplish this. According to Jim Magerkurth of US Traffic Corporation, a detector should provide an inductance change sensitivity level down to 0.0025% to reliably detect bicycles. Examples of such detectors include the US Traffic Corporation 262 series rack-mount detectors, which offer nine sensitivity levels. Shelf-mount detectors with this sensitivity include the US Traffic Corporation 921-2, 910 and 913 units. Such modern inductive loop detectors vary in price from $100 to $250. Note that some other models of detector systems on the market offer sensitivity to only 0.01% inductance change; such detectors should be avoided for bicycle-sensitive loop installations.

Good detectors can be adjusted to detect bicycles on quadrupole loops. As described by one signals

expert:

> *It is always possible to set a detector's sensitivity to pick up a bicycle. The trade-off is in longer detection times and the possibility of false detections from vehicles in adjacent lanes. Most people who set signal detectors use the lowest sensitivity setting that will pick up cars reliably. I advocate using the highest setting that will avoid picking up vehicles in adjacent lanes. Digital circuits used in modern detectors can use high sensitivity settings without unacceptable increases in detection times. Unfortunately, there are still a lot of old detectors out there, and most people who work on signals use principles based on the performance characteristics of old detectors.*
>
> - Bob Shanteau, PhD, PE, Registered Traffic Engineer (Source: Rec.Bicycles.FAQ)

Summary

Detection of bicycles by demand-actuated traffic signal sensors is important at cross streets, left-turn-only lanes and other travel lanes where cyclists may become stuck, unable to get a green light. Compact (not much longer than a bicycle) quadrupole loop detectors, located near the stop line and operated by suitably sensitive detector circuits, can reliably detect most bicycles waiting at traffic signals without generating false positive detection of vehicles in adjacent lanes due to spillover. Detection does not depend on the bicycle being made of iron, but the loop conductivity of the rims is important. As the quadrupole loop footprint increases in length, the chances that it may detect large vehicles in adjacent lanes increase. Many existing quadrupole loop installations with lengths of 20 feet are able to detect bicycles but operate acceptably. Quadrupole footprints that are much longer can also be adjusted to detect bicycles, but result in progressively increased probability of spillover effects. NCDOT standards that specify very long loop sizes should be revised to include a short bicycle-sensitive loop near the stop line. Lane markings that show cyclists where to position their bicycle maximize the capability of the sensor.

For more information:

"How to Turn Signals Green"

"Traffic Signals", http://www.bikeplan.com/signal.html

Alan Wachtel, "Re-Evaluating Signal Detector Loops", *Bicycle Forum* #50

John Forester, *Bicycle Transportation*, Second Edition, MIT Press, 1994

John Allen, "Traffic Signal Actuators: Am I Paranoid?"

Letter No. 20

Ventura Coastkeeper

RECEIVED
PLANNING DIVISION
MAY 0 3 2004
PLANNING AND BUILDING SERVICES
CITY OF SANTA CLARITA

May 3, 2004

City of Santa Clarita
Planning Commission

Via Fax: (661) 259-8125

RE: Newhall Land and Farming Company EIR SCH #2001091081 (River Park)

Dear Commissioners:

Thank you for the opportunity to comment on the EIR for the proposed project known as River Park. Ventura Coastkeeper is a non-profit organization dedicated to the protection of coastal and riparian waterways and habitat, of which the Santa Clara River is one of the most important. The spadefoot toad, the unarmored threespine stickleback, you are witnessing today these species going extinct, and yet nothing is being done. This cannot be allowed to happen. 1

The cumulative impacts of development in the Santa Clara River floodplain exacerbate the decline of these species. The Clean Water Act and the Endangered Species Act mandate that this habitat be protected. Least Damaging Practicable Alternatives analysis and an adequate Cumulative Impacts analysis must conducted. This EIR, however, is woefully inadequate. The EIR should include a detailed analysis of the proposed activity's cumulative impacts in light of the impacts of the Natural River Management Plan (NRMP) on the Santa Clara River and its tributaries. In particular, the EIR should evaluate the cumulative loss of riparian and aquatic habitat, elimination of wildlife movement corridors, increased human disturbance, and loss of biological diversity and productivity, among other factors. 2 3

Moreover, the NRMP, far from serving as a model for a permit for the Newhall Ranch project, provides many useful lessons as to what to avoid or do differently in permitting for the River Park project. Specific observations of failings of the Natural River Management Plan include:

- Failed habitat mitigation (e.g. dead or dying riparian vegetation in mitigation areas) with no effective enforcement mechanism to address failure.
- Dead or dying riparian habitat associated with loss of surface and/or subsurface flows with no adequate mechanism to address this problem. 4
- The NRMP has facilitated vehicular access to and human disturbance of the River Rampant and uncontrolled off-road vehicle use in the Santa Clara River, including areas containing unarmored threespine stickleback and arroyo toad habitat. Shooting of birds and wildlife by children from adjacent urban development is prevalent.
- Biological diversity has been greatly diminished. A recent UCLA report noted "marked reductions in total macroinvertebrate taxa and sensitive taxa, and increases in dominant

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Ventura Coastkeeper

taxa (frequently an indicator of stressed conditions) compared to reference sites" in the Santa Clara River below the Valencia treatment plant. 4

The Santa Clara River is southern California's last truly dynamic big river. It boasts one of the largest watersheds in the South Coast region at 1,600 miles, is the longest free-flowing river in southern California, and is the only one that extends from the desert to the coast. Unfortunately, the Santa Clara River and its tributaries are within one of the most rapidly urbanizing watersheds in the state of California, making the area a high priority for monitoring and enforcing environmental regulations. Extensive and uncontrolled urbanization will degrade this pristine river environment. Any alteration of this important area must be approached with the utmost caution so as not to destroy this ecologically and biologically important region. 5

Specifically, the proposed activities of the River Park development threaten to severely degrade the water quality and habitat of in the Santa Clara River by increasing the amount of impervious surfaces, thereby creating significant volumes of contaminated stormwater runoff from the construction to post-development stages. Stormwater pollution will significantly increase the pollutant load in the River, affecting the beneficial uses of the River, as well as the riparian species and wetland habitat. Furthermore, due to the amount of proposed impervious surfaces, the volume of stormwater runoff discharged into the River will increase, and channelization of the River will become necessary to control the amount of runoff. This channelization will destroy both the River habitat as well as the wetlands. Therefore, a more adequate analysis of water quality impacts of the entire project must be considered than is currently presented in the EIR. 6 7

The continued degradation of the Santa Clara River watershed must not be allowed to continue. Ventura Coastkeeper finds many of the proposed mitigations unacceptable in protecting riparian and wetland habitat. Buried bank stabilization in not acceptable. Removing non-native vegetation is not acceptable mitigation to hardening of stream banks. Ventura Coastkeeper acknowledges and understands the need for additional housing. We also understand the need for biological resource and floodplain protection. Resolutions to these issues are not mutually exclusive. Proper planning can allow for both. This EIR, however, does not provide a document that satisfies both concerns. If does not demonstrate adequate environmental protection and is not acceptable for certification. 8 9 10 11

Thank you again for the opportunity to comment. Please feel free to contact me if you have any questions.

Sincerely,

Damon Wing
Programs Director

3600 South Harbor Blvd., Ste 222 • Oxnard, CA 93035 • Phone (805) 382-4540 • Fax (805) 382-4541

5/3/04

From: Santa Clarita Oak Conservancy
P.O. Box 800520
Santa Clarita, CA 91380-0520

To: Mr. Jeff Hogan, Associate Planner
City of Santa Clarita
23920 Valencia Boulevard, Suite 300
Santa Clarita, CA 91355-2196

Re: Draft Environmental Impact Report for
Riverpark
Project Master Case Nos.02-175
Oak Tree Permit 02-025
State Clearinghouse No. 2002091081

Dear Mr. Hogan:

Thank you for the opportunity to comment on Oak Tree Permit 02-025.

The Santa Clarita Oak Conservancy is excited that the applicant is "saving" 72 of the oak trees on the site especially the rare and single "Blue Oak". 1

However the Conservancy is concerned that the project will remove fifteen of the 87 oak trees on the site and encroach on three more. The problem to save the remaining trees comes from the fact that 5.5 million cubic yards of grading in a flood plain is planned on the site causing the removal of the 15 trees. The 7,500 linear feet of bank and erosion "protection" will prevent the remaining oak tree to be able to absorb the water from the Santa Clara River. As the rapid approach of the Sudden Oak Death that has killed ten of thousands of California oak trees and has arrived in Los Angeles County we must not allow the removal of even one healthy oak tree. Much like the infestion of the Bark Beetle that was "successful" because of lack of water to the pine trees, denying water to oak trees in the flood plain will create a hazardous environment not only to the oak trees on this project but jeopardizing the remaining oak trees in the Santa Clarita Valley to SOD. Please refer to the Pest Alert by the United States Department of Agriculture report # NA-PR-06-01. 2 3

Please also refer to the "Understanding Our Oak Trees" published by the City of Santa Clarita: "Oak tree have value beyond their aesthetic appeal. They give shade and help reduce air conditioning needs. Their root systems help control soil erosion. They provide shelter from the blistering summer heat and moisture to our atmosphere. ...They represent the best physical examples of our heritage and outdate most of the history of our country. Just think—some of these trees were already 150 years old when George Washington, the Father of our Country was born. They are certainly worthy of our care. Age alone with alterations of the natural environment, such as falling water table, loss of leaf litter normally found 4

beneath their canopy, and the past agronomic uses of the land, (and now SOD) have weakened the oak and have made them dependent upon proper care..."

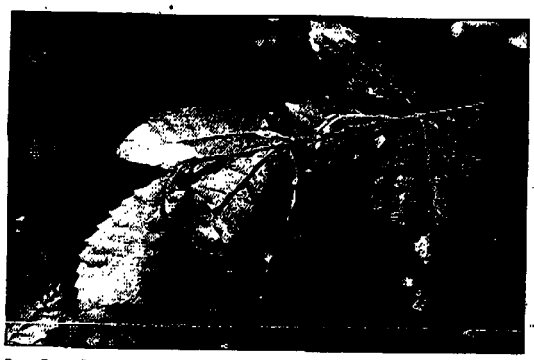
4

It is important that the City of Santa Clarita review alternatives that will allow the Cultural and natural resources to remain on this site. The best use would be to continue the Center Park down to the river.

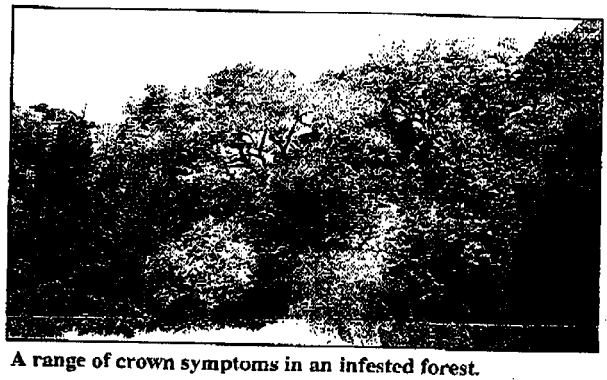
We look forward to continued comments and discussions on this project.

Cynthia Harris
Vice President
Santa Clarita Oak Conservancy

Infected coast live oaks sometimes gradually lose their leaves and fade out slowly. If bleeding oaks and leaf spots on bay laurel or other symptomatic hosts are adjacent to one another, the presence of *Phytophthora ramorum* is likely. Laboratory confirmation is needed, however, since many other pathogens cause similar symptoms.



Leaf and twig dieback symptoms in tanoak.



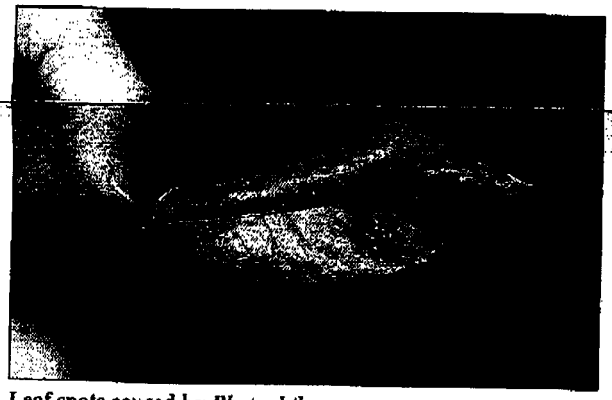
A range of crown symptoms in an infested forest.

On small tanoaks (less than 4 inches diameter at breast height) the first symptom may be a wilting of branch tips. The branch dies back and resprouts with multiple shoots. Eventually, the entire tree dies and resprouts from the base, but the new shoots die back as well.

The pathogen has been linked to tree mortality only for oaks in the red oak group and the related tanoak and madrone. It causes leaf spots and twig dieback in bay laurel and several other species, including rhododendron and huckleberry. Spore levels may build up rapidly on these hosts creating a reservoir of inoculum.

A common saprophytic fungus (*Hypoxylon thouarsianum*), ambrosia beetles (*Monarthrum* spp.), bark beetles (*Pseudopityophthorus* spp.), and other organisms often colonize infected trees.

Other Oak Disorders with Similar Symptoms: Sudden Oak Death can be confused with many other disorders of oaks. Oaks defoliated by insects may appear dead, but leaves usually reflush later in the season. Canker rots, slime flux, leaf scorch, root diseases, freeze damage, herbicide injury, and other ailments may be confused with this disease.



Leaf spots caused by *Phytophthora ramorum* on rhododendron. Leaf spot margins caused by this *Phytophthora* are often fuzzy, rather than sharply defined.

Other insects and fungi colonize diseased trees. These organisms attack trees weakened by many other agents and are not specific to trees killed by *Phytopthora ramorum*.

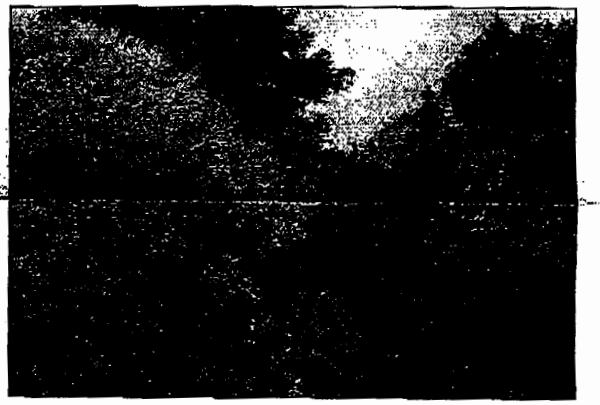
Prepared by:
Susan Frankel, USDA Forest Service, Pacific Southwest Region, 1323 Club Drive, Vallejo, CA 94592

Pest Alert

United States
Department of Agriculture
Forest Service
State and Private Forestry
Northeastern Area
NA-PR-06-01
Revised January 2002

Sudden Oak Death Caused by a New Species, *Phytophthora ramorum*

Tens of thousands of tanoak (*Lithocarpus densiflorus*), coast live oak (*Quercus agrifolia*), California black oak (*Quercus kelloggii*), Shreve oak (*Quercus parvula* var. *shrevei*), and madrone (*Arbutus menziesii*) have been killed by a newly identified species, *Phytophthora ramorum*, which causes Sudden Oak Death. Sudden Oak Death was first reported in 1995 in central coastal California. The pathogen also infects rhododendrons (*Rhododendron* spp.), huckleberry (*Vaccinium ovatum*), bay laurel (*Umbellularia californica*), California buckeye (*Aesculus californica*), and other tree and shrub species, but usually causes only leaf spots and twig dieback on these hosts. The host list is expected to expand as Dr. David Rizzo, University of California at Davis, and Dr. Matteo Garbelotto, University of California at Berkeley, continue their investigations of affected ecosystems.



Tree mortality caused by *Phytophthora ramorum*.

The disease is widespread in coastal California and is found commonly in two forest types: in the understory of coast redwood (*Sequoia sempervirens*) forests on tanoak; and in coastal evergreen forests on oaks, madrone (*Arbutus manziesii*), bay laurel, and other species. In California, Southern Oak Death has been confirmed in scattered locations along the Pacific coast north of Monterey County. The pathogen has also been found on dying tanoak in coastal southern Oregon, just north of the California border. Marin and Santa Cruz counties are heavily infested, and dead and dying trees are common in the wildland interface in backyards, parks, and open-space greenbelts.

Symptoms and Impact: On oaks and tanoak, cankers are formed on the stems. Cankered trees may survive for one to several years, but once crown dieback begins, leaves often turn from green to pale yellow to brown within a few weeks.

Black or reddish ooze often bleeds from the cankers, staining the bark, as well as killing the mosses that grow on it. Bleeding ooze may be difficult to see if it has dried or has been washed off by rain.

Bleeding ooze from a canker on an oak.

Necrotic bark tissues surrounded by black zone lines are present under affected bark. Because these symptoms can also be caused by other *Phytophthora* species, laboratory tests must be done to confirm pathogen identity.

Black zone lines under diseased bark in oak.

To report infected trees or to receive additional information, please contact your State or Federal forest health specialist. On the Internet, visit the Sudden Oak Death home page at: www.suddenoakdeath.org. To distinguish this new disease from diseases with similar appearance, visit www.na.fs.fed.us/SOD

Photo Credits: Pavel Svihra, University of California Cooperative Extension, Marin County; Tim Tidwell, California Department of Food and Agriculture; David Rizzo, University of California at Davis; Steve Oak, USDA Forest Service

Letter No. 22

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Angeles Chapter

3435 Wilshire Boulevard
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Los Angeles, CA 90010-1904

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(213) 387-5383 fax
www.angeles.sierraclub.org

May 3, 2004

RECEIVED
PLANNING DIVISION
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PLANNING AND BUILDING SERVICES
CITY OF SANTA CLARITA

City of Santa Clarita
Planning Department
Attn: Jeff Hogan
via hand delivery

Subject: **Comments on Riverpark DEIR SCH 2002091081**

Mr. Hogan and interested parties:

Listed below are comments from the Sierra Club on the DEIR for Riverpark.

Air:

1. p. 2.0-20 and other portions of the DEIR refer to the 1997 AQMP and attainment goals. All portions of the document and analysis should reflect the new AQMP adopted in 2003. An interim plan was adopted in 1999. (1)

2. Footnotes beginning on p. 2.0-33 refer to the 1993 CEQA Handbook from SCAQMD. The CEQA handbook is under revision, and according to the SCAQMD website as of 4/27/04, many portions of it are obsolete. The consultant should verify that the most up to date information for CEQA analysis were obtained from SCAQMD, rather than just relying on the 1993 Handbook. (2)

3. Section 4.4 in general: The air section provides temperature, rainfall, and air quality information based on the entire South Coast Air Basin. News reports throughout the summer of 2003 indicated the Santa Clarita Valley's air is much worse than the whole South Coast Air Basin, which includes coastal areas. Information in this section should match available data for the Santa Clarita valley. (3)

4. Provide details such as from 2003 daily smog maps provided on the SCAQMD website. See attached page for example. (4)

5. P. 4.4-17 paragraph 2 (and other locations in this section, including 4.4-22) refers to SSAB, which appears to be the Salton Sea Air Basin, which is not relevant to this project. As stated above, Santa Clarita Valley specific information should be used. Air quality, wind, temperatures, rainfall, and inversion patterns are significantly different from the entire South Coast Air Basin. (5)

6. p. 4.4-67 refers to mitigations for construction equipment exhaust (aqueous fuels, cooled gas) but it is not clear if there are any other available diesel exhaust controls. The following excerpt covers selective catalytic reduction technology that was retrofitted on existing diesel busses: (6)

Each older diesel bus can spew hundreds of pounds of NOx, soot, and other pollutants into the air each year, but the test results show that number can be reduced to a mere fraction by installing the ADEC System," said Phil Roberts, president of Extengine Transport Systems of Fullerton, California. "Plus, the retrofit system's cost is substantially lower than buying a new diesel or CNG bus. There just aren't many transit bus operators that can afford to replace their diesel-powered fleets in these days of big budget deficits."

The ADEC System is based on Selective Catalytic Reduction (SCR), which has been used for nearly 35 years in controlling NOx emissions from stationary diesel fueled power plants. The System designed for vehicle applications diffuses minute quantities of a reductant into the exhaust stream after combustion has taken place; the small refill tanks are swapped out periodically as needed.

7. The EIR should comment on all available Diesel controls and why they may or may not be feasible. 7

8. p. 4.4-67 to 69 cover mitigations for air emissions during construction. SCAQMD mandated dust control and grading restrictions are not covered and should be addressed in this section. 8

9. p. 4.7-18 The project is NOT consistent with efforts to minimize air quality impacts because it in fact significantly worsens air quality. 9

10. p.4.7-28 to 30, policy 13.5. This project is inconsistent with City policy for protecting residents from air quality concerns because it worsens the air quality and does not mitigate air impacts to less than significant. The statement on p. 4.7-30 that the project is consistent with policy 13.5 is incorrect. . 10

11. Conclusion / Air comment in general: The Santa Clarita Valley has extremely poor air quality. We are opposed to any project, like this one, that will significantly worsen air quality during construction and during the life of the project. The project should be downsized to reduce the negative air impacts. 11

Noise

12. p.4.5-4 provides a Noise Attenuation table showing the sound dampening effects of various buildings. It lists residences as being similar to offices, with windows open and closed. In the appropriate portion of the noise section, it should be mentioned that many of the residences near the project are from the 1960s and 1970s, with only single-paned double hung windows. This type of construction suffers greatly from noise impacts – much more so than a modern office, for example. 12

Biological Impacts

13. p.4.6-60 and biological resources in general. EIR does not provide information on percent of long term success for habitat restoration efforts. For comparison purposes, publicly available studies indicating whether or not habitat restoration is successful for all plant, animal, bird, reptile, etc. occupants of the area over a long term basis. Merely replacing the native plants does not mean a habitat has been restored. 13

14. p. 4.6-83 Typo/editing error on first line. It is unclear what this paragraph was intended to say. 14

15. p. 4.6-106 Condition 4.6-15 and p. 4.7-64, Policy 4.14 consistency finding: A more strongly worded condition should be provided for lighting impacts. Consider specifying the maximum allowable voltage and also the maximum footprint of lighting in commercial, residential, and open areas. There is currently a lot of glare from commercial lighting immediately adjacent to the river, such as in the Pavillion's parking lot on McBean Parkway. There is also significant negative lighting impact from the Pony Fields adjacent to the river. More specifics and lighting restrictions are needed, and should be based on studies that show the levels that do not affect wildlife and do not affect night skies. 15 16

16. p. 4.6-107 Condition 4.6-18 AND ELSEWHERE dust control is mentioned: Dust control measures should meet or exceed those required by SCAQMD regulations, including new Rule 403 requirements effective in 2005. 17

17. p. 4.6-108 We are opposed to the loss of 25.5 acres of SEA and 280 acres of wildlife habitat. 18

18. p. 4.6-121-122. Proposed projects Las Lomas and the development at Placerita/Sierra highway are not mentioned but would also have major impacts on wildlife areas. 19

19. p.4.7-39 presents a misleading analysis of consistency with City General Plan Policy 3.5 for promoting compatible use within SEAs. The project destroys 25.5 acres of SEA and is inconsistent with Policy 3.5. 20

20. Section 4.6 in general. There is no statement as to the likelihood of success of habitat restoration. Revegitation does not mean a habitat has been replaced. 21

21. Section 4.6 and 4.20 in general do not reveal sufficient details on the actual destructiveness of bank stabilization, which is relevant in deciding the impacts of the project. Drawing 4.20-6 should be provided "to scale." The amount of earth disturbance related to bank stabilization should be quantified (in cubic yards and depth of excavation). See attached photos of nearby bank stabilization work. 22 23 24

22. Section 4.6 on bank stabilization and Section 4.2 (drainage) and 4.8 (water) should provide for more permeable paving or open pavers on paved areas and around trees, permeable concrete or natural rip rap with openings for infiltration on bank stabilized areas to allow for slowing of water flows, water infiltration and groundwater recharge. 25

23. Biologic/Bank Stabilization in general: We are opposed to bank stabilization in general and suggest the project be required to meet aggressive setback requirements such as the 300 ft boundary used by the State of New Jersey. See attached information. At minimum, the project should be downsized and moved back from the river to reduce the need for bank stabilization. 26 27

Traffic

24. p. 4.3-26 makes an incorrect assumption that 90 percent of the residential traffic will stay within the Santa Clarita Valley. Calculations recently presented in the Los Angeles Times and Daily News indicated that 75% of commuters leave the Santa Clarita Valley on a daily basis. The EIR should clarify what percent of the households will have drivers using the 5 and 14 freeways. 28

25. This project is a net increase in traffic and a net worsening of conditions of nearby roadways and intersections. We are opposed to this and suggest the project be downsized to reduce the traffic impacts that will add to the currently deplorable conditions on our streets and in the air. 29

Misc. Policy Consistency / General Comments

26. p.4.7-23 to 25, Policy 6.5 and 8.4 and page 4.7-46 to 47, Policy 8.5 and 8.8: Solar energy is deemed not applicable or infeasible due to need for visible frontage for commercial buildings and potential maintenance issues. Solar panels can be installed in a multitude of directions in this area, and brackets are available to tilt panels in appropriate direction regardless of building orientation. Solar uses were not discussed for residential buildings or any potential community pools or park structures. The project proponent need make an effort to provide for solar power since it is indeed feasible and consistent with city policy. 30

27. p.4.7-128 The EIR makes the incorrect statement that the development is consistent with the City General Plan. For reasons discussed elsewhere is this letter, there are numerous cases of 31

inconsistency and the project should be changed appropriately or additional mitigations should be proposed. 31

28. Section 4.9 (solid waste) in general does not mention the possibility and feasibility of either Material Recovery Facilities or Waste to Energy facilities as aspects of solid waste management. Also, educational material related to waste management should include specifics on source reduction, rather than just recycling, and also should outline the nearby landfill situation and linkage between trash generation and landfill, air, and groundwater pollution. 32

29. General Comment: To facilitate public involvement and review, and due to public concerns over protection of air quality and watershed, and due to past agency investigations and/or Notices to Comply being issues to the project applicant over both air quality (2003 – for dust from grading activities along Soledad) and stormwater (2004 – for sediment discharge to river), an EIR condition should be added that all submittals, permit applications, and required reports and filings be copied to the City of Santa Clarita. This should include all written items called out in the EIR even if they are not normally required to be submitted. In addition, advance notice of biologic work should also be available to citizens, along with the results of any findings, on the same time table as notice is given to regulatory agencies and the City. Finally, a compliance checklist or similar list should be completed and updated at least quarterly to demonstrate compliance with all the requirements of the EIR, including such things as providing public notice/informational brochures. Where no frequency for such activities is listed in the EIR, the compliance plan should specify a frequency that meets or exceeds EIR intent. The City of Santa Clarita shall serve as a clearinghouse for these filings to facilitate public review and oversight of compliance. 33 34 35

Water

See also bank stabilization comments.

30. p.4.7-35 and Policy 7.12 – To be consistent with drought-tolerant and native landscaping requirements the project and mitigation measures should specify minimal use of turf. In particular, turf should not be used on medians or other areas not used for recreational purposes. Where turf is specified, it should be the lowest water-use type available. 36

31. p.4.7-70 and consistency with Policy 7.5, along with Section 4.8 in general: There is inadequate water currently in the Santa Clarita Valley to accommodate this project. The UWMP relied on for this project does not adequately disclose reliability problems with the State Water Project, loss of water due to perchlorate pollution, and provides for unfinalized supplies from water transfers. See attached Resolution 2004-3 from an adjacent water purveyor for details on actual supply vs. potential supply. SB610 and 221 require reliance on actual supplies when assessing if there is adequate water for the project. 37

32. p.4.8-1. Comment: The UWMP has an extremely inadequate section on Water Shortage Contingency Planning and by itself should not be construed as adequate protection in times of drought. 38

33. p. 4.8-4 Provide source of data for rainfall table. The average rainfall of 19+ inches appears to possibly be overstated. Provide more recent data than 1998. The California Groundwater Bulletin from DWR states the average rainfall in the basin is 14-16 inches. A letter from Slade to CLWA indicates rainfall of 18 inches. Both of these references are attached. 39

34. Figures 4.8-5 and 4.8-11, 4.8-19 are not legible. 40

35. p. 4.8-12 makes a statement "when CLWA takes its full 95,200 af/yr allocation." p. 4.8-72 and related pages on SWP water are extremely misleading on the subject of reliability. CLWA never has, and never will, be able to take its full allocation. 41,000 af of the 95,200 af has not yet been finalized and is still subject to an EIR process that has not been initiated. The reliability of the SWP is such that as little as 30% of the allocation can be relied on 90% of the time, and 50% of the allocation can be relied on 80% of the time. Due to growth in Southern California, the 2002 DWR Reliability Report states that historic deliveries cannot be used as adequate predictors of future reliability. See attached NCWD Resolution 2004-3 and supporting presentation for more details. 41

36. p. 4.8-16 incorrectly indicates that if SWP water is curtailed, groundwater will be easily used to make up the difference. Several areas of the Santa Clarita Valley run solely on SWP water. In time of curtailment, there is not immediately available water supply for those areas, and emergency measures will have to be taken. 42

37. p. 4.8-17 and p. 4.8-86 to 87 incorrectly imply that CLWA and the purveyors have documented successful implementation of conservation Best Management Practices. In fact, the 2000 UWMP states that many of the Best Management Practices are "not applicable" and no documented evidence in significant progress toward required conservation activities is available. The Best Management Practices require an annual, statistical report of progress toward their goals, and CLWA and the purveyors have not documented progress towards the 14 conservation BMPs listed in the EIR. 43

38. p.4.8-20 and also 4.8-55 to 62. The correct statement regarding the 41,000 af/yr transfer is that the transfer SHALL NOT BE USED FOR PLANNING PURPOSES. The current maximum CLWA "Table A" amount of State Water Project (SWP) water is 95,200 acre-feet per year, but that amount includes 41,000 acre-feet per year allowed on an interim basis under Section II of the "Settlement Agreement by and among Planning and Conservation League, Plumas County Flood Control and Water conservation District, Citizens Planning Association of Santa Barbara County, Inc. and The State of California Department of Water Resources, Central Coast Water Authority, Kern Water Bank Authority and those State Water Project Contractors identified herein." The Settlement Agreement refers to the case Planning and Conservation League, et al. v. Department of Water Resources, 83 Cal. App.4th 892(2000) which resulted in a write of mandate vacating the certification of the 1995 EIR upon which the transfer of the 41,000 acre-feet of water was based; and the new environmental reviews for the final approval of the 41, 000 acre-feet are not yet complete. The settlement agreement states in Section VII (A) that SWP Contractors shall not "approve any new project or activity in reliance on the 1995 EIR, that was not approved, initiated, or implemented prior to March 26, 2001, and the approval, initiation, or implementation of which would require a separate environmental impact report or negative declaration under CEQA". Additionally, it should be noted that the 41,000 af portion of the 95,200 af/yr net allocation does not meet the definition of "available" water under SB610/221 because it is not yet fully permitted due to the pending EIR. 44

39. p. 4.8-23. NCWD recently requested that CLWA provide details on the allocation due to them and to the other water service areas because it is felt that information is relevant to future planning. CLWA has not yet responded. 45

40. p. 4.8-27 and related pages incorrectly overstate the support for the UWMP. NCWD, the only independent water purveyor in the valley, has passed resolution 2004-3 clarifying the water supply numbers are actually currently lower than presented in the UWMP. Of the other purveyors signing on to the 2000 UWMP, Valencia Water Company is owned by the developer of this project – Newhall Land and Farm / Lennar, and Santa Clarita Water Company is owned by 46

CLWA. According to Ken Peterson, General Manager of NCWD, DWR did not formally approve the UWMP, nor did they issue any written letter of completeness. The facts on ownership of Valencia Water and the lack of support by the independent NCWD are relevant and should be presented in the EIR. The EIR incorrectly states that the outcome of litigation against the UWMP will be irrelevant. If successful, the litigation will show that the UWMP overstated water supplies and based on current population and development in the valley, the water supply may not be adequate for this project. 46

41. p. 4.8-35 refers to perennial yield as a sustainable level of pumping that will not produce an undesirable effect, yet it does not mention what the perennial yield figure is. The perennial yield was defined by Slade to be 31,600-32,600 af/yr. This yield has now been reduced due to perchlorate pollution. See also NCWD Resolution 2004-3. 47

42. p.4.8-37, paragraph 1: Wells in the eastern portion of the aquifer have experienced drops in water levels even in years of normal rainfall. Media coverage of dry wells in the Sand Canyon, Canyon Country, and Aqua Dulce areas has been prevalent. The statement that the aquifer has been "operated within it's operational yield" is extremely misleading because, as used by Slade, operational yield is merely the historical range of annual pumping....i.e. by definition it would be impossible to operate outside the operational yield. 48

43. p. 4.8-43 State levels for perchlorate in drinking water have now been established and this should be reflected in the EIR. 49

44. p. 4.8-53, Table 4.8-3, p. 4.8-91 and remainder of section on perchlorate contamination do not provide relevant information on the amount of perchlorate contamination (700-1000 af/yr lost in Alluvial Aquifer, 4000 af/yr lost in the Saugus formation), the status of the characterization of the plume (still uncharacterized,) and the timeline for expected cleanup (action plan due August 2005, cleanup through 2010 per DTSC.) See NCWD Resolution 2004-3 for more details on this basin-wide issue. 50

45. p. 4.8-53 to 55 do not clearly indicate that none of the currently expanding reclaimed water supplies west of the I-5 will be available to the project. 51

46. p. 4.8-64 Table 4.8-6, column 2 is extremely misleading. The actual percent of allocation that was delivered is shown in the last column. Column 2 merely indicates that CLWA matched its request to what it was told it could get, and then that a high percentage of that pre-determined request was granted. 52

47. p.4.8-85 and related pages on desalination fail to mention many notable local failures or rejections of desalination and present a falsely optimistic picture. San Diego and Long Beach both recently rejected desalination projects, and a desalination project in Santa Barbara has reportedly never become operational. This information and the problems with desalination should be provided in the desalination discussion. 53

48. p. 4.8-90, table 4.8-13. The entire amount recycled water shown in the table is not currently available and should be marked accordingly. The bulk of the recycled water is not yet available, and the expanded capacity is not yet build so it should not be included for SB 610/221 assessment purposes. . Also, the table should illustrate the lost supply due to perchlorate contamination and indicate that portion as being "future supply." 54

49. p. 4.8-91. Table 4.8-15 This table gives no indication of when the "planned future supply" will be available, and if it will be available by the time the project is built. This and other tables on supply 55

do not illustrate supplies lost to perchlorate pollution. It should be corrected and the project approval should be based on actual water supply as defined by SB610/221. 55

50. p. 4.8-100, Table 4.8-22 shows a factor of 0.55 af/yr for each single family residence. This factor is extremely low. Usage for landscaped residences typically is up to 1 af per unit. More information should be provided to explain why the water use is expected to be so abnormally low. For example, provide water use for similar size residences on similar size lots in the Santa Clarita valley to demonstrate if this factor is accurate. This comment also applies to all other EIR references to total water demand for the project. 56

51. General water comment: Owing to the widespread media coverage on water shortages in the west and the lack of build-out of the State Water Project, the EIR should go beyond just what the UWMP plan says and consider and present all available information on the water situation. We are concerned about the buildout of our valley exceeding current water supply, and believe projects should not be built until water is on hand to serve them. 57

Visual Impacts

52. p.4.16-11 incorrectly assumes that viewing audiences will only be motorists and thereby minimizes the impact due to the brief duration that visual impacts will be viewed. The length of time of visible is much longer for trail users and pedestrians in the area. 58

53. p.4.16-19 and section 4.16 in general: Gunnite bank stabilization around bridge abutments and trail access points should be textured if possible to minimize impacts of graffiti and cut glare to trail path users. 59

54. p.4.16-34 Specific wording should be added on lighting to insure it is minimal and properly shielded. The specific allowable voltages and the footprint of lighting should be specified. Currently there are serious negative light impacts along the River, such as at the Pavillion's parking lot on McBean and adjacent to the Pony fields. Additional negative impacts should not be allowed. 60 61

Ridgelines

55. p.4.7-37. Policy 2.1. This project is inconsistent with City General Plan Policy 2.1 because it allows the destruction of secondary ridgelines. Analysis on p. 4.7-38 does not present analysis showing this inconsistency. 62

56. We are opposed to any destruction of secondary ridgelines and the use of an "innovative" designation to condone ridgeline impacts. We suggest the project be revised to avoid ridgeline impacts. 63

Please send a copy of the reply to this letter to the Sierra Club office listed on the letterhead. Thank you for your consideration.

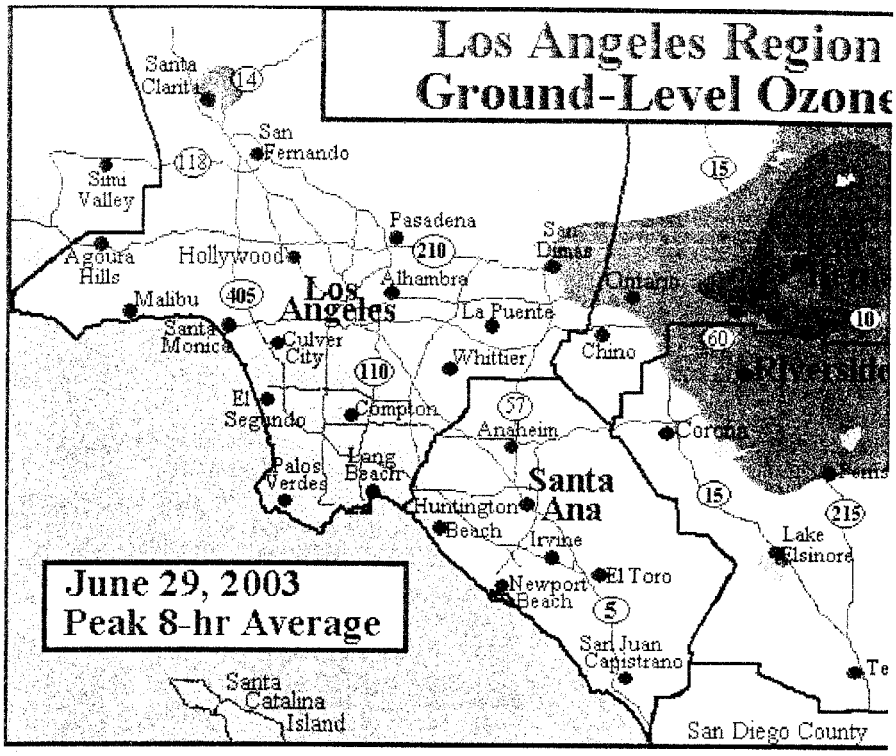
Sincerely,

Henry Schultz

List of Attachments on Next Page:

Attachments included:

Ozone Map Sample
Rainfall Alternative Information
NCWD Resolution 2004-3
Presentation for NCWD 2004-3
Bank Stabilization Photos
New Jersey Watershed Protection Information


Los Angeles Region
Ground-Level Ozone
June 29, 2003
Peak 8-hr Average
Santa Clarita
San Fernando
Simi Valley
Agoura Hills
Hollywood
Pasadena
San Dimas
Malibu
Los Angeles
Alhambra
Ontario
La Puente
Santa Monica
Culver City
Whittier
Chino
El Segundo
Compton
Anaheim
Corona
Palos Verdes
Long Beach
Santa Ana
Huntington Beach
Irvine
Lake Elsinore
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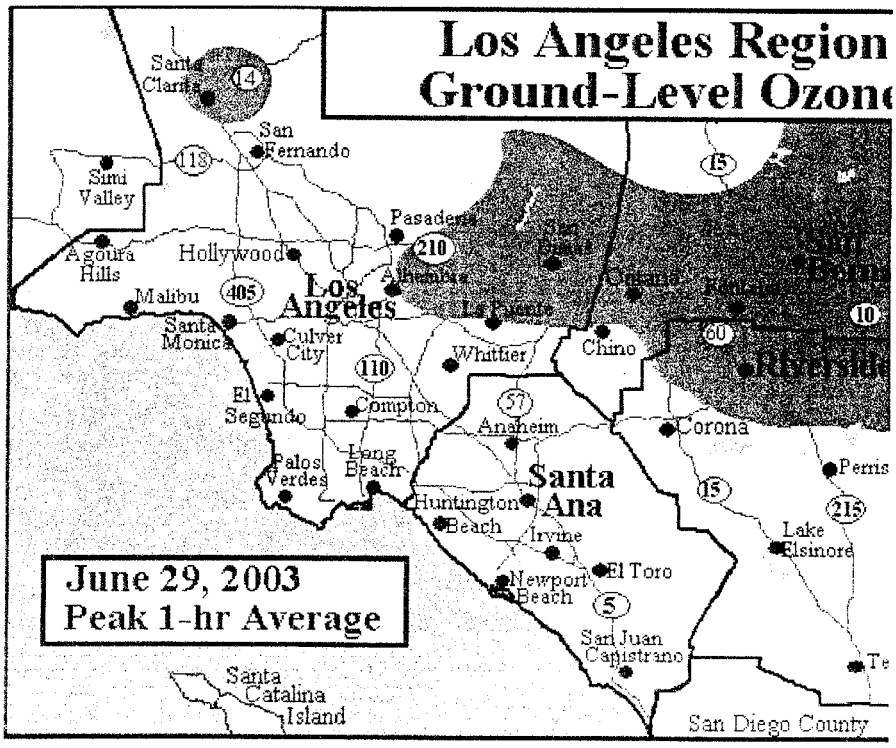
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Culver City
Whittier
Chino
El Segundo
Compton
Anaheim
Corona
Palos Verdes
Long Beach
Santa Ana
Huntington Beach
Irvine
Perris
Lake Elsinore
Newport Beach
El Toro
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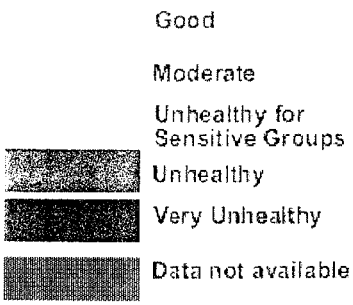
Peak AQI - Ozone



RICHARD C. SLADE & ASSOCIATES LLC
CONSULTING GROUNDWATER GEOLOGISTS

MEMORANDUM

November 16, 2000

To: Mr. Robert Sagehorn
General Manager
Castaic Lake Water Agency
27234 Bouquet Canyon Rd
Santa Clarita 91350-2175

From: Richard C. Slade, Principal Groundwater Geologist
Richard C. Slade & Associates, LLC

Job S2052

Re: Groundwater Extractions,
Alluvial and Saugus Formation Aquifer Systems
Santa Clarita Valley

In response to your request to support Black and Veatch in their preparation of the Urban Water Management Plan, we submit the following work on the alluvial and Saugus Formation aquifer systems in the Santa Clarita Valley:

1. Well Locations

Figure 1 – Map of Wells and Aquifer Systems – illustrates the locations of key municipal-supply water wells and the geologic contacts for the alluvial and Saugus Formation aquifer systems in the Santa Clarita Valley. Specifically denoted on Figure 1 are the locations, municipal-supply ownerships, and well numbers/names for each alluvial-supply well and for each Saugus Formation water well.

2. Rainfall

Long-term rainfall data are available from the Saugus rainfall gage for a period of record of 1883 through 1998. Figure 2 – Total Annual Rainfall – presents a bar chart of the annual rainfall versus time over the period of record. Average annual rainfall over the period of record has been approximately 18 inches as shown on Figure 2.

Historic high rainfall over the period of record was 42.11 inches in 1884, although annual totals in excess of 35 inches were also recorded in 1890, 1978, 1983, and 1998. Historic low rainfall over the period of record was 3.32 inches in 1898, although annual totals less than 8 inches were also recorded in 1885, 1894, 1899, 1900, 1925, 1948, 1950, 1961, 1987, 1990, and 1997.

From these data accumulated rainfall departure values were calculated for each year of rainfall relative to the long-term average and plotted to determine long-term historic trends in rainfall for the region.

6442 COLDWATER CANYON AVE., SUITE 214 • NORTH HOLLYWOOD, CALIFORNIA 91606 • PHONE: (818) 506-0418 • FAX: (818) 506-1343
NAPA VALLEY OFFICE: 176 MAIN ST., SUITE B • ST. HELENA, NAPA VALEY, CALIFORNIA 94574 • TELEPHONE: (707) 963-3914

Santa Clara River Valley Groundwater Basin, Santa Clara River Valley East Subbasin

- Groundwater Basin Number: 4-4.07
- County: Los Angeles
- Surface Area: 66,200 acres (103 square miles)

Basin Boundaries and Hydrology

The Santa Clara River Valley East Subbasin is bordered on the north by the Piru Mountains, on the west by impervious rocks of the Modelo and Saugus Formations and a constriction in the alluvium (DPW 1933), on the south by the Santa Susana Mountains, and on the south and east by the Gabriel Mountains. The surface is drained by the Santa Clara River, Bouquet Creek, and Castaic Creek. Average annual precipitation ranges from 14 to 16 inches.

Hydrogeologic Information

Water Bearing Formations

Groundwater is found in alluvium, terrace deposits, and Saugus Formation. Groundwater in the subbasin is generally unconfined in the alluvium, but may be confined, semi-confined, or unconfined in the Saugus Formation (Slade 2002).

Alluvium. Holocene age alluvium consists of unconsolidated, poorly bedded, poorly sorted to sorted sand, gravel, silt, and clay with cobbles and boulders. These deposits are thickest below the channel of the Santa Clara River and thin laterally away from the channel, and east and west of the community of Acton (Slade 1990; DWR 1993). The maximum reported thickness is 240 feet and specific yield is estimated to range from about 9 to 19 percent (Slade 2002).

Terrace Deposits. Pleistocene age terrace deposits consist of crudely stratified, poorly consolidated, weakly cemented, gravel, sand and silt (Slade 2002). They can be found on the low-lying flanks of the foothills and upper reaches of the Santa Clara River tributaries. Terrace deposits attain a maximum thickness of 200 feet near Saugus, Agua Dulce, and Acton (Slade 1990; DWR 1993). These deposits generally lie above the water table and likely have limited ability to supply groundwater to wells (Slade 2002).

Saugus Formation. The late Pliocene to early Pleistocene age Saugus Formation consists of as much as about 8,500 feet of poorly consolidated, weakly indurated, poorly sorted, sandstone, siltstone, and conglomerate. The lower portion of the Saugus Formation is termed the Sunshine Ranch Member, which consists of as much as 3,500 feet of sand and silt deposited in a brackish marine to terrestrial environment (Slade 2002). Groundwater is not widely produced from this member for municipal and irrigation uses because well yield is typically low, about 100 gpm and the groundwater can be brackish (Slade 2002). The upper member of the Saugus Formation contains lenses of conglomerate and sandstone interbedded with sandy-mudstone deposited in a terrestrial environment (Slade 2002). Wells in the upper member have typically have higher yields, reaching more than 3,000

Final – Approved 1/29/04

RESOLUTION NO. 2004-3
RESOLUTION OF THE BOARD OF DIRECTORS OF
NEWHALL COUNTY WATER DISTRICT
REGARDING WATER SUPPLY AND DEMAND

PREAMBLE

This resolution provides notice to the public that the District intends to protect the rights of its current customers to safe, dependable and adequate domestic water supplies on an ongoing basis and in all water supply assessments and verifications, to utilize the best available knowledge concerning supplies, the current information on which is summarized in the following resolution. After much deliberation, the Board is proposing to adopt the following resolution to send the strongest message possible to the public:

1) That, at least as far as the District is concerned, there is not sufficient current supply of water to meet all current and future demands, especially in times of drought or other emergency;

2) That, as stated in *SCOPE v. County of Los Angeles and Newhall Land and Farming Company* (2003) 106 Cal. App. 4th 715,131 Cal. Rptr 2d 186, the State Water Project (SWP) "entitlements are based on a state water system that has not been completed. There is a vast difference between entitlements and the amount of water that SWP can actually deliver;"

3) That the Urban Water Management Plan 2000 being relied upon in granting entitlements to develop and build is inaccurate in its assessment of current supply; and

4) That in its actions regarding water service, the District will be guided by its decisions as to the available supply based upon the facts set forth in the accompanying resolution.

By adopting this resolution the District is not purporting to amend or change the current regional Urban Water Management Plan 2000 ("UWMP 2000"). By this resolution, however, the District does intend to put members of public and planning agencies with jurisdiction over the Santa Clarita Valley on notice that the continued granting of rights to develop property without proof of adequate water supplies and infrastructure is irresponsible. This resolution also is intended to make the District customers aware of the fact that any loss or damage resulting from city and county planning agencies ignoring the true facts regarding water supply and intentionally allowing additional growth, not supported by adequate supply, will be the responsibility of those planning agencies.

WHEREAS, State Water Project (SWP) water presently constitutes the majority of water served to NCWD customers, and in some areas is the exclusive water available; and

WHEREAS, the remaining water supplies of the District are primarily derived from the extraction of groundwater by wells overlying the Alluvial Aquifer and Saugus Formation; and

WHEREAS, the UWMP 2000 Table 1-4 "Total Existing and Planned Supplies" of water (Exhibit A to this Resolution) is among the factors used by planners to determine whether adequate water supplies exist to meet specific project demands; and

Alluvial Aquifer

WHEREAS, according to the December 10, 2003 CH2M Hill presentation titled "Groundwater Modeling Analysis, Upper Santa Clara River Basin" stated that 700-1000 acre-feet per year of water in the Alluvial Aquifer are currently not available due to Perchlorate pollution; and

WHEREAS, one Santa Clarita Water Company (SCWC) well in the Alluvial Aquifer has been taken out of service due to Perchlorate contamination; and

WHEREAS, the area impacted by the Perchlorate pollution in the Alluvial Aquifer has not been characterized as of the date of this resolution; and

WHEREAS, a Remedial Action Plan for local groundwater affected by Perchlorate pollution is not projected to be complete until August 2005 and certification of final cleanup is not expected until August 2010, according to the November 2003 schedule from the Department of Toxic Substances Control: and

WHEREAS, the December 1986 "Hydrogeologic Investigation: Perennial Yield and Artificial Recharge Potential of the Alluvial Sediments in the Santa Clarita River Valley of Los Angeles County, California" by Richard C. Slade ("Slade") studied 30 wells over a 28-year base period and found a practical perennial yield of 31,600 to 32,600 acre-feet per year from the Alluvial Aquifer before the Perchlorate contamination was found; and

WHEREAS, the 1990 Kennedy/Jenks/Chilton report "Conjunctive Use of the Saugus Aquifer: Castaic Lake Water Agency" stated "from the alluvial aquifer the safe yield is anticipated to be 32,500 acre-feet/year;" and

WHEREAS, many additional public agency reports during the period of 1993-1999 incorporated and referenced the 31,600-32,600 acre-feet per year safe perennial yield figure; and

WHEREAS, the July 2002 Slade report entitled "2001 Update Report: Hydrogeologic Conditions in the Alluvial and Saugus Formation Aquifer Systems" reiterated that perennial yield "represents a long-term average value for annual yield" and introduced the concept of "operational yield" which was defined as "a fluctuating value of pumpage that may be above or below the perennial yield in any given year, and that varies as a function of the availability of other water supplies. The basic intent of the operational yield value is that it should not exceed the perennial yield of the groundwater basin over multi-year wet and dry cycles;" and

WHEREAS, the 2002 Slade report did not quantify in detail a safe yield or a perennial yield, which is defined in the 1986 report as "the quantity of groundwater" that "can be pumped annually without any change in groundwater levels or net change in groundwater in storage over the Base Period" (28 years), and

WHEREAS, the 2002 Slade report did state that the Alluvial Aquifer "on a long-term average basis can be operated at an average pumping volume on the order of 10 percent higher than was reported as a 'practical or perennial yield' in 1986," but the report based that conclusion on "the combination of historical observations and current planning;" and

WHEREAS, the 2002 Slade report referred to "current planning" that included the UWMP 2000 and the future commitment via a MOU between the "Santa Clarita Valley Water Purveyors and the downstream United Water Conservation District to develop a numerical groundwater flow model in order to analyze in greater detail how this aquifer system can be operated;" and

WHEREAS, the numerical flow model is not complete as of the date of this resolution; and

WHEREAS, the 2002 Slade report cited increased recharge from Water Reclamation Plants as a reason for higher potential yields, but the Water Reclamation Plants are not located in areas that would recharge the eastern part of the Alluvial Aquifer system; and

WHEREAS, the 2002 Slade report did not address other factors such as loss of recharge areas due to development and increased flood control channeling; and

WHEREAS, the December 1986 Slade report (referenced above) stated "... urbanization has had a rather startling impact on the availability of areas for recharge.... All recharge to the aquifer system does not occur in the low-flow channels of the river and its tributaries, but infiltrates over much of the alluviated areas which are not within the flood channels of the Santa Clara River system. Paving of these areas has, and will continue to reduce the net effective area for natural recharge to the underlying groundwater system;" and

WHEREAS, the Alluvial Aquifer has been pumped above the safe perennial yield since 1994; and

WHEREAS, the alluvial groundwater level in the eastern basin has been dropping, which may be caused by weather patterns, increased development, increased pumping, or a combination of the foregoing and possibly other factors; and

Saugus Formation

WHEREAS, the December 2003 CH2M Hill presentation (referenced above) stated that 4,000 acre-feet/year of water in the Saugus Formation are currently not available due to Perchlorate pollution; and

WHEREAS, NCWD Well #11, two SCWC wells, and one Valencia Water Company well in the Saugus Formation have been taken out of service due to Perchlorate pollution; and

WHEREAS, the Winter 2003 "Water Currents" newsletter published by Castaic Lake Water Agency states that the four closed Saugus Formation wells have a combined maximum production of 14,500 acre-feet per year; and

WHEREAS, the area impacted by the Perchlorate pollution in the Saugus Formation has not been characterized as of the date of this resolution; and

WHEREAS, a Remedial Action plan for cleanup of Perchlorate in local groundwater is not projected to be complete until August 2005 and certification of final cleanup is not expected until August 2010, according to the November 2003 schedule from the Department of Toxic Substances Control; and

Recycled Water

WHEREAS, Table 1-4 (Exhibit A attached) references recycled water supply amounts up to 17,000 acre-feet per year, but existing facilities only supply 1700 acre-feet per year and new facilities are not planned or budgeted in the NCWD area; and

WHEREAS, the UWMP 2000 states that the Saugus Water Reclamation Plant (WRP) cannot be expanded and both the Valencia WRP and the proposed Newhall Ranch WRP exist on the western edge of the CLWA service area, limiting the areas to which recycled water could be practically provided; and

WHEREAS, to serve the eastern portion of the Valley with reclaimed water, a new WRP would be required; and

WHEREAS, the technical and economic feasibility determination for the potential recycled water use in the CLWA service area has not yet been finalized; and

SWP Water

WHEREAS, the current maximum CLWA "Table A" entitlement to State Water Project (SWP) water is 95,200 acre-feet per year; and

WHEREAS, according to the 2002 State Water Delivery Reliability Report, 90% of the time deliveries can be at or above 30% of the full Table A amount, and 80% of the time deliveries can be at or above 50% of the Table A amount; and

WHEREAS, the reliability criteria established in Chapter 4.0 of UWMP 2000 states that "this criterion requires water supply to be sufficient to meet projected demands 90 percent of the time;" and

WHEREAS, that, as stated in *SCOPE v. County of Los Angeles and Newhall Land and Farming Company* (2003) 106 Cal. App. 4th 715,131 Cal. Rptr 2d 186, the State Water Project (SWP) "entitlements are based on a state water system that has not been completed" and "there is a vast difference between entitlements and the amount of water that SWP can actually deliver;" and

WHEREAS, SWP water deliveries could be interrupted in an emergency; and

Un-Finalized Water Sources

WHEREAS, Table 1-4 (Exhibit A attached) includes supply numbers for new wells in the Saugus Formation, water banking/conjunctive-use, water transfers, and desalination, yet no finalized, approved plans or budgets for these items exist in the CLWA or NCWD area; and

WHEREAS, many of these supplemental supply projects would require extensive infrastructure improvements; and

WHEREAS, California Water Code Division 6 Part 2.6 Chapter 1 (the Urban Water Management Planning Act) Section 10631(c) states that the preparer of an UWMP shall "for any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climactic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable" and the UWMP 2000 does not contain detailed information to that end for the projected, but not implemented, new Saugus wells, water banking/conjunctive-use, water transfers, desalination, and recycled water sources; and

WHEREAS, without specific perennial yield figures for the Saugus aquifer, new wells in the Saugus aquifer can not be assumed to provide additional water, but rather only additional pumping points for the same total bank of water from which the current Saugus wells draw.

NOW, THEREFORE, BE IT RESOLVED that, based on the foregoing recitals, the NCWD Board of Directors resolves and makes the following determinations, reserving to itself the right to make changes as new facts, data or studies justify in the opinion of NCWD Board of Directors; for planning purposes, NCWD no longer has confidence in the water supply and availability numbers in Table 1-4 (and identical tables) in the UWMP 2000;

FURTHER RESOLVED, that in response to any inquiry from cities, county, developers or the public generally NCWD will provide the water supply and availability statistics as presented in Exhibit B attached to this resolution.

FURTHER RESOLVED, that the supply from the alluvial aquifer will be based on the perennial yield of 31,600-32,600 acre feet/year as established in the 1986 Slade report. Because the perennial yield is a long-term average based on wet and dry years, no differentiation will be made between wet and dry year. Pending characterization, containment and/or remediation, the current supply will be reduced by the amount of Perchlorate contaminated water (700-1000 acre feet/year at current estimate.) The contaminated water will be counted as "unfinalized supply," with restoration of water supply counted incrementally as remediation to drinking water standards occurs and individual well production is restored with DHS and DTSC approval.

FURTHER RESOLVED, that any increase in pumping not offset by imported supplies or other factors will be supported only for short terms, unless future comprehensive groundwater studies clarify that longer term pumping that pushes averages above the perennial yield will not harm the aquifer.

FURTHER RESOLVED that the numbers over the perennial yield values for the Alluvial Aquifer will not be used for any planning purposes other than emergency planning or when necessary to meet short term demands of existing customers.

FURTHER RESOLVED, pending characterization, containment and/or remediation; that the current supply (7,500-15,000) from the Saugus Formation will be reduced by the amount of Perchlorate-contaminated water, which is currently estimated at between 4,000-14,500 acre-ft. The contaminated water will be counted as "unfinalized supply," with restoration of water supply counted incrementally as remediation to drinking water standards occurs and individual well production is restored with DHS and DTSC approval.

FURTHER RESOLVED, that new columns for "unfinalized additional supply" were added to the planning table in Exhibit B to differentiate between water that is available and water that is only in the conceptual planning stages. Unfinalized additional supply means that conceptual plans have been made, but no budget, approved capital project, or contractual construction or purchase deadline exists. These supplies may be constrained, limited, or voided by economic or legal issues. Water from the UWMP 2000 categories of "Saugus formation new wells," "recycled water," "water

banking/conjunctive use," "water transfers" and "desalination" have been moved to the unfinalized supply columns until they are finalized.

FURTHER RESOLVED, that potential water from new Saugus Formation wells will not be considered new "finalized supply" until it can be shown that the formation has a perennial yield above the total supply specified in Exhibit B for the existing Saugus wells (7,500-15,000 acre-ft/year.)

FURTHER RESOLVED, that until adequate assurances exist, water in the "unfinalized additional supply" column of Exhibit B will not be considered as available.

PASSED AND ADOPTED this ____day of _____, 2004, by the Board of Directors of the Newhall County Water District.

_____
Lynne Plambeck, President of the
Board of Directors of the
NEWHALL COUNTY WATER DISTRICT
ATTEST:

_____
Kenneth J. Petersen, General Manager
NEWHALL COUNTY WATER DISTRICT

Attach: Exhibit A
Exhibit B

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

I, KARIN J. RUSSELL, Secretary of the Newhall County Water District, DO HEREBY CERTIFY that the foregoing is a full, true and correct copy of Resolution No. 2004-3 of the Board of Directors of Newhall County Water District adopted at a Special Meeting held on _____, 2004 and that the same has not been amended or repealed.

_____
Karin J. Russell, Secretary,
NEWHALL COUNTY WATER DISTRICT

DATED: _____, 2004

Exhibit A

Table 1-4
Total Existing and Planned Supplies
(acre-feet per year)

Source	Average/Normal Year	Dry-year
Local Supplies		
Groundwater		
Alluvial Aquifer	30,000-40,000	30,000-35,000
Saugus Formation	7,500-15,000	11,000-15,000
Saugus Formation (new wells)*	--	10,000-20,000
Stormwater*	--	--
Recycled Water*	1,700-17,000	1,700-17,000
Imported Supplies		
SWP Supplies	56,800-95,200	37,900-75,800
Water Banking/conjunctive-use*	--	105,000
Water Transfers*	5,200-8,700	3,500-6,900
Desalination*	2,000-5,000	2,000-5,000
Total Supplies	**103,200-180,900**	**201,100-279,700**

*Planned programs for future implementation.

Source: UWMP 2000

Exhibit A to NCWD Resolution 2004-3
Inital: _____
Dated:_____

Exhibit B

Total Existing and Planned Supplies
(acre-feet per year unless noted)

	Current and Finalized Future Supply				Existing Backup Dry Year Supply[8]		Unfinalized Additional Supply[1]			
	Average/Normal Year		Dry Year[2]				Average/Normal Year		Dry Year[2]	
Source	**Range[9]**	**Average**	**Range[9]**	**Average**		*Source*	*Range[9]*	*Average*	*Range[9]*	*Average*
Local Supply						*Local Supply*				
Groundwater						*Groundwater*				
Alluvial Aquifer	**30,750-31,750[3]**	**31,250**	**30,750-31,750[3]**	**31,250**		*Alluvial Aquifer*	*700-1000[4]*	*850*	*700-1000[4]*	*850*
Saugus Formation	**0-5,750[5]**	**2,875**	**0-5,750[5]**	**2,875**		*Saugus Formation*	*4,000-14,500[4]*	*9,250*	*4,000-14,500[4]*	*9,250*
Saugus Formation (new wells)						*Saugus Formation (new wells)*	*10,000-20,000[6]*	*15,000*	*10,000-20,000[6]*	*15,000*
Stormwater						*Stormwater*				
Recycled Water *(NOT potable)*	**1,700**	**1,700**	**1,700**	**1,700**		*Recycled Water (NOT potable)*	*15,300*	*15,300*	*15,300*	*15,300*
Imported Supply						*Imported Supply*				
SWP	**28,560-47,600[7]**	**38,080**	**28,560-47,600[7]**	**38,080**		*SWP*	*0-57,120*	*28,560*	*0-57,120*	*28,560*
Water Banking/conjunctive use					21000 af	*Water Banking/conjunctive use*			*0-84,000*	*42,000*
Water Transfers						*Water Transfers*	*5,200-8,700*	*6,950*	*3,500-6,900*	*5,200*
Desalination						*Desalinization*	*2,000-5,000*	*3,500*	*2,000-5,000*	*3,500*
Total Supply		**73,905**		**73,905**	21000 acre-feet (total, not per year)	*Total Additional Supply incl. Non-Potable only if all Future Projects Approved and Built[9]*		*79,410*		*119,660*
Total Potable Supply		**72,205**		**72,205**	21000 acre-feet (total, not per year)	*Total Additional Potable Supply only if all Future Projects Approved and Built[9]*		*64,110*		*104,360*

Note: All numbers are from UWMP 2000 unless otherwise noted below.

[1]Unfinalized additional supply means that conceptual plans have been made, but no budget, approved capital project, or contractual construction or purchase deadline exists. These supplies may be constrained or limited by economic or legal issues.

[2]Dry Year means a short term period during drought. Supplies listed in these columns should be viewed as contingency planning only and are not considered sustainable on a long-term basis.

[3] Perennial yield (31,600-32,600 af/yr per Slade, 1986) less average of range of loss (850 af/yr) due to perchlorate contamination.

[4] Estimated amount currently lost to perchlorate contamination per 12/2003 CH2MHill presentation and Winter 2003 CLWA "Water Currents."

[5] UWMP 2000-stated supply (7,500-15,000 af/yr based on operational yield) less average of range of loss (9,250 af/yr) from perchlorate contamination.

[6] New Saugus wells will not yield additional water supply beyond the perennial yield of the formation, which has not been quantified.

[7] Per 2002 DWR Reliability Report, 90% of the time deliveries can be made at or above 30% of the full Table A amount, and 80% of the time deliveries can be at or above 50% of the Table A amount. The range in the current supply column reflects 80-90% reliability and in some cases water deliveries will be lower than what is shown. Our current full Table A amount is 95,200 af/yr. 95,200 af/yr minus the average of the "current supply" range (38,080) is shown as unfinalized additional supply. SWP deliveries vary annually.

[8] An additional one-time stored excess of 21,000 acre-ft/ currently exists in a water bank for dry year supply. <u>This amount is not to be counted when planning for future projects.</u> This amount may not reoccur in the future, and is required by court settlements to be provided to current users only. The UWMP 2000 estimated a total of 105,000 acre-feet potential exists for water banking. The remainder (105,000 minus 21,000) is listed in the unfinalized supply column on this table.

[9] Where ranges exist, the midpoint of the range was used for calculating totals.

Initial _____ Date:_____

NCWD

Proposed Resolution 2004-3

Summary & Issues

29 January, 2004

Why are we here?

"For the past three decades, California's population has severely outstripped the state's ability to store water." Maurice Roos, chief hydrologist for the California Department of Water Resources, claimed three years ago that the state lacked sufficient storage capacity to get through two consecutive dry years. Even with continuing conservation efforts and occasional wet Sierra Nevada Winters, experts agree that California will face chronic water shortages in the near future unless something changes." – LA Times, 1/25/04

Introduction

- Overview of Planning and Water
- NCWD's Mission
- Our Concern
- The Numbers
- What's Next

Planning and Water

- Water Districts inform planners how much water supply exists
- State rules (SB610 and SB 221) require planning for large projects be done with "real" water – not conceptual plans
  - Water supplies must be verified in the approval process
  - Water supplies must be available before construction starts
- Approval/denial of projects rests with Planning Agencies, not Water District
- Water District supplies water - if water is available

NCWD Mission Is To...

- Vigorously protect the water supplies of the District - and its customers - from contamination or degradation, including diminished supply,
- Inform the residents of our District about issues and plans which affect the District,
- Adopt strategies and plans to accommodate an expanded customer base, either through the expansion of District territory or the acceptance of new users within District territory,
- Keep other agencies apprised of the ability and plans of the District to accept growth,
- Conduct our business in an open, and honest, and ethical manner. (Above are relevant excerpts from longer mission statement posted online.)

Our Concern:
Real
or
Imaginary
Water?

What is "Real" Water?

- Water Code Section 10910 and Government Code 66473.7 (larger projects)
- Existing water supply...shall be demonstrated by...
  - Written contracts or other proof of entitlement
  - Copies of capital outlay program for financing
  - Permits for construction of infrastructure associated with delivering the water supply
  - Necessary regulatory approvals

Urban Water Management Plan 2000

Table 1-4
Total Existing and Planned Supplies
(acre-feet per year)

Source	Average/Normal Year	Dry-year
Local Supplies		
Groundwater		
Alluvial Aquifer	30,000-40,000	30,000-35,000
Saugus Formation	7,500-15,000	11,000-15,000
Saugus Formation (new wells)*	--	10,000-20,000
Stormwater*	--	--
Recycled Water*	1,700-17,000	1,700-17,000
Imported Supplies		
SWP Supplies	56,800-95,200	37,900-75,800
Water Banking/conjunctive-use*	--	105,000
Water Transfers*	5,200-8,700	3,500-6,900
Desalination*	2,000-5,000	2,000-5,000
Total Supplies	**103,200-180,900**	**201,100-279,700**

*Planned programs for future implementation.

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	Current and Finalized Future Supply			
	Average/Normal Year		Dry Year[2]	
Source	**Range[9]**	**Average**	**Range[9]**	**Average**
Local Supply				
Groundwater				
Alluvial Aquifer	**30,750-31,750 [3]**	**31,250**	**30,750-31,750 [3]**	**31,250**
Saugus Formation	**0-5,750 [5]**	**2,875**	**0-5,750 [5]**	**2,875**
Saugus Formation (new wells)				
Stormwater				
Recycled Water *(NOT potable)*	**1,700**	**1,700**	**1,700**	**1,700**
Imported Supply				
SWP	**28,560 [7]**	**28,560**	**28,560 [7]**	**28,560**
Water Banking/conjunctive use				
Water Transfers				
Desalination				
Total Supply [8]		**64,385**		**64,385**
Total Potable Supply [8]		**62,685**		**62,685**

- Current and finalized future supply

NCWD Resolution 2004-3

	Unfinalized Additional Supply [1]			
	Average/Normal Year		Dry Year [2]	
Source	Range [9]	Average	Range [9]	Average
Local Supply				
Groundwater				
Alluvial Aquifer	700-1000 [4]	850	700-1000 [4]	850
Saugus Formation	4,000-14,500 [4]	9,250	4,000-14,500 [4]	9,250
Saugus Formation (new wells)	10,000-20,000 [6]	15,000	10,000-20,000 [6]	15,000
Stormwater				
Recycled Water (NOT potable)	15,300	15,300	15,300	15,300
Imported Supply				
SWP	0-66,640	33,320	0-66,640	33,320
Water Banking/conjunctive use			0-84,000	42,000
Water Transfers	5,200-8,700	6,950	3,500-6,900	5,200
Desalinization	2,000-5,000	3,500	2,000-5,000	3,500
Total Additional Supply incl. Non-Potable only if all Future Projects Approved and Built [9]		84,170		124,420
Total Additional Potable Supply only if all Future Projects Approved and Built [9]		68,870		109,120

- Unfinalized additional supply

Alluvial Groundwater

- Alluvial Aquifer is groundwater in our "shallow" water table, just below ground
- Alluvial Groundwater is about half our current, available water supply (NCWD Exhibit B)
- NCWD Clarifications
  - Alluvial groundwater pumping changed to reflect perennial (safe, long-term average) yield
  - Perchlorate contaminated water not counted until after cleanup

Safe Pumping Levels

- Operational Yield Vs. Perennial Yield?
- Work to Date by Richard Slade, hydrologist
  - 1986 Report covered perennial yield
  - 2002 Report addressed operational yield

Perennial Yield

- 1986 Slade report definition:
  - "the quantity of groundwater" that "can be pumped annually without any change in groundwater levels or net change in groundwater in storage over the base period" (28 years)

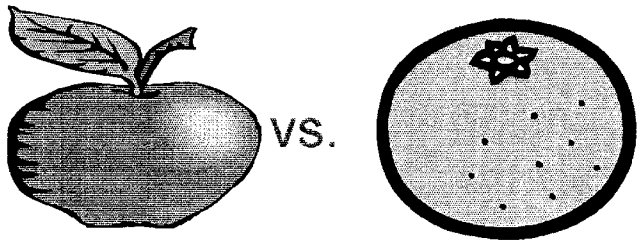
Operational Yield

- 2002 Slade Report definition:
  - "a fluctuating value of pumpage that may be above or below the perennial yield in any given year, and that varies as a function of the availability of other water supplies. The basic intent of the operational yield value is that it should not exceed the perennial yield of the groundwater basin over multi-year wet and dry cycles."

Operational Vs. Perennial Yield

- Operational Yield = actual pumping levels throughout history
  - 20,000 – 45,000 acre-feet per year
  - Still needs to average out to be perennial yield on long term basis, per Slade's 2002 Report
- Perennial Yield = sustainable, long term average that should be maintained

  -31,600-32,600 acre-feet per year per 1986 Slade Report



Future Studies Coming

- New groundwater model under development
  - NCWD to be more involved to ensure end results include "safe" pumping levels for long term
- For now, best safe long-term average is perennial yield

Water Lost to Perchlorate

Groundwater Modeling Analysis
Upper Santa Clara River Basin

Restoring Impacted Water Supplies
Near Whittaker-Bermite

December 10, 2003

presented by

John Porcello/CH2M HILL

→

Restoring lost water supplies

- Saugus: 4,000 AF/yr
- Alluvium: 700-1,000 AF/yr

Perchlorate Treatment Schedule

- Extent of contamination not yet determined
- Per November 2003 DTSC timetable
  - Expect Remedial Action (Cleanup) Plan in August 2005
  - Expect final cleanup in August 2010
- Schedule will vary as study work continues and agencies review and decide on actions they will approve

Alluvial Groundwater Summary

- UWMP
  - Pumping of 30,000-40,0000 acre-feet per year based on operational yield
  - Does not point out necessary qualifier that pumping needs to average out to perennial yield on long term basis
  - Does not account for perchlorate
- NCWD will clarify the following
  - Pumping long term goal is perennial yield (31,600-32,600)
  - Subtract out perchlorate contamination
  - Perchlorate contaminated water will be "counted" as wells brought back on line

Saugus Formation Groundwater

- Groundwater in the Saugus Formation is our "deep" water table. It is located below and is mostly separate from the Alluvial groundwater
- Saugus Groundwater is about 5 % of our current, available water supply (NCWD Exhibit B)
- NCWD Clarifications
  - Perchlorate contaminated water not counted until after cleanup

Water Lost to Perchlorate

Groundwater Modeling Analysis
Upper Santa Clara River Basin

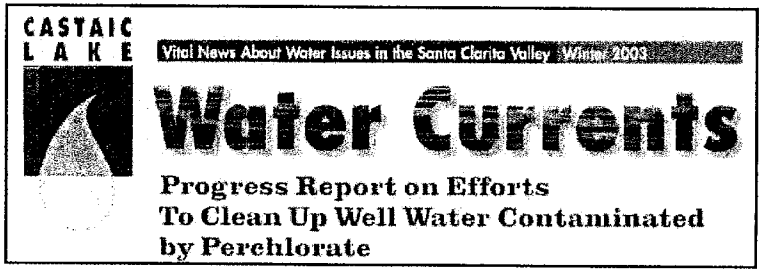
Restoring Impacted Water Supplies
Near Whittaker-Bermite

December 10, 2003

presented by

John Porcello/CH2M HILL

→ Restoring lost water supplies
- Saugus: 4,000 AF/yr
- Alluvium: 700-1,000 AF/yr


CASTAIC LAKE

Vital News About Water Issues in the Santa Clarita Valley Winter 2003

Water Currents

Progress Report on Efforts To Clean Up Well Water Contaminated by Perchlorate

→ "The four affected Saugus Aquifer wells have a combined capacity of 9000 gallons per minute or about 14,500 acre-feet a year."

Saugus Groundwater Summary

- UWMP
  - Pumping of 7,500-15,000 acre-feet per year based on operational yield
  - No perennial yield numbers available
- NCWD will clarify the following
  - Subtract out perchlorate contamination
  - Perchlorate contaminated water will be "counted" as wells brought back on line
- Additional note
  - Hopeful that new studies will verify total pumping that can be done safely in the Saugus aquifer (possible increase)

State Water Project Water

- Water coming from Northern California in Aqueduct/Pipes
- State Water Project (SWP) water is about 44 % of our current, available water supply (NCWD Exhibit B)
- NCWD Clarifications
  - SWP water supply is highly variable
  - In some areas, SWP water is sole supply, so taking risks is a gamble

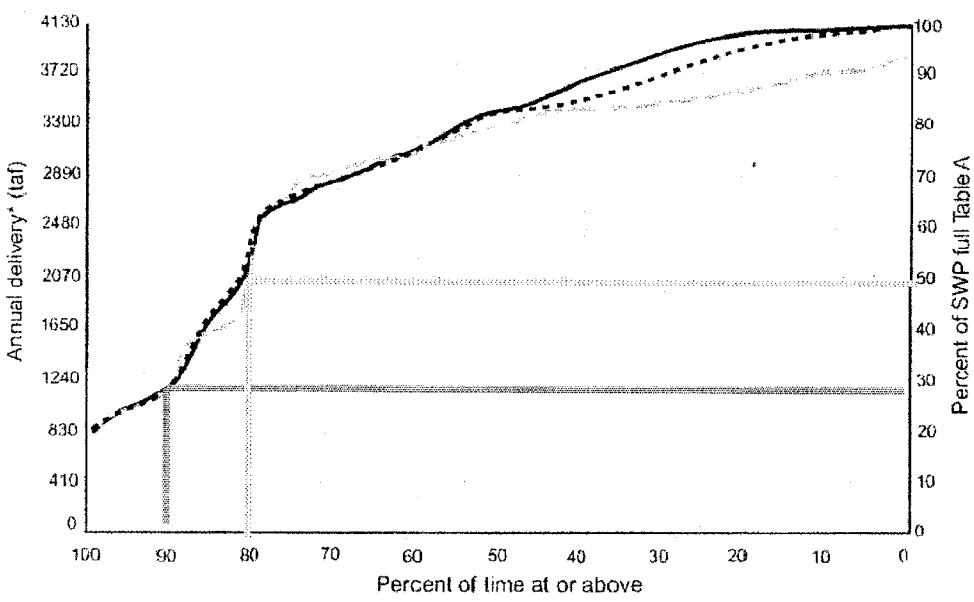
State Water Allocations

- "Table A" or "Maximum Allocation"
- Used to decide who gets what share of the water
  - Percentage of total water in State
  - Same percentage is amount we contribute to paying for system
- What we could get under optimum conditions
  - If all users of SWP water ask for their "maximum allocation" no one will be able to get it
  - System not currently able to deliver total amount of water allocated to everyone
  - Weather conditions and demand limits supply

Our Current Allocation

- Current Allocation is 95,200 acre-feet per year
- We have NEVER gotten 95,200 acre-feet per year
- In the last reporting year we got 64,771 acre-feet
  - 24,000 sent to water bank. After allowances made, this results in a one-time lump sum of 21,000 acre-feet of water limited to use for CURRENT residents only
  - Remaining 40,000+ acre-feet were used

State Water Reliability

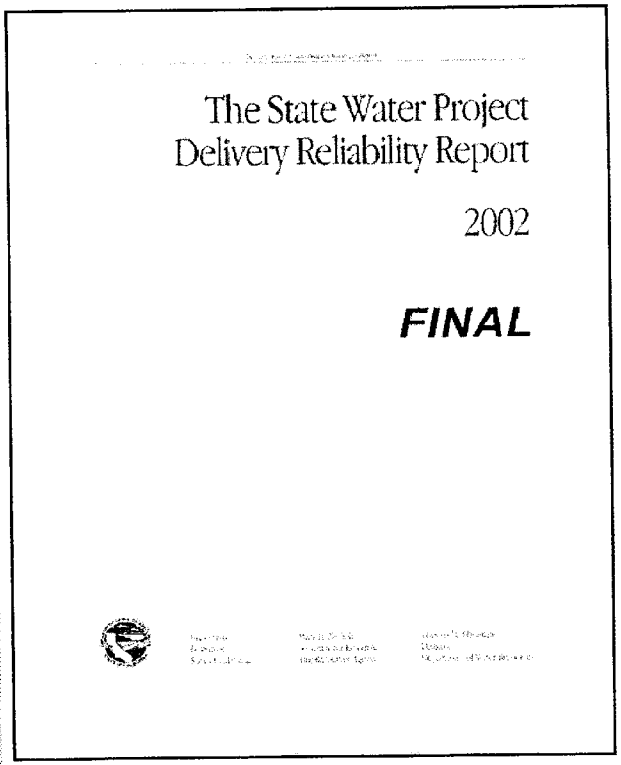


* Annual delivery rounded to nearest 10,000 acre-feet

Figure 1—SWP Delta delivery probability (Table A)

- 90 % of the time we can expect to be at or above 30% of our State allotment
- 80% of the time we can expect to be at or above 50% of our allotment

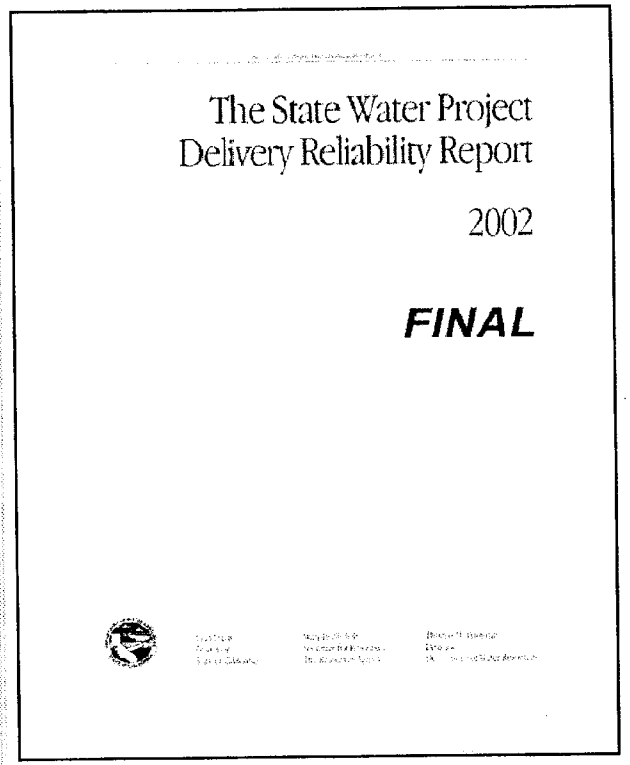
Past State Water Deliveries Can't Predict Future



Past Deliveries Cannot Accurately Predict Future Deliveries

It is worthwhile to note that actual, historical water deliveries cannot be used with a significant degree of certainty to predict what water deliveries will be. As discussed earlier, there are continual, significant changes over time in the determinants of water delivery: changes in water storage and delivery facilities, in water use by others, in water demand, and in the regulatory constraints on the use of facilities for the delivery of water. Given the very significant historical changes that have occurred, past deliveries are not necessarily good predictors of current deliveries, much less of future deliveries.

Allocation isn't a Guarantee


The State Water Project
Delivery Reliability Report

2002

FINAL

The amounts listed in Table A cannot be viewed as an indication of the SWP water delivery reliability, nor should these amounts be used to support an expectation that a certain amount of water will be delivered to a contractor in any particular time span. Table A is simply a tool for apportioning available supply and cost obligations under the contract.

Interruptions Cripple SWP Supply

- Earthquake or other actions could cause breaks in pipelines
- Droughts can reduce supply to below even 30%
  - In 1991, we got less than 30% of our allocation at the time
- SWP water is not steady state – may be cut off for parts of a year

Legal Actions Confirm Problems

- as stated in 2003 decision 106 Cal.App. 4th 715,131 Cal.Rptr 2d 186, the State Water Project (SWP) "entitlements are based on a state water system that has not been completed. There is a vast difference between entitlements and the amount of water that SWP can actually deliver"

Choices in Reliability Planning

- UWMP uses reliability of "90% of time"
- Some other NCWD reports use reliability of "80% of the time" which predicts a minimum of 50% of our supply (47,600 acre-feet/year)
- If less reliable water is counted on, be warned that we will need tough rationing and conservation in droughts or emergencies

State Water Project Summary

- UWMP
  - Lists range of 37,900-95,200 acre-feet per year (varies in wet and dry years)
  - This is 40-100% of our maximum
- NCWD will clarify the following
  - Use numbers predicted by 2002 State Reliability Report
  - The minimum expected 90% of the time is 28,560 acre-feet per year
  - Draft resolution matches UWMP reliability criteria of "90% of time"

Recycled Water

- Recycled Water is water treated in Wastewater Treatment Plants.
- Treated water is usually clean enough for landscaping and other purposes, but cannot be used to drink. It is "non-potable" water.
- Recycled Water less than 3% of our current, available water supply (NCWD Exhibit B)
- NCWD Clarifications
  - No projects underway to increase supply

Recycled Water Summary

- UWMP
  - Table lists range of 1,700-17,000 acre-feet per year
  - Has note indicating "future implementation"
- NCWD will clarify the following
  - Current supply is 1,700 acre-feet per year
  - Increasing supply will require large budget and long-term planning
    - New or upgraded facilities
    - Extensive delivery system since can't mix with other water in current pipes
    - Likely not feasible in all areas, particularly on east side of valley
  - Supply will be counted as "finalized" when projects underway

Water Banking/Conjunctive Use

- Water Banking relates to contracts to "store" water for use when other supplies run low
- Currently we have one-time (not annual) bank amount of 21,000 acre feet for current users (not for new projects)
- Water Banking is 0% of our recurring annual supply (NCWD Exhibit B)
- NCWD Clarifications
  - Exhibit B and UWMP table is supposed to indicate "acre-feet per year"
  - Current bank is one-time, not annual
  - No projects underway to increase supply

Water Banking Summary

- UWMP
  - Table lists total of 105,000 acre-feet per year as dry year supply
  - Has note indicating "future implementation"
- NCWD will clarify the following
  - Current supply is one-time lump sum of 21,000 acre-feet per year
    - For current users only
    - Not for planning purposes
    - Not an "annual" amount
- Future banking will depend on many factors so is "unfinalized"
  - Arrangement/location to "store" water
  - Availability of "extra" water
  - Legal and environmental clearances

Water Transfers

- Water Transfers are deals to trade or buy other water
- Currently we have no water transfers finalized
- Water Transfers are 0% of our current annual supply (NCWD Exhibit B)
- NCWD Clarifications
  - No transfers underway

Water Transfer Summary

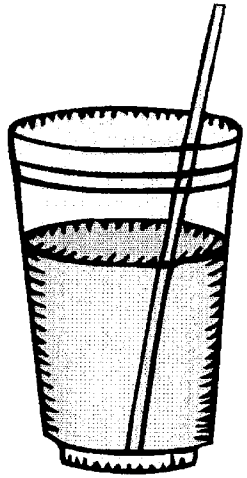
- UWMP
  - Table lists range of 3,500-8,700 acre-feet per year from water transfers, varying with wet and dry years
  - Has note indicating "future implementation"
- NCWD will clarify the following
  - No current transfers exist
  - Future transfers will depend on many factors so supply is "unfinalized"
    - Will not necessarily recur from year to year
    - Legal and environmental clearances

New Saugus Wells

- Concept is that more wells can be put into Saugus Formation
- New Saugus wells are 0% of our current annual supply (NCWD Exhibit B)
- NCWD Clarifications
  - No project underway
  - Unclear if more wells mean more water

New Saugus Well Summary

- UWMP
  - Table lists range of 10,000-20,000 acre-feet per year in dry years
  - Has note indicating "future implementation"
- NCWD will clarify the following
  - No project underway
  - Costly, requires new piping too
  - New wells aren't necessarily more water –
    - More straws in same milkshake
    - Total supply from Saugus not fully studied



Desalination

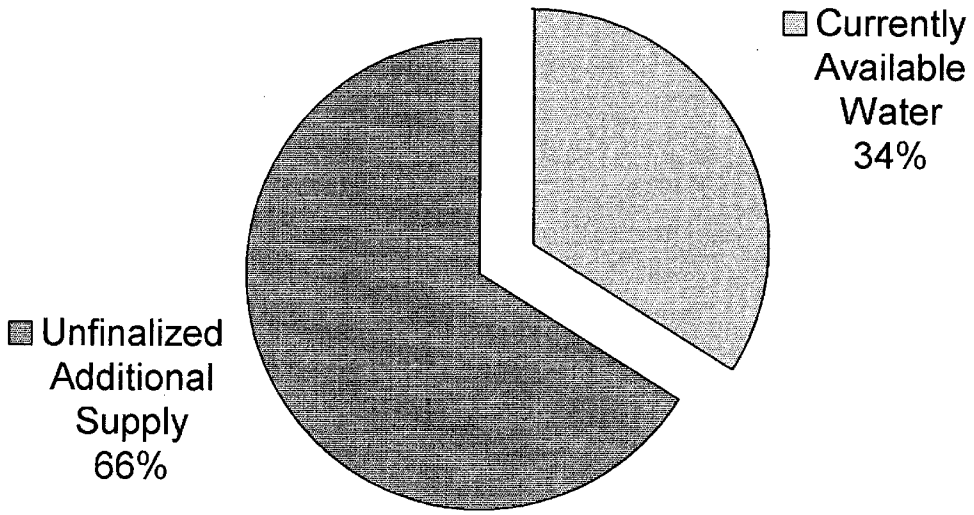
- Desalination will likely entail a deal to participate in building a desalination plant in a coastal community in trade for us getting part of their other water (such as State water)
- Desalination is 0% of our current annual supply (NCWD Exhibit B)
- NCWD Clarifications
  - No project budgeted, planned, or underway

Desalination Summary

- UWMP
  - Table lists range of 2,000-5,000 acre-feet per year from desalination
  - Has note indicating "future implementation"
- NCWD will clarify the following
  - No project is underway
  - Future project will depend on many factors so is "unfinalized"
    - Costly, unproven technology
      - Santa Barbara plant had troubles
    - Legal and environmental clearances

NCWD Summary of Current Supply

Current Vs. Unfinalized Water



Note: Percentages are approximations based on averages from NCWD Resolution Exhibit B

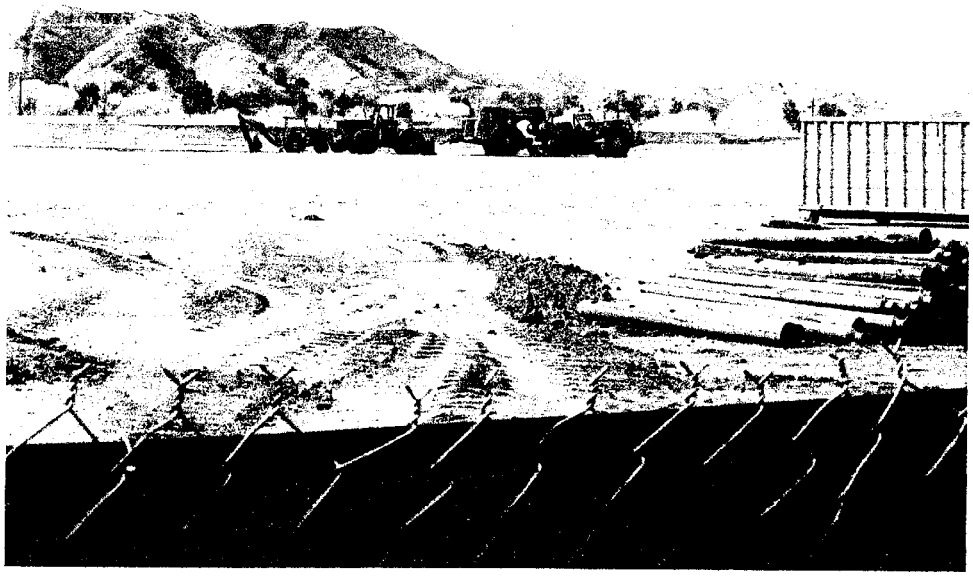
What's Next?

- Numbers to be provided to planners and the public
- Implementation plans to be developed
  - Potentially includes better conservation measures so growth can be accommodated with less demand on water system
  - Schools will be served no matter what, based on legislation/laws
- Water in "Current Supply" columns will increase as justified by new data, new finalized supply, and ongoing perchlorate cleanup
- Note that "new" sources of water likely will cost more

We WON'T Gamble with Our Customer's Water Supply!

New flood control channel installed as part of NLF/Lennar bank stabilization, west of bowling alley along Soledad. 3/1/04.

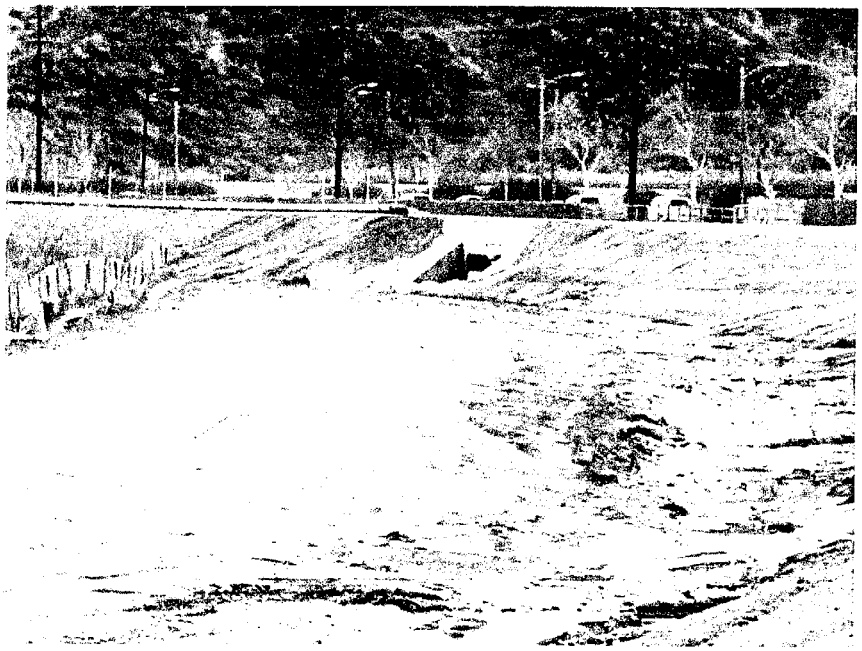
Lennar/NLF bank stabilization project west of bowling alley. 3/1/04.



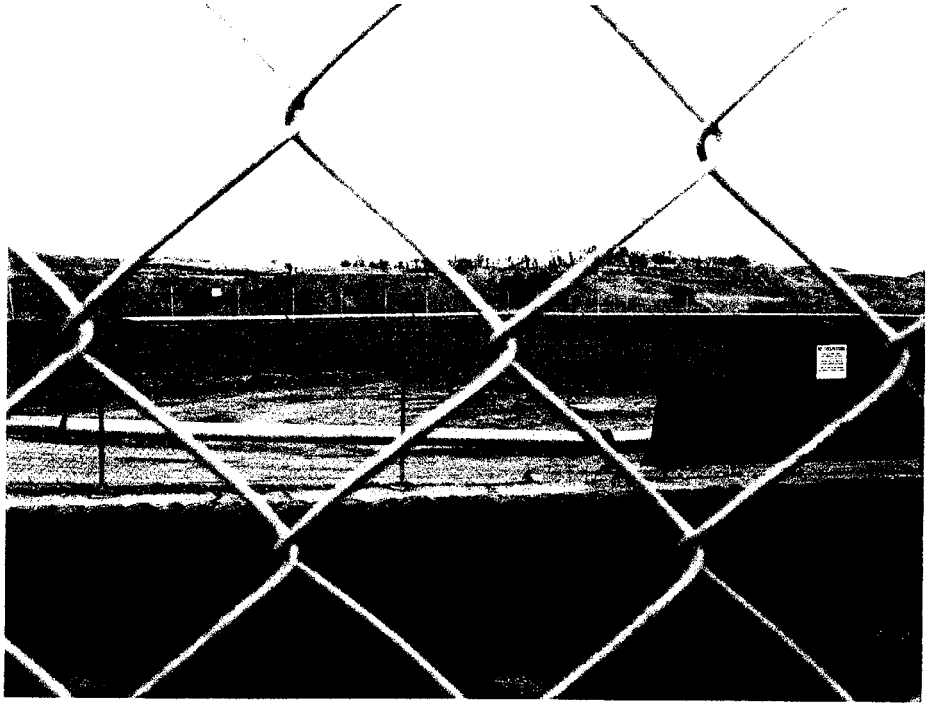
This huge area was natural river/floodplain, just west of bowling alley along Soledad. 3/1/04.

Bank stabilization near bowling alley, along Soledad. Lennar/NLF 3/1/04.

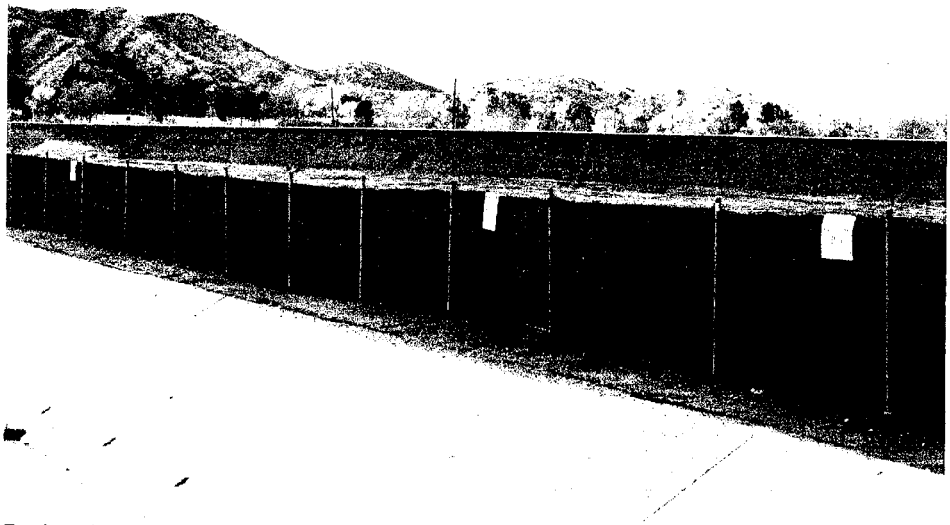
This area was floodplain/riverbed BELOW street level before grading began. Note roof of pickup truck barely visible on street. Estimate height 5-10 feet above street level, 15-20 feet above original natural height?



New culvert and banking west of stabilization area along Soledad. Note elevation of natural riverbed to left, in comparison to street level and in comparison to height of new pad installed to east. 3/1/04.



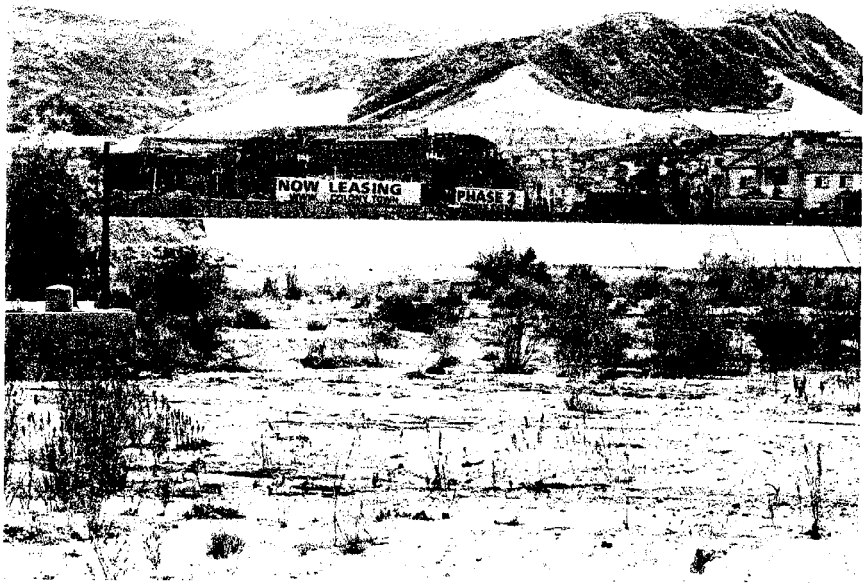
Bank stabilization near bowling alley, along Soledad. Lennar/NLF 3/1/04.



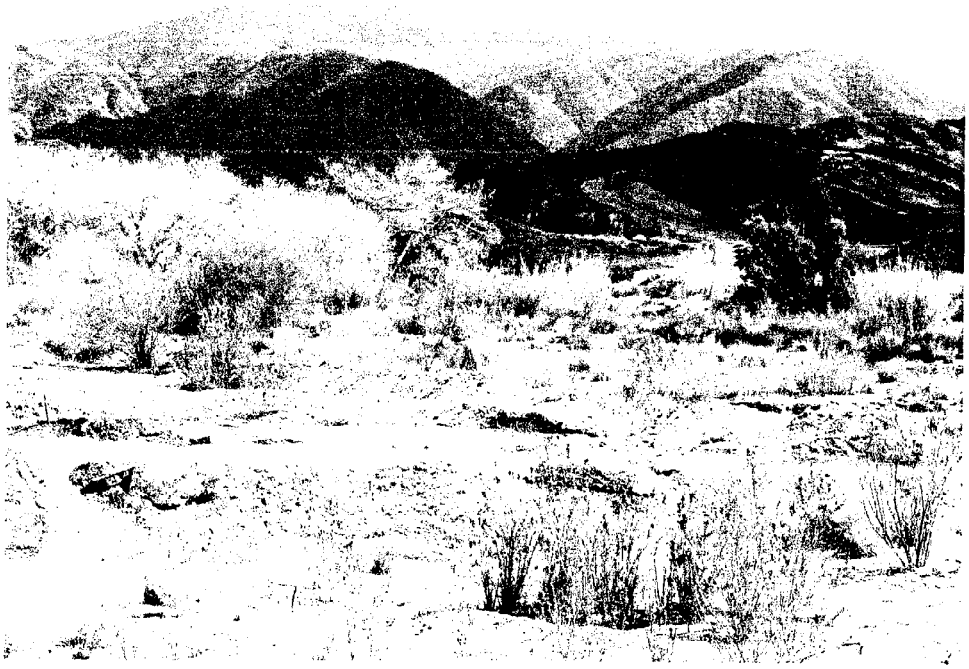
Bank stabilization near bowling alley, along Soledad. Lennar/NLF 3/1/04.

Natural river along Soledad Canyon Rd. 3/1/04

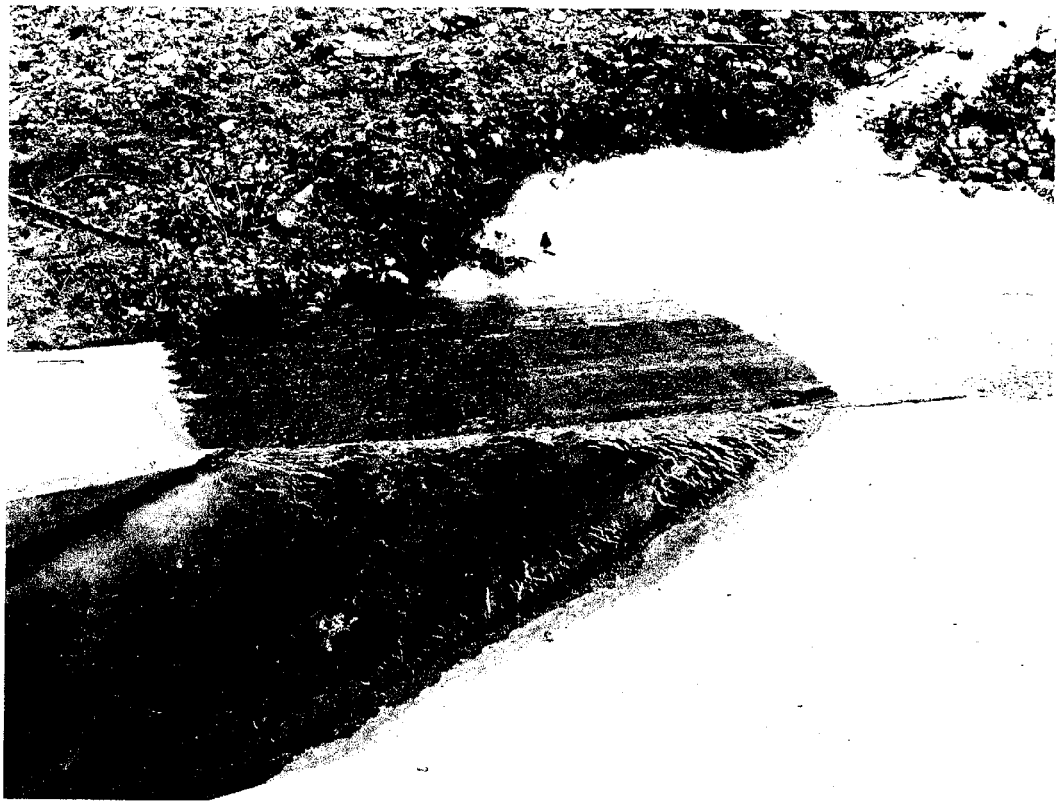
Pony fields N. of Valencia Blvd. 3/1/04. Bank stabilization?? excavation 10-20 feet east of river bank. NLF/Lennar.



Homes built on bank stabilized pads in riverbed east of 14 freeway near btwn Via Princessa and Lost Canyon, as viewed from bike path under 14 freeway.



Natural River north of "Colony Town" east of 14 freeway, along bike path, south of Lost Canyon.



Contamination from condo complex entering river at drain outfall at Nugget Drive off Soledad Canyon Road, east of Sierra Highway. 3/1/04. Reported to City Environmental Services. Resolution unknown.

PO BOX 004
TRENTON, NJ 08625

Contact: Micah Rasmussen
609-777-2600

RELEASE: January 05, 2004

Previous Screen

Share your thought with the Governor

Send to a friend

Governor McGreevey Announces Most Comprehensive Water Protections in the Nation

300-foot buffer will apply to more than 6,000 miles of waterways

(CLOSTER)— In his strongest move to date to protect New Jersey's drinking water and to stop sprawl, Governor James E. McGreevey today announced the formal adoption of two sets of stormwater rules that protect water quality and preserve the integrity of drinking water supplies statewide.

The rules will minimize the impact hundreds of new development projects, encouraging recharge of rainwater into the ground and controlling development within a 300-foot buffer around more than 6,000 miles of high quality waterways.

"As we stand here today, special interests are asking the courts to overturn our previous actions to protect drinking water and open space. Our actions today demonstrate that we will not back down—our efforts to protect drinking water will only get stronger, not weaker.

"These stormwater rules are the most comprehensive set of water protections in the nation—no other state has required statewide 300-foot buffers around its high quality waters. They will prove to be a critical tool in our fight against sprawl."

Standing near the banks of the Anderson Brook, one of the tributaries of the Oradell Reservoir, the Governor used today's event to highlight a local development project that will have to be extensively redesigned as a result of the stormwater rules in order to prevent the degradation of this tributary to an important drinking water resource. Joining him at the announcement were Department of Environmental Protection (DEP) Commissioner Bradley M. Campbell, Closter Mayor Fred Pitofsky, Rivervale Mayor George Paschalis, and local and statewide environmental advocates.

National and state environmental leaders have hailed New Jersey's new stormwater rules as among the most comprehensive and most protective of any state's rules. While at least six

other states provide for protective buffers and groundwater recharge in certain areas, no other state calls for a 300-foot buffer around all of its C1 waterbodies and no net loss of recharge into underground aquifers.

"This is the most important and significant action taken yet to protect New Jersey's water since the passage of the Freshwater Wetlands Act in 1988," said Jeff Tittel, Executive Director of the New Jersey Chapter of the Sierra Club. "These stormwater rules prove that Governor McGreevey is a national leader in protecting water quality and stopping sprawl. This is a huge victory for our environment."

"With these rules, Governor McGreevey has taken the single, largest step of any state in the nation to protect drinking water, the environment and future generations," said Maya von Rossum, the Delaware River Keeper. "He has set the standard for the rest of the nation to follow. I can think of no better way to bring in the New Year than with these new protections."

The first set of adopted rules updates the state's Stormwater Management Rules for the first time since their original adoption in 1983. The rules provide the basis for municipalities to develop stormwater management plans and also will affect requirements of several state-issued permits such as freshwater wetlands and stream encroachment permits.

The second set of adopted stormwater rules requires municipalities, large public complexes such as hospitals, and highway systems to develop stormwater management programs through the New Jersey Pollutant Discharge Elimination System (NJPDES) permit program. The new NJDPES permits address requirements of the federally mandated Environmental Protection Agency (EPA) Phase II stormwater rules published in December 1999.

One of the most significant provisions of the new rules is the requirement of a 300-foot buffer minimizing new development to protect Category One (C1) waterbodies. C1 protection is the highest form of water quality protection in the state, preventing any measurable deterioration in the existing water quality. The buffers will significantly protect critical drinking water and sensitive ecological resources from degradation by additional pollutants.

The rules provide for some flexibility on the size of the buffers in areas where stormwater management plans have been approved and for minor disturbances around existing development within the 300-foot buffer. The rules also apply the buffer to tributaries of C1 waterbodies within the immediate watershed boundary that are not themselves designated C1 waterbodies.

In total, the buffers will impact 6,093 stream miles – including the 3,307 miles of currently designated C1 rivers and streams and an additional 2,786 miles of non-C1 tributaries to C1 streams.

Since taking office, Governor McGreevey has made C1 protection of important drinking water resources one of his top environmental priorities. Last Earth Day, he designated nine reservoirs totaling more than 7,000 acres and serving over 3.5 million residents as C1 waterbodies. He has also proposed an additional 500 miles of ecologically sensitive streams and rivers for C1 designation.

The Stormwater Management Rules also stress performance standards for ground water

recharge to increase the integrity of the state's aquifers. They establish a goal of maintaining 100 percent of the average annual groundwater recharge for new development projects, a major initiative toward mitigating future droughts and flooding.

In addition to recharge standards, the regulations also stress water quality controls, such as best management practices to reduce runoff of total suspended solids (TSS) by 80 percent and other pollutants up to the maximum extent feasible. The rules promote smart growth techniques, stressing low impact site designs for stormwater management systems that maintain natural vegetation and drainage and reduce clear-cutting and the unnecessary loss of trees. Many of the rules are waived and streamlined in urban areas, however, promoting urban redevelopment while still protecting the environment.

"Some studies estimate that more than half of existing surface water pollution in the state is attributable to non-point source pollution and stormwater runoff," said Commissioner Campbell. "By enacting these rules, Governor McGreevey has kept his promise to take a firm stand against sprawl, calling for common sense strategies to ensure that pollution from development and from everyday litter does not poison our water supplies."

The DEP will issue the new NJDPES permits required by the second set of stormwater rules for all municipalities; large public complexes such as colleges, prisons, and hospitals; and highway systems operated by counties and other government agencies, such as the NJ Department of Transportation and the South Jersey Transportation Authority. All permittees will be required to develop and to adopt stormwater management programs for new development.

In addition, permittees will have to develop public education programs and waste disposal controls for existing developed areas. These regulations affecting existing development address a significant oversight in current regulations that only focus on new development.

One of the most important focuses of this set of stormwater rules is its emphasis on public education. Few people realize the impact of everyday litter on their sources of drinking water. By promoting public awareness campaigns, these rules will help citizens realize that every person plays a critical role in keeping our drinking water safe and clean.

The programs will emphasize common sense steps toward reducing non-point source pollution, such as discouraging unnecessary applications of pesticides, requiring proper disposal of yard and pet waste, retrofitting of storm sewer grates and improving municipal maintenance yard management.

The state developed both sets of stormwater control measures with significant input from regulated communities, including the New Jersey League of Municipalities, the New Jersey County Planners Association, and the Association of New Jersey Environmental Commissions. Developers, mayors, and environmental groups were also heavily consulted in the rulemaking process.

Both sets of rules were originally proposed on January 6, 2003 and were subject to an extensive public comment period. The adopted rules will appear in the February 2, 2004 *New Jersey Register*.

california water impact network

Via facsimile
Jeff Hogan, Associate Planner
Planning and Building Services Department
City of Santa Clarita
23920 Valencia Blvd.
Santa Clarita, CA 91355

May 4, 2004

RE: The River Park Project, Project No. 02-175

Dear Mr. Hogan:

The California Water Impact Network (C-WIN) objects to the proposed River Park Project relying on a contested transfer of 41,000 acre feet (AF) of SWP allocation from the Kern County Water Agency to the Castaic Lake Water Agency (CLWA) as a reliable source of water supply for the proposed River Valley Project. The Draft EIR's assessment of water services and water supply reliability (section 4.8 and appendix 4.8) is not accurate. The analysis is inappropriately relying on the permanence of a non-final and highly contested transfer of 41,000 acre feet of SWP water from the Kern County Water Agency. This 41,000 acre foot transfer continues to be clouded by ongoing litigation and its very validity is one of the subjects of the forthcoming and very complex EIR known as "Monterey Plus", to be prepared by the state Department of Water Resources. 1

C-WIN is currently a plaintiff in several cases against CLWA opposing proposed transfers that depend on the 41,000 AF transfer mentioned above. Any transfer that is dependent on a water source that is not free and clear is not reliable. C-WIN hereby incorporates our January 1, 2004 objection letter to the CLWA on the Negative Declaration for a proposed 35,000 AF transfer for a Groundwater Banking Project that depends on this same 41,000 AF transfer and the C-WIN February 3, 2004 objection letter to the LA County Regional Planning Department on the proposed West Creek Project #98-008 that depends on this same 41,000 AF transfer. We also incorporate our February 26, 2004 objection letter to the County of Los Angeles Regional Planning Department regarding the proposed River Valley Project No.00-196 that also relies on this 41,000 acre foot transfer. 2 3

The River Park Project, along with many other developments in California, is dependent on the analysis by DWR and its State Water Project Delivery Reliability Report, Final 2002. This Reliability Report has been seriously criticized for overstating actual available supply, questionable modeling and simulations, and lack of proper peer review. C-WIN hereby incorporates this Final Report, including all of the published comment letters in Appendix E. Please make a special note of those letters submitted by Senator Michael Machado, Robert Wilkinson, Arve Sjovold, Joan Wells, Dr. Peter Gleick and myself. 4

C-WIN also incorporates "A Strategic Review of CALSIM II and its Use for Water Planning, Management, and Operations in Central California" submitted by the California Bay Delta Authority Science Program Association of Bay Governments, December 4, 2003. This 5

document raises significant questions as to the reliability of DWR's Delivery Reliability Report. 5

Please reject the proposed River Park Project consisting of 1,183 residential units on the grounds that the proposed water supply is inadequate and unsubstantiated at this time. 6

Please send me any relevant documents that may come out in the future regarding this project. 7

C-WIN hereby incorporates all other comments by reference opposing the Draft EIR on the proposed River Park Project. 8

Sincerely,

Carolee K. Krieger

Carolee K. Krieger
President, C-WIN
808 Romero Canyon Road
Santa Barbara, CA 93108
PH: (805) 969-0824

Letter No. 24

ROSSMANN AND MOORE, LLP

Attorneys at Law

380 HAYES STREET, SUITE ONE
SAN FRANCISCO, CALIFORNIA 94102 USA
TEL (01)(415) 861-1401 FAX (01)(415) 861-1822
www.landwater.com

ANTONIO ROSSMANN
ADMITTED IN CALIFORNIA
NEW YORK AND
THE DISTRICT OF COLUMBIA
ar@landwater.com

ROGER B. MOORE
ADMITTED IN CALIFORNIA
rbm@landwater.com

May 4, 2004

Via facsimile
Jeff Hogan, Associate Planner
Planning and Building Services Department
City of Santa Clarita
23920 Vancia Blvd.
Santa Clarita, CA 91355

Re: Draft Environmental Impact Report for Riverpark Project, #02-175

Dear Mr. Hogan:

This letter provides comments on the above-referencedproject on behalfof the Planning and Conservation League (PCL) and the Citizens Planning Association of Santa Barbara County (CPA). PCL and CPA were two of the plaintiffs whose CEQA challenge resulted in the court-ordered decertification of the original 1995 Monterey Agreement EIR (*Planning and Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892 ("*PCL* decision"). PCL and CPA are also signatories to a court-approved settlement agreement subsequently reached with the Department of Water Resources (DWR), state water contractors, and other interested parties, including the Castaic Lake Water Agency (Castaic). Under this agreement, DWR is preparing a comprehensive statewide environmental review of a revised project designated as "Monterey Plus." (A full copy of that agreement, referred to here as the *PCL* settlement, is posted on the website of the Department of Water Resources at http://www.montereyamendments.water.ca.gov/ and is referenced in appendix 4.8 of the Draft EIR.) 1

The Draft EIR's assessment of water services and water supply reliability (section 4.8 and appendix 4.8) is fatally defective, failing to honor the *PCL* decision and its subsequent settlement agreement. Most glaringly, the analysis in the Draft EIR mistakenly relies upon the permanence of the non-final and highly contested transfer of 41,000 acre-feet of State Water Project Table A Amounts (previously known as "entitlements") from the Kern County Water Agency and one of 2

its member districts to Castaic , despite the absence of a legally adequate EIR supporting either the Monterey Amendments or the transfer based upon article 53 of those amendments. Even worse, the Draft EIR presupposes the finality of that Kern-Castaic transfer in defiance of the contrary understanding in the *PCL* settlement agreement, which excludes it from the list of "final" transfers and requires DWR to conduct a statewide assessment of precisely the same transfer in its pending "Monterey Plus" EIR. The SWP allocation attributed to Castaic in the Draft EIR's analysis of water service expressly presupposes that this transfer can be construed as permanent, and relied upon as a source of deliverable water for the project. (See, e.g., DEIR at pp. 4.8-18, 61, 64 and table 4.8-64.) The 41,00 acre-feet from the contested Kern-Castaic transfer constitutes more than 40 percent of Castaic's permanent Table A amount assumed in the Draft EIR's water reliability calculations. (*Id.* at pp. 64.)

The relevance of the *PCL* decision and subsequent settlement to assessment of the present project is therefore direct and inescapable. In *PCL,* the Third District Court of Appeal found that the Central Coast Water Authority's 1995 EIR "failed to meet the most important purpose of CEQA, to fully inform the decision makers and the public of the environmental impacts of the choices before them." (83 Cal.App.4th at 920.) CCWA improperly served as lead agency in place of DWR and prejudicially failed to analyze the enforcement of the pre-Monterey permanent shortage provision, article 18(b), prior to its elimination from the State Water Project contracts. The appellate court found it unnecessary to adjudicate the other CEQA deficiencies identified by the Monterey plaintiffs, observing that "DWR, with its expertise on the statewide impacts of water transfers, may choose to address those issues in a completely different and more comprehensive manner." (*Id.*)

In *Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.4th 1373, the Second District Court of Appeal ordered the decertification of Castaic's EIR supporting the proposed Kern-Castaic transfer. The appellate court found that Castaic's EIR violated CEQA by "tiering" from the invalidated Monterey EIR. The court also relied upon the "lead agency" analysis in the *PCL* decision, emphasizing "the importance of the statewide perspective in analyzing the implications of water entitlement transfers for the state and SWP as a whole." (*Id.* at 1384.).

Unfortunately, the Draft EIR simply repeats Castaic's self-serving efforts to portray the 41,000 acre-feet Kern-Castaic transfer as final, rather than subjecting them to the critical scrutiny they deserve. While the Draft EIR concedes that the 41,000 acre-feet transfer, as well as the Monterey Amendments themselves, may still be invalidated (page 4.8-62), it relies on glaring misstatements to perpetuate its imprudent reliance on that transfer.

First, the notion that the *PCL* settlement agreement somehow recognizes the transfer as a *fait accompli* (cf. DEIR, p. 4.8-56) is false and misleading. That *PCL* settlement agreement conspicuously excludes the 41,000-acre Kern/ Castaic transfer from the list that the signatories, including Kern and Castaic, recognize as "final." (*PCL* settlement, §III.D and Attachment E.) The contested Kern-Castaic transfer, and other newly proposed and non-final transfers, cannot proceed

without new environmental analysis satisfying CEQA. (PCL settlement, §VII.A.) Recognizing that this transfer remains subject to pending litigation and potential invalidation in the Los Angeles Superior Court, a circumstance which remains the case today, the *PCL* settlement also requires the new "Monterey Plus" EIR to analyze the 41,000 acre-feet transfer, as well as other transfers facilitated by Monterey Amendments provisions, such as other agriculture-to-urban transfers referenced in Article 53 of those amendments. (*PCL* settlement, § II.C.4.) Reliance on this contested transfer, without the benefit of DWR's statewide "Monterey Plus" EIR, would mirror the "provincial experience" criticized in the *PCL* decision. (83 Cal. App. 3d at p. 918.) That reliance would also create a substantial risk of final decisions based on local analysis that is likely to prove inconsistent with the project decision reached after DWR's "Monterey Plus" EIR. 7 8

Second, CLWA's suggestion, repeated in the EIR, that the Monterey Agreement somehow provides "blanket pre-approval" for this and other Monterey-dependent transfers (*id.* at 4.0-64) also deserves rejection in the strongest possible terms. It cannot be reconciled with the *PCL* decision, which required DWR's forthcoming project decision to be based upon its entirely new statewide EIR. (*PCL*, 83 Cal.App.4th at p. 920.) Nor can it be reconciled with the *PCL* settlement, which authorizes only the interim application of Monterey in tandem with new settlement components, while leaving to DWR the responsibility to make a new project decision following comprehensive statewide review. (*PCL* settlement, §§II, VII.) The Draft EIR's speculation that the transfer is unlikely to be "unwound" (page 4.8-63) cannot be reconciled with the *PCL* decision and settlement agreement. 9

Third, the Draft EIR is equally specious in its assertion that this Monterey-dependent transfer could proceed under present circumstances in the absence of the Monterey Amendments. Kern County Water Agency's speculation that it would have supported the transfer under pre-Monterey Article 41 is inconsequential to that scenario, in which DWR would have had to consent under different circumstances and requirements for public accountability. Moreover, although transfers with DWR approval were available under Article 41 of the pre-Monterey State Water Project contracts, it is highly speculative whether agriculture-to-urban transfers such as those in the NOPs would even have taken place without the Monterey Amendments, since those Table A amounts would have been subject to "agriculture first" cutbacks under pre-Monterey article 18(a). Read in context, such maneuvers would amount to little more than the "straw man" argument considered and rejected in the *Friends* appeal. (95 Cal.App. 4th at p. 1387.) 10 11

Finally, the Draft EIR should not rely upon Castaic's promise to prepare its own separate EIR supporting the Kern-Castaic transfer. As noted in the attached comments sent to Castaic last year, those attempts are also in direct violation of the *PCL* decision and its lead agency principle. 12

Other aspects of the Draft EIR are equally problematic. To provide just several examples, the document relies on a proposed 16,000 acre-foot permanent transfer of Table A amounts from Kern to Castaic (page 4.8-17) that PCL and CPA have already challenged in scoping comments as inconsistent with the *PCL* decision and settlement. It also relies upon a separate 24,000 acre-foot storage agreement that is the subject of a separate judicial challenge. Finally, it relies upon a 2003 13 14 15

reliability report issued by DWR that is the subject of a vigorous and ongoing statewide debate. (See http://swpdelivery.water.ca.gov/commentletters.htm) Applications of the CALSIM II model, another subject pending in DWR's statewide EIR, have been the subject of intense recent criticism, notably that of the CALFED peer review panel. 15 16

In sum, approval of the project under present circumstances would ignore the central teaching of the *PCL* decision that "the dream of water entitlements from the incomplete State Water Project is no substitute for the reality of actual water the SWP can deliver." (*Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2003) 106 Cal.App.4th 715 717-18.) PCL and CPA urge the County to avoid any reliance on the faulty assumptions in the Draft EIR discussed in this letter. 17

Respectfully,

Roger B. Moore

Counsel for Planning and Conservation League and Citizens Planning Association of Santa Barbara County, Inc.

ROSSMANN AND MOORE, LLP

Attorneys at Law

380 HAYES STREET, SUITE ONE
SAN FRANCISCO, CALIFORNIA 94102 USA
TEL (01)(415) 861-1401 FAX (01)(415) 861-1822
www.landwater.com

ANTONIO ROSSMANN
ADMITTED IN CALIFORNIA
NEW YORK AND
THE DISTRICT OF COLUMBIA
ar@landwater.com

ROGER B. MOORE
ADMITTED IN CALIFORNIA
rbm@landwater.com

August 22, 2003

Via facsimile and U.S. Mail
Mary Lou Cotton, Assistant to the General Manager
Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, CA 91350-2173

Re: Comments on Notices of Preparation for (1) CLWA's Proposed Transfer of 16,000 acre-feet of State Water Project Table A Amount from Kern County Water Agency (including proposed annexations); (2) CLWA's Proposed Transfer of 41,000 Acre-Feet of State Water Project Table A Amount from Kern County Water Agency

Dear Ms. Cotton:

This letter provides comments on the above-referencedNotices of Preparation on behalf of the Planning and Conservation League (PCL) and the Citizens Planning Association of Santa Barbara County (CPA). PCL and CPA were two of the plaintiffs whose CEQA challenge resulted in the court-ordered decertification of the original 1995 Monterey Agreement EIR (*Planning and Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892). Although CPA has separately submitted a broader set of comments, this letter focuses on legal and institutional problems common to both notices, arising from their relationship to the *Planning and Conservation League* decision and subsequent court-approved settlement agreement.

In both notices of preparation (respectively, the "16,000 NOP" and the "41,000 NOP"), the Castaic Lake Water Agency (Castaic) announces its intention to move forward with its own separate environmental review of permanent transfers of State Water Project Table A Amounts, partly drawing on authority conferred in the 1995 Monterey Amendments to the State Water Project contracts. But under the Monterey settlement agreement, which Castaic signed, the court-identified lead agency, the Department of Water Resources (DWR), is already conducting a statewide environmental review of a new "Monterey Plus" project. We strongly urge Castaic to

Exh. B-7 1

refrain from moving forward with these separate project reviews, which are premature and likely to operate at cross-purposes with DWR's statewide review. Moreover, even if Castaic were to proceed now with its own separate EIRs on these permanent transfers, it lacks the institutional authority and statewide accountability to serve as CEQA lead agency under the *Planning and Conservation League* decision.

PCL and CPA received no timely notice of the January 22, 2003 41,000 NOP, even though Castaic was a participant in the Monterey settlement negotiations that were nearing finality at the time of its January 2003 filing. Although the formal scoping deadline has already passed, Castaic has since ignored timely scoping comments from at least two groups (SCOPE and the Sierra Club Angeles Chapter) advising that it should await the preparation of the new Monterey EIR, and that this separate review of a permanent transfer of table A amounts was in likely violation of the lead agency holding in the *Planning and Conservation League* case. In submitting scoping comments on the 16,000 NOP, we therefore find it appropriate to advise Castaic that its separate review following the 41,000 NOP is likewise questionable.

The 16,000 NOP addresses a separate new permanent transfer of an additional 16,000 acre-feet of Table A amounts from Kern County Water Agency to Castaic, through an agreement with Kern's Berrenda Mesa member district. The notice, which recognizes the transfer's relationship to the Monterey Amendments, announces the expected use of this transfer in annexation agreements associated with urban development projects, including Newhall Ranch. The notice also recognizes that the transfer would change the amount of SWP supplies available to several agencies, the location and timing of SWP deliveries, and the utilization and conveyance of storage facilities. (16,000 Initial Study at p. 39.)

The "Monterey Amendments" Problem

Both NOPs are fraught with a glaring "Monterey Amendments" problem. They would engage Castaic prematurely in the study of Monterey-related permanent transfers under the State Water Project contracts, without the benefit of DWR's forthcoming "Monterey Plus" EIR analyzing these amendments. The invalidated 1995 Monterey EIR prepared by the Central Coast Water Authority (CCWA) is the only one that now exists on the Monterey Agreement. Under *Planning and Conservation League* and two sequel decisions addressing Castaic's transfer of Table A amounts, "tiering" or otherwise relying on that EIR would render the approval decision vulnerable to CEQA challenge. However, any attempts by Castaic to conduct a separate Monterey review in advance of DWR's, or to rely on its own hypothetical non-Monterey analysis, would shift rather than solve this fundamental CEQA problem.

In *Planning and Conservation League*, the Third District Court of Appeal found that CCWA's 1995 EIR "failed to meet the most important purpose of CEQA, to fully inform the decision makers and the public of the environmental impacts of the choices before them." (83 Cal.App.4th at 920.) CCWA improperly served as lead agency in place of DWR and prejudicially failed to analyze the enforcement of the pre-Monterey permanent shortage provision, article 18(b),

prior to its elimination from the State Water Project contracts. The appellate court found it unnecessary to adjudicate the other CEQA deficiencies identified by the Monterey plaintiffs after analyzing the defects in the lead agency selection and no project assessment, observing that "DWR, with its expertise on the statewide impacts of water transfers, may choose to address those issues in a completely different and more comprehensive manner." (*Id.*) The court also noted that the deficiencies in the 1995 EIR might be related to the "provincial experience" of CCWA. (*Id.*)

In *Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.4th 1373, the Second District Court of Appeal ordered the decertification of an EIR prepared by Castaic, supporting its Monterey Amendments-based attempt to permanently acquire 41,000 acre-feet of State Water Project entitlements (now "Table A" amounts) from the Kern County Water Agency and its Wheeler Ridge member district. The appellate court found that Castaic's EIR violated CEQA by "tiering" from the invalidated Monterey EIR. This ruling involved precisely the same transfer that Castaic now attempts to address in its separate 41,000 NOP. That piecemeal approach, however, is in apparent defiance of the expectation of the court of the appeal in the *Friends* case that Castaic would await "action by the DWR complying with the *PCL* decision." (95 Cal.App.4th at p. 1388.)

Another recent Second District appellate decision, *Santa Clarita Organization for Planning and the Environment (SCOPE) v, County of Los Angeles* (2003) 106 Cal.App.4th 715, critically addressed Castaic's characterization of the 41,000 acre-feet transfer. In that case, the County of Los Angeles violated CEQA in its review of the West Creek development project that erroneously assumed that 100 per cent of Castaic's purported 41,000 acre-feet would be available in wet years and 50 per cent in drought years. Drawing on *Planning and Conservation League's* assessment of the historic disparity between Table A amounts and deliverable water, the court concluded that the EIR failed to undertake a "serious and detailed analysis" of State Water Project supplies, and observed that "[t]he dream of water entitlements for the incomplete State Water Project is no substitute for the reality of actual water the SWP can deliver." (*Id.* at pp. 723, 717.)

Both NOPs appear to confuse the legitimacy of Castaic's separate reviews with the distinct issue of the interim operation of the 41,000 acre-feet transfer pending further environmental review. (See Public Resources Code section 21168.9; 16,000 Initial Study at p. 11; 41,000 NOP p. 1.) The trial court did not enjoin interim operation, but left the issue open to further demonstrations that could lead to interim prohibition. The issue of interim operation is pending on appeal in the Second District (2 Civil B164027).

The 16,000 NOP wrongly assumes that the earlier 41,000 acre-feet proposed transfer is already part of Castaic's permanent Table A amounts. (16,000 NOP, p. 1.) That inference of finality is highly misleading. Neither the 41,000 acre-feet nor the 16,000 acre-feet transfer is on the list of Table A amount transfers recognized as "final" in the Monterey Amendments settlement agreement (Attachment E). Such transfers cannot proceed without new environmental analysis satisfying CEQA. (Monterey Settlement Agreement, section VII.A.) That settlement agreement, while recognizing that the remedial issue remains before the Second District, also requires DWR's

"Monterey Plus" EIR to analyze the 41,000 acre-feet transfer, as well as other transfers facilitated by Monterey Amendments provisions, such as other agriculture-to-urban transfers referenced in Article 53 of those amendments. (Section II.C.4.) The new 16,000 NOP, like its predecessor, clearly presupposes the operation of the Monterey Amendments. (16,000 Initial Study at pp. 38-39.)

If Castaic rushes to finality by continuing its separate environmental reviews at this stage, without the benefit of DWR's statewide "Monterey Plus" EIR, its perspective would mirror the "provincial experience" criticized in the *Planning and Conservation League* decision. (83 Cal. App. 3d at 918.) Those attempts would also create a substantial risk of final decisions based on local analysis that may well prove inconsistent with DWR's "Monterey Plus" EIR.

The "Lead Agency" Problem

If Castaic continues with these separate environmental reviews without awaiting DWR's assessment in the "Monterey Plus" EIR, it would violate CEQA's lead agency requirement based upon the well-established standards set forth in *Planning and Conservation League v. Department of Water Resources*. The court in that case could hardly have been clearer that DWR is the "state agency charged with the statewide responsibility to build, maintain, and operate" the State Water Project. (*Id.* at p. 906.; see also Wat. Code, §12930, *et seq.*) Finding that DWR was the only entity with the requisite statewide perspective and expertise to serve as lead agency, the court found it "incongruous to assert that any of the regional contractors" could "assume DWR's principal responsibility for managing the SWP." (*Id.*)

Similarly, the court-approved settlement agreement in *Planning and Conservation League* expressly recognizes DWR's duty as "the State agency responsible for administration and operation of the SWP," as well as its continuing obligation to comply with applicable requirements of CEQA and the Water Code. (Agreement, Section X.B.) The transfer guidelines disclosed to contractors under the settlement agreement also recognize the continuing need to comply with all existing legal requirements, including CEQA, and to honor the lead agency principles identified in the Third District's decision in the Monterey Amendments case. (Agreement, Attachment C.)

These principles apply clearly to the proposed permanent transfers of the Table A amounts referenced in the state project contracts, which require DWR's approval and presuppose the application of Monterey. They also concededly require changes in the amount of supplies available to several water agencies, the "location and timing" of project deliveries, and changed utilization of the project's "conveyance and storage facilities." (16,000 Initial Study at p. 39.) The transfers, which may require the fallowing of farmland in agricultural areas and are associated with proposed annexations linked to some of the more controversial development projects in California, demand the statewide authority and experience that only DWR can provide.

Lastly, neither the NOPs' summary references to other project EIRs nor a hypothetical "non-Monterey" analysis of the transfers can substitute for DWR's new assessment of the

Heal the Bay
3220 Nebraska Avenue
Santa Monica CA 90404

Facsimile Cover Sheet

to:	**Jeff Hogan**
company:	City of Santa Clarita Planning Commision
ph:	661-259-2489
fax:	661-259-8125
from:	**Shelley Luce**
ph:	310 453 0395
x:	105
fax:	310 453 7927
email:	sluce@healthebay.org
date:	May 6, 2004
total pages:	24
comments:	

Hard copies to follow by mail.
Please call Ileana Ruiz at 310-453-0395 ext.124 if you have any problems receiving this fax.

Heal the Bay
3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

May 6, 2004.

Mr. Jeff Hogan
Planning Commission
City of Santa Clarita
Santa Clarita CA
FAX: 661-259-8125
EMAIL: jhogan@santa-clarita.com

RE: Heal the Bay Comments on the Draft EIR for Riverpark

Dear Mr. Hogan:

Heal the Bay is a nonprofit environmental group whose mission is to make southern California coastal waters safe and healthy for people and marine life. On behalf of our 10,000 local members, we submit the following comments on the Draft Environmental Impact Report (DEIR), dated February 2004, for the Riverpark Project in Santa Clarita.

The Santa Clara River (River) is the largest wild river remaining in southern California. It provides crucial aquatic ecosystem functions in the region, including groundwater recharge and riparian habitat for endangered and rare species. It is a significant input to southern California's coastal waters at the City of San Buenaventura. It is imperative that development occurring within the Santa Clarita River watershed proceeds in a manner that protects and restores the water quality and aquatic ecosystem functions of this important river system. As lead agency for the review of this proposed project under the California Environmental Quality Act (CEQA), it is the responsibility of the elected officials and city staff of the City of Santa Clarita (City) to ensure that development within City boundaries abides by the requirements of CEQA, the federal Clean Water Act, the state Porter-Cologne Act, the LA County General Plan and the plans and policies of the City designed to protect water quality. 1

Our over-arching concern with this project is that it impinges upon the natural functioning of the River to such an extent that significant, immitigable damage will be done to water quality and aquatic habitat. Specifically: 2

- Significant development occurs within the 100-year floodplain of the River. 3
- There is little or no buffer zone (undeveloped vegetated area) provided between developed areas and the River.
- There are extensive areas of stream bank alteration, in the form of hardened structures for stabilization, including buried bank stabilization, which are known to increase erosion/sedimentation problems and decrease aquatic and riparian habitat. 4
- The water quality analyses are flawed and do not accurately present the true impacts to water quality of the proposed development. 5
- No mitigation is described for impacts to water quality and aquatic or riparian habitat. 6

Our comments and concerns are described in detail below.

Heal the Bay
3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

Project Area

The project proposes to develop a 694.4 acre site, with 1183 homes and 40,000 square feet of commercial space. Chapter 1.0 of the DEIR states that 440 acres will be preserved as open space but does not clarify that approximately 330 acres of this is the actual river bed of the Santa Clara River. This should be clarified early in the document, and further calculations of the proportion of the project that will be preserved as open space should not include this area, since this area is virtually undevelopable due to both physical and legal restraints. In fact, the proposed project will build upon approximately 245.4 acres of a 364.4-acre developable site, preserving approximately 119 acres (33%) as open space, including active use parks and landscaped areas. 7 8 9

Grading On Site

The project would require 5.5 million cubic yards of grading plus 3.6 million cubic yards of remedial grading. This is an enormous amount of cut and fill, yet there are no grading restrictions specified in the DEIR. For example, there should be no grading within 100 feet of the River or any tributary, or on steep slopes (steeper that 4:1) during the rainy season. Standards such as these to control impacts due to grading are established in Local Coastal Plans throughout California and should apply to any significant water resource such as the Santa Clara River. Further, the time period over which cut and fill activities would occur is not specified in the DEIR. 10 11

For a proposed project of this magnitude, in intimate proximity to an important waterbody, and including areas of steep gradient, extra precautions are required. At a minimum, there should be absolutely no grading allowed during the rainy season (November through April every year). Heal the Bay has first-hand evidence of the disastrous effect of grading, even at much smaller projects, when a rainstorm occurs.[1] The basic best management practices (BMPs) are not sufficient to prevent massive sediment inputs to creeks when hillsides are graded and exposed to rainfall. Considering the huge volumes of cut and fill proposed for this project, and the presumably extended time period for the construction phase, there should be a strict prohibition on grading during the rainy season and increased requirements for sediment BMPs and BMP inspections to avoid excess sediment runoff to streams during construction. 12 13 14

Destruction of Tributary Streams

At least seven streams on the property would be destroyed by the proposed project. The loss of streams is described in the DEIR, on page 4.2-37, in acres rather than in linear feet. As a result, the loss of streams on-site appears small (0.6 acres under Army Corps of Engineers jurisdiction and 4.6 acres under California Department of Fish and Game jurisdiction) but these areas provide extremely important water quality and aquatic habitat functions. Linear feet is a more appropriate measure of riparian corridors and water courses. Dr. Philip Rundel stated in his written comments on the proposed Ahmanson Ranch project that "Riparian ecosystems are keystone habitats in Southern California and play a critical role in a variety of 15 16 17

[1] See Attachment 1, Heal the Bay Report of Sediment Discharge to Las Virgenes Creek, dated March 4, 2004

Heal the Bay
3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

ecosystem processes... these ecosystems act to buffer hydrologic and erosional cycles, control and regulate biogeochemical cycles of nitrogen and other key nutrients, limit fire movements, and create unique microclimates for animal species. Both terrestrial and aquatic wildlife depend on riparian ecosystems with their year-round availability of water, nutrients, food sources, and organic sediments ... It is not surprising, therefore, that riparian ecosystems are centers of high biodiversity. Riparian communities and associated wetland habitats make up less than 1% of the land area of the Santa Monica Mountains of Southern California but are the primary habitat for nearly 20% of the native vascular plant flora."[2] Dr. Rundel referred in these comments to perennial, intermittent and ephemeral watercourses inclusively. 17

Shockingly, no mitigation whatsoever is offered for the destruction of these streams. This is clearly illegal because the destruction of even ephemeral watercourses requires mitigation under the federal Clean Water Act. Some of these streams are classified as waters of the U.S. and so their loss must be mitigated under sections 403 (water quality certification from the Regional Water Quality Control Board) and 404 (permit for discharge of fill or dredge material, issued by the Army Corps of Engineers) of the CWA. Others of these streams fall under the jurisdiction of the California Department of Fish and Game who may also require mitigation under section 1603 of the Fish and Game Code. When applications are made for these certifications, permits and agreements, the responsible agencies may use this legally-binding DEIR to make their mitigation determinations. Therefore the DEIR must contain appropriate mitigation for loss of streams, wetlands and riparian areas in the proposed project. 18 19

The DEIR claims that there will be no significant impacts to the River due to destruction of its tributary streams. Science holds that this is impossible: destroying tributary streams represents a loss of water quality and aquatic habitat functions of the larger river system. The loss of streams due to the proposed project should be described in linear feet as well as acres. Streams are linear landscape features and it is riparian corridor length and their edge effects that provide crucial ecosystem functions, not their area as measured in acres. The impacts of completely burying these tributary streams go well beyond their areal measurements and include complex effects on nutrient and sediment cycling between upland and riparian areas as well as wildlife migration and refugia.[3] The proposed project should be designed to protect and preserve natural drainages and necessary buffer zones (see below). To destroy these watercourses without appropriate mitigation is a violation of the federal Clean Water Act. 20 21 22 23

Lack of Riparian Buffer Zones

Scientific evidence clearly demonstrates that buffer zones, or intact areas of natural vegetation, are crucial to the protection of water quality.[4] These studies show that a minimum 24

[2] See letter from Dr. Philip Rundel to Dennis Hawkins, dated April 26, 2002, Attachment 2.

[3] See above.

[4] See these references: "National Management Measures to Control Nonpoint Source Pollution from Urban Areas" (http://www.epa.gov/owow/nps/urbanmm/index.html, last updated 8/8/2003); Herson-Jones et. al, 1995, cited in the aforementioned EPA document; Wenger, S. J. & Fowler, L. (2000) Protecting Stream and River Corridors. Creating Effective Local Riparian Buffer Ordinances. *Policy Notes*. Public Policy Research Series, Carl Vinson Institute of Governments, the University of Georgia. 1(1):1-2; Wegner, S. (1999) A Review of the

3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

width of 100 feet of naturally-vegetated buffer zone is required for the buffer to effectively guard against irreversible damage to river systems. The proposed Riverpark project impinges upon the 100-year floodplain of the River and the actual banks of the River, and leaves zero buffer zone between urban residential development tracts and the River itself. There is absolutely no reason why housing needs to be placed in the 100-year floodplain, thus necessitating streambank stabilization measures (i.e. streambank hardening) to then protect those homes in the floodplain. Any development in the Santa Clara River watershed must occur well outside the 100-year floodplain and must maintain, at a minimum, 100-foot vegetated buffers in order to protect the water quality and ecosystem functions of the River.

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Increased Imperviousness on the Proposed Project Site

A key factor in the degradation of stream water quality is the proportion of impervious surfaces versus pervious surfaces in the watershed.[5] Scientific research demonstrates unequivocally that as little as 10% imperviousness leads to degradation of stream functions and water quality. The DEIR must provide a straightforward analysis of increased imperviousness due to the proposed project, including pre- and post-development proportions of impervious surfaces. Estimates of imperviousness for various land use categories are provided but overall imperviousness increases must be calculated and laid out clearly, and those calculations must not include the actual riverbed of the Santa Clara River as open space, since this is the very area that we are attempting to protect from the impacts of development.

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Increased Pollutant Loads to the River

The DEIR includes some numeric estimates of expected changes in pollutant loads to the River due to the proposed project but the analyses are general and too little detail is provided. Specifically:

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- The analyses use loading estimates from the LA County stormwater manual and do not use actual data collected onsite. In the past, the Regional Water Quality Control Board has requested that on-site data be used in these calculations in order to provide a realistic picture of expected water quality impacts and to receive certification under section 403 of the Clean Water Act.[6]
- The pre-development pollutant loading analyses used the LA County "bulk and burn" runoff estimates, which provide unrealistically high flow and pollutant estimates most of the time. Given the return frequency of major fires in the region, it is extremely unlikely that most rain events will generate the equivalent of the amount of water and pollutants estimated in the "bulk and burn" method. We understand that this is the

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Scientific Literature on Riparian Buffer Width, Extent and Vegetation. Office of Public Service & Outreach, Institute of Ecology, University of Georgia; Basnyat, P., Teeter, L. D., Flynn, K. M., & Graeme Lockaby, B. (1999). Relationships between Landscape Characteristics and Nonpoint Source Pollution Inputs to Coastal Estuaries. *Environmental Management* 23(4):539-549; and US EPA (2002) National Management Measures to Control Nonpoint Source Pollution From Urban Areas-Draft. Office of Wetlands, Oceans and Watersheds. Nonpoint Source Control Branch. Washington D.C.

[5] Center for Watershed Protection, 2003. Impacts of impervious cover on aquatic systems. Watershed Protection Research Monograph 1, 158 pp. http://www.cwp.org/Downloads/

[6] See letter from Melinda Becker to Mr. Dennis Hawkins, dated June 19, 2002, Attachment 3.

3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

standard calculation used in the LA County stormwater manual but we feel it is imperative that the project proponent also analyze stormwater flow and loadings under normal, non-burned conditions and we urge the City to require such analyses for flow and pollutant loadings in this DEIR, in order to achieve a realistic estimate of pre- and post-development pollutant loads to the River. 29

- The DEIR emphasizes the calculated decreased pollutant loads in the post-development scenario compared to the pre-development scenario. This ignores the increase in overall loadings of constituents such as total nitrogen (+58% per year post-development) and phosphorus (+39% per year post-development), nutrients which contribute to excess algae problems in the Santa Clara River (see Table 4.8.1-12 of the DEIR). The River is listed on the state 303(d) list as impaired by nitrate and nitrite, and already has a nitrogen TMDL approved, which includes neither a wasteload allocation for point sources from the proposed Riverpark development, nor a load allocation for non-point sources from the proposed development. The proposed project must comply with all existing TMDLs or be in violation of the Clean Water Act. Further, certain metals, including copper (which is highly toxic to aquatic life) and lead are also predicted to increase in overall loadings to the River. Both copper and lead may accumulate in aquatic sediments which in turn support aquatic life, therefore increased loadings would negatively impact the aquatic life beneficial use of the River. 30
- The predicted metals concentrations are based on hardness concentrations of 200 mg/l and 400 mg/l but no data are provided in either the DEIR or its appendices to justify these numbers. Hardness may significantly impact the toxicity of metals to aquatic species. If hardness data are used to adjust the metals limits specified in the California Toxics Rule (CTR) then those hardness values should represent critical hardness conditions in runoff to the River, i.e. hardness data should be collected over a long period of time to determine the variability of hardness in the runoff and in the River, and a conservative value, such as the 10^{th} percentile hardness value, should be used. In the absence of these data, the untranslated metals limits provided in the CTR should be used for metals loadings calculations until appropriate hardness data are available. 31
- No numeric estimates are provided for increased pesticide loads to the River. Many pesticides are extremely toxic to aquatic life. The DEIR states that public landscaped areas will conform to an integrated pesticide management plan to minimize pesticide use but no details of such a plan are provided. The DEIR must at a minimum: 32
    1. Provide details of an integrated pesticide management plan that will be implemented, including but not limited to (1) prohibition on any applications of pesticides within 48 hours of an irrigation event or expected rain event, (2) allowing use of pesticides only when a specific pest problem occurs, rather than periodic "maintenance" applications of pesticides, and (3) enforcing a complete ban of certain pesticides, such as those banned by the LA Unified School District or other agencies with public health concerns. 33
    2. Provide information on the percentage of landscaped areas that will be publicly owned, and therefore may be subject to integrated pest management plans, and the percentage of land that will be privately owned and therefore subject to virtually unregulated use of pesticides. 34

3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

- The proposed water quality BMPs are described only in general terms. Two detention ponds, one grassy swale and an unspecified number of hydrodynamic separator systems are proposed but the sizes, capacities and pollutant removal efficiencies of these BMPs, for specific pollutants of concern, are not specified. Therefore it is impossible to determine whether the BMPs will truly reduce the impacts of anthropogenic pollutants on the River should the development be built. Since the DEIR is the legally-binding CEQA document that determines mitigation for this project, the lack of detailed mitigation proposals renders the DEIR flawed and inadequate. 35
- Some of the proposed water quality BMPs (number unspecified) will be maintained by homeowner associations. This does not ensure ongoing water quality protection because there is no regulatory oversight of these associations. All water quality protection measures should be the responsibility of municipal or county government agencies. Alternatively the homeowners associations should at least be required to sign binding agreements with such government agencies requiring the homeowners associations to perform specific maintenance, monitoring and reporting requirements, depending on the BMP. Without maintenance, monitoring and reporting follow up there is no point in using BMPs since there will be no way of determining whether a given BMP is effective in mitigating water quality impacts. 36

Impacts to Stream Banks and Stream Bed

The exact area of stream bank and stream bed that will be modified by structures must be specified in order to determine required mitigation. These include:

- buried bank stabilizations;
- storm drain outlet structures; 37
- energy dissipation structures immediately downstream of storm drain outlets;
- bridge piers and abutments;
- toe slope reinforcement;
- rip rap;
- gabions and splash aprons; and
- any other unnatural structure placed within the stream bank or stream bed.

Any of these structures or modifications will affect the hydrology of the stream even if only in localized areas. The long-term effects of stream bank/bed modifications include increased scouring, increased erosion, and increased downstream deposition of eroded material, which degrades downstream habitat. The Santa Clara River supports numerous endangered, threatened and rare aquatic species that must be protected from the deleterious erosion and deposition effects of stream bank/bed modifications. 38

The hydrological analyses provided in the DEIR and appendices do not conclusively show that these deleterious effects will not occur. The analyses do not predict into the near future when the effects of natural erosive forces in the River will likely expose the "buried" bank 39

Heal the Bay
3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

stabilization and cause it to act hydrologically in the same way that a concrete-walled channel would act. 39

The best ways to avoid increased erosion/deposition effects and to protect properties and utilities from flooding and/or collapse are to (1) keep all structures and utilities outside the 100-year floodplain of the River and (2) use only bioengineering techniques to stabilize banks. Bioengineering utilizes natural plants such as willows and other riparian vegetation to stabilize eroded banks, as well as natural bank grading and stream meanders to ensure protection from flooding and river bank erosion and/or collapse. Bioengineering is preferable because it allows the river to maintain a natural dynamic balance. It also requires less maintenance over time as there are no concrete or other hard structures to eventually fail and be replaced. Bioengineering also provides natural riparian habitat that maintains water quality and wildlife habitat. 40

Cumulative Impacts Analysis

The Cumulative Impacts Analysis, required by CEQA, is inadequate and flawed due to the unrealistic and inaccurate analyses of impacts as discussed above. The true impacts of the proposed development on water quality and aquatic resources in the Santa Clara River are likely much greater than described in the DEIR, therefore the Cumulative Impacts Analysis does not account for the true impacts of the proposed project. 41

Alternative Analysis

The Project Alternatives Analysis, required by CEQA, includes a Santa Clara River Reduced Bank Stabilization Alternative (Alternative 2). From a water quality and aquatic resources perspective, this is clearly the preferred project alternative. Chapter 6.0 of the DEIR shows that that Alternative 2 would result in:

- more open space,
- reduced impacts to biota,
- reduced runoff therefore reduced negative impacts on water quality,
- reduced risk of flooding,
- reduced water demand, and
- reduced wastewater generation. 42

The DEIR further states that "on the basis of environmental impacts alone, this alternative is environmentally superior to the proposed project."[7] However, in the conclusions with regard to Alternative 2, the DEIR states that "Alternative 2 would not provide for flood protection or bank stabilization and does not meet the intent of this objective."[8] This statement is disingenuous because in fact less flood protection and bank stabilization would be needed, since there are no dwellings built within the 100-year floodplain under this alternative project.

[7] See Chapter 6.0 of the DEIR, Project Alternatives, page 6.0-12.
[8] As above, see bullets page 6.0-12.

Heal the Bay

3220 Nebraska Avenue
Santa Monica CA 90404

ph 310 453 0395
fax 310 453 7927

info@healthebay.org
www.healthebay.org

The conclusions of this section, and indeed of the DEIR as a whole, should clearly state that Alternative 2, the Santa Clara River Reduced Bank Stabilization Alternative, is the preferred alternative for development of this site. 43

Definition of Waters of the United States

On p. 4.2-5 of the DEIR, the definition of waters of the U.S. begins with: "Although the definition may change in 2003 to exclude non-navigable, isolated water bodies... [followed by the 1986 definition as it currently stands in the Federal Register]." Waters of the U.S. were not re-defined and this phrase should be removed from the DEIR. 44

For these and other reasons we conclude that the DEIR is inadequate to address the impacts of the proposed Riverpark development on the Santa Clara River and should not be approved by the City of Santa Clarita in its present form. If you wish to discuss these issues further please feel free to contact me. 45

Sincerely,

Shelley Luce, D.Env.
Science and Policy Director
Heal the Bay

3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

Attachment 1. Heal the Bay Report of Sediment Discharge to Las Virgenes Creek, March 4, 2004.

3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

Report of Sediment Discharge from Construction site east side of Las Virgenes Canyon Road at the intersection of Agoura Road.

March 4, 2004

To Whom It May Concern:

On March 4th Heal the Bay personnel observed massive sediment discharges into Las Virgenes Creek from a large construction and grading site on the east side of Las Virgenes Canyon Road at the intersection of Agoura Road in the City of Calabasas. Massive gullying within the grading portions of the construction site contributed sediment to Las Virgenes Creek via a side channel. The side channel is fed by a culvert that drains the construction site, flows under Las Virgenes Road, and joins with Las Virgenes Creek behind the business office park that houses LA PAZ restaurant at 4505 Las Virgenes Road. The sediment deposit is approximately 300 feet long by 50 feet wide on average and more than 12 inches deep. The photos below demonstrate the severity of the sediment issue and the likelihood of riparian vegetation and biological species loss on site.

The Stream Team and noted ichthyologist Camm Swift have documented the presence of Arroyo Chub in this area and we also have benthic macro invertebrate samples above and below this location. In addition, Las Virgenes Creek was recently placed on the State 303(d) list as being impaired for sediment. This event has increased sediment loading in an already impaired water body. Unless the sediment deposit at this location is immediately cleaned up and adequate construction BMPs are immediately implemented, additional impacts to Las Virgenes Creek will be pushed further downstream. Additionally, this failure at the construction site may have caused elevated nutrient levels in an already impaired water body. Heal the Bay requests that an order to cease and desist all grading activities be immediately issued. Moreover, Heal the Bay requests that a cleanup and abatement order be issued and that the construction contractors be immediately required to install all appropriate BMPs that will prevent a similar illegal discharge and downstream habitat degradation from occurring in the future. Your agency's prompt response to this matter would be most appreciated. Please feel free to call me if you have any further questions. Heal the Bay also respectfully requests that we be notified of all actions regarding this event.

Sincerely,

Mark Abramson
Malibu Creek Watershed Stream Team Manager

3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

Photo 1: Site Overview

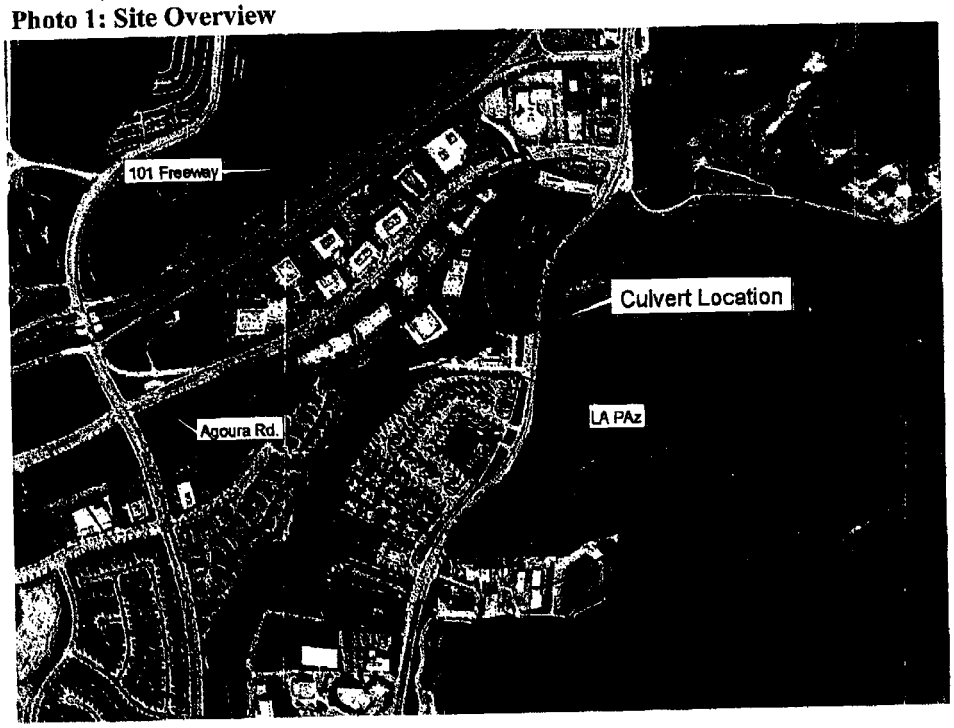
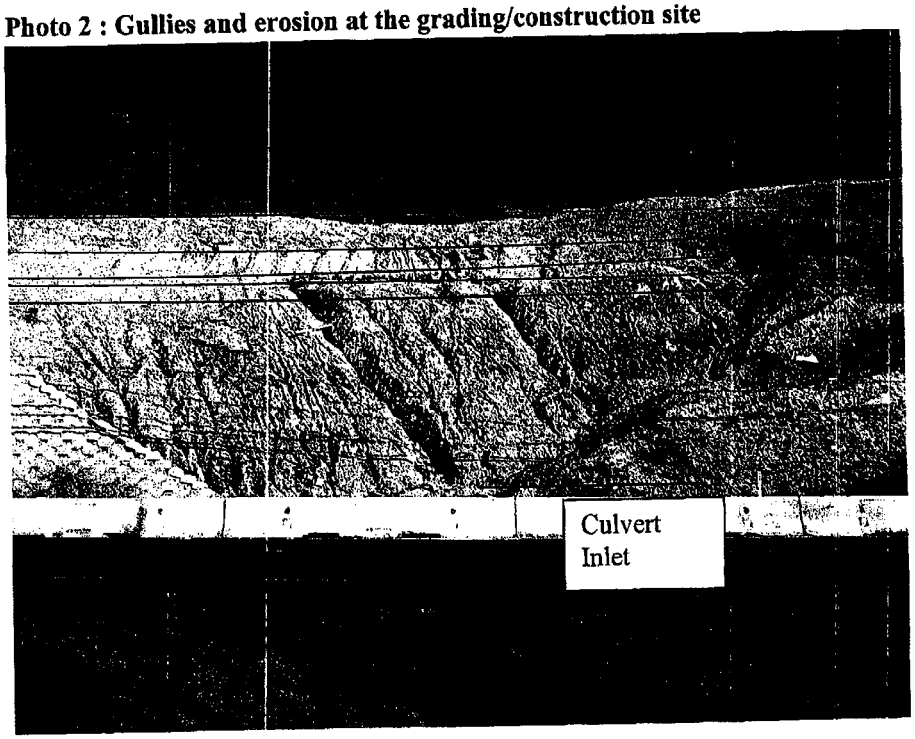


Photo 2 : Gullies and erosion at the grading/construction site



Heal the Bay Comments on Riverpark DEIR

3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

Photo 3: Side Channel immediately downstream from culvert outlet

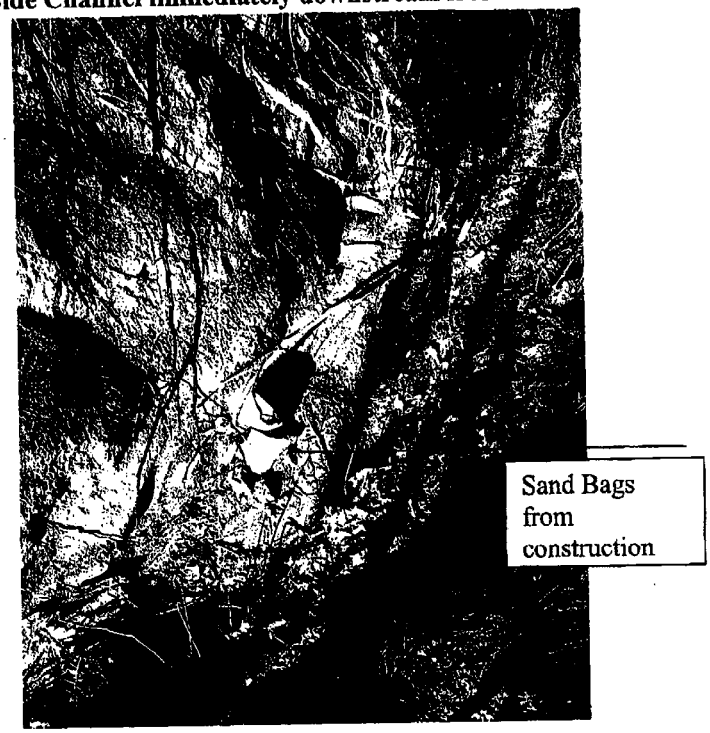
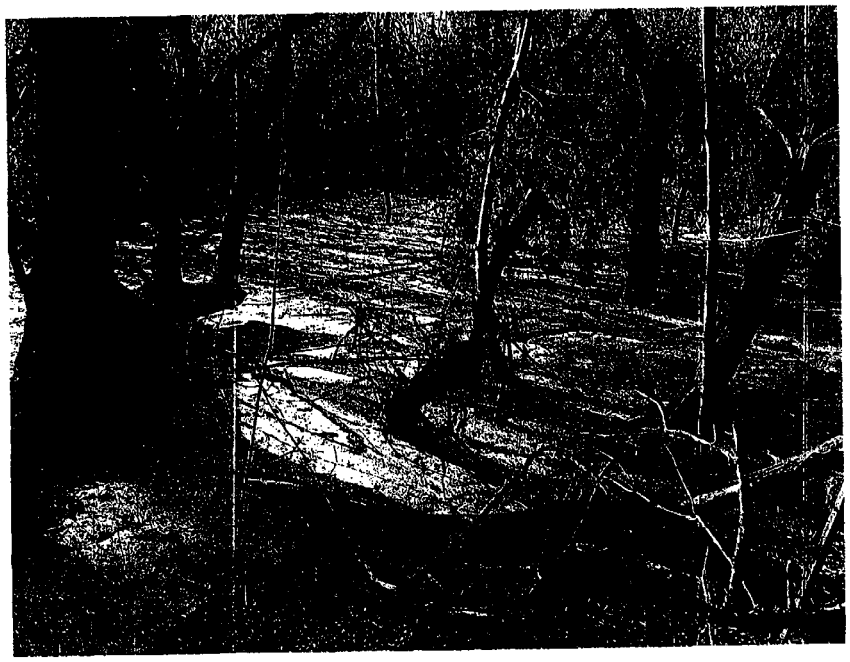


Photo 4: Side Channel near confluence to Las Virgenes Creek. Sediment deposit is approximately 300 ft long by 50 ft wide and 12 inches deep.



Heal the Bay
3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

Attachment 2. Letter from Dr. Philip Rundel to Dennis Hawkins, dated April 26, 2002.
(hard copy only)

April 26, 2002

Mr. Dennis Hawkins
County of Ventura
Resource Management Agency
Planning Division
800 South Victoria Avenue, L #1740
Ventura, California 93009

Dear Mr. Hawkins:

With this letter I would like to offer written testimony on the *Ahmanson Ranch Phase "A" Tract Map Supplemental EIR*. As a plant ecologist with extensive experience working on native plant communities in Southern California, I would particularly like to comment on aspects of what I believe to be inadequate treatment and discussion of impacts and mitigation measures for both riparian habitats and rare and endangered species in the project area in section *4.6 Biological Resources*.

Riparian ecosystems are keystone habitats in Southern California and play a critical role in a variety of ecosystem processes. Situated at the interface between terrestrial and aquatic ecosystems, these ecosystems act to buffer hydrologic and erosional cycles, control and regulate biogeochemical cycles of nitrogen and other key nutrients, limit fire movements, and create unique microclimates for animal species. Both terrestrial and aquatic wildlife depend on riparian ecosystems with their year-round availability of water, nutrients, food sources, and organic sediments. In addition to these critical components of food resources, riparian ecosystems provide wildlife with a structural complexity that includes mosaics of shade and sun, shelter, and protected corridors between adjacent plant communities. It is not surprising, therefore, that riparian ecosystems are centers of high biodiversity. Riparian communities and associated wetland habitats make up less than 1% of the land area of the Santa Monica Mountains of Southern California but are the primary habitat for nearly 20% of the native vascular plant flora.

The ecological significance of riparian zones is accentuated in the semiarid mediterranean-climate regions of Southern California where water resources are strongly limiting for plant growth. Riparian communities here occur in an unusually dynamic geomorphic and climatic environment, and these dynamic processes are critical in maintaining the natural ecosystem processes that sustain these ecosystems. Flooding with associated sediment deposition and/or erosion, as well as nonfluvial impacts from adjacent upland areas in the form of fire impacts, landslides, and other large events all provide strong but unpredictable disturbance regimes that are critical in seedling establishment and nutrient cycling for riparian trees and shrubs.

Given the significance of riparian ecosystems, it is disappointing to see lack of consideration given in the EIR to natural ecosystem processes that sustain and are influenced by riparian habitats. To begin with, it is disingenuous to describe riparian habitats only in terms of area covered. As linear landscape features, it is the length of riparian corridors and their extended edge effects that are critical in assessing impacts to these ecosystems, not their area. Little or nothing is mentioned in the EIR with regard to the influence of riparian resources to wildlife and to fluxes of nutrients and sediments between upland and lowland

habitats as mediated by these riparian systems. The impacts of the filling and/or channelization of extensive lengths of East Las Virgenes Creek by the project grading go well beyond the simple impacts described in the EIR.

The EIR describes mitigation of loss of this riparian corridor by the establishment of enhanced or created wetlands and riparian areas at a 5:1 ratio for those impacted. While such a statement sounds appropriate, it ignores the difficulties of such wetland creation. There is a well-established literature for Southern California documenting the general ineffectiveness of artificial wetlands and riparian habitats in providing any of the nature ecosystem structure and services provided by natural wetlands. The EIR avoids any mention of this historical documentation and failure of virtually 100% of such mitigation efforts.

The EIR makes the statement that golf course development adjacent to wetlands and riparian corridors will have no impact in introducing herbicides, pesticides or enriched nutrients to these systems. Such a statement is totally unsupported by any documentation and contrasts with wide experience with such interactions. The degree of chemical and nutrient additions required to keep golf course fairways and greens in top condition will clearly lead to runoff and leaching of these compounds. Without a total separation of the hydrologic drainage areas of golf course and wetlands, negative interactions seem inevitable. Such negative impacts degrade habitat quality, critical for such species as the California red-legged frog, and invariably promote invasive species to the detriment of native species.

The EIR is also deficient in describing mitigation measures to sustain populations of San Fernando Valley spineflower in the project area. Spineflowers are species whose ecology is tied to regular disturbance regimes in their habitats. Nothing in the EIR suggests an understanding of what those natural disturbance regimes would be in the absence of the project. Thus, the establishment of the spineflower "reserves" would be pointless without such an understanding. Does the threat to maintaining spineflower populations come from invasive species or from natural successional processes? What are the natural disturbance regimes to maintain spineflower habitat conditions...fire? ...pocket gopher activity?...grazing? ...erosion? Nothing seems to be known about such spineflower's response to these disturbance factors, but such knowledge is critical to maintain populations of this species. If invasive species are the critical factor that must be controlled, then how will such control be implemented? Herbicides and mechanical control each offer potential impacts detrimental to the spineflower itself. Without more information, the success of any spineflower reserve is unlikely.

The significance of natural biodiversity and rare habitats on the Ahmanson Ranch property should demand that the EIR be far more complete in addressing the critical issues for the survival of rare and endangered species and the maintenance of wetland and riparian habitat quality. Simple declaratory statements mentioning planned mitigation steps are not adequate in dealing with these issues when they lack documentation suggesting that success is likely to be achieved.

Yours sincerely,

Philip W. Rundel, PhD.
Professor

3220 Nebraska Avenue
Santa Monica CA 90404
ph 310 453 0395
fax 310 453 7927
info@healthebay.org
www.healthebay.org

Attachment3 . Letter from Melinda Becker to Dennis Hawkins, dated June 19, 2002
(hard copy only)

Winston H. Hickox
Secretary for Environmental Protection

California Regional Water Quality Control Board
Los Angeles Region

Over 50 Years Serving Coastal Los Angeles and Ventura Counties
Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

Gray Davis
Governor

June 19, 2002

Mr. Dennis Hawkins
County of Ventura Resource Management Agency
800 South Victoria Avenue
Ventura, California 93009

Subject: Ahmanson Ranch Project Phase "S" Master Tract Map, Tentative Tract No. 5206
Comments on Water Quality Report and Master Hydrology Study

Dear Mr. Hawkins:

The Los Angeles Regional Water Quality Control Board (Regional Board) staff thank the County of Ventura for extending the public comment period to allow for receipt and review of the revised water quality and hydrology reports for the Ahmanson Ranch project. Regional Board staff have reviewed these documents and met with representatives of the Ahmanson Ranch project on May 17 and June 13. Attachments A and B hereto are written responses provided by the Applicant's consultant, Camp, Dresser & McKee, to Regional Board staff in response to the aforementioned meetings. The second set of responses (Attachment B) was received yesterday afternoon, and staff has not had adequate time to review them. This letter is intended to summarize and highlight some of the more salient, outstanding issues discussed with representatives of the Project Applicant, and does not constitute a final or exhaustive review of the potential impacts to water quality.

Since the certification of the 1992 FEIR, Malibu Creek and the Los Angeles River have been listed on the Clean Water Act, Section 303(d) list due to exceedances of water quality standards for nutrients, coliform bacteria, metals, and pesticides. In addition, the proposed 303(d) list for 2002, includes additional listings for excessive sediment loading. The Los Angeles Regional Water Quality Control Board will be developing Total Maximum Daily Loads (TMDLs) for the watershed, but the DSEIR may be certified before the TMDLs become effective.

The Project Applicant has maintained that the post-development pollutant loadings to Malibu Creek and the Los Angeles River will be less than the pre-development loadings. Regional Board staff have interpreted this commitment to apply to both construction and post-development phases of the project. Loading data provided by the Applicant is very preliminary and not based solely on site-specific data. Given that the commitment to zero increase in pollutant loading is very crucial to our assessment of this project, we will continue to evaluate the potential impacts of the project as new information becomes available.

The comments and recommendation provided herein are referenced by the section headings as presented in the DSEIR. It is our hope that Ventura County will consider incorporating Regional Board staff recommendations into the mitigation plan, where appropriate.

4.5 WATER RESOURCES

4.5.2.3 Project Impacts

Effect WR-1: Construction of the project could result in the runoff of sedimentation and other pollutant that would effect local drainage. However, the implementation of BMPs through a SQUIMP, as required under the RWQCB NPDES regulations would reduce impacts to less than significant.

Effect WR-2: Build-out of the project would result in an increased in impervious surface onsite and potentially affect surface water quality. Given required water quality control devices, this is considered a less than significant impact.

Hydromodification Study Plan

A hydromodification study plan should be prepared describing how the Applicant intends to monitor or predict channel changes and stream aggradations as a result of the proposed development. Although, the revised Water Quality Report did address the issue of impacts to stream channels due to hydromodification and the increased amount of storm water runoff (section 3.4.3), it does not provide sufficient information for us to evaluate the effectiveness of the proposed design controls. The Applicant should conduct a hydrologic study to guide the final design of the storm water management system. The study should be based on the recommendations in the report "Stream Response to Storm Water Best Management Practices in Maryland" (Capuccitti and Page, 2000. Maryland Department of the Environment. Final Deliverable for a US EPA 319 Grant, page 21). To understand how impacted stream channels will respond to changes in the hydrology of the watershed, at a minimum the study should assess stream channel stability in the project area and downstream, including habitat features, determine thresholds of flow and flow duration for channel stability and habitat integrity, and evaluate the likely impacts from predicted stream flows following construction of the project. We expect the study to begin as soon as possible. This study needs to address the semi-arid climate of the project site, rainfall/runoff events with frequencies ranging from 0.5-yr to 100-yr, impacts from peak flow rates, and impacts from the increased flow duration required to release increased total runoff volumes. In addition, it is important that the study include field assessments of impacted stream reaches, including habitat and bed and bank materials, and modeling of stream flow for pre- and post-development based on long term hydrologic data records. In addition, potentially impacted stream reaches should be monitored during and after project construction to detect any negative impacts from the project. If negative impacts are detected after construction is complete, we expect the project to mitigate the damage and retrofit runoff BMPs if necessary

Water Quality Monitoring Program

The project Applicant has stated that the pollutant loadings from the project will be less than pre-development. Regional Board staff have interpreted this to mean that pollutant loadings during both construction and post-development phases will be less than pre-development loadings. This point of clarification is especially important considering the long time period during which grading and construction activities are planned to occur. Regional Board staff will continue to work with the Applicant to verify the assumptions in the pollutant loading models, including calibration with future water quality monitoring programs to ensure no net increase loading. In order to ensure that pollutant loading is not increased, the Applicant has agreed to develop a monitoring program that will incorporate both surface and groundwater monitoring elements. This program must be designed in a manner that will establish existing baseline conditions for constituents of concern (including pesticides); and include approaches for monitoring during construction phase and post development. The program should also include an assessment component, which includes water quality modeling, based on site-specific data, to periodically update the loading estimates and potential impacts.

Restrictions on Earthmoving

The potential sediment loadings from grading activities, especially grading of slopes during wet weather, are of particular concern. In addition to restrictions provided in the Ventura County Municipal Stormwater NPDES permit and SQUIMP, it is noted that the Draft City of Malibu Local Coastal Program Implementation Plan would restrict grading during wet weather. Although, the project lies outside of the Coastal Zone, we recommend that at a minimum, similar restrictions be applied to this project, since the project will include grading of sloped areas and has the potential to impact downstream coastal waters. A copy of the referenced excerpt from the Draft LCP is provided as Attachment C hereto for informational purposes.

4.15 WATER SUPPLY

4.15.2.3 Project Impacts

Effect WS-1: The project would generate an average daily demand for non-potable water from the TWRF of 1.52 million gallons per day (mgd) and a maximum daily demand of 3.69 mgd. The TWRF is expected to meet this demand, and impacts are considered less than significant.

Potential Groundwater Contamination from Rocketdyne Santa Susanna Field Laboratory.

Although the major source of irrigation water will be reclaimed water from the project and/or the TWRF, we understand that the Applicant intends to use water well No. 1 as a source of supplemental non-potable water. Concerns have been raised that pumping of this well has the potential to draw the contaminant plume from the Rocketdyne Santa Susanna Field Laboratory. Information provided to date has not provided conclusive evidence that the well will not impact the Rocketdyne contaminant plume, and additional information may be required.

4.16 SEWAGE TREATMENT/DISPOSAL

4.16.2.3 Project Impacts

Effect S-1: The net amount of wastewater sent to the TWRF from the proposed development would not create excessive supply and therefore cause the facility to violate the conditions of its Malibu Creek discharge permit. Impacts are considered less than significant.

Impact on TWRF

It is the Regional Board's understanding that the Applicant intends to provide a total of six days of storage for recycled water, consisting of normal operating storage of 2.5 million gallons and an additional 3 days of emergency storage (Water Quality Report, p. 3-10). According to the Applicant, this will provide a contingency for managing excess recycled water resulting from daily fluctuations or major storm events and will not adversely impact Tapia's ability to comply with the provisions of the discharge prohibition. Regional Board staff may request further evaluations to ensure that storage capacity is adequate and will not adversely impact Tapia's ability to comply with its permit requirements.

Biosolids Impact

An assessment on the potential cumulative impact of the biosolids discharged to the TWRF from the Project has not been addressed. Specifically, the impact on the ability of TWRF to meet its current effluent discharge limits given the highly concentrated nature of the liquid fraction within of the biosolids. Although TWRF has options for the

management of the solid portion of the biosolids, the liquids will be managed as effluent, and thus subject to effluent limits.

Summary

In summary, the Applicant has committed to not increasing pollutant loading from the project to Malibu Creek or the Los Angeles River. Loading data provided by the applicant is very preliminary and not based solely on site-specific data. Given that the commitment to zero increase in pollutant loading is very crucial to our assessment of this project, we will continue to evaluate the potential impact of the project, as new information becomes available. Furthermore, the Regional Board staff requests that we be consulted during the development of the mitigation monitoring conditions that pertain to protection of water quality.

Again, Regional Board staff appreciates the opportunity to comment on the DSEIR and related documents. Should you have any questions regarding this response, please contact Rod Collins at (213) 576-6691.

Sincerely,

Mèlinda Becker
Chief, Standards and TMDL Unit 1

Attachments: (3)

ATTACHMENT A

RESPONSES FROM AHMANSON RANCH CONSULTANTS AS RECEIVED BY REGIONAL BOARD STAFF ON JUNE 6, 2002

ATTACHMENT B

RESPONSES FROM AHMANSON RANCH CONSULTANTS AS RECEIVED BY REGIONAL BOARD STAFF ON JUNE18, 2002_

ATTACHMENT C

EXCEPRT FROM DRAFT CITY OF MALIBU LOCAL COASTAL PROGRAM IMPLEMENTATION PLAN
GRADING ORDINANCE

Letter No. 26

May 6th, 2004
City of Santa Clarita
Attn.: Mr. Jeff Hogan
Planning Department

RE: Newhall Land and Farming Company EIR SCH #2001091081 (River Park)

Ongoing degradation of the Santa Clara River Valley is threatening the important ecological values of this rich and diverse area.
The Santa Clara River is important habitat for many endangered species, native birds, plants, amphibians, reptiles, and fish. We have monitored many unlawful violations and environmental abuses in this area. Thus far, regulatory agencies and the City of Santa Clarita have failed to respond to these issues. 1

Newhall Lands AKA; Valencia Company's (Natural River Management Plan NRMP) and the proposed Riverpark project which relies on the Natural River Management Plan is based on inadequate biological data, and fails to consider important concerns. Please see attachment 1 (10 pages), May 2002 letter written to the California Department of Fish and Game addressing the Natural River Management Plan. 2
The Natural River Management Plan did not address side drainage's, and in many area's these tributaries were cleared, ponds were filled and Newhall Land has never mitigated for the loss of this habitat. These side drainage's are a valuable component of the Santa Clara River. We cannot protect the integrity of the Santa Clara River by saving only the bottom of the river. Please see attachment # 2 (25 pages) Where Rivers Are Born prepared by American Rivers. 3

Specific Comments on the proposed Riverpark Project are as follows:

The following comment upon Section 4.6, Biological Resources, of the Riverpark Revised EIR (Impact Sciences, Inc. March 2004), and the technical appendices for that section. The numbers at the beginning of each comment refer to the page number within Sec. 4.6. References to Impact Sciences may be abbreviated as IS in text.
1: the statement that there are only two identified agency-listed sensitive communities on the site is inaccurate and misleading on two levels: first, the 14 natural communities recognized further in the document (pgs. 9 – 17) include two (on p. 16) which do not correspond to the California Department of Fish & Game [hereinafter, CDFG] Natural Heritage Division's list of communities, and thus would not be considered sensitive as defined by the document. But, correctly defined, the so-called "riverwash" might be considered Riversidian alluvial fan sage scrub-– a listed sensitive community; and mixed oak/grass more 4 5

accurately would be considered valley oak/coast live oak savannah or grassland, also a listed sensitive community type. The preparers of the document appear to have developed their own substitute nomenclature for sensitive community types, to inaccurately record otherwise sensitive resources, and thereby render them invisible to the lay reader. 5

2: the disturbance of 13 acres along the margin of the river represents a temporal loss of highest habitat values, animal movement corridor, and sensitive vegetation type. The statement makes it sound insignificant, but even a temporary loss of this sort of habitat type is significant, and typically must be mitigated at a greater than 1:1 ratio. 6

4: the statement that significant impacts will be "mitigated" by preservation of other areas is not correct; it is minimization, but not mitigation. The areas not developed do not mitigate for impacts to resources lost to development, and such losses, where they are to sensitive habitats (riparian areas, coastal sage scrub, valley oak savannah) would have to be fully mitigated either by compensatory purchase and conservation easement, or creation and maintenance of like habitat values. Further, the set-aside of land within the project does not minimize specific impacts unless it represents similar habitat values to those lost (that is, chaparral set aside does not minimize or mitigate losses to coastal sage scrub or riparian areas); and it must be set aside for conservation purposes, without further or future development or active use (equestrian trails, recreation sites, etc.). Conservation areas must conserve and protect the natural resources, not merely provide additional human recreational opportunities. 7 8 9

5: Field surveys -- according to the document, surveys have been conducted on the site for arroyo toad, red legged frog, and other sensitive species since 1993, and the paragraph states that the technical reports documenting these surveys are included in the appendices to 4.6, but only a few surveys alluded to in this paragraph are included within the appendices provided. Moreover, most of the surveys were conducted only recently, not "since 1993," and by a former employee of the primary consultant firm. The accuracy and qualifications of the surveyors and their reports cannot be evaluated without access to all of the reports promised, but not delivered. 10

18: the language used in pgh. 2 concerning spadefoot observations by passersby remains inaccurate and misleading. A number of local biologists of considerable repute have repeatedly stated to the agencies and local groups that they had observed spadefoot toad on the site in past years, when the road led to school district offices, and that they were breeding within the ponds nearest the western entrance (behind the Vons market). The use of the term "passersby," implies that it might have been someone not skilled in the identification of amphibians, and therefore of little consequence. In point of fact, the ONLY reason that Impact Sciences and their subconsultant, Dave Crawford (a former IS employee) ever found the spadefoot on the site is that the agencies knew of their existence from these earlier reports, and insisted that the consultant repeat their surveys. To say that these surveys "resulted in detection of this 11

species on the site" is absurd. It had been detected years ago and was well-known to occur thereon; the final surveys only provided enlightenment to the consultants. This issue will be addressed in greater detail below, in the discussion of the spadefoot report in the technical appendices. 11

Section 2, Birds, on the same page: in the "common wildlife" discussions, California thrasher, oak titmouse and Nuttall's woodpecker were observed on the site and stated to be representative of their habitat types. Costa's hummingbird also is listed in the species accounts upon which the report was based. All four of these species are listed as California Special Animals by CDFG for areas where they nest, and all of them nest on the site. Inexplicably, though, they are considered only as common wildlife, and all of them are omitted from the sensitive species discussions (starting on p. 26 and in Table 2). 12

19: Mammals: this discussion is based upon at best sketchy data. The methodologies outlined in the one page report in the appendices are inadequate to determine more than the presence of the largest and commonest species, and moreover, were not conducted properly. The techniques used to set up scent stations, in particular, were sloppy and inadequately conducted, and the results should be disregarded. 13 14

26: In the section on Sensitive wildlife species, the corrected statement that twelve, not eleven, special-status species observed omits the four bird species noted above, as having been seen on the site. Moreover, these four species are not included in the "51 potential species"[sic] discussed in Table 2. 15

Table 4.6-2: The first two status accounts, for two species of fairy shrimp, are completely incorrect. They state that "No indication of vernal or other seasonal pools were detected during site surveys." and also that soils are not suitable for seasonal pools. How could the pools within the entry to the property have been overlooked by competent biologists? These pools form every winter, and often hold water for 4 months or more, sustaining breeding spadefoot and other amphibians. Even without water in them, their configuration and bottom substrates would suffice to alert any competent biologist to their seasonal presence. Clearly, the surveys conducted have been inadequate to the task of determining the presence/absence of sensitive aquatic resources, and in the absence of proper investigations, it can only be concluded that the spadefoot ponds on the site certainly might be suitable for fairy shrimp as well, as might the other seasonal pools on the site. 16 17 18

Statements in the status accounts for the horned lizards, whiptail and legless lizard (p. 29) are suspect. These species are have persisted throughout the upland margins of the Santa Clara River, and their presence on the site would be expected. That the surveyors for IS and their subconsultant did not find them is less surprising considering their inabilities to find large ponds in plain sight, and the statements that these species were not observed no doubt more reflect the capabilities of the observers than the status of the species on site. Focused surveys for these species must be conducted by competent, independent biologists. Likewise, the statement on the status of the garter snake, that "little to no ponding occurs on site," is incorrect, and taints the 19 20

entire account.
The table fails to include the black-crowned night heron, another CDFG listed species, commonly reported from the site in the bird survey accounts in the appendices. 20 21
Least Bell's vireo has recently been reported from the Riverpark area (Dan Cooper, Audubon Society), and occurs elsewhere along the river as a breeding bird (various reports, including Guthrie). 22
35: The statement in the first pgh. that the site supports perhaps 16 – 20 pair of breeding spadefoot is without supporting data or informational value. The person making the statement could not even find the species on the site during at least two prior years of surveys, and only "detected" them after being instructed to do so by the agencies. His observations are based upon one actual day of surveying, during a dry year, and without his having any way to determine where in the breeding cycle he made his observations. Prior reports had noted hundreds of breeding spadefoot on the site, and without any corroborating scientific evidence one way or the other, the estimate given is without biological merit. 23
35-37: The accounts given for various sensitive bird species invariably conclude that the species either don't breed on the site, based upon a lack of observations, or that they were observed during the breeding season, but actual nests were not observed. These statements can only serve to mislead the lay reader into assuming that they mean something they do not. The lack of observed breeding may either reflect the timing of the observations, the lack of effort to find the nests, or the inability of the observers to find nests. Moreover, many of the species listed are very secretive during nesting, and finding their nests would be very difficult. Not finding them does not mean they aren't there. 24
Further, the statements that San Diego black-tailed jackrabbits on the site occupy areas that are occasionally disturbed means that those areas are only moderate in quality for the species implies a knowledge that the writers do not have. IF the species is present within a particular area on the site, then that is where they choose to forage or reside, and therefore it is not "moderate in quality," but rather, it clearly is suitable to their needs. Such meaningless, unsupported value judgements can mislead the reader into concluding that the loss of these habitat areas will not be significant, only "moderate." 25 26
47: The City has adopted its own policies for the County Significant Ecological Areas (a court-mandated General Plan zoning overlay) within its jurisdiction, but this in no way accords SEA status to the former County overlay. Being an SEA means that project effects to natural resources within the overlay are reviewed by a Technical Advisory Committee (SEATAC), which reports directly to the L.A. Co. Regional Planning Commission. Reports such as this one, which are intended to provide biological information relative to the CEQA process, would be critically and carefully reviewed by SEATAC, and recommendations would be given to insure the integrity of the SEA relative to development approvals. No such process exists within the City of Santa Clarita, and therefore the " 27

adoption" of the SEAs is symbolic, but essentially meaningless in terms of the intent of the SEA element of the County General Plan. 27

50 – 52: The assumption that less than 100 feet of setback for direct project impacts and grading is warranted because of the disturbed nature of the uplands is motivated by a desire to accommodate the project, not the environment. Encroachment into the riverbed cannot be justified by the condition of the uplands, and revegetation of the graded areas subsequent to their destruction does not minimize the need for at least 100 foot development setbacks. The only methodology that makes sense for river margin developments is site-specific setbacks for habitat types. This requires expertise and knowledge of the resources present and at risk of disturbance, and such an assessment is clearly lacking from this report. 28

In conclusion the Santa Clara River is threatened by ongoing and proposed housing developments, commercial development, industrial development, roads, bridges, mining and major alterations to the banks and tributaries of the Santa Clara River. The cumulative impacts to the Santa Clara River Watershed are staggering. Comprehensive independent studies and surveys must be conducted for the Santa Clara River in order to address the cumulative impacts to our watershed and ensure that the river does not meet the fate that all other rivers in Southern California has.. The Santa Clara River is an important part of California's natural heritage. 29

Teresa Savaikie
26724 Mocha Drive
Saugus, Calif. 91350

Attachments:
1) Letter written to the California Department of Fish and Game addressing the Natural River Management Plan, May 2002. (10 pages)
2) Where Rivers are Born - A recent report released by American Rivers and the Sierra Club on the importance of tributaries including small unnamed drainage's - (22 pages)
3) Letter from Daniel S. Cooper, Director of Bird Conservation, Audubon California (1 page)
4) Environmental Defense Center press release January 2004, Endangered Unarmored threespined stickleback (2 pages)
5) LA Weekly articles - Gods of Small Things - 20 pages - The City of Santa Clarita was made of the observations that are discussed in this article. .

Attachment ~~E~~ F

page 1 of 10

#1 - Fish & Game letter submitted May 20, 2002 - Issues related to EA projects within the Santa Clara River / issues related to the Natural River Management Plan

May 20, 2002

Director Robert Hight
California Department of Fish and Game
1416 Ninth Street
Sacramento, California 95814
Phone: (916) 445-0411
Fax: (916) 653-1856
rhight@dfg.ca.gov

Re: Management of the Santa Clara River

Dear Director Hight,

We would like to thank you for the work of your department to protect the natural resources of the State of California and your attention to the concerns we express in this letter.

Ongoing degradation of the Santa Clara River valley is threatening the important ecological values of this rich and diverse area. On behalf of the undersigned organizations and their members, we submit these comments and concerns about the management of the Santa Clara River.

The Santa Clara River is important habitat for many endangered species, native birds, plants, amphibians, reptiles, and fish. We have monitored many unlawful violations and environmental abuses in this area. Thus far, regulatory agencies have failed to respond to these problems.

Recognizing that the mission of the Department of Fish and Game (DFG) is to manage California's diverse fish, wildlife, and plant resources - and the habitats upon which they depend - for their ecological values and for their use and enjoyment by the public, we urge you to take action to protect the resources of the Santa Clara River. Specifically, we encourage the DFG to:

... Revoke the streambed alteration agreement for Newhall Land and Farming/Valencia Company (ACOE404/CDFG1603). AKA; Valencia Company's Natural River Management Plan NRMP) The agreement, based on inadequate biological data, fails to consider important concerns. A new, amended agreement must be adopted subsequent to a careful environmental impact review. ... Withhold approval on any permits or agreements for the proposed Newhall Ranch project until an unbiased, scientific review, guided by applicable federal and California environmental statutes, can inform necessary protection and mitigation measures for endangered and threatened species. As an important part of California's natural heritage the Santa Clara River should be a high priority for conservation measures and protection from degradation. The California Department of Fish and Game has a responsibility to uphold the Public Trust by protecting wildlife and its habitat. We appreciate your consideration of this letter that describes our concerns about the ongoing Natural River Management Plan, the proposed Newhall Ranch project, and the context for those concerns.

The Santa Clara River

The Santa Clara River, southern California's last truly dynamic big river, boasts one of the largest watersheds in the South Coast region at 1,600 square miles. The Santa Clara River is the longest free-flowing river in southern California, and is the only one that extends from the desert to the coast. The river is of critical biological importance linking several major ecoregions: Coastal Plain, Coast Ranges, Transverse Ranges, and Mojave Desert. The 116-mile-long river rises on the northern slope of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, lined by riparian habitat featuring willow, mulefat, and cottonwood forests - habitats so rare that they still exist in only three to five percent of their original range in the western United States. These streamside habitats are home to 12 federally endangered species among other sensitive native wildlife. Unfortunately, the Santa Clara River and its tributaries are within one of the most rapidly urbanizing watersheds in the state. This makes the area a high priority for monitoring and enforcing environmental regulations.

Wildlife

The Santa Clara River is a key wildlife corridor that connects the Los Padres and Angeles National Forests.

The habitat along the Santa Clara River supports the largest community of riparian-obligate birds between the Santa Ynez River in Santa Barbara County and the Prado Basin in Riverside County. The Audubon Society designated this area as an Important Bird Area. Some of the sensitive bird species that occur within this stretch of the Santa Clara River include: least Bell's vireo, southwestern willow flycatcher, yellow-billed cuckoo, Cooper's hawk, sharp-shinned hawk, merlin, prairie falcon, yellow breasted chat, yellow warbler, common yellowthroat, mountain plover, western burrowing owl, long-eared owl, ferruginous hawk, white-tailed kite,

tri-colored blackbirds, many other sensitive raptors and songbirds. Mammals observed or expected to occur in this area include: California leaf-nosed bat, small-footed myotis, long-eared myotis, fringed myotis, long-legged myotis, Yuma myotis, pale Townsend's big-eared bat, spotted bat, pallid bat, California mastiff bat, San Diego black-tailed jack rabbit, San Diego desert woodrat, Los Angeles pocket mouse, ringtail, mountain lion, bobcat, coyote, gray fox, American badger, and deer. Reptiles include: western pond turtle, San Diego horned lizard, California horned lizard, coastal western whiptail, silvery legless lizard, rosy boa, San Bernadino ringneck snake, two-striped garter snake. Insects: riverside fairy shrimp, and San Emigdio blue.
Fish: unarmored threespined stickleback, arroyo chub, Santa Ana sucker, and steelhead trout.
Amphibians occurring include arroyo toad, western spade-foot toad, and California red-legged frog.
Many California native and rare plants are also present.
While this is not an exhaustive list of the remarkable wildlife that inhabits the Santa Clara River area, it exhibits the rich diversity and importance of preserving habitat for these species.

3

Streambed Alteration Agreement Requires Review and Amendment
Newhall Land and Farming Company (NLF) has been engaged in development activities in the Santa Clara River valley for decades. Such development poses a strong threat to the persistence of native wildlife and natural ecosystems. A Natural River Management Plan (NRMP) was created by Newhall Land and Farming to guide the development of the Santa Clara River valley. Since the plan was created, significant new scientific information has rendered the NRMP inadequate. Year after year, NLF has used an outdated agreement to continue development and inhibit environmental protection on hundreds of acres along the river. The NRMP streambed alteration agreement should be revoked and a comprehensive review of the Newhall Land and Farming Company's development in the Santa Clara River valley must be conducted as mandated by the California Environmental Quality Act (CEQA).

Two key factors have demonstrated the inadequacy of the current NRMP. First, the biological inventories are inadequate and overlooked several important natural resources. And second, the approved Natural River Management Plan does not provide satisfactory mitigation for the negative impact that the development has on the ecosystem.

Inadequate Biological Inventories
The current NRMP was based on surveys conducted by scientists with a conflict of interest. The scientists conducting the surveys were employed by Newhall Land and Farming Company. The biological inventories were never reviewed by independent biologists and they failed to identify many important natural resources that need to be conserved.

Originally, the use of hazing machines during wildlife surveys may have

precluded an accurate count of state and federally protected species. NLF installed more than 30 hazers to scare away nesting birds along sections of the river. Officials estimate that the hazers had been in place for as many as 2 to 5 years. The river provides suitable habitat for two endangered birds, the willow flycatcher and the least Bell's vireo. As federally protected species, the hazing machines may have excluded these birds from surveys and it is likely that the machines also harassed the birds.
Also, an endangered species, the arroyo toad (Bufo microscaphus californicus) was not accounted for in the NRMP despite the fact that it can be found within the boundaries of the area covered by the NRMP. The arroyo toad was listed as a federal endangered species in 1994. The State of California classifies it as a Species of Special Concern. The arroyo toad has been extirpated from approximately 75 percent of its previously occupied habitat. This amphibian is a habitat specialist to the dynamic climatic regime and drainages of the central and southern California coast, and a sensitive indicator to the quality of riparian habitats and stream systems. The major reason for their decline is human alteration and use of arroyo toad habitats that include water storage reservoirs, recreational facilities, flood control structures, agriculture and urbanization. Introduction of predatory non-native fish and wildlife has also impacted the arroyo toad. Studies conducted by Dan Holland on Camp Pendleton revealed that arroyo toads travel up to 1.5 miles from the edge of the riparian ecotone to utilize upland habitats for foraging and burrowing. In upland travel, these toads are vulnerable to predation, entrapment, and human-caused sources of mortality such as roadways. Burrowed toads are often situated a few inches below the soil surface, and can be easily crushed by pedestrian or vehicle traffic.

The first records of the arroyo toads within the vicinity of Newhall Land and Farming development were listed in the California Biodiversity Data Base in 1994. Biologists also reported presence of the arroyo toad in 1996, 1998 (egg cases), and 2000 (tadpoles). The toads in this area have been continuously overlooked by regulation agencies. The U.S. Fish and Wildlife Service failed to include land owned by NLF as critical habitat for the arroyo toad. This is a noteworthy omission since no other river system with arroyo toads lacks such designation. Subsequently, the Fish and Wildlife Service did not address impacts upon the arroyo toad in the Biological Opinions for the development projects.

In April of 2001, four adult arroyo toads were located in field surveys conducted by N.H. Sandburg along the Santa Clara River in the ongoing North Valencia 1 project. The riparian area and the river were incurring heavy impacts from trespassing off-highway vehicle (OHV) traffic, directly impacting burrow substrate in the area where the toads were located. In addition, a flowing tributary adjacent to the area where one toad was located was channeled by heavy equipment and denuded of riparian vegetation. While agencies concur that the arroyo toad exists in the Newhall development area, these agencies have failed to take appropriate regulatory action:
... Newhall Land and Farming disked arroyo toad upland habitat directly above

the site location of four adult toads, which most likely caused take on the arroyo toad. Again, the Fish and Wildlife Service and Army Corps declined to take regulatory action.
... Hundreds of acres of cottonwood and other vegetation types that comprised arroyo toad upland habitat has been removed and replaced by asphalt, parking lots, and roadways. Arroyo toads require and utilize upland habitats wherever accessible for foraging and burrowing. They cannot maintain populations where riparian systems have been lost.
... Large apartment complexes have been constructed directly on upland habitat of the arroyo toads most recently located. The creek directly downstream of the apartment complex has again been channeled by heavy equipment and denuded of riparian vegetation. This creek would have been an important water source and breeding habitat for the toad. The uplands continue to be developed with intensive land manipulations and roadways. Off-road traffic continues on top of breeding, foraging, and burrow habitat in the Santa Clara River bed.
Therefore, new measures must be included in an amended plan that protects the arroyo toad from harm or harassment.

Currently the implementation of the NRMP allows the "take" of endangered species that cannot be ignored. The CEQA, EIR, and NRMP documents did not acknowledge the arroyo toad, and subsequently failed to address impacts upon this endangered species with the result that irrevocable harm and take has undoubtedly occurred. Any new management plan should incorporate new biological surveys conducted by independent scientists.

Unsatisfactory Mitigation and a History of Violations
Second, the approved Natural River Management Plan does not provide satisfactory mitigation for the negative impact that the development has on the ecosystem. Newhall Land and Farming (NLF) has a history of unlawful activities along the Santa Clara River. It is imperative to monitor this company and uphold applicable environmental laws. Some of Newhall's most significant violations to-date include:
1. In 1992, NLF unlawfully channelized Bouquet Creek near the confluence of the Santa Clara River. The company illegally poured concrete in the creek and destroyed habitat along the banks. The concrete was never removed, Newhall paid a fine of only a small portion of the cost of the damage and their wetland mitigation measures have failed miserably.
2. Newhall widened the McBean Parkway Bridge over the Santa Clara River without a permit. As a result Newhall sidestepped laws that would have required them to mitigate for threats to endangered species and habitat destruction.
3. In 2001, Friends of the Santa Clara River reported that NLF dewatered wetlands that were not identified in the Natural River Management Plan or Streambed Alteration Agreement. In the last year, vital wetlands have been destroyed and in a single day hundreds of thousands of amphibian eggs, native fish, acres of cattail/willow habitat have been wiped out.
4. In violation of the Migratory Bird Treaty Act, there have been several

incidents of NLF's activities harming colonies of migratory songbirds. Biologists reported that colonies of redwings, song sparrows, and common yellowthroats along San Francisquito creek were extirpated in June 1999. Without a permit, NLF has installed hazing machines to keep endangered birds such as the least Bell's vireo from breeding and nesting in areas planned for development. Such harassment could be considered a violation of the Endangered Species Act among other laws intended to protect endangered species.

6

The current NRMP has resulted in damage to the biological diversity of the Santa Clara River and its tributaries. A new management plan should account for these violations and incorporate mitigation for problems such as the lost wetlands. The NRMP must be pulled for CEQA review to address the problems described above.

The Newhall Ranch Project

Newhall Ranch is a "new town" proposed by the Newhall Land and Farming Company (also known as the Valencia Company). The project consists of 22,000 dwelling units on nearly 12,000 acres that will house approximately 68,000 people. The project features 323 acres of commercial and business uses, over 5,000 acres of high country and river corridor open areas, an 18-hole golf course, a 15-acre man-made lake, and a 6.9 million gallons-per-day water reclamation plant.

Potential Impacts of the Newhall Ranch Project

The development of the proposed Newhall Ranch will have many environmental impacts that must be addressed. The Newhall Ranch project plan that was created for this area has not provided adequate regulatory measures.

First, the Santa Clara River is a major wildlife corridor that will be fragmented by development. The Santa Clara River and its tributaries serve as major wildlife corridors. Newhall Land and Farming's development has substantially degraded the value of the Santa Clara River as a wildlife corridor. Already the development has hemmed in the Santa Clara River with thousands of homes, condominiums, apartments, drive through restaurants, retail stores, gas stations, car washes and various other commercial and industrial sites within no more then a 100 foot buffer zone from the river.

Second, development in the Santa Clara River valley will change water quality, flow, and may deplete water resources. The Newhall Ranch is being constructed in a flood plain. Such development requires massive alteration to the natural flow of the river. Changes to the river and the riparian habitat surrounding the river will inevitably result in changes in the flow, course, and cleanliness of the river water. This will negatively impact the wildlife in the area. Moreover, the use of water for the new town will deplete local aquifers and lower the water table upon which local vegetation depends. Increased storm runoff and channelization of the river's tributaries will result in higher water velocities and increase the likelihood of flooding. Runoff will also exacerbate water quality problems in the Santa Clara River. The proposed urban area is expected to release millions of gallons of treated sewage water into the river. Currently the

water has a very high level of chemicals that have triggered an investigation by CA Regional Water Quality Control Board to determine whether treatment plant releases are responsible.

1

Third, endangered, threatened and other special status birds, fish, reptiles, and amphibians will be impacted from "take" and habitat destruction. The habitat along the Santa Clara River supports a large community of wildlife that is considered a high priority for protection. Several species that occur in the valley are listed as endangered or threatened pursuant to the federal Endangered Species Act. There are other imperiled species with habitat in this area that are protected under California laws. The Newhall Ranch will threaten these species through habitat destruction and direct "take" of species-that means to harass, harm, hunt, shoot, wound, kill, trap, capture, or collect.

For example, the unarmored threespine stickleback (Gasterosteus aculeatus wiliamsoni), an endangered species, is at risk. The unarmored threespine stickleback is protected both under the federal Endangered Species Act and California law. The stickleback is a small, scaleless, freshwater fish that inhabits the slow and quiet waters of streams and rivers. The stickleback depends on clean, clear water with a good diversity of algae and other plants. Historically, the stickleback was found throughout Southern California, but by 1985 it only remained in a small portion of the upper Santa Clara River drainage in Los Angeles County and the San Antonio Creek drainage in Santa Barbara County. The decline of the stickleback is attributed to urbanization in the Los Angeles area.

The cumulative impacts of the development permitted by the current Natural River Management Plan and the proposed Newhall Ranch will seriously and adversely impact the stickleback population in the San Francisquito Creek. The overall impacts of development on lower San Francisquito Creek are likely to increase the isolation of this population of the unarmored threespine stickleback. This will increase the risk of extirpation of this population. Isolation prevents genetic exchange and the stickleback requires upstream movement in its life strategy. The second potential adverse impact is from water extraction. If the frequency, magnitude and length of time water flows are present in this area are reduced this could harm the stickleback population. Deviation from historical hydrological conditions creates greater impacts on natural ecosystems.

The impacts upon the arroyo toad and unarmored threespine stickleback have not been adequately addressed within the Natural River Management Plan and the proposed Newhall Ranch plan. This is a serious regulatory and legal failing of federal and state jurisdictional agencies. The continuing unregulated impacts of this project may cause the loss of the remaining and increasingly isolated population of arroyo toads and stickleback within the Santa Clara River valley.

Fourth, existing measures have not adequately considered or mitigated for environmental impacts. Unregulated actions by Newhall Land and Farming

continue and have significant negative impacts. These actions include: habitat destruction, take of endangered species, violation of the Migratory Bird Treaty Act, paving, construction, disking, draining of wetlands, channeling streams, introduction of non-native predators, sewage run-off, and pollution. The EIR, CEQA, and NFMA documents are seriously deficient and fail to address many of these critical issues and their cumulative effects.

8

Newhall Ranch Is Already Moving Ahead Prior to Official Approval

Newhall Land and Farming destroyed the Spineflower, an important plant that was once thought extinct. Although the San Fernando Valley Spineflower was once assumed to be extinct, it has been properly identified on the proposed site of the Newhall Ranch. The San Fernando Valley Spineflower is listed as Endangered under the California Endangered Species Act and is a candidate under the federal ESA (Endangered Species Act). Recently, biologists have observed that the activities of NLF have systematically destroyed the habitat and threatened the survival of this rare species. Impacts to rare species, especially rare plants, are extremely difficult and expensive to mitigate. A study by Dr. Peggy Fiedler demonstrated that mitigation measures for rare plant species, such as the Spineflower, have failed over 90 percent of the time.

Major alterations were made to the Santa Clara River prior to preparing the required Environmental Impact Report. In 1992 NLF engaged in major alterations to the Santa Clara River at the proposed Newhall Ranch site. Some controversy exists over whether these alterations took place prior to completing measures required by law. Photos of the streambed alterations compared with overlays of the proposed Newhall Ranch project substantiate that the alterations happened before an adequate environmental review.

Responsibilities of the California Department of Fish and Game
The mandate of the California Department of Fish and Game requires the DFG to uphold environmental laws and ensure that California's diverse wildlife, plants, and their habitat are preserved for their ecological values. As a part of this commitment the Department of Fish and Game must take action to ensure that the Santa Clara River Valley is protected as a part of California's natural heritage. Additionally, due to the sensitive issues around the Newhall Ranch project we are concerned that employees may face retaliatory actions or may be reprimanded for reporting violations. DFG employees who take proactive steps toward assuring that the DFG complies with environmental laws and its mission should be commended. As an interested party in the protection of the Santa Clara River we intend to monitor the actions of the Department of Fish and Game and its compliance and enforcement of environmental laws.

Conclusion
The Newhall Land and Farming's Natural River Management Plan has failed to

protect the diversity and natural resources in the Santa Clara River valley. The plan was approved before important natural resources were identified. These poor management practices are a precursor to the destruction the Newhall Ranch project may impose on the Santa Clara River if approved. The Natural River Management Plan has permitted the destruction of portions of the Santa Clara River and will continue the devastation up the San Francisquito Creek and down the river through the proposed Newhall Ranch project area unless the Department of Fish and Game requires further CEQA review and depends upon sound, unbiased scientific studies to ensure adequate mitigation measures. The Department of Fish and Game needs to take proactive measures to monitor the actions of Newhall Land and Farming Company and must uphold the strictest environmental regulations to protect the biologically important Santa Clara River valley.

9

We urge the Department of Fish and Game to revoke the streambed alteration agreement until the Natural River Management Plan accounts for the impacts described above and withhold new permits until adequate CEQA reviews and mitigation measures can protect the ecological values in this region.

Thank you, again, for your attention to this letter and the concerns expressed above.
Sincerely,

Kris Ohlenkamp
Audubon Society / San Fernando Valley Chapter

David Magney
California Native Plant Society

Peter Galvin
Center for Biological Diversity

Ron Bottorff, Chairman; Barbara Wampole, Vice chair; Teresa Savaike
Friends of the Santa Clara River

Lynne Plambeck
SCOPE (Santa Clarita Organization for Planning and the Environment)

Gordon Labedz
Sierra Club / Angeles Chapter

Henry Schultz
Sierra Club / Santa Clarita Valley Group

Cc:
Barbara Boxer CA Senator fax 213-894-5012
Rick Farris USFWS
Mary Nichols Secretary of Resources Agency CA
Maria Rea Resources Agency CA

Penny Liotta CDFG
Morgan Wehtje CDFG
Paul Edelman SMMC
Rorie Skei SMMC

Brian Hembacher CA Attorney General's office
Sara Morrison CA Attorney General's office
Greg Newmark CA Attor Gen LA

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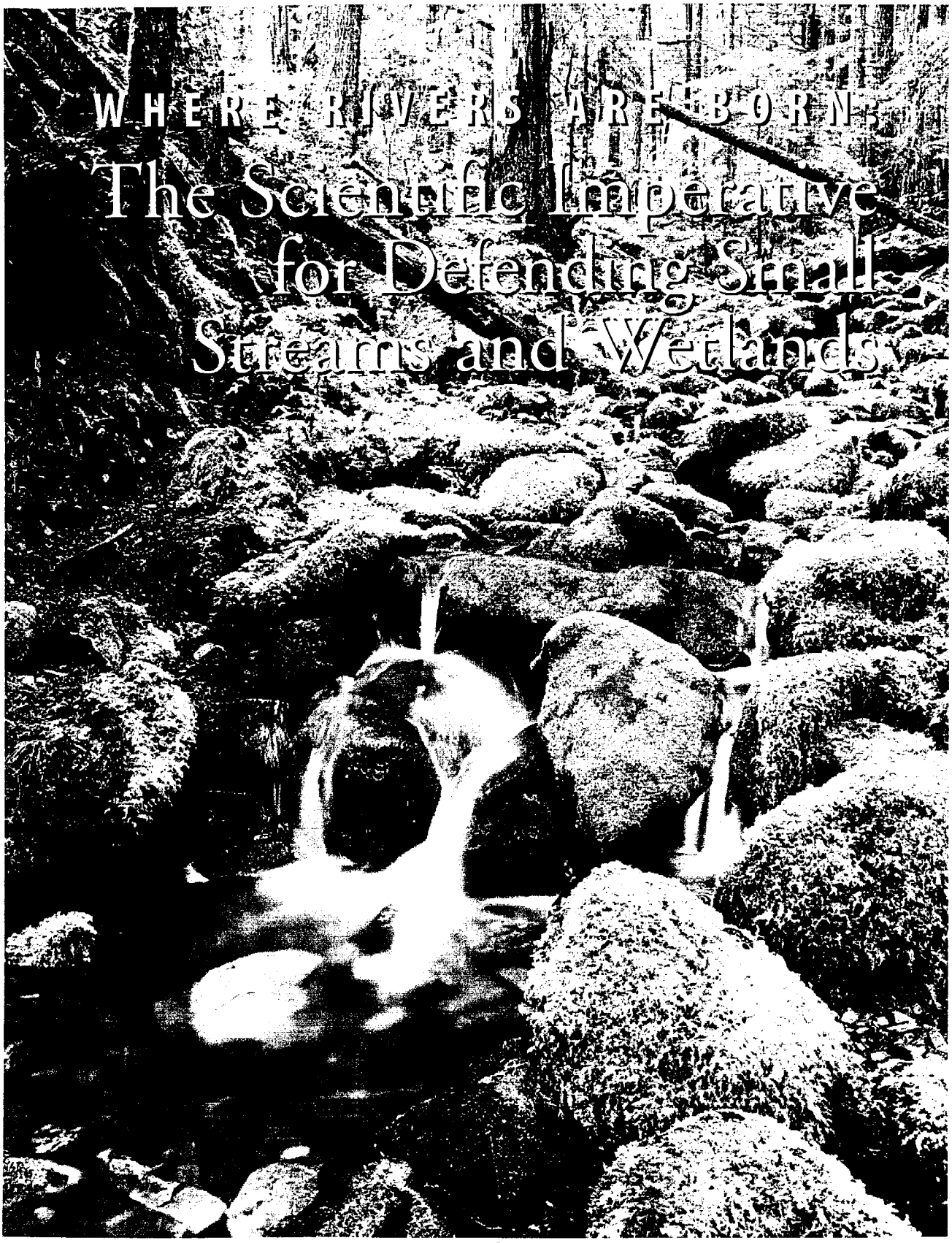
Barbara Wampole
28006 San Martinez Grande Road
Saugus, CA 91384-2306
661-257-3036 voice
661-294-9290 fax

barbara@wampole.com
http://www.imageg.com
http://FSCR.org
http://www.wampole.com
http://www.540.com

Peter Galvin
California and Pacific Director
Center for Biological Diversity
Post Office Box 83
Garberville, California 95542

P: (707) 986-7805 or Mobile # (520) 907-1533
F: (707) 923-4210



Attachment 2 Page 1 of 22

WHERE RIVERS ARE BORN:

The Scientific Imperative for Defending Small Streams and Wetlands

The following scientists authored *Where Rivers Are Born:*

Judy L. Meyer, Ph.D.
Distinguished Research Professor
Institute of Ecology and River Basin Science and Policy Center
University of Georgia
Athens, GA

Expertise: *River and stream ecosystems*

Louis A. Kaplan, Ph.D.
Senior Research Scientist
Stroud Water Research Center
Avondale, PA

Expertise: *Organic matter biogeochemistry and microbial ecology of stream ecosystems*

Denis Newbold, Ph.D.
Research Scientist
Stroud Water Research Center
Avondale, PA

Expertise: *Nutrient cycling in stream ecosystems*

David L. Strayer, Ph.D.
Scientist, Institute of Ecosystem Studies
Millbrook, NY

Expertise: *Distributions and roles of freshwater invertebrates including exotic and endangered species*

Christopher J. Woltemade, Ph.D.
Associate Professor
Department of Geography-Earth Science
Shippensburg University
Shippensburg, PA

Expertise: *Hydrology, fluvial geomorphology, stream and wetland restoration, and water quality*

Joy B. Zedler, Ph.D.
Aldo Leopold Professor of Restoration Ecology
University of Wisconsin-Madison
Madison, WI

Expertise: *Wetland and restoration ecology*

Richard Beilfuss, Ph.D.
Africa Program Director, International Crane Foundation
Baraboo, WI

Expertise: *Wetland hydrology and ecological restoration*

Quentin Carpenter, Ph.D.
Lecturer, Gaylord Nelson Institute for Environmental Studies
University of Wisconsin-Madison
Madison, WI

Expertise: *Groundwater-fed wetlands*

Ray Semlitsch, Ph.D.
Professor of Biology
University of Missouri
Columbia, MO

Expertise: *Amphibian conservation biology, wetland ecology*

Mary C. Watzin, Ph.D.
Director, Rubenstein Ecosystem Science Laboratory
School of Natural Resources, University of Vermont
Burlington, VT

Expertise: *Aquatic ecology and ecosystem management*

Paul H. Zedler, Ph.D.
Professor of Environmental Studies
University of Wisconsin - Madison
Madison, WI

Expertise: *Plant population and community ecology*

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WHERE RIVERS ARE BORN:

The Scientific Imperative for Defending Small Streams and Wetlands

EXECUTIVE SUMMARY

Our nation's network of rivers, lakes and streams originates from a myriad of small streams and wetlands, many so small they do not appear on any map. Yet these headwater streams and wetlands exert critical influences on the character and quality of downstream waters. The natural processes that occur in such headwater systems benefit humans by mitigating flooding, maintaining water quality and quantity, recycling nutrients, and providing habitat for plants and animals. This paper summarizes the scientific basis for understanding that the health and productivity of rivers and lakes depends upon intact small streams and wetlands.

Historically, federal agencies have interpreted the protections of the Clean Water Act to cover all the waters of the United States, including small streams and wetlands. Despite this, many of these ecosystems have been destroyed by agriculture, mining, development and other human activities. The extent to which small streams and wetlands should remain under the protection of the Clean Water Act is currently (2003) under consideration in federal agencies and Congress. Extensive scientific studies document the significance of these small systems and form the basis for this paper. Further references are provided at the end of the document.

We know from local/regional studies that small, or headwater, streams make up at least 80 percent of the nation's stream network. However, scientists' abilities to extend these local and regional studies to provide a national perspective is hindered by the absence of a comprehensive database that catalogs the full extent of streams in the United States. The topographic maps most commonly used to trace stream networks do not show most of the nation's headwater streams and wetlands. Thus, such maps do not provide detailed enough information to serve as a basis for stream protection and management.

Scientists often refer to the benefits humans receive from the natural functioning of ecosystems as ecosystem services. The special physical and biological characteristics of intact small streams and wetlands provide natural flood control, recharge groundwater, trap sediments and pollution from fertilizers, recycle nutrients, create and maintain biological diversity, and sustain the biological productivity of downstream rivers, lakes and estuaries. These ecosystem services are provided by seasonal as well as perennial streams and wetlands. Even when such systems have no visible overland connections to the stream network, small streams and wetlands are usually linked to the larger network through groundwater.

Small streams and wetlands offer an enormous array of habitats for plant, animal and microbial life. Such small freshwater systems provide shelter,

food, protection from predators, spawning sites and nursery areas, and travel corridors through the landscape. Many species depend on small streams and wetlands at some point in their life history. For example, headwater streams are vital for maintaining many of America's fish species, including trout and salmon. Both perennial and seasonal streams and wetlands provide valuable habitat. Headwater streams and wetlands also provide a rich resource base that contributes to the productivity of both local food webs and those farther downstream. However, the unique and diverse biota of headwater systems is increasingly imperiled. Human-induced changes to such waters, including filling streams and wetlands, water pollution, and the introduction of exotic species, can diminish the biological diversity of such small freshwater systems, thereby also affecting downstream rivers and streams.

Because small streams and wetlands are the source of the nation's fresh waters, changes that degrade these headwater systems affect streams, lakes, and rivers downstream. Land-use changes in the vicinity of small streams and wetlands can impair the natural functions of such headwater systems. Changes in surrounding vegetation, development that paves and hardens soil surfaces, and the total elimination of some small streams reduces the amount of rainwater, runoff and snowmelt the stream network can absorb before flooding. The increased volume of water in small streams scours stream channels, changing them in a way that promotes further flooding. Such altered channels have bigger and more frequent floods. The altered channels are also less effective at recharging groundwater, trapping sediment, and recycling nutrients. As a result, downstream lakes and rivers have poorer water quality, less reliable water flows, and less diverse aquatic life. Algal blooms and fish kills can become more common, causing problems for commercial and sport fisheries. Recreational uses may be compromised. In addition, the excess sediment can be costly, requiring additional dredging to clear navigational channels and harbors and increasing water filtration costs for municipalities and industry.

The natural processes that occur in small streams and wetlands provide Americans with a host of benefits, including flood control, adequate high-quality water, and habitat for a variety of plants and animals. Scientific research shows that healthy headwater systems are critical to the healthy functioning of downstream streams, rivers, lakes and estuaries. To provide the ecosystem services that sustain the health of our nation's waters, the hydrological, geological, and biological characteristics of small streams and wetlands require protection.

Introduction

Our nation's rivers, from the Shenandoah to the Sacramento, owe their very existence to the seemingly insignificant rivulets and seeps that scientists call headwater streams. Although 19th century explorers often searched for the headwaters of rivers, the birthplace of most rivers cannot be pinpointed. The origins of rivers are many anonymous tiny rills that can be straddled by a 10-year-old child, and no one trickle can reasonably be said to be "the" start of that river. Rather, rivers arise from a network of streamlets and wetlands whose waters join together above and below ground as they flow downstream. As other tributaries join them, creeks grow larger, eventually earning the title "river." The character of any river is shaped by the quality and type of the numerous tributaries that flow into it. Each of the tributaries is, in turn, the creation of the upstream waters that joined to form it.

The ultimate sources of a river often appear insignificant. They could be a drizzle of snowmelt that runs down a mountainside crease, a small spring-fed pond, or a depression in the ground that fills with water after every rain and overflows into the creek below. Such water sources, which scientists refer to as headwater streams and wetlands, are often unnamed and rarely appear on maps. Yet the health of these small streams and wetlands is critical to the health of the entire river network. The rivers and lakes downstream from degraded headwater streams and wetlands may have less consistent flow, nuisance algal growth, more frequent and/or higher floods, poorer water quality, and less diverse flora and fauna.

Historically, federal agencies have interpreted the protections of the Clean Water Act to cover all the waters of the United States, including small streams and wetlands. The current administration is examining whether such streams and wetlands merit protection. In January 2003, the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers announced an "advance notice of proposed rulemaking" to solicit public comments on whether and how to exclude "isolated," intrastate, and non-navigable waters from the scope of the Clean Water Act. Many small streams and wetlands, including headwater streams, could fall into one or more of those categories. At the same time, the agencies instructed their field staff not to enforce the law to protect such waters or, depending on the situation, to seek case-by-case guidance from headquarters before enforcing the Act.

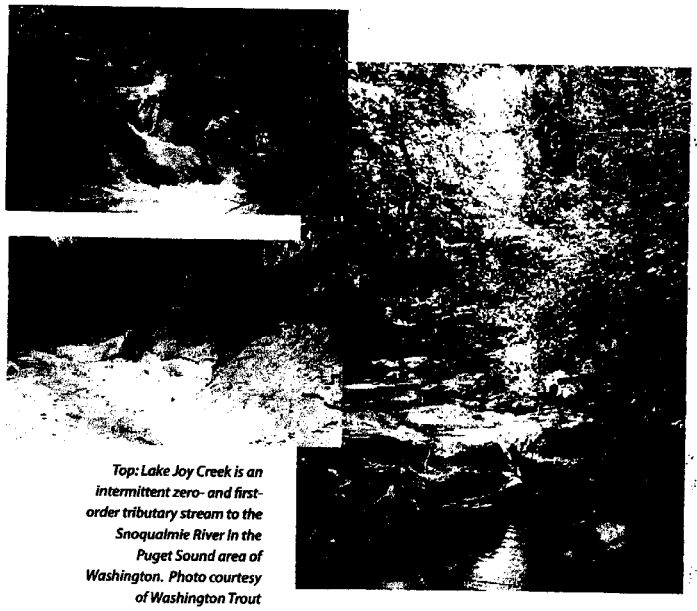
Small streams and wetlands provide crucial linkages between aquatic and terrestrial ecosystems and also between upstream watersheds and tributaries and the downstream rivers and lakes. This paper summarizes the scientific basis for understanding how small streams and wetlands mitigate flooding, maintain water quality and quantity, recycle nutrients, create habitat for plants and animals, and provide other benefits.

Human Beings Depend on Functioning Headwater Stream Systems

Human civilizations and economies are ultimately based on the products and processes of the natural world. While frequently hidden from view, some of the processes integral to the functioning of ecosystems-such as the purification of water and the processing of waste-are crucial to human well-being. Scientists often refer to the benefits humans receive from the functioning of natural ecosystems as *ecosystem services*.

The natural processes that occur in intact headwater streams and wetlands affect the quantity and quality of water and the timing of water availability in rivers, lakes, estuaries and groundwater. For example, the upper reaches of stream networks are important for storing water, recharging groundwater, and reducing the intensity and frequency of

"THE RIVER ITSELF HAS NO BEGINNING OR END. IN ITS BEGINNING, IT IS NOT YET THE RIVER; IN ITS END, IT IS NO LONGER THE RIVER. WHAT WE CALL THE HEADWATERS IS ONLY A SELECTION FROM AMONG THE INNUMERABLE SOURCES WHICH FLOW TOGETHER TO COMPOSE IT. AT WHAT POINT IN ITS COURSE DOES THE MISSISSIPPI BECOME WHAT THE MISSISSIPPI MEANS?"



Top: Lake Joy Creek is an intermittent zero- and first-order tributary stream to the Snoqualmie River in the Puget Sound area of Washington. Photo courtesy of Washington Trout

Cwnter: A primary headwater stream in arid Cienega Creek Preserve, Pima County. Photo courtesy of Alabama Game and Fish Division

Right: A primary headwater stream in Athens County, Ohio. Photo courtesy of Ohio EPA

Bottom: Diagram of stream orders within a stream system. Image created by Sierra Club, based on EPA graphic.

floods. Stream and wetland ecosystems also process natural and human sources of nutrients, such as those found in leaves that fall into streams and those that may flow into creeks from agricultural fields. Some of this processing turns the nutrients into more biologically useful forms. Other aspects of the processing store nutrients, thereby allowing their slow and steady release and preventing the kind of short-term glut of nutrients that can cause algal blooms in downstream rivers or lakes.

The Extent of U.S. Headwater Streams is Underestimated

For many people, *headwater stream* brings to mind a small, clear, icy-cold, heavily-shaded stream that tumbles down a steep, boulder-filled channel. Indeed, there are thousands of miles of such shaded, mountainous headwater streams in the United States. But the term "headwater" encompasses many other types of small streams. Headwaters can be intermittent streams that flow briefly when snow melts or after rain, but shrink in dry times to become individual pools filled with water. Desert headwater streams can arise from a spring and run above ground only a few hundred yards before disappearing into the sand. Other spring-fed headwaters contain clear water with steady temperature and flow. Yet other headwaters originate in marshy meadows filled with sluggish tea-colored water.

No comprehensive study has been conducted to catalog the full extent of streams in the United States. However, on the basis of available maps, scientists have estimated that these smallest streams, called first- and second-order streams, represent about three-quarters of the total length of stream and river channels in the United States. The actual proportion may be much higher because this estimate is based on the stream networks shown on the current U.S. Geological Survey (USGS) topographic maps,

TYPES OF STREAMS

Any one river typically has several different types of sources: *perennial* streams that flow year-round; *intermittent* streams that flow several months during the year, such as streams that come from snowmelt; and *epherneral* streams that flow at the surface only periodically, usually in response to a specific rainstorm. All these types of streams can be the *headwaters* of a river.

The rivulet of water that flows from a hillside spring and forms a channel is a *first-order stream. Second-order streams* are formed when two first-order channels combine, *third-order streams* are formed by the combination of two second-order streams, and so on.

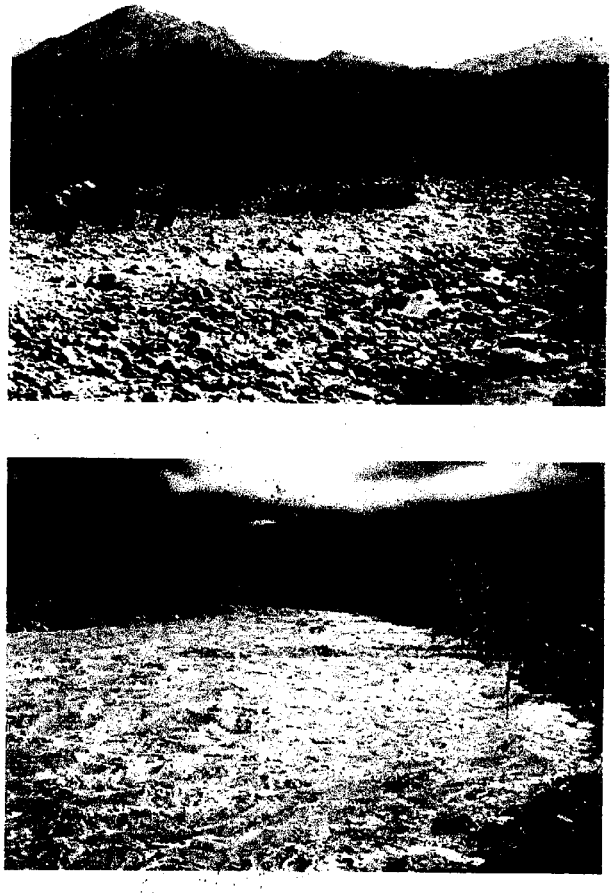
The term *headwaters* refers to the smallest streams in the network. Scientists often use the term headwaters to refer to zero-, first- and second-order streams. Easily half of the total length of the channels in a stream network can be first-order streams. Such small headwater streams can join a river system at any point along the network. So, a fourth-order stream resulting from the upstream merger of many first-, second-, and third-order streams may flow through a forest and be joined by another first-order stream that meanders out of a nearby marshy meadow.

One way scientists classify streams is the *stream order* system, which assigns streams a number depending upon their location in the network's branching pattern. The term *zero-order stream* refers to swales: hollows that lack distinct stream banks but still serve as important conduits of water, sediment, nutrients, and other materials during rainstorms and snowmelt. Such zero-order streams are integral parts of stream networks. *First-order streams* are the smallest distinct channels.

which do not show all headwater streams. The absence of a comprehensive survey of U.S. streams hinders our ability to estimate the nationwide importance of these systems; it also indicates our need to better understand them.

Studies including field surveys of stream channel networks have found far more headwater streams than are indicated on USGS topographic maps. For example, an on-the-ground survey of streams in the Chattooga River watershed in the southern Appalachian Mountains found thousands of streams not shown on USGS topographic maps. Approximately one-fifth or less of the actual stream network was shown on the USGS map. The missing streams were the smaller ones-the headwaters and other small streams and wetlands. Similar discrepancies have been found at the state level. For example, Ohio's Environmental Protection Agency found that the state's primary headwater streams, although generally absent from USGS topographic maps, comprise more than 80 percent of the total length of the state's streams. Even when small streams are on the map, they are sometimes misclassified: a large number of Ohio streams shown as intermittent on topographic maps are actually perennial.

Intact stream networks contain streams that flow year-round and others that flow only part of the time. Compared with the humid-region examples above, stream and river networks in arid regions have a higher proportion of channels that flow intermittently. For example, in Arizona, most of the stream networks-96 percent by length-are classified as ephemeral or intermittent.

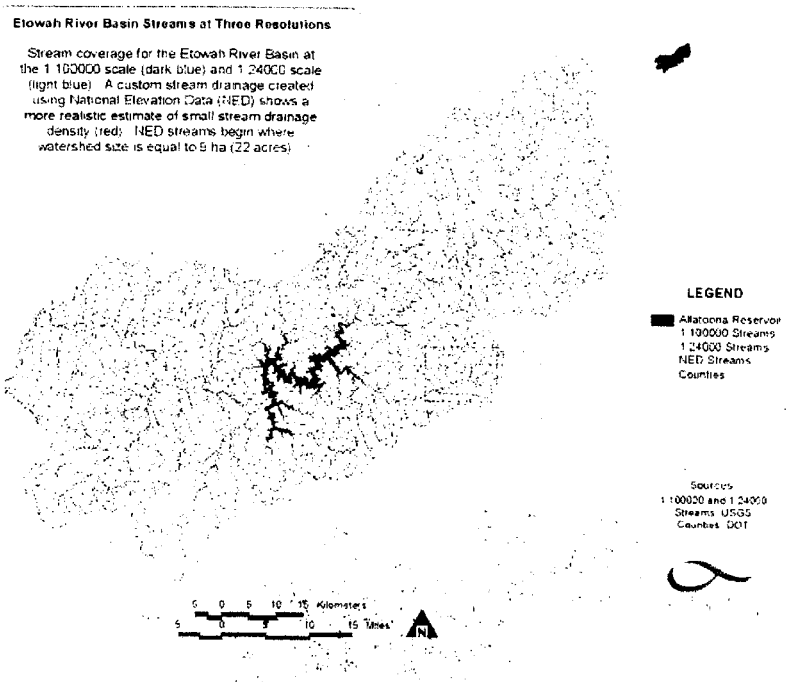


Top: Sycamore Creek in Arizona, an arid stream during a dry period. Photo Courtesy of Nancy Grimm

Center: Sycamore Creek (the same stream) after a winter storm. Photo Courtesy of Nancy Grimm

Thus, regional calculations on the extent of small streams grounded in solid evidence show these streams to be underestimated by existing inventories and maps. But actual measurements are not available for the whole nation. Moreover, the topographic maps commonly used as catalogues of stream networks are not detailed enough to serve as a basis for stream management and protection. The very foundation of our nation's great rivers is a vast network of unknown, unnamed, and underappreciated headwater streams.

Sometimes resource managers define a stream based on the size of its watershed, the land area that drains into the stream. For example, Ohio's EPA defines headwater streams as those that drain an area 20 square miles or smaller. Such a definition includes first-, second-, and often third-order streams. Other managers suggest that headwater systems can be defined as those having watersheds of less than one square kilometer, a definition that would generally include only first- and second-order streams. For the purposes of this paper, we consider zero-, first- and second-order streams as headwaters.



Existing tools for cataloging U.S. waters generally omit a large proportion of the headwaters. In this illustration of Georgia's Etowah River Basin, National Elevation Data details, in red, the approximately 40 percent and 60 percent of headwaters not captured by standard cataloging methods. Diagram courtesy of B.J. Freeman, University of Georgia.

Small Streams Provide Greatest Connection Between Water and Land

Within any intact stream and river network, headwater streams make up most of the total channel length. Therefore, such small streams offer the greatest opportunity for exchange between the water and the terrestrial environment. Small streams link land and water in several ways. As a stream flows, it links upstream and downstream portions of the network. In addition, water flows out of and into a channel during events such as floods and runoff from rainstorms. Floodwaters and runoff carry various materials, ranging from insects and bits of soil to downed trees, between land and a channel. Much exchange between land and water occurs in the transition zone along edges of stream channels, called the *riparian zone.*

Water and land also meet in saturated sediments beneath and beside a river channel, a region which scientists call the *hyporheic zone.* Stream water flows within the stream channel and the hyporheic zone. It is in this zone, where stream water makes its most intimate contact with the channel bed and banks, that much of a stream's cleansing action and nutrient processing occurs. This zone is also where groundwater and surface water come into contact.

Ecological processes that occur in hyporheic zones have strong effects on stream water quality. Rivers with extensive hyporheic zones retain and process nutrients efficiently, which has a positive effect on water quality and on the ecology of the riparian zone. Scientific research is illuminating the importance of maintaining connectivity between the channel, hyporheic, and riparian components of river ecosystems. When human actions, such as encasing streams in pipes, sever those connections, the result is poorer water quality and degraded fish habitat downstream.

Wetlands Have Hidden Connections to Streams

Like headwater streams, wetlands are also key components of the nation's network of rivers and streams. Many wetlands, such as marshes that border lakes or streams, have obvious connections to surface waters. Other wetlands, however, seem cut off from stream networks - but that appearance is deceiving. Wetlands are almost always linked to stream networks and other wetlands through groundwater. There are biological connections also; many aquatic and semi-aquatic animals, ranging in size from aquatic insects to raccoons, routinely move between land-locked wetlands, streamside wetlands, and stream channels. Animals often use different parts of the aquatic environment at different points in their life cycle, so groundwater connections and food webs link many wetlands to larger waterways.

Wetlands without obvious surface connections to streams are diverse. Scientists generally distinguish between wetlands that have permanent water and others, called ephemeral wetlands, that are only seasonally wet. At least one out of five wetlands does not have a visible connection to a waterway, and, in some areas, more than half of the wetlands fall into that category. Despite the abundance of such wetlands, the United States has no national inventory of their numbers or locations.

A U.S. Fish and Wildlife Service study of wetlands in 72 areas within the United States found that wetlands without obvious surface connections to waterways are generally small in area, but numerous. All such wetlands are depressions in the ground that hold water, whether from rainwater, snowmelt, or groundwater welling up to the surface. Each region of the United States has unique types of depressional wetlands. Ephemeral wetlands called vernal pools occur in California and the Northeast; the prairie potholes used by ducks and other waterfowl dot the Upper Midwest; and Carolina bays, cypress ponds, and grass-sedge marshes occur in the Southeast.

Top: A vernal pool in Massachusett's Ipswich River Basin during the dry phase in summer. Photo courtesy of Vernal Pool Association

Bottom: The same Ipswich River Basin vernal pool inundated by fall precipitation. Photo courtesy of Vernal Pool Association

Small Streams and Wetlands Provide Beneficial Ecosystem Services

A headwater stream channel near Toledo, OH relocated to accommodate development. Photo courtesy of Marshal A. Moser

Natural processes that occur in small streams and wetlands provide humans with a host of benefits, including flood control, maintenance of water quantity and quality, and habitat for a variety of plants and animals. For headwater streams and wetlands to provide ecosystem services that sustain the health of our nation's waters, the hydrological, geological and biological components of stream networks must be intact.

Small Streams and Wetlands Provide Natural Flood Control

Floods are a natural part of every river. In times past, waters of the Mississippi River routinely overtopped its banks. Floodwaters carried the sediment and nutrients that made the Mississippi Delta's soil particularly suitable for agriculture. But floods can also destroy farms, houses, roads and bridges.

When small streams and wetlands are in their natural state, they absorb significant amounts of rainwater, runoff and snowmelt before flooding. However, when a landscape is altered, such as by a landslide or large forest fire or a housing development, the runoff can exceed the absorption capacity of small streams. Moreover, the power of additional water coursing through a channel can change the channel itself. Humans often alter both landscape and stream channels in ways that result in larger and more frequent floods downstream.

A key feature of streams and rivers is their shape. Unlike a concrete drainage ditch, a natural streambed does not present a smooth surface for water flow. Natural streambeds are rough and bumpy in ways that slow the passage of water. Particularly in small narrow streams, friction produced by a stream's gravel bed, rocks, and dams of leaf litter and twigs slows water as it moves downstream. Slower moving water is more likely to seep into a stream's natural water storage system-its bed and banks-and to recharge groundwater. Slower moving water also has less power to erode stream banks and carry sediment and debris downstream.

In watersheds that are not carefully protected against impacts of land development, stream channels often become enlarged and incised from increased runoff. Changed channels send water downstream more quickly, resulting in more flooding. For example, after forests and prairies in Wisconsin watersheds were converted to agricultural fields, the size of floods increased. This change in land use had altered two parts of the river systems' equation: the amount of runoff and shape of the stream channel. Cultivation destroyed the soil's natural air spaces that came from worm burrows and plant roots. The resulting collapse of the soil caused more rainfall to run off into streams instead of soaking into the ground. Additional surface runoff then altered the stream channels, thereby increasing their capacity to carry large volumes of water quickly downstream. These larger volumes flow downstream at much higher velocity, rather than soaking into the streambed.

Urbanization has similar effects; paving previously-vegetated areas leads to greater storm runoff, which changes urban stream channels and ultimately sends water more quickly downstream. Covering the land with impermeable surfaces, such as roofs, roads, and parking lots, can increase by several times the amount of runoff from a rainstorm. If land uses change near headwater streams, effects are felt throughout the stream network. In an urban setting, runoff is channeled into storm sewers, which then rapidly discharge large volumes of water into nearby streams. The additional water causes the stream to pick up speed, because deeper

water has less friction with the streambed. The faster the water moves, the less it can soak into the streambed and banks. Faster water also erodes channel banks and beds, changing the shape of a channel. The effect is magnified downstream, because larger rivers receive water from tens, sometimes hundreds, of small headwater basins. When such changes are made near headwater streams, downstream portions of the stream network experience bigger and more frequent flooding.

As regions become more urbanized, humans intentionally alter many natural stream channels by replacing them with storm sewers and other artificial conduits. When larger, smoother conduits are substituted for narrow, rough-bottomed natural stream channels, flood frequency increases downstream. For example, three decades of growth in storm sewers and paved surfaces around Watts Branch Creek, Maryland more than tripled the number of floods and increased average annual flood size by 23 percent.

"ALTERATION OF SMALL STREAMS AND WETLANDS DISRUPTS THE QUANTITY AND AVAILABILITY OF WATER IN A STREAM AND RIVER SYSTEM."

Small Streams and Wetlands Maintain Water Supplies

Headwater systems play a crucial role in ensuring a continual flow of water to downstream freshwater ecosystems. Water in streams and rivers comes from several sources: water held in the soil, runoff from precipitation, and groundwater. Water moves between the soil, streams and groundwater. Wetlands, even those without any obvious surface connection to streams, are also involved in such exchanges by storing and slowly releasing water into streams and groundwater, where it later resurfaces at springs. Because of these interactions, groundwater can contribute a significant portion of surface flow in streams and rivers; conversely, surface waters can also recharge groundwater. If connections between soil, water, surface waters, and groundwater are disrupted, streams, rivers, and wells can run dry. Two-thirds of Americans obtain their drinking water from a water system that uses surface water. The remaining one-third of the population relies on groundwater sources. The quality and amount of water in both of these sources respond to changes in headwater streams.

USGS estimates that, on average, from 40 to 50 percent of water in streams and larger rivers comes from groundwater. In drier regions or during dry seasons, as much as 95 percent of a stream's flow may come from groundwater. Thus, the recharge process that occurs in unaltered headwater streams and wetlands both moderates downstream flooding in times of high water and maintains stream flow during dry seasons.

Headwater streams and wetlands have a particularly important role to play in recharge. These smallest upstream components of a river network have the largest surface area of soil in contact with available water, thereby providing the greatest opportunity for recharge of groundwater. Moreover, water level in headwater streams is often higher than the water table, allowing water to flow through the channel bed and banks into soil and groundwater. Such situations occur when water levels are high, such as during spring snowmelt or rainy seasons. During dry times, the situation in some reaches of the stream network, particularly those downstream, may reverse, with water flowing from the soil and groundwater through the channel banks and bed into the stream. This exchange of water from the soil and groundwater into the stream maintains stream flow. However, if land-use changes increase the amount of precipitation that runs off into a stream rather than soaking into the ground, the recharge process gets short-circuited. This increased volume of stream water flows rapidly downstream rather than infiltrating into soil and groundwater. The consequence is less overall groundwater recharge, which often results in less water in streams during drier seasons.

Therefore, alteration of small streams and wetlands disrupts the quantity and availability of water in a stream and river system. Protecting headwater streams and wetlands is important for maintaining water levels needed to support everything from fish to recreational boating to commercial ship traffic.

Small Streams and Wetlands Trap Excess Sediment

Headwater systems retain sediment. Like the flow of water, movement of sediment occurs throughout a river network. Thus, how a watershed is managed and what kinds of land uses occur there have substantial impact on the amount of sediment delivered to larger rivers downstream. Increased sediment raises water purification costs for municipal and industrial users, requires extensive dredging to maintain navigational channels, and degrades aquatic habitats. Intact headwater streams and wetlands can modulate the amount of sediment transported to downstream ecosystems.

Runoff from rain, snowmelt and receding floodwaters can wash soil, leaves and twigs into streams, where the various materials get broken up into smaller particles or settle out. If natural vegetation and soil cover are disturbed by events and activities such as fires, farming or construction, runoff increases, washing more materials into streams. At the same time, the increased velocity and volume of water in a stream cause erosion within the streambed and banks themselves, contributing additional sediment to the stream system. Moreover, the faster, fuller stream can carry more and larger chunks of sediment further downstream.

"Intact headwater streams and wetlands can modulate the amount of sediment transported to downstream ecosystems."

One study found that land disturbances such as urban construction can, at minimum, double the amount of sediment entering headwater streams from a watershed. A Pennsylvania study showed how, as a 160-acre headwater watershed became more urbanized, channel erosion of a quarter-mile stretch of stream generated 50,000 additional cubic feet of sediment in one year-enough to fill 25 moderate-sized living rooms. In a non-urban watershed of the same size, it would take five years to generate the same amount of sediment. Such studies demonstrate that landscape changes such as urbanization or agriculture, particularly without careful protection of headwater streams and their riparian zones, may cause many times more sediment to travel downstream.

Excess Sediment in Downstream Ecosystems Costs Money

Keeping excess sediment out of downstream rivers and lakes is one ecosystem service intact small streams and wetlands provide. Once sediment moves further downstream, it becomes an expensive problem. Too much sediment can fill up reservoirs and navigation channels, damage commercial and sport fisheries, eliminate recreation spots, harm aquatic habitats and their associated plants and animals, and increase water filtration costs.

Additional sediment damages aquatic ecosystems. Sediment suspended in the water makes it murkier; as a result, underwater plants no longer receive enough light to grow. Fish that depend on visual signals to mate may be less likely to spawn in murky water, thereby reducing fish populations. High levels of sediment suspended in water can even cause fish kills. Even as it settles to the bottom, sediment continues to cause problems because it fills the holes between gravel and stones that some animals call home, smothers small organisms that form the basis of many food webs, and can also smother fish eggs.

Getting rid of sediment is expensive. For example, keeping Baltimore Harbor navigable costs $10 to $11.5 million annually to dredge and dispose of sediment the Patapsco River deposits in the harbor.

Small Streams and Wetlands Retain Sediment

Headwater streams and wetlands typically trap and retain much of the sediment that washes into them. The faster the water travels, the larger the particles it can carry. So, natural obstructions in small streams-rocks, downed logs, or even just a bumpy stream bottom-slow water and cause sediment to settle out of the water column. Wetlands, whether or not they have a surface connection to a nearby stream, are often areas where runoff slows and stops, dropping any debris the water may be carrying. Because headwater streams represent 75 percent or more of total stream length in a stream network, such streams and their associated wetlands retain a substantial

amount of sediment, preventing it from flowing into larger rivers downstream.

Even ephemeral streams can retain significant amounts of sediment. Such small headwater streams expand and contract in response to heavy rains. During expansion, a stream flows over what was a dry or damp streambed. Most of the water at the leading edge of a growing stream, called the "trickle front," soaks into the streambed and does not carry sediment downstream. In a small watershed near Corvallis, Oregon, researchers found that 60 to 80 percent of sediment generated from forest roads traveled less than 250 feet downstream before settling out in stream pools. Headwater streams can store sediment for long periods of time: research in Oregon's Rock Creek basin found that headwater streams could retain sediment for 114 years.

Natural Cleansing Ability of Small Streams and Wetlands Protects Water Quality

Materials that wash into streams include everything from soil, leaves and dead insects to runoff from agricultural fields and animal pastures. One of the key ecosystem services that stream networks provide is the filtering and processing of such materials. Healthy aquatic ecosystems can transform natural materials like animal dung and chemicals such as fertilizers into less harmful substances. Small streams and their associated wetlands play a key role in both storing and modifying potential pollutants, ranging from chemical fertilizers to rotting salmon carcasses, in ways that maintain downstream water quality.

Excess Nutrients Cause Problems in Rivers and Lakes

Inorganic nitrogen and phosphorus, the main chemicals in agricultural fertilizers, are essential nutrients not just for plants, but for all living organisms. However, in excess or in the wrong proportions, these chemicals can harm natural systems and humans.

In freshwater ecosystems, eutrophication, the enriching of waters by excess nitrogen and phosphorus, reduces water quality in streams, lakes, estuaries and other downstream waterbodies. One obvious result is the excessive growth of algae. More algae clouds previously clear streams, such as those favored by trout. In addition to reducing visibility, algal blooms reduce the amount of oxygen dissolved in the water, sometimes to a degree that causes fish kills. Fish are not the only organisms harmed: some of the algae species that grow in eutrophic waters generate tastes and odors or are toxic, a clear problem for stream systems that supply drinking water for municipalities. In addition, increased nitrogen can injure people and animals. Excess nitrogen in the form called nitrate in drinking water has been linked to "blue baby disease" (methemoglobinemia) in infants and also has toxic effects on livestock.

Stream networks filter and process everything from leaves and dead insects to runoff from agricultural fields and animal pastures. Without such processing, algal blooms can ruin living conditions for fish and the quality of drinking water. Here, algae overtakes a lake in Iowa. Photo courtesy of Lynn Betts, USDA NRCS

Headwater Streams Transform and Store Excess Nutrients

Headwater streams and associated wetlands both retain and transform excess nutrients, thereby preventing them from traveling downstream. Physical, chemical and biological processes in headwater streams interact to provide this ecosystem service.

Compared with larger streams and rivers, small streams, especially shallow ones, have more water in physical contact with a stream channel. Therefore, the average distance traveled by a particle before it is removed from the water column is shorter in headwater streams than in larger ones. A study of headwater streams in the southern Appalachian Mountains found that both phosphorus and the nitrogen-containing compound ammonium traveled less than 65 feet downstream before being removed from the water.

In headwater streams and wetlands, more water is in direct contact with the streambed, where most processing takes place. Bacteria, fungi and other microorganisms living on the bottom of a stream consume inorganic nitrogen and phosphorus and convert them into less harmful, more biologically beneficial compounds. A mathematical model based on research in 14 headwater streams throughout the U.S. shows that 64 percent of inorganic nitrogen entering a small stream is retained or transformed within 1,000 yards.

Channel shape also plays a role in transforming excess nutrients. Studies in Pennsylvania have shown that when the forest surrounding headwaters is replaced by meadows or lawns, increased sunlight promotes growth of grasses along stream banks. The grasses trap sediments, create sod, and narrow the stream channel to one-third of the original width. Such narrowing reduces the amount of streambed available for microorganisms that process nutrients. As a result, nitrogen and phosphorus travel downstream five to ten times farther, increasing risks of eutrophication.

"IF HEADWATER STREAMS AND WETLANDS ARE DEGRADED OR FILLED, MORE FERTILIZER APPLIED TO FARM FIELDS OR LAWNS REACHES LARGER DOWNSTREAM RIVERS."

Streams do not have to flow year-round to make significant contributions to water quality. Fertilizers and other pollutants enter stream systems during storms and other times of high runoff, the same times that ephemeral and intermittent streams are most likely to have water and process nutrients. Federal, state and local programs spend considerable sums of money to reduce non-point source inputs of nutrients because they are a major threat to water quality. One principal federal program, the EPA's 319 cost-share program, awarded more than $1.3 billion between 1990 and 2001 to states and territories for projects to control non-point pollution. Failure to maintain nutrient removal capacity of ephemeral and intermittent streams and wetlands would undermine these efforts.

Wetlands also remove nutrients from surface waters. Several studies of riparian wetlands have found that those associated with the smallest streams to be most effective in removing nutrients from surface waters. For example, headwater wetlands comprise 45 percent of all wetlands able to improve water quality in four Vermont watersheds. Another study found that wetlands associated with first-order streams are responsible for 90 percent of wetland phosphorus removal in eight northeastern watersheds. Such studies demonstrate that riparian wetlands, especially those associated with small streams, protect water quality.

As land is developed, headwater streams are often filled or channeled into pipes or paved waterways, resulting in fewer and shorter streams. For example, as the Rock Creek watershed in Maryland was urbanized, more than half of the stream channel network was eliminated. In even more dramatic fashion, mining operations in the mountains of central Appalachia have removed mountain tops and filled valleys, wiping out entire headwater stream networks. From 1986 to 1998, more than 900 miles of streams in central Appalachia were buried, more than half of them in West Virginia.

If headwater streams and wetlands are degraded or filled, more fertilizer applied to farm fields or lawns reaches larger downstream rivers. These larger rivers process excess nutrients from fertilizer much more slowly than smaller streams. Losing the nutrient retention capacity of headwater streams would cause downstream waterbodies to contain higher concentrations of nitrogen and phosphorus. A likely consequence of additional nutrients would be the further contamination and eutrophication of downstream rivers, lakes, estuaries and such waters as the Gulf of Mexico.

Natural Recycling in Headwater Systems Sustains Downstream Ecosystems

Recycling organic carbon contained in the bodies of dead plants and animals is a crucial ecosystem service. Ecological processes that transform inorganic carbon into organic carbon and recycle organic carbon are the basis for every food web on the planet. In freshwater ecosystems, much of the recycling happens in small streams and wetlands, where microorganisms transform everything from leaf litter and downed logs to dead salamanders into food for other organisms in the aquatic food web, including mayflies, frogs and salmon.

Like nitrogen and phosphorus, carbon is essential to life but can be harmful to freshwater ecosystems if it is present in excess or in the wrong chemical form. If all organic material received by headwater streams and wetlands went directly downstream, the glut of decomposing material could deplete oxygen in downstream rivers, thereby damaging and even killing fish and other aquatic life. The ability of headwater streams to transform organic matter into more usable forms helps maintain healthy downstream ecosystems.

Headwater Stream Systems Store and Transform Excess Organic Matter

Intact headwater systems both store and process organic matter in ways that modulate the release of carbon to downstream lakes and rivers. Headwater systems receive large amounts of organic matter, which can be retained and transformed into more palatable forms through decomposition processes. This organic matter is anything of biological origin that falls into, washes into or dies in a stream. Plant parts, such as leaves, twigs, stems and larger bits of woody debris, are the most common of these items. Another source of organic material is dead stream organisms, such as bits of dead algae and bacteria or bodies of insects and even larger animals. Waste products of plants and animals also add organic carbon to water. Water leaches dissolved organic carbon from organic materials in a stream and watershed like tea from a tea bag.

"The ability of headwater streams to transform organic matter into more usable forms helps maintain healthy downstream ecosystems."

Much of the organic matter that enters headwater systems remains there instead of continuing downstream. One reason is that the material often enters headwater streams as large pieces, such as leaves and woody debris, that are not easily carried downstream. In addition, debris dams that accumulate in headwater streams block the passage of materials. One study found four times more organic matter on the bottoms of headwater streams in forested watersheds than on the bottoms of larger streams.

Another reason material stays in headwater streams is that food webs in small streams and wetlands process organic matter efficiently. Several studies have found that headwater streams are far more efficient at transple, one study showed that, for a given length of stream, a headwater stream had an eight-fold higher processing efficiency than a fourth-order channel downstream. Microorganisms in headwater stream systems use material such as leaf litter and other decomposing material for food and, in turn, become food for other organisms. For example, fungi that grow on leaf litter become nutritious food for invertebrates that make their homes on the bottom of a stream, including mayflies, stoneflies and caddis flies. These animals provide food for larger animals, including birds such as flycatchers and fish such as trout.

Headwater Systems Supply Food for Downstream Ecosystems

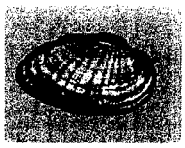
The organic carbon released by headwater streams provides key food resources for downstream ecosystems. Headwater ecosystems control the form, quality and timing of carbon supply downstream. Although organic matter often enters headwaters in large amounts, such as when leaves fall in autumn or storm runoff carries debris into the stream, those leaves and debris are processed more slowly. As a result, carbon is supplied to downstream food webs more evenly over a longer period of time. Forms of carbon delivered range from dissolved organic carbon that feeds microorganisms to the drifting insects such as mayflies and midges that make ideal fish food. Such insects are the preferred food of fish such as trout, char and salmon. One study estimated that fishless headwater streams in Alaska export enough drifting insects and other invertebrates to support approximately half of the fish production in downstream waters.

Processed organic matter from headwater streams fuels aquatic food webs from the smallest streams to the ocean. Only about half of all first-order streams drain into second-order streams; the other half feed directly into larger streams or directly into estuaries and oceans, thus delivering their carbon directly to these larger ecosystems. The health and productivity of downstream ecosystems depends on processed organic carbon-ranging from dissolved organic carbon to particles of fungus, and leaf litter to mayflies and stoneflies-delivered by upstream headwater systems.

Headwater Streams Maintain Biological Diversity

Headwater Habitats are Diverse

Headwater streams are probably the most varied of all running-water habitats; they range from icy-cold brooks tumbling down steep, boulder-filled channels to outflows from desert springs that trickle along a wash for a short distance before disappearing into sand. As such, headwater systems offer an enormous array of habitats for plant, animal and microbial life.



Top left: Populations of the ellipse mussel (Venustaconcha ellipsiformis) have disappeared from many of its native Midwestern headwaters. Photo courtesy of Kevin Cummings, Illinois Natural History Survey

Top right: A hydrobiid snail [Pyrgulopsis robusta] found in the headwaters of the Snake River in Wyoming. Photo courtesy of Dr. Robert Hershler

Center: Caddis flies and other aquatic insects spend their larval stage in streams, feeding on the algae, vegetation and decaying plant matter. The Brachycentris, a caddis fly found in headwater streams of eastern North America, constructs a protective case out of twigs, leaves and other debris. Photo courtesy of David H. Funk

Bottom: American dippers rely on headwater streams for sustenance, walking along stream bottoms and feeding on insect larvae and crustaceans among the rocks of the streambed. This American dipper was photographed at Tanner's Flat, just east of Salt Lake City. Photo courtesy of Pomera M. France

This variation is due to regional differences in climate, geology, land use and biology. For example, streams in limestone or sandy regions have very steady flow regimes compared with those located in impermeable shale or clay soils. Plants or animals found only in certain regions can also lend a distinctive character to headwater streams. Regionally important riparian plants, such as alder and tamarisk, exercise a strong influence on headwater streams. Headwater streams in regions with beavers are vastly different from those in regions without beavers.

Environmental conditions change throughout a stream network. In wet regions, streams grow larger and have wider channels, deeper pools for shelter, and more permanent flow as they move downstream. In arid regions and even humid regions during dry periods, headwater streams may become smaller downstream as water evaporates or soaks into a streambed. Because marked changes in environmental conditions can occur over very short distances, conditions required by a headwater species may exist for as little as 100 yards of stream. Consequently, local populations of a species may extend over just a short distance, particularly in spring-fed headwaters with sharp changes in environmental conditions along the length of a stream.

With this variety of influences, headwater streams present a rich mosaic of habitats, each with its own characteristic community of plants, animals, and microorganisms.

Headwater Systems Support a Diverse Array of Animals and Plants

There has never been a complete inventory of the inhabitants in even a single headwater stream, much less surveys across many types of headwaters that would permit a thorough understanding of biodiversity in headwater streams. Nevertheless, it is clear that individual headwater streams support hundreds to thousands of species, ranging from bacteria to bats.

The species in a typical headwater stream include bacteria, fungi, algae, higher plants, invertebrates, fish, amphibians, birds and mammals. Headwater streams are rich feeding grounds. Large amounts of leaves and other organic matter that fall or blow into streams, the retention of organic matter in a

channel or debris dams, and the high rates of plant and algal growth in unshaded headwaters all supply food sources for animals such as caddis flies, snails and crustaceans. These animals become food for predators such as fish, salamanders, crayfish, birds and mammals, which, in turn, become prey for larger animals, including herons, raccoons and otters. Many widespread species also use headwaters for spawning sites, nursery areas, feeding areas, and travel corridors. Thus, headwater habitats are important to species like otters, flycatchers, and trout, even though these species are not restricted to headwaters. The rich resource base that headwaters provide causes the biotic diversity of headwater streams to contribute to the productivity of both local food webs and those farther downstream.

Diversity of headwater systems results in diverse headwater plants and animals. Many of these species are headwater specialists and are most abundant in or restricted to headwaters. For example, water shrews live along small, cool streams, feed on aquatic invertebrates, and spend their entire lives connected to headwater streams. Because different headwaters harbor different species, the number of headwater-dependent species across North America is far greater than the number of species in any one headwater.

Headwater specialists often have small geographic ranges. These species, many of which are imperiled, include: species of minnows, darters, and topminnows in southeastern springs and brooks; aquatic snails in spring-fed headwaters in the Great Basin, the Southeast, Florida, and the Pacific Northwest; crayfish in small streams from Illinois and Oklahoma to Florida; and salamanders and tailed frogs in small streams, springs, and seeps in the Southeast and Pacific Northwest. Two factors contribute to specialists' small ranges: their limited ability to move between headwaters and high diversity of headwater habitats. Unlike mobile animals, such as mammals and birds, fully aquatic animals like fish and most mollusks cannot move from one headwater stream to another. As a result, local evolution may produce different species in adjacent headwater systems. Moreover, environmental conditions often differ greatly between adjacent headwater streams and even within the course of a single stream. For example, in a spring-fed headwater stream in western Pennsylvania, one species of caddis fly inhabits headwaters starting at the spring and going downstream about 200 yards. A different species of caddis fly inhabits the stream after that point.

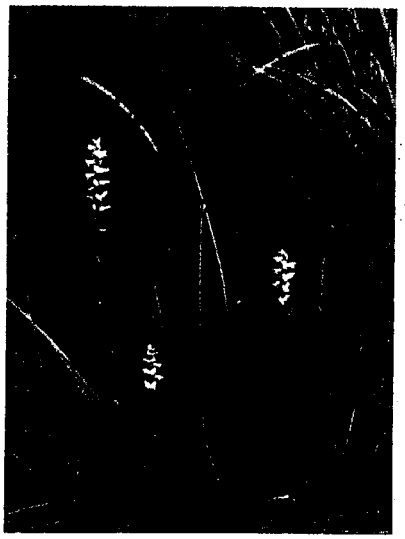
A water shrew (Sorex palustris) in the water's of Oregon's Mt. Hood. Photo courtesy of RB Forbes, Mammal Images Library

Animals may use headwater streams for all or part of their lives. Although many fish species live exclusively in headwater systems, others use headwaters only for key parts of their life cycle. For example, headwaters are crucial for the diversity of salmon stocks in the Pacific Northwest because salmon spawn and rear in headwater streams. In other parts of the country, trispot darters, brook trout and rainbow trout spawn in small streams. Young cutthroat trout use shelter formed by streams' debris dams but move onto larger portions of a stream network as they mature. Intermittent streams can offer special protection for young fish, because the small pools that remain in such streams often lack predators. Still other fish species use headwater streams as seasonal feeding areas.

A coho salmon migrating up a spring-fed tributary of the Snowqualmie River watershed in Washington's Puget Sound region. Many anadromous fish species spawn in headwater streams that are so small as to be omitted from standard USGS topographical maps. Photo courtesy of Washington Trout.

Both permanent and intermittent streams provide valuable habitat for microorganisms, plants and animals. Generally, biodiversity is higher in permanent streams than in intermittent streams, but intermittent streams often provide habitat for different species. Some species that occur in both types of streams may be more abundant in predator-free intermittent streams. For example, because of the lack of large predatory fish, salamanders and crayfish are sometimes more abundant in fishless intermittent streams rather than those with permanent flow. In contrast, for animals such as brook trout that require steady water temperatures and constant water flow, perennial streams provide better habitat.

A westslope cutthroat trout from Deep Creek, a headwater of the Kettle River. Cutthroat trout spawn in headwaters where the young trout seek shelter amid piles of debris, moving on to larger waters for their adult lives. Photo courtesy of Bill McMillan, Washington Trout



Canelo Hills ladies' tresses [Sprianthes delitescens] in a southwestern freshwater marsh known as a cienega. The cienegas of Arizona and New Mexico and Mexico, are the exclusive habitat for this member of the orchid family. Photo courtesy of Jim Rorabaugh, USFWS

Linkages between Headwater and Streamside Ecosystems Boost Biological Diversity

The movement of plants and animals between headwater and streamside ecosystems boosts biodiversity in both areas. Headwater streams are tightly linked to adjacent riparian ecosystems, the zones along a stream bank. Riparian ecosystems have high species diversity, particularly in arid environments where the stream provides a unique microclimate. Typical riparian vegetation depends upon moist streamside soils. Some plants must have "wet feet," meaning their roots have to stretch into portions of soil that are saturated with water. Seeds of some riparian plants, such as those of cottonwood trees found along rivers in the Southwest, require periodic floods to germinate and take root.

The Cleistes, a member of the orchid family, is found in pocosin wetlands of North Carolina. Photo courtesy of Vince Bellis

Another link between stream and land is often provided by insects, such as mayflies, that emerge from streams and provide a vital food resource for animals, including birds, spiders, lizards and bats. For example, insect-eating birds living by a prairie stream in Kansas consume as much as 87 percent of the adult aquatic insects that emerged from the stream each day. Such exchanges between land and water help maintain animal populations across landscapes. In many landscapes, the network of headwater streams is so dense that it offers a nearly continuous system of interconnected habitat for the movement of mobile species that rely on streams and riparian areas.

Biological Diversity of Headwater Systems is Threatened by Habitat Destruction

Because of their small size and intimate connections with surrounding landscape, headwaters and their inhabitants are easily influenced by human activities in watersheds and riparian zones. Changes to riparian vegetation or hydrology, water pollution, or the introduction of exotic species can have profound effects on biota living in headwaters.

Specialized headwater species can be particularly sensitive to habitat destruction because of their small geographic ranges, sometimes as small as a single headwater stream or spring. Thus, human activities have driven some headwater specialists, like the whiteline topminnow, to extinction, and imperiled many others. Furthermore, as the natural disjunction of headwater systems is increased by human activities such as pollution, impoundment, and destruction of riparian vegetation, more populations of headwater specialists may be extirpated.

Many headwater species, including fish, snails, crayfish, insects and salamanders, are now in danger of extinction as a result of human actions. A few dozen headwater species are already listed under the U.S. Endangered Species Act; hundreds of others are rare enough to be considered for listing. Given the diversity and sensitivity of headwater biota, it seems likely that continued degradation of headwater habitats will put more species at risk of extinction.

Wetlands Make Key Contributions to Biological Diversity

The presence of wetlands adds another aspect of habitat diversity to headwater systems and therefore increases the variety of species a headwater system may support. Most headwater wetlands are depressions in the ground that hold water permanently or seasonally. Wetlands provide critical habitat for a variety of plants and animals. Scientists usually distinguish between ephemeral and perennial wetlands.

Biodiversity in Ephemeral Wetlands

Some species of plants and animals prefer or require ephemeral wetlands. Certain zooplankton, amphibians, and aquatic plants need the wet phase of an ephemeral wetland to complete all or part of their life cycles. Other species that rely on ephemeral wetlands wait out the aquatic phase, flourishing only when pools shrink or disappear. For example, although adult spotted salamanders are generally terrestrial, during the springtime they trek to vernal pools to breed and reproduce. So-called amphibious plants, including button celery, meadowfoam, wooly marbles and many others do the opposite; although they live in water, they cannot reproduce until water levels drop. Some plants and crustaceans most strongly identified with ephemeral wetlands worldwide, including quillworts, fairy shrimp, and tadpole shrimp, are ancient groups that probably originated at least 140 million years ago. The disappearance of ephemeral wetlands would mean the loss of these highly specialized and ancient groups of plants and animals.

One type of ephemeral wetland found in both California and the Northeast is known as a vernal pool because it generally fills with water in the spring. In California, blooming flowers ring the edges and fill depressions of such pools. Of the 450 species, subspecies, or varieties of plants found in California's vernal pools, 44 are vernal pool specialists. Several such plants are already on the Endangered Species list. If California's vernal pool habitats were completely destroyed, at least 44 species would disappear. Although vernal pool animals are less well known, there appear to be at least as many

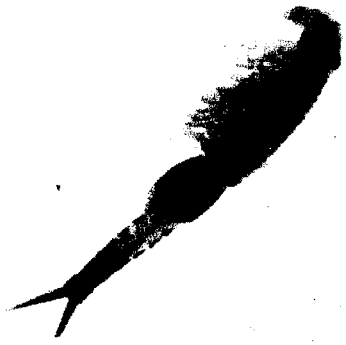
Pitcher plants, such as this white top (Sarracenia leucophylla), pictured top left; and sundews, such as this Drosera brevifolia, pictured bottom right; are among the carnivorous plants found in the Carolina Bay wetlands of the Southeastern U.S. Photo courtesy of David Scott/SREL

Although spotted salamanders are generally terrestrial animals, they only breed and reproduce in vernal pools. Photo courtesy of Vernal Pool Association

specialized animals as plants. New species of specialists such as fairy shrimp and clam shrimp continue to be discovered.

Other ephemeral wetlands also make significant contributions to biodiversity. A study of wetlands in the Southeast including cypress-gum swamps, cypress savannas, and grass-sedge marshes, found that plants from one wetland are often very different from those in others nearby. Such differences in nearby habitats increase overall biodiversity in a region. In some cases, differences in periods of wetting and drying appear to be important for the persistence of many species. Different wetting and drying patterns explain some differences between Gromme Marsh and Stedman Marsh, two prairie pothole wetlands in Wisconsin. Although the two marshes are only about 450 yards apart, they have different species of dragonflies; also, Stedman Marsh has damselflies and caddis flies that Gromme Marsh lacks.

A female fairy shrimp from the Ipswich River Basin in Massachusetts. Fairy shrimp spend their entire life cycles in vernal pools. Photo courtesy of Vernal Pool Association



Amphibians are key parts of the food web in small wetlands. Some wetlands are hot spots for amphibian biodiversity; twenty-seven amphibian species, one of the highest numbers of amphibian species known from such a small area, inhabited a 1.2-acre ephemeral wetland in South Carolina. Other small wetlands in the region have been found to have similar numbers of amphibian species, demonstrating how small wetlands are especially important for maintaining the regional biodiversity of amphibians. Larger, more permanent wetlands may be less diverse because they may also be home to predators-such as crayfish and dragonfly larvae-that eat amphibian larvae.

Biodiversity in Fens (A Type of Perennial Wetland)

Plant biodiversity peaks in fens, unique perennial wetlands that occur where groundwater flows to the surface. Fens also provide clean water that supports downstream ecosystems; outflows from such wetlands are critical to the formation of the cold, low-nutrient streams that are ideal for trout. Although fens are rarely inundated, water seeps continuously into root zones.

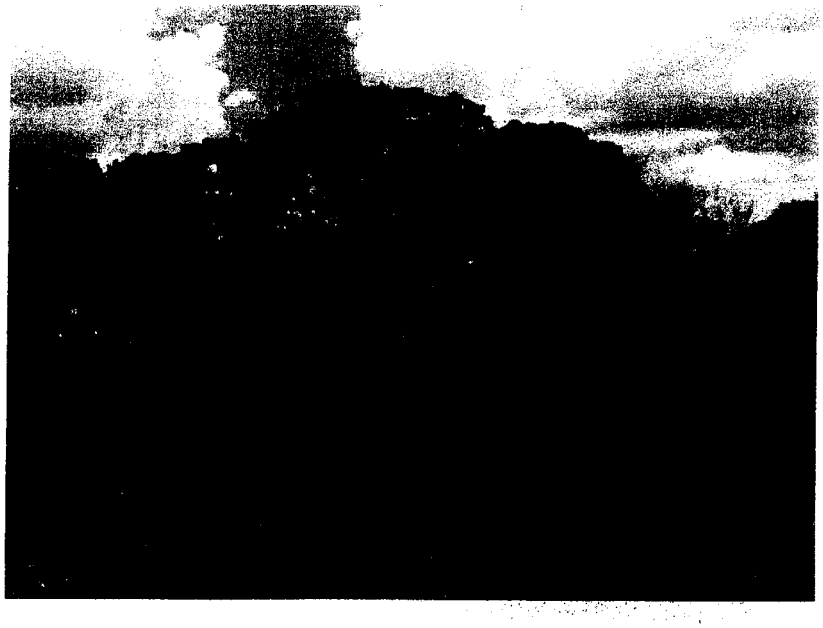
Similar to other wetlands, the small land area covered by fens belies the high biodiversity found within them. For example, in northeastern Iowa, fens contain 18 percent of the state's plant species but cover only 0.01 percent of the land surface. Fens are probably the wetlands with the greatest numbers of plant species. Because groundwater that comes to the surface is typically low in available nutrients, fen plants are often dwarfed and the total mass of vegetation is typically low. As a result, no one species can become dominant and exclude other species.

In the Upper Midwest, more than 1,169 species of plants have been identified in fens, with more than half needing wet conditions. Fens also have

a high proportion of plant species known to occur primarily in pristine sites. Often, such species are listed as rare, threatened or endangered. Of 320 vascular plant species found within fens in northeastern Iowa, 44 percent are considered rare. Fens themselves are imperiled: 160 fens that one researcher sampled in northeastern Iowa were all that remained from 2,333 historic fens.

Because diversity in fens stems from low nutrient availability, overfertilization can harm fens and, in turn, downstream ecosystems. Examining one fen in New York, researchers found the lowest diversity of plants where nitrogen and phosphorus inflows were greatest. Both nutrients came from agricultural activities: phosphorus was entering the fen primarily through surface water flows, while the nitrogen-containing compound nitrate was flowing with the groundwater. Thus, a loss of plant diversity in fens is a clear indication they are receiving excess nutrients, such as can occur when fertilizer runs off a field or urban lawn or water carries animal waste from farmyards. Allowing excess nutrients to enter fens can also damage downstream trout streams because trout prefer cold, low-nutrient streams. Therefore, the low-nutrient conditions of fens require protection from nutrient contamination.

A wood frog (Rana sylvatica) in an autumnal vernal pool in central Pennsylvania. Photo courtesy of Gene Wingert



Fens are unique perennial wetlands that occur where groundwater flows to the surface. Plant biodiversity peaks in fens: Among the 320 vascular plant species found in northeastern Iowa fens, 44% are considered rare. However, fens themselves are imperiled. Pictured is a fen wetland in Illinois. Photo courtesy of Steve Byers, Bluff Spring Fen Nature Preserve

Conclusion

Headwater streams and wetlands abound on the American landscape, providing key linkages between stream networks and surrounding land. Although often unnamed, unrecorded, and underappreciated, small headwater streams and wetlands-including those that are dry for parts of the year-are an integral part of our nation's river networks. Small wetlands, even those without visible surface connections, are joined to stream systems by groundwater, subsurface flows of water, and periodic surface flows. Current databases and maps do not adequately reflect the extent of headwater streams and associated wetlands. The resulting underestimate of the occurrence of such ecosystems hampers our ability to measure the key roles headwater systems play in maintaining quality of surface waters and diversity of life.

"THE PHYSICAL, CHEMICAL, AND BIOTIC INTEGRITY OF OUR NATION'S WATERS IS SUSTAINED BY SERVICES PROVIDED BY WETLANDS AND HEADWATER STREAMS."

Essential ecosystem services provided by headwater systems include attenuating floods, maintaining water supplies, preventing siltation of downstream streams and rivers, maintaining water quality, and supporting biodiversity. These small ecosystems also provide a steady supply of food resources to downstream ecosystems by recycling organic matter.

Small streams and wetlands provide a rich diversity of habitats that supports unique, diverse, and increasingly endangered plants and animals. Headwater systems, used by many animal species at different stages in their life history, provide shelter, food, protection from predators, spawning sites and nursery areas, and travel corridors between terrestrial and aquatic habitats.

Since the 1970s, the federal Clean Water Act has played a key role in protecting streams and wetlands from destruction and pollution. We have made progress toward cleaner water, in part because the law has historically recognized the need to protect all waters of the United States. The health of downstream waters depends on continuing protection for even seemingly isolated wetlands and small streams that flow only part of the year.

Photo courtesy of Raymond Eubanks.

These small streams and wetlands are being degraded and even eliminated by ongoing human activities. Among the earliest and most visible indicators of degradation is the loss of plant diversity in headwater wetlands. The physical, chemical, and biotic integrity of our nation's waters is sustained by services provided by wetlands and headwater streams.

Today's scientists understand the importance of small streams and wetlands even better than they did when Congress passed the Clean Water Act. If we are to continue to make progress toward clean water goals, we must continue to protect these small but crucial waters. The goal of protecting water quality, plant and animal habitat, navigable waterways, and other downstream resources is *not achievable* without careful protection of headwater stream systems.

WHERE RIVERS ARE BORN:

The Scientific Imperative for Defending Small Streams and Wetlands

The following scientists authored *Where Rivers Are Born:*

Judy L. Meyer, Ph.D.
Distinguished Research Professor
Institute of Ecology and River Basin Science and Policy Center
University of Georgia
Athens, GA

Expertise: *River and stream ecosystems*

Louis A. Kaplan, Ph.D.
Senior Research Scientist
Stroud Water Research Center
Avondale, PA

Expertise: *Organic matter biogeochemistry and microbial ecology of stream ecosystems*

Denis Newbold, Ph.D.
Research Scientist
Stroud Water Research Center
Avondale, PA

Expertise: *Nutrient cycling in stream ecosystems*

David L. Strayer, Ph.D.
Scientist, Institute of Ecosystem Studies
Millbrook, NY

Expertise: *Distributions and roles of freshwater invertebrates including exotic and endangered species*

Christopher J. Woltemade, Ph.D.
Associate Professor
Department of Geography-Earth Science
Shippensburg University
Shippensburg, PA

Expertise: *Hydrology, fluvial geomorphology, stream and wetland restoration, and water quality*

Joy B. Zedler, Ph.D.
Aldo Leopold Professor of Restoration Ecology
University of Wisconsin-Madison
Madison, WI

Expertise: *Wetland and restoration ecology*

Richard Beilfuss, Ph.D.
Africa Program Director, International Crane Foundation
Baraboo, WI

Expertise: *Wetland hydrology and ecological restoration*

Quentin Carpenter, Ph.D.
Lecturer, Gaylord Nelson Institute for Environmental Studies
University of Wisconsin-Madison
Madison, WI

Expertise: *Groundwater-fed wetlands*

Ray Semlitsch, Ph.D.
Professor of Biology
University of Missouri
Columbia, MO

Expertise: *Amphibian conservation biology, wetland ecology*

Mary C. Watzin, Ph.D.
Director, Rubenstein Ecosystem Science Laboratory
School of Natural Resources, University of Vermont
Burlington, VT

Expertise: *Aquatic ecology and ecosystem management*

Paul H. Zedler, Ph.D.
Professor of Environmental Studies
University of Wisconsin - Madison
Madison, WI

Expertise: *Plant population and community ecology*

American Rivers and Sierra Club, sponsors of this publication, are extremely grateful for the contributions the authors have made in describing the ecological importance of headwater streams and wetlands and the benefits they provide to humans. We extend special thanks to Judy Meyer for coordinating the project. We also thank editors Mari N. Jensen and David Sutton.

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September, 2003

Ken Pulskamp, City Manager
Harry Corder, Senior Engineer
23920 Valencia Boulevard, Suite 300
Santa Clarita, California 91355

March 19, 2004

Dear Mr. Pulskamp and Mr. Corder,

This letter is to alert you to the potential presence of the Federally Endangered Least Bell's Vireo (*Vireo bellii pusillus*) in the vicinity of the Bouquet Canyon Bridge (hereafter "the bridge") in Santa Clarita, the site of recently-begun habitat modification.

Although the environmental documentation for the proposed "Riverpark" development (just upstream of bridge) did not record the Least Bell's Vireo, several singing vireos, including one family group with recently-fledged young, were present just downstream of the bridge during summer 2001 (D. Cooper, *unpubl. data*), and patches of suitable habitat extends from here upstream past the bridge, through the proposed Riverpark area. Singing (and presumably nesting) Yellow Warblers (State Species of Special Concern) were also detected during summer 2001 (*Ibid*).

Per the directive of the "Natural River Management Plan" (3.4-2), such habitat modification must be considered "significant" when it involves "disturbance...due to noise, human activity, and emissions from equipment and vehicles."

As such, significant temporary impacts as treated under Mitigation Measure BIO-3 require "pre-construction mapping and field surveys for sensitive riparian breeding birds near construction sites (3.4-2)." They also require that disturbance to the Least Bell's Vireo habitat is not to occur within 300' of a known vireo nest.

In southern California, the Least Bell's Vireo arrives on nesting territory "by the end of March" with 11 March the earliest record for Los Angeles Co. (Garrett and Dunn 1981) and 15 March the earliest for Orange Co. (Hamilton and Willick 1996). The Yellow Warbler arrives (in Los Angeles Co.) in "mid- to late-April" (Garrett and Dunn 1981).

Since the construction activity was initiated in mid-March, before the arrival of both species, it is simply not possible that "pre-construction mapping and field surveys" were done prior to this work.

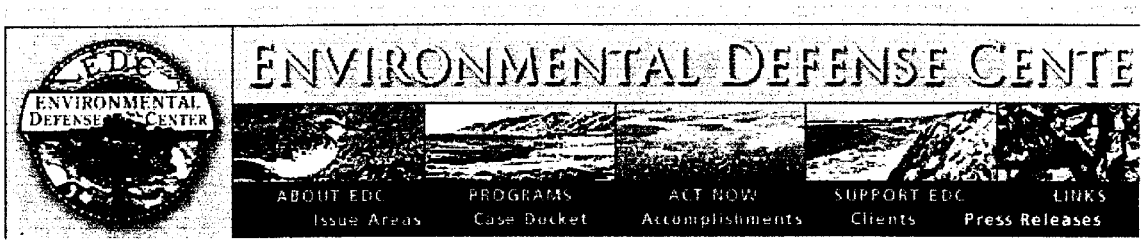
We urge you to postpone work on the Bouquet Canyon Bridge until after late-April, at which time it can be established that neither the Least Bell's Vireo nor the Yellow Warbler have established territories at the site.

In the future, we strongly recommend that work be done *outside* the nesting season (August - February), and *not* be initiated during March – July.

Sincerely,

Daniel S. Cooper, Dir. of Bird Conservation
Audubon California

Cc: Tom Worthington, Impact Sciences



Press Release

January 9, 2004

Contact:

John Buse, EDC (805) 677-2577
Peter Galvin, CBD (707) 986-7805

ENVIRONMENTAL GROUPS APPEAL TO NINTH CIRCUIT TO PROTECT ENDANGERED UNARMORED THREESPINE STICKLEBACK

VENTURA, CA - The Environmental Defense Center ("EDC"), representing Friends of the Santa Clara River, and the Center for Biological Diversity ("CBD") filed notice on January 8, 2004 that they will pursue their claims under the Endangered Species Act to protect a rare and highly endangered fish species before the Federal Ninth Circuit Court of Appeals.

The Unarmored Threespine Stickleback existed historically throughout Southern California's rivers and streams. The fish is now on the verge of extinction due to widespread destruction and modification of its habitat. Today, only a few viable Stickleback populations remain in California, one on the upper Santa Clara River near the proposed site for the Newhall Ranch development in Los Angeles.

In early 2002, EDC and CBD filed suit in federal district court to require the U.S. Fish and Wildlife Service ("FWS") to designate critical habitat for the Stickleback, which was listed as an endangered species in 1970. The lawsuit also challenged FWS's decision to authorize the harming or killing of the Stickleback that would result from the proposed CEMEX gravel mine operation in Soledad Canyon. These claims were dismissed by the Central District Court of California in November of 2003.

The groups' decision to appeal their claims to the Ninth Circuit Court of Appeals is based on the precarious status of the Stickleback and the significant threats it faces from urban sprawl, water pumping and the massive gravel mine proposed in Soledad Canyon. EDC attorney John Buse stated, "The federal government has known for over twenty years that protection of this species' habitat is critical to its survival and recovery, and it is inexcusable that they have failed to take this important step to protect it." Buse added, "A critical habitat designation is essential to protect the Stickleback from the impacts of the Newhall Ranch Development."

Peter Galvin, California Director, for the Center for Biological Diversity, stated "While the unarmored threespine stickleback was once a common species in the LA area, today it is one of the most endangered fish in the United States. Galvin added, "This species will go extinct unless its habitat is

protected."

Designation of critical habitat adds an additional important layer of protection for wildlife listed as endangered or threatened under the Endangered Species Act. Federal agencies are barred from granting permits and funding or authorizing activities that would adversely modify or destroy the habitat areas. Research has shown that species for which critical habitat has been designated are recovering faster than those for which critical habitat has not been designated.

Since 1977, EDC has been serving California's Central Coast as the only nonprofit, public interest environmental law firm between Los Angeles and San Francisco. EDC represents citizen groups in court and before governmental agencies, provides legal counsel, and educates the community on issues involving water quality and watersheds, biodiversity and endangered species, environmental health and justice, land use and open space, offshore oil and gas, and access to public lands. For more information, contact EDC at (805) 963-1622.

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NOVEMBER 22 - 28, 2002

The Gods of Small Things

The Center for Biological Diversity cares as much about the unarmored threespine stickleback as it does a cathedral forest of trees, which is why it is reinventing the environmental movement and could be saving Southern California in the process.

by Susan Zakin

TERESA SAVAIKIE SLAMMED HER FORD ESCORT to a halt on the parkway's outside lane, near the spot where a chunky construction worker was hauling up water from a riverbed. Ignoring the blaring horns of outraged suburban motorists, the barefoot woman, blond and good-looking in a classic Southern California way, approached the worker.

When Teresa Savaikie came up against the developers of Newhall ranch, she called the Center for Biological Diversity. (Photo by Debra DiPaolo)
Enlarge Image

"Don't you know there are fish in there?" she asked him.

"Yeah, I seen some fish," he said.

"Well, you're not supposed to be sucking them up with that hose," she said.

"Hey, I'm just working here. You don't like it, call the city."

She turned the full force of her blue, mascaraed eyes on the guy. "I *need* one of those fish. Do you have a cup or something?"

Savaikie and the fish, a small inconspicuous creature called

arroyo chub, were about to become unlikely characters in an intense drama playing out in the hinterlands of Los Angeles County, one that may turn out to be the biggest environmental battle of the decade. When the curtain drops, we just might be left with a new definition of wilderness and a new approach to protecting it, or, failing that, a free pass for the kind of development that ignores it.

Mixing a soccer mom and an environmental activist together might not always seem like a recipe for a David Lynch movie, but it was in this case. Indeed, it's safe to say that when Teresa Savaikie got married and moved in 1999 from working-class Highland Park to the *über*-suburb of Valencia, California, she had no intention of walking point for a Heidegger-quoting, Jesuit-fired, philosopher-turned-environmental iconoclast named Kieran Suckling. That was before she knew that the Newhall Land and Farming Company planned to build the largest housing development in Los Angeles County history on the banks of the Santa Clara River. The Santa Clara, which runs for 116 miles from Agua Dulce, a high-desert, Old West-feeling community 44 miles north of Los Angeles, to the Pacific, is the largest natural river left in Southern California. At a time when millions of dollars are being spent to restore some semblance of nature to the much-abused Los Angeles River, it looked like the Newhall Land and Farming Company was about to turn a tree-lined ribbon of water into a concrete garbage can.

For more than a decade, a small cadre of women — old hippies, really — had bucked business-as-usual by fighting development in this outlying suburb of Los Angeles. But they had been relying on the traditional argument that there wasn't enough water to fill hot tubs and water lawns, working on the assumption that Southern California was still like the movie *Chinatown*. Their arguments may yet prove persuasive, but with that strange little fish and other odd animals she noticed in her very back yard, Savaikie came upon something even bigger — her little corner of what could fairly be called a global holocaust.

The Center's Peter Galvin and Kieran Suckling way up the Santa Clara River (Photo by Debra DiPaolo)

Enlarge Image

As it happened, soon after she moved to Valencia, Savaikie saw a bizarre neon-orange-and-black bird outside her window. "I

thought it had escaped from a cage," she said, laughing. She watched the bird for a few days and realized her mistake. Her husband bought her an Audubon dictionary, where she found a picture of a hooded oriole that matched the creature darting among the palm trees in her neighborhood. "I wish I had never seen that damn bird," she says now. "I went back to the store and got another book, it was called *The Lives of North American Birds*. It had the status of each bird. I realized all these birds were declining. The reason the book kept listing was 'loss of habitat.' Declining brown bird, declining this bird. Everything was declining."

She also discovered that Valencia, a locked-down, affluent Republican suburb that looks custom-built for the mallified masses, is actually a pretty remarkable place. She found out, too, that a lot of what is remarkable about it happens right where Newhall Ranch is set to rise, along the banks of the Santa Clara River.

Life congregates around water, especially in arid and semiarid places like Southern California. Behind phalanxes of oil-seeping auto malls and Home Depots, five federally listed endangered species live on the stretch of the Santa Clara River that runs through Los Angeles County. Their names alone help explain why few knew about them: the unarmored threespine stickleback, the arroyo toad, the Least Bell's vireo, the southwestern willow flycatcher and the slender-horned spineflower.

As an ecosystem, the Santa Clara River is no joke. From the river's headwaters to its outlet at the Pacific, you can find 10 species of plants and animals on the federal endangered-species list, and these are just the plants and animals that someone cared about enough to badger the federal government into protecting. For example, in

MICHELLE HUNEVEN.

San Francisquito Creek that day, Savaikie and her construction-worker helper captured an arroyo chub, a rare fish that doesn't receive federal protection but has been given special status by the state of California.

Although the Newhall Land Company hadn't yet received final approval for Newhall Ranch, it was quietly amputating the Santa Clara and its tributaries, filling in wetlands, building new wells, and pouring concrete to control natural flooding. In smaller subdivisions with names like Avignon and Bridgeport, megahouses were being constructed up to the water's edge. Savaikie worked the phones, telling her story to brand-name environmental groups like the National Audubon Society. They sympathized, but claimed they didn't have the time or money to fight development in every sprawling suburb. And while they gave lip service to protecting endangered species, they didn't get excited about an obscure toad or a 3-inch fish with a weird name. "They kept asking, 'Did you talk to the Center for Biological Diversity?'" Savaikie said.

Photos courtesy National Wildlife Federation and Jim Greaves (bottom)

(Photo by Anne Fishbein)

THAT THE CENTER FOR BIOLOGICAL DIVERSITY would be anyone's idea of a savior belies its roots, which are low-budget and iconoclastic even by environmental-group standards. A dozen years before it would set its sights on Savaikie's fight with Newhall Ranch, the Center's founder, Kieran Suckling, had taken a similarly dramatic left turn. Suckling was in his early 20s, a scruffy intellectual who had been ricocheting around the country on graduate fellowships studying everything from linguistics to

mathematics at Stanford, Columbia, UC Irvine and the State University of New York at Stony Brook. In the summer of 1989, at a gathering of the radical environmental group Earth First! in the Jemez Mountains of New Mexico, Suckling met a fast-talking biologist-cum-politico named Peter Galvin who was studying the precarious existence of the spotted owl in New Mexico's Gila National Forest for the U.S. Forest Service. The meeting with Suckling would prove to be fateful, not just for the two young environmentalists, but for the environmental movement at large.

If the Forest Service knew Galvin better, they might not have been so quick to hire him fresh out of Prescott College in northern Arizona. He is dogged and his interests haven't changed much since bulldozers ripped into the woods behind his house where he used to play cowboys and Indians. "That was the beginning of the high-tech boom on Route 128 outside Boston," he says. "The pace of sprawl was just unbelievable. For a lot of people in my generation the pace of destruction has been so rapid you'd have to be comatose not to notice." Galvin didn't have to work hard to convince Suckling that the Mexican spotted owl should be more vocation than vacation. Having researched the raptor at Prescott College, he knew the owl was in danger of dying out. The studies he and Suckling worked on that summer helped prove it. Galvin, who had been an Earth First! activist as a college student, wanted to do something right away, file papers to get the owl protected under the federal endangered-species act, stage a protest, *something*.

Think bigger, Suckling told Galvin. Over the next 18 months, Suckling and Galvin pulled all-nighters at the University of New Mexico library in Albuquerque, gathering evidence that at least 100 species of plants and animals were facing extinction in the high country surrounding the Gila River watershed, a 70,000-plus-square-mile region stretching from western New Mexico to the Mexican border. In the shadowed folds of New Mexico's canyon country, Suckling and Galvin stumbled onto a phenomenon that fused the aesthetic, scientific and political arguments of traditional conservation around a hard truth: extinction.

For these two, it was a small step from the Gila National Forest to global holocaust. The species circling the drain in New Mexico, were, in fact, only a small part of what scientists everywhere were calling an extinction episode rivaling the end of the dinosaur age. The first hints of an extinction crisis had come in the 1980s, when supercomputers allowed biologists to understand entire landscapes rather than a lagoon here or a forest there. As the studies racked up, they realized that the sixth major extinction episode in four and a half billion years of evolution was under way.

It was no coincidence that the appearance of an unfamiliar bird spurred Teresa Savaikie to learn about extinction. She had grown up in a world in which one-fifth of the world's bird species had already died out. The birds were a portent, the proverbial canaries in the coal mine. E.O. Wilson of Harvard and other scientists predict that an equal proportion of the world's other species are likely to disappear over the next 30 to 50 years. To see the future, all one has to do is look south: Extinctions in rainforests already have increased to between 1,000 and 10,000 times the usual rate of one species per 1 million species a year. Of the world's six great extinctions, this is the first caused by humans. The murder weapons are as varied as contemporary life, from unregulated logging in the Ivory Coast to metastasizing condominiums in Florida.

Spurred by the urgency of extinction, Suckling and Galvin began a conversation that has continued almost without interruption for 13 years. Suckling has become the conceptual thinker behind the Center for Biological Diversity, keeping track of a dense library of information and making connections that turn seemingly isolated cases into big-picture causes. Galvin is more a concrete strategist, politically adept and always fascinated by the quirky habits of pink fish and red-legged frogs.

Suckling and Galvin started slowly at first, filing a petition in 1989 to list the Mexican spotted owl on the endangered-species list, and then one to protect the Northern goshawk in 1991. After that came the deluge: 58 frighteningly well-researched petitions to list everything from an orchid called the Canelo Hills ladies' tresses to the yellow-billed cuckoo. Unfortunately, their tsunami of petitions landed inside the Beltway just when the Clinton administration was trying to sort through hundreds of previously neglected endangered-species listing petitions approved by the first Bush in his final days. To complicate matters, Republicans had gained a majority in Congress in 1994. Industry-friendly politicians from the West, where the majority of high-stakes endangered-species conflicts were brewing, started whittling away at the Endangered Species Act. Many in Congress threatened to rewrite the law so dramatically that it would become virtually impossible to protect species.

Soon Suckling and Galvin's combination of full-on energy and political naiveté — with a soupçon of arrogance — infuriated people across the political compass. Critics ranged from New Mexico cattlemen to then-Secretary of the Interior Bruce Babbitt, who was struggling to change a pattern of misuse of federal lands without being run out of town on a rail by Old West right-wingers.

"There's no question that Kieran and Peter were viewed as huge pains in the rear end," says Don Barry, who was Babbitt's assistant secretary of the interior at the time. "They were totally upending and reorganizing the Fish and Wildlife Service priorities, imposing their own sense of priorities based on what the grassroots groups wanted when we were dealing with national priorities. They kept hitting the accelerator with us."

Nobody would have paid attention to the guys' frenetic paper shuffling if it hadn't been for the one characteristic that truly annoyed the bureaucrats: an ability to win in court that seemed almost uncanny. But there was nothing magical about it. The agency charged with protecting most endangered species, the U.S. Fish and Wildlife Service, has traditionally been weak and underfunded. Once the extinction crisis hit, the beleaguered bureaucrats were simply unable to keep up. For Suckling and Galvin, the legal possibilities seemed inexhaustible. There were lawsuits forcing the agency to list species, lawsuits against the agency for missing deadlines (sometimes by decades), lawsuits to force the agency to actually protect the species it had listed but then ignored.

They might not have known it at the time, but by moving the battlefield from the lobbying halls of Capitol Hill to courtrooms, Suckling and Galvin were leaving their counterparts in the dust by simply catching up with political realities. These days, corporate contributions to candidates outpace those from do-gooder organizations such as the Sierra Club by more than 50-to-1. Congress is no longer friendly to environmental legislation; only one major environmental law had passed since the '70s, the relatively non-controversial Safe Drinking Water Act. With strong laws already in place, and increasingly complex debates that didn't scan with the general public, the best bet now is using the courts to enforce environmental laws to the hilt, supported by increasingly sophisticated scientific research.

The Endangered Species Act is widely regarded as the nation's strongest environmental law. Suckling and Galvin were among the first environmentalists to wield the law as an assault weapon instead of a rapier. The Center relentlessly hounded the Fish and Wildlife Service to protect endangered species and their habitat, regardless of the threat of political fallout.

In environmental lawyer Mark Hughes, Galvin and Suckling found just what they needed. Hughes had tried for years to convince his colleagues at the Sierra Club Legal Defense Fund (now Earthjustice) to bust a move on the Mexican spotted owl. When no action came, he resigned in disgust and founded his own law firm. Galvin, who had a master's degree in conservation

biology, but who is the son of a lawyer, begged, cajoled and charmed Hughes into working for what he and Suckling had taken to calling the Greater Gila Biodiversity Project.

Hughes won an injunction that stopped logging for 18 months on 2.4 million acres of national forests. A judge ordered the U.S. Forest Service to spend that time figuring out how many trees it could cut down without hurting the Mexican spotted owl. It turned out to be a lot less than the Forest Service had in mind. Logging on national forests in Arizona and New Mexico declined 84 percent from 1989 to 2001; much of this shift can be attributed to legal strong-arming by the Center for Biological Diversity, as the group began calling itself.

The Mexican spotted owl case started one of the longest winning streaks in the history of the environmental movement. In a dozen years, the Center for Biological Diversity, which moved to Tucson, Arizona, in 1995, won 80 percent of its cases, roughly twice the rate of most environmental law firms, gaining protection for 288 species in 44 states. It has changed the way 38 million acres are managed in the American West, ended cattle grazing along hundreds of miles of fragile desert rivers, slowed the sprawl of subdivisions, and reduced logging from Alaska to Arizona. Because they deal in protecting plants and animals and because loss of habitat is the most common cause of extinction, the Center has become a one-stop shopping outlet, suing on everything from big dams to the expansion of military installations.

It may sound elementary to make species protection the main thrust of protecting the environment, but, in fact, the Center was making a radical departure from old-line male environmentalists who cared more about conquering mountains than nurturing warm fuzzy animals. Heather Weiner, a Washington, D.C.-based environmentalist, says that until the Center came along, practically the only people aggressively lobbying for endangered species were tough women like her who did battle on the Hill dressed in short skirts and armed with attitude.

Washington, D.C., environmental attorney Eric Glitzenstein, who has litigated on behalf of the Center, believes the group has almost single-handedly pushed endangered-species protection to center stage, edging out more familiar but less pressing issues like pollution, where the big battles have mostly been won. *Fearless* was the word that kept coming up when Nathaniel Lawrence of the Natural Resources Defense Council (NRDC) — a more conservative Washington, D.C.-based conservation group that also specializes in science and litigation — talked about the Center for Biological Diversity. "They are, pound for

pound, dollar for dollar, the most effective conservation organization in the country," Lawrence says.

THE CENTER FOR BIOLOGICAL DIVERsity's rise came at a time when the environmental movement as a whole had lost its footing. The late 1980s and early 1990s were a confusing time for progressive politics in general and above-ground environmentalists in particular. Many environmentalists found themselves wondering what the hell was wrong in their world. "Who's the next David Brower?" was the question asked over and over in rambling phone calls and buzzed late-night, drunken agonizing.

In the 1960s, Brower, the legendary Sierra Club director and "archdruid" profiled by *The New Yorker*'s John McPhee, had democratized the elitist wilderness-movement, lobbying Congress with theatrical flourishes and taking on issues like nuclear power that lay outside the stodgy movement's traditional purview. Brower, who was both a creative genius and a towering egoist, attracted a talented lineup to the environmental movement that has not been matched since. He set loose adman Jerry Mander and world-class photographers like Ansel Adams and Eliot Porter to shape the marketing iconography of an idealized America: the Grand Canyon, Yosemite, Yellowstone.

But as environmental groups became institutions with big budgets, they grew vulnerable to the cyclical nature of the public's interest in environmental issues. To support larger staffs and higher overhead through lean times, big groups like the Sierra Club and the Wilderness Society had to rely on the whims of rich patrons and the fads of fickle foundations. They became hesitant to offend friends and enemies alike. Once the province of visionaries, environmentalism became the domain of political lobbyists whose only philosophy was pragmatism.

As it turned out, the environmental movement didn't need another David Brower. It needed a 21st-century Arthur Rimbaud, the tousled, dirty prodigy whose only interest in convention was flouting it. Rimbaud reinvented poetry. Kieran Suckling would do the same with environmentalism.

You wouldn't have known it to see him in action in the early days. Ten years ago, the éminence grise behind the Center for Biological Diversity was in a smack-induced stupor in British Columbia, doing field research on the heroin habits of out-of-work loggers. Logical enough, maybe. Suckling thought he should know the culture in which he was working. The environmental movement, with its quasi-religious overtones, is prone to anointing epic heroes for its epic battles. In those days,

Kieran Suckling was probably not at the top of anyone's list as most likely to be anointed. Paradoxically, it may be just this willingness to go beyond normal limits that helped him become the first truly original thinker that the movement has seen in decades.

Suckling grew up in Massachusetts, Rhode Island, Peru, Ireland and England. His mother is Irish and his father is English, a civil engineer whose work on power plants and pulp mills ensured a peripatetic existence. His parents divorced when he was 12. His loyalties swung to his mother, whom he describes as "a pagan Catholic." Suckling says his mother keeps not only a lock of a sainted aunt's hair but also dirt from her grave, and she prays fervently to an up-close-and-personal Virgin Mary.

This otherworldly bent was not lost on her son. When one of Suckling's many Jesuit uncles returned from a missionary stint in Africa with a hard-to-shake tropical disease, he bequeathed his philosophy books to the impressionable teenager. As an undergraduate at Holy Cross College, Suckling discovered he loved philosophy and befriended Joe Lawrence, a philosophy professor.

"He's intense, he's energetic, he's creative," said Lawrence. "A very interesting question is what in the hell was Kieran Suckling doing at a Catholic school.

"If you think of the Grand Inquisitor chapter in *The Brothers Karamazov*, which was Dostoyevsky's critique of the Jesuits, it makes sense. The Jesuit is the one who realizes that Christ should have accepted the Devil's offer to turn stone into bread — he could have fed the hungry. He should have accepted the offer to make a magical display of his power and reformed the world.

"That desire for achieving a *humanly made* perfect world, that's the Jesuit desire," said Lawrence.

Suckling took up phenomenology, the study of direct experience. He studied linguistics and the deconstruction theory that was ubiquitous in the academy. His conversation is peppered with references to mainstream philosophers like Aristotle and Heidegger, but edgier characters like the French-Algerian philosopher Jacques Derrida, a coyote trickster whose work suggests that meaning is ever-shifting and relational, clearly have influenced him.

Suckling didn't just study experience. He hurled himself into it. You could say he transcended ethics in favor of Kierkegaardian intensity. He became an industrial-strength shoplifter and all-

around grifter, not an illogical lifestyle for a perpetual student from a financially strapped family. Orgies, anarchism and the occasional arrest were de rigueur in the radical environmental movement. Suckling navigated the underworld with apparent ease. When he came back into the mainstream, it would be to fight for the very definition of wilderness.

That fight began with William Cronon of the University of Wisconsin, who is considered one of the environmental movement's leading intellectuals. For years, Cronon has been vocal about his belief that wilderness is a mere intellectual construct. Many rank-and-file environmentalists, drawn to the movement by their quasi-religious fervor for the tangibility of the outdoors, found Cronon's ideas horrifying. At the very least, Cronon's announcement (tantamount to saying "God is dead") was spectacularly poor strategy — especially since he made it rather publicly in *The New York Times Magazine* in mid-1995, when the newly empowered Republican congressional majority was taking a run at the country's basic environmental laws, with a special emphasis on the Endangered Species Act. Cronon's article, or at least its timing, seemed to characterize the anemia and disarray plaguing the movement.

To Suckling, Cronon's ideas seemed outdated, hopelessly pre-postmodern. "This is where I take issue with Cronon and Nash [Roderick Nash, author of *Wilderness and the American Mind*]," says Suckling. "Because Cronon and Nash want to write a biography of wilderness, they have to come up with a concept of wilderness.

"In fact," Suckling contends, "wilderness is antithetical to concept itself. It's where you go to get rid of your concepts. That's what I mean when I say wilderness deconstructs us. It's comforting because you realize you don't need to be in control."

Today, Suckling runs an organization of 30 employees, raises a multimillion-dollar budget, cuts deals with Bush's Interior secretary, Gale Norton, and defends the environmental position on CNN's *Crossfire*. He also puts up with occasional hostility from the media — *The Wall Street Journal* editorial page in particular. He's not afraid to show that under the Lamborghini brain is a nice Irish Catholic boy from Massachusetts. He still refutes Cronon, for lack of a better opponent. But his argument is subtly different. At 37, he talks less about philosophical ambiguity and more about morality.

"Nature isn't moral," says Suckling. "It's our relationship to nature that's moral. A human's engagement with the world is always moral, religious and aesthetic. Heidegger talks about *wissen* and

kennen as words for knowledge: wife and husband. This is more a notion of a caring spouse. A rabbi, Emmanuel Levinas, defines it as the experience of meeting the face. It's the face that says to you, 'Thou shalt not kill.' It's the relationship."

When the Center began its spectacular run of lawsuits, suit-and-die environmentalists worried that a take-no-prisoners assault would give the congressional Republicans an excuse to gut the Endangered Species Act. Those concerns are perhaps elevated now with Republicans owning the House and Senate. Michael Bean, of the Washington, D.C.-based Environmental Defense, which works with corporations to find common ground, is one who believes the Center's aggressive stance could inspire equally aggressive retaliation from opponents.

"They've been successful in getting a lot of species on the endangered-species list," says Bean. "I think that, by itself, doesn't ensure a result that will endure. My view is that lasting solutions to environmental problems require some substantial degree of buy-in from the people who are affected by those decisions. There are just too many ways for disaffected people to undo a particular environmental result."

The Jesuit steel in Suckling, though, remains fired by his absolute conviction that the unprepossessing scrap of habitat for an endangered rat near a highway is as important as a million-acre national forest of cathedral trees. He understood what the professional environmentalists didn't. It's fairly simple, really: People like animals.

NORTHERN CALIFORNIA IS BETTER-known for its groovy environmental ethic, but Southern California's roller-coaster landscape of high mountains and sun-blasted valleys, combined with a forgiving Mediterranean climate, has created a near-perfect petri dish for evolution and natural diversity. That's why Mark Gold, of Heal the Bay in Santa Monica, calls Southern California "the endangered-species capital of the nation."

The hitch is that Southern California's population, now 19 million, is expected to rise 40 percent over the next 30 years. The population of San Bernardino and Riverside counties, the edge habitat between the mountains and the city, is expected to grow even more dramatically, doubling to 6 million by 2025.

"It's a pretty volatile situation," said the NRDC's Lawrence. "I'd draw a parallel between the situation in Southern California and the fight over the spotted owl in the Pacific Northwest 15 years ago."

The Newhall Land and Farming Company intends to do its part to make sure California's population growth comes in on schedule. The company calls the nearly 22,000-home, 60,000-resident city it plans to build Newhall Ranch. Like so many of those evocative names given to nouveau suburbia, this one has a checkered past. A San Francisco auctioneer, some would say carpetbagger, named Henry Mayo Newhall bought the land at bargain-basement prices when its *Californio* owners ran into tax troubles. The 143,000-acre Del Valle land grant became Newhall Ranch in the 1870s.

Newhall Land is a local behemoth. Aside from the proposed Newhall Ranch development, it controls more than 50,000 acres in the state, including L.A. County's largest industrial park, the 4,500-acre Gateway Center. The company, which started the town of Valencia, develops master-planned communities, which it then sells off piecemeal to real estate developers, so the actual landholdings have diminished over time. Company spokeswoman Marloe Lauffer downplays the company's influence, saying Newhall Land only owns 25 percent of the town of Valencia, "but we've generated 70 percent of the jobs and sales tax." Everybody else in town readily admits that Newhall has ruled over this part of Los Angeles County for a century, in much the same way as the Spanish *hacendados* who preceded it.

What's striking is how much rural character remains where Newhall Land wants to develop. Once you leave Valencia, you enter an earlier time, California's past as limned by California historian Kevin Starr. The old, elegant Rancho Camulos, once the home of the Del Valles and reputedly the inspiration for Helen Hunt Jackson's 1886 novel *Ramona*, is now a museum sheltered beneath an imposing mountain range. It is as if a time machine threatens to fast-forward from the 1800s to the 21st century, landing this shard of Old California smack in the middle of a Disney theme park Levittown. Only with this machine, there is no going back.

Newhall Land's long history in the region may be one reason the company is behind the curve on urban planning. According to Lauffer, its development approach is based on the post-World War II designs of architect Victor Gruen, whom Newhall hired to design its utopian suburban villages.

Gruen, who designed the country's first enclosed mall, was more of an architect than "one of the fathers of new urbanism," as the company likes to bill him. His ideas predate any notion of what is now called sustainable development. For instance, Gruen clustered houses and commercial development around the Santa

Clara River, the way Indians and early settlers settled on rivers in the early days of the West. Today, New Urbanist model cities like Boise, Idaho, and Madison, Wisconsin, are designed to take into account the fragility and value of river corridors by protecting them as natural open space, usually with bike paths and meandering trails.

Of course, when it comes to the old fashioned civic virtues, Lauffer points out that the company has donated land for the hospital, the city center and the local branch of the county library. Newhall also guarantees funds for school construction, Lauffer said. What she failed to mention was that the Sierra Club, the Santa Clarita Organization for Planning and the Environment and a local homeowner's association sued the company in 1993 to force them to provide those guarantees. In any case, few would argue with the proposition that, one way or another, Newhall Land has created a place where a lot of people want to live. But the company's sense of noblesse oblige doesn't appear to extend to the environment. Recently, the California Department of Fish and Game officials accused Newhall Land of deliberately breaking environmental laws in its efforts to ensure approval for its sprawling new development.

In May, state Fish and Game investigator Penelope Liotta filed a search-warrant request alleging that Newhall had deliberately destroyed habitat for a state listed endangered species called the San Fernando Valley spineflower by grading vegetation and planting agaves on the site of a road planned for Newhall Ranch.

"It is my opinion that NLF [Newhall Land and Farming Company] is using the idea of an agave farm as a ruse to justify the systematic destruction of habitat that is consistent with SFVS [spineflower] habitat requirements," Liotta wrote. Liotta requested a search warrant because Newhall Land had consistently denied biologists access to search for endangered species on their land.ä

Documents indicate that this isn't the first time the company has covered up evidence of endangered species on its property. Biological consultant Louis Courtois reported in the 1994 edition of the *California Natural Diversity Database* that arroyo toads lived in sections of the Santa Clara River owned by Newhall Land. In 1995, the U.S. Fish and Wildlife Service placed the toad on the endangered-species list, stating that 75 percent of its habitat had been lost, and of the 22 remaining populations, only six had more than a dozen toads.

This wasn't surprising, given the state of Southern California's rivers. The arroyo toad, which exists only in Southern California

and Baja, survives by burrowing into the loose sand of riverbanks. Arroyo toads cannot penetrate the soil-cement mix that is commonly used when developers want to build houses without leaving a buffer sufficient to protect them from natural flooding.

In 1999, after being hired by Newhall Land, Courtois reported to the U.S. Fish and Wildlife Service that he had not found any arroyo toads in company-sponsored surveys in 1995 and 1999. This letter failed to mention the results he had reported in 1994.

Teresa Savaikie says the company's own environmental impact report, required under California law, showed that the toad had been found under a major traffic artery, McBean Parkway, in 1996. Yet in 1998, the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service signed off on a management plan for the river and its tributaries that did not mention the presence of the arroyo toad. Neither Courtois nor Newhall Land admitted that the toad had been found in the river until local environmentalists hired their own biologist, who confirmed that the toads lived in the Santa Clara.

Did the company break the law? Landowners have a legal obligation not to "take" or harm the habitat the species needs to survive, said Rick Farris, a biologist with the Fish and Wildlife Service. Newhall's activities in the Santa Clara River and its tributaries might fall within that definition. It would be difficult to prove in court, but it's hard to believe that Courtois, who failed to return a reporter's phone calls for this article, didn't inform his client that an endangered species lived on their property. Lauffer, meanwhile, contends the river-management plan has already established what Newhall Land is allowed to do on the river. "All of this is kind of moot, all this about frogs and toads," she said.

Federal wildlife officials don't agree. Because the arroyo toad was not included in the river's management plan, agencies are now reviewing the plan to determine if it meets state and federal laws, said Farris. The river-management plan is one of the keys to finishing the Newhall Ranch development, as well as many smaller developments in the Santa Clara Valley. It basically sets the parameters for everything Newhall Land and other developers can do along the river.

Newhall's public relations materials attempt to depict a company that has become sensitive to its critics. Lauffer points out that Newhall Land's master-planned communities have always contained open space as an amenity. The Newhall Ranch development would cover 12 square miles west of Magic Mountain and include 6.7 million square feet of commercial and

business space inside five "villages." The plan also calls for 6,000 acres of open space. But nearly all of this "open space" is in the mountains that loom over the proposed new city. This steep terrain would be difficult or impossible to develop.

Newhall Land may be trying to satisfy the traditional but outdated "rocks and ice," or scenery based, approach to conservation. The problem, though, is that approach has been one of the factors leading to the current extinction crisis. In the last 20 years, scientists have stressed that rivers and valleys, which contain more food and cover for animals, are often more valuable than the scenic high country traditionally preserved in parks. But to Lauffer, science is eclipsed by one incontrovertible fact. "We actually own the river," she points out.

NEWHALL LAND AND FARMING Company may own the Santa Clara, but Teresa Savaikie has adopted the river as her own. "One reporter called me Erin Brockovich without the cleavage," Savaikie says ruefully.

Savaikie enumerates the sins committed by Newhall Land with the zeal of a convert. Indeed, her political activism is of an even more recent vintage than her love for nature. In the summer of 2000, Teresa was walking along San Francisquito Creek looking for warblers when she ran across a forest of tall poles with speakers mounted at the top. "You know those speakers at the old drive-ins? That's what they looked like."

When she returned after a July 4th weekend, Newhall Land had cleared the creek of willows and cattails to make way for a housing development. Savaikie placed a few calls and found out that the drive-in movie speakers were called hazing machines, meant to fool birds into thinking a predator was nearby in order to frighten them away. That way the company could claim it wasn't disturbing any endangered species, like the local Least Bell's vireo.

"They knew they could get away with it because when all these projects came along, nobody knew anything about endangered species. The developers know but we didn't," said Savaikie.

For months she had been calling Peter Galvin, who had moved to Garberville, in Northern California. Galvin hadn't returned her phone calls. Finally, in desperation, she e-mailed another environmentalist who had shown some interest in her problems. He agreed to talk to Galvin for her.

Galvin finally called. "He's always been there," Savaikie said. "I felt like God had called or something." It was the beginning of a

beautiful friendship — and a spate of lawsuits. First, Galvin got the hazing machines removed. Then [illegible] found out Newhall Land had successfully lobbied to get its Newhall Ranch and other development sites taken off what is called "critical habitat" for the arroyo toad and another endangered species, a fish called the unarmored threespine stickleback. To date, the Center has eight lawsuits that could affect Newhall one and counting, currently. "Whenever Teresa gets bored now, she gets Peter and has a conference call," says longtime Valencia environmentalist Lynne Plambeck.

Newhall Land finally began to feel the pressure. For several years, Plambeck and other community activists had been trying to stop Newhall Ranch by arguing that there wouldn't be enough water to meet the needs of 60,000 new residents. Over their protests, the L.A. County Board of Supervisors had approved the Newhall Ranch project in 1999.

But the next year, a Kern County judge halted the project until Newhall could prove it had enough water for the 22,000 homes, as well as business and industrial facilities envisioned for the new city. After the judge's decision, supervisors delayed a new hearing on the development until early 2003. If the company manages to nail down a water supply for Newhall Ranch, it will face a fresh round of opposition. Endangered species lawsuits will be the only way to force Newhall Land to tailor its development to the needs of toads and birds and obscure flowers that live along the Santa Clara River.

"Without Peter Galvin we wouldn't have a clue about the [Endangered Species Act]," said Sevaikie. "Without the Center, we wouldn't have a prayer."

The Center for Biological Diversity recently moved two activists in Idyllwild to be closer to the ragged edge of sprawl in Southern California, its hot-spot spot. Not that the Center is an unproven entity in California. Back in 1990, a 20-year-old Center wunderkind named Dave Hogan persuaded to get the California gnatcatcher to the federal list of threatened species, which, under the law, provides almost equal protection as endangered species. The Natural Resources Defense Council followed up with its legal firepower, and before long, the small bluish bird was on the front page of *The New York Times* as the champion of what is to be a landmark approach to endangered-species conservation. Babbitt hoped to head off the upcoming "train wreck" between the gnatcatcher and [illegible] in San Diego with something called a habitat conservation plan, which allowed a certain amount of destruction to occur in exchange for protection in other places. The San Diego plan

would eventually cover more than half a million acres and potentially protect 85 species. A similar plan covers most of Orange County. In San Pedro, a smaller swath of land is being managed to protect the Palos Verdes blue butterfly, among other species.

In Idyllwild, the Center's newly hired lawyers, Brendan Cummings and Kassie Siegel, work at the epicenter of the battle over Southern California's last shreds of wildlife habitat. Cummings, Siegel and staff biologist Monica Bond are going where no national-level environmentalists have gone before — to tortuous, mind-numbingly dull local planning and zoning board meetings. So far, the Center has run into the same kind of labor-intensive cases with nickel-and-dime outcomes that made the big national environmental groups shy away. Last year, the Center's lawyers sued over Oak Valley, a proposed 4,400 home development in Riverside County between I-10 and the 60 freeway. They didn't stop the development, but they forced the developer to reduce the size of the project, preserve wetlands, and set aside a wildlife migration corridor for mountain lions and black bears.

"We didn't stop it, but we made it better," says Siegel. "Unfortunately, that's been the history of land-use law."

According to Siegel, the Center is determined to change history by flat out stopping development on 647 acres of Lytle Creek near the Lytle Creek exit in unincorporated San Bernardino County. Lytle Creek, the lower end of an intermittent canyon stream that flows down from the San Bernardino Mountains, is an illegal dumping ground for trash. Growing around the old tires and broken bicycles is a patch of perilously rare sage and riverbed habitat for the San Bernardino kangaroo rat, which is on the federal endangered-species list, and the California gnatcatcher. Lytle Creek is the unpropossessing face of 21st-century conservationism, at least in the U.S. With the extinction crisis overturning obscure post card views of nature, vacant lots outside sprawling suburbs have become the new militarized zone.

As it tries to block the transformation of Jack London's rough-hewn California into just another modern convenience, it sometimes seems as if the Center is trying to stop time itself. Occasionally, they succeed not only in stopping time, but turning it back. Nothing is more crucial to the Center's impact on federal lands in California, where the political power of the state's real estate developers is not feared. A 1998 lawsuit over the endangered Los Padres, Cleveland and San Bernardino national forests prompted the U.S. Forest Service to take into account the needs of newly listed endangered species, such as the arroyo toad. That resulted in a whole raft of actions, including closing areas to off-

road vehicles, restricting mining and grazing, and even retrofitting power lines so condors wouldn't get electrocuted when they perched on them.

In the gnarly Charlie Manson outback of the Southern California desert, another Center lawsuit closed 50,000 acres of the Algodones Dunes to off-road vehicles. The Center is currently litigating over the management of the 25-million-acre California Desert Conservation Area, which stretches from the Mexican border almost to Mono Lake. A lawsuit on behalf of 24 endangered species already has forced federal agencies to close off millions of acres in the desert-conservation area to mining, grazing and roads.

If that sounds like a lot, it is. Almost half of the state of California's 163,707 square miles are under litigation brought by the Center for Biological Diversity.

But Galvin says there is something about the Newhall Ranch that feels different, riskier perhaps, with powerful, entrenched opposition and a lot at stake because of the river's biological importance.

"We've never been involved in an issue where we haven't felt we've made a big difference," Galvin said. "But, as my grandmother would say, we got big *tsuris*. When we get involved in something, we like to get results and get results fast and get lots of results. The whole Santa Clara River issue is our toughest issue to date. I feel like we're up against this unstoppable juggernaut. Well, not unstoppable, but . . ."

But maybe. A recent court decision favoring the [illegible] Association of Homebuilders that rescinded protection for 4.1 million acres of habitat for the red-legged frog in California — protection won by the Center — is evidence that the business community has begun to turn the Center's innovative legal approach against it, lending some credence, perhaps, to Isbell's argument against the Center's tactics. For his part, Galvin is acutely aware that the Center for Biological Diversity's $1.8 annual million budget is minuscule compared to the power and money of Southern California's real estate developers. What the Center may have on its side is something less easily quantifiable.

Dodie Hoffman is wheeling her daughter's stroller around the faux New England village called Bridgeport when [illegible] stops her car to talk. Hoffman says she is shocked to hear that the Newhall Land and Farming Company may have violated the Endangered Species Act. She is shocked, too, to learn that her gated community may be harming condors and

funny little toads by pumping groundwater to fill its tacky postmodern ode-to-Venice concrete-lined canal. "I was told that they were protected, the animals. That's what the builder told us. We were told that many times," Hoffman says, pausing in her promenade down Bridgeport's impeccably manicured sidewalk. Hoffman probably never heard the word *phenomenology*. She might not care that this obscure discipline has created a new kind of environmental politics. But she would understand if Kieran Suckling told her that his definition of wilderness is the split second when an owl lights on a branch and locks his gaze on yours.

"They will change the game," said John Buse of the Environmental Defense Center in Ventura, which has represented the Center in several cases. "They've brought a new perspective to the battle against sprawl. Even more than that, they're bringing the reality of the extinction crisis home to Southern Californians."

Thomas R. Haglund, Ph.D.
Consulting Biologist
3627 Valley Meadow Road
Sherman Oaks, CA 91403
818=906-3440

Jeff Hogan
City of Santa Clarita

Re: Riverpark EIR Comments

Dear Mr Hogan:

I am submitting the following comments on the Riverpark EIR for your consideration. I am an aquatic biologist with over 20 years experience on the Santa Clara River (resume attached).

My first comment is a relatively minor comment. The EIR claims to have performed "protocol" surveys for the unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*). To the best of my knowledge this is no protocol for stickleback surveys, so this statement is misleading. 1

Section 4.6 Biological Resources claims to have found no Western spadefoot toads during surveys, yet the property contains an area well known for Western spadefoots - "behind" the Von's. This site is very well known by most local biologists (F. Havore, pers comm.). It is disconcerting when such obvious species are not located in well known localities, and raises questions about the quality of the surveys. 2

The same section acknowledges that habitat for San Diego horned lizards is present on site based on vegetation surveys, but there is no indication that any survey was specifically conducted for the horned lizards or the harvester ants that are their primary food source. 3 It appears that no general surveys were conducted for amphibians and reptiles. 4 In the absence of such surveys, species known to occur in the area and for which habitat occurs on site must be considered present. For reptiles such as snakes, sensitive species should be considered present if appropriate habitat is present and a survey technique such as pit-fall trapping has not been employed. The presence/absence of snake species is difficult to ascertain with any degree of certainty without extensive fieldwork over several years (see California Department Fish and Game survey protocol for southern rubber boa). 5

While I agree that unarmored threespine sticklebacks do not currently occupy this area, because the riverbed is dry most of the year, the EIR must still address potential impacts to this endangered fish which may seasonally occupy the river and has typically occupies the stream immediately downstream of the project site. 6 Any changes to the flow conditions in this river reach may affect both downstream and upstream areas. I find it difficult to believe that bank stabilization that encroaches on the river will have no flow impacts when the surface water diagrams at various flood stages show bank to bank flow. 7

Water does not flow along hard siding the same way it flows along a natural riverbank and hard-siding does not typically provide the same refuges from flow that natural banks do. 7

It must also be remembered that rivers are systems, and isolated river segments do not function independent of the rest of the river system or drainage. When you alter one portion of a river, the impacts are likely to be seen elsewhere in the drainage as well. Changes in flow, magnitude, duration, temporal extent will all have impacts on the system. Even an increase in incidental runoff from developed property may have an impact. The need to preserve a functioning system in order to preserve an endangered species is acknowledged in the US Fish and Wildlife Service Critical Habitat Designation for the Santa Ana Sucker (*Catostomus santaanae*). This project occurs immediately upstream of habitat that has been essentially continuously occupied by the unarmored threespine stickleback, yet downstream impacts are not addressed at all. 8 9

Lastly the project area undoubtedly provides a corridor for (at least) downstream movement of fish (gene flow). This biologically important function is not addressed. 10

Thank you for your consideration of my comments.

Thomas R. Haglund, Ph.D.

Letter No. 28

SIERRA CLUB
FOUNDED 1892
Angeles Chapter

3435 Wilshire Boulevard
Suite 320
Los Angeles, CA 90010-1904

(213) 387-4287 phone
(213) 387-5383 fax
www.angeles.sierraclub.org

5-7-04

Jeff Hogan
City of Santa Clarita
23920 Valencia Blvd.
Valencia, Ca. 91355

Re: Riverpark Project, Master Case # 02-175

Sirs:

The Sierra Club wishes to submit the following additional comments on water supply.

First, we object to the inclusion of water that is polluted by ammonium perchlorate as an available supply. We agree with the Newhall County Water District that contaminated water that cannot currently be supplied to the public should not be counted as available for planning purposes until it actually can be served to the public. In fact, a water supply that is not fully permitted and has not received completed environmental review, cannot be counted as an existing water source under section 10910(d)(2) of the California Water Codes. We submit the recently passed Newhall County Water District Resolution 2004-3 in support of our position. 1

Additionally, the City may not include the 41,000 acre feet Monterey Transfer in its calculations for water supply for this new project approval because this violates the Court Order filed June 6th, 2003 in *Planning and Conservation League v. Department of Water Resources* Case No. 95CS03216 (see attached order, item #5, page 3). 2

We wish to inform you that both the SB610 Water Assessment and the Urban Water Management Plan on which you are relying are inaccurate and do not conform to existing legal requirements under the California Water Codes. 3

Sincerely,
Johanna Zetterberg
Conservation Coordinator

cc: Castaic Lake Water Agency, Santa Clarita Division

Final – Approved 1/29/04

RESOLUTION NO. 2004-3
RESOLUTION OF THE BOARD OF DIRECTORS OF
NEWHALL COUNTY WATER DISTRICT
REGARDING WATER SUPPLY AND DEMAND

PREAMBLE

This resolution provides notice to the public that the District intends to protect the rights of its current customers to safe, dependable and adequate domestic water supplies on an ongoing basis and in all water supply assessments and verifications, to utilize the best available knowledge concerning supplies, the current information on which is summarized in the following resolution. After much deliberation, the Board is proposing to adopt the following resolution to send the strongest message possible to the public:

1) That, at least as far as the District is concerned, there is not sufficient current supply of water to meet all current and future demands, especially in times of drought or other emergency;

2) That, as stated in *SCOPE v. County of Los Angeles and Newhall Land and Farming Company* (2003) 106 Cal. App. 4th 715,131 Cal. Rptr 2d 186, the State Water Project (SWP) "entitlements are based on a state water system that has not been completed. There is a vast difference between entitlements and the amount of water that SWP can actually deliver;"

3) That the Urban Water Management Plan 2000 being relied upon in granting entitlements to develop and build is inaccurate in its assessment of current supply; and

4) That in its actions regarding water service, the District will be guided by its decisions as to the available supply based upon the facts set forth in the accompanying resolution.

By adopting this resolution the District is not purporting to amend or change the current regional Urban Water Management Plan 2000 ("UWMP 2000"). By this resolution, however, the District does intend to put members of public and planning agencies with jurisdiction over the Santa Clarita Valley on notice that the continued granting of rights to develop property without proof of adequate water supplies and infrastructure is irresponsible. This resolution also is intended to make the District customers aware of the fact that any loss or damage resulting from city and county planning agencies ignoring the true facts regarding water supply and intentionally allowing additional growth, not supported by adequate supply, will be the responsibility of those planning agencies.

WHEREAS, State Water Project (SWP) water presently constitutes the majority of water served to NCWD customers, and in some areas is the exclusive water available; and

WHEREAS, the remaining water supplies of the District are primarily derived from the extraction of groundwater by wells overlying the Alluvial Aquifer and Saugus Formation; and

WHEREAS, the UWMP 2000 Table 1-4 "Total Existing and Planned Supplies" of water (Exhibit A to this Resolution) is among the factors used by planners to determine whether adequate water supplies exist to meet specific project demands; and

Alluvial Aquifer

WHEREAS, according to the December 10, 2003 CH2M Hill presentation titled "Groundwater Modeling Analysis, Upper Santa Clara River Basin" stated that 700-1000 acre-feet per year of water in the Alluvial Aquifer are currently not available due to Perchlorate pollution; and

WHEREAS, one Santa Clarita Water Company (SCWC) well in the Alluvial Aquifer has been taken out of service due to Perchlorate contamination; and

WHEREAS, the area impacted by the Perchlorate pollution in the Alluvial Aquifer has not been characterized as of the date of this resolution; and

WHEREAS, a Remedial Action Plan for local groundwater affected by Perchlorate pollution is not projected to be complete until August 2005 and certification of final cleanup is not expected until August 2010, according to the November 2003 schedule from the Department of Toxic Substances Control: and

WHEREAS, the December 1986 "Hydrogeologic Investigation: Perennial Yield and Artificial Recharge Potential of the Alluvial Sediments in the Santa Clarita River Valley of Los Angeles County, California" by Richard C. Slade ("Slade") studied 30 wells over a 28-year base period and found a practical perennial yield of 31,600 to 32,600 acre-feet per year from the Alluvial Aquifer before the Perchlorate contamination was found; and

WHEREAS, the 1990 Kennedy/Jenks/Chilton report "Conjunctive Use of the Saugus Aquifer: Castaic Lake Water Agency" stated "from the alluvial aquifer the safe yield is anticipated to be 32,500 acre-feet/year;" and

WHEREAS, many additional public agency reports during the period of 1993-1999 incorporated and referenced the 31,600-32,600 acre-feet per year safe perennial yield figure; and

WHEREAS, the July 2002 Slade report entitled "2001 Update Report: Hydrogeologic Conditions in the Alluvial and Saugus Formation Aquifer Systems" reiterated that perennial yield "represents a long-term average value for annual yield" and introduced the concept of "operational yield" which was defined as "a fluctuating value of pumpage that may be above or below the perennial yield in any given year, and that varies as a function of the availability of other water supplies. The basic intent of the operational yield value is that it should not exceed the perennial yield of the groundwater basin over multi-year wet and dry cycles;" and

WHEREAS, the 2002 Slade report did not quantify in detail a safe yield or a perennial yield, which is defined in the 1986 report as "the quantity of groundwater" that "can be pumped annually without any change in groundwater levels or net change in groundwater in storage over the Base Period" (28 years), and

WHEREAS, the 2002 Slade report did state that the Alluvial Aquifer "on a long-term average basis can be operated at an average pumping volume on the order of 10 percent higher than was reported as a 'practical or perennial yield' in 1986," but the report based that conclusion on "the combination of historical observations and current planning;" and

WHEREAS, the 2002 Slade report referred to "current planning" that included the UWMP 2000 and the future commitment via a MOU between the "Santa Clarita Valley Water Purveyors and the downstream United Water Conservation District to develop a numerical groundwater flow model in order to analyze in greater detail how this aquifer system can be operated;" and

WHEREAS, the numerical flow model is not complete as of the date of this resolution; and

WHEREAS, the 2002 Slade report cited increased recharge from Water Reclamation Plants as a reason for higher potential yields, but the Water Reclamation Plants are not located in areas that would recharge the eastern part of the Alluvial Aquifer system; and

WHEREAS, the 2002 Slade report did not address other factors such as loss of recharge areas due to development and increased flood control channeling; and

WHEREAS, the December 1986 Slade report (referenced above) stated "... urbanization has had a rather startling impact on the availability of areas for recharge.... All recharge to the aquifer system does not occur in the low-flow channels of the river and its tributaries, but infiltrates over much of the alluviated areas which are not within the flood channels of the Santa Clara River system. Paving of these areas has, and will continue to reduce the net effective area for natural recharge to the underlying groundwater system;" and

WHEREAS, the Alluvial Aquifer has been pumped above the safe perennial yield since 1994; and

WHEREAS, the alluvial groundwater level in the eastern basin has been dropping, which may be caused by weather patterns, increased development, increased pumping, or a combination of the foregoing and possibly other factors; and

Saugus Formation

WHEREAS, the December 2003 CH2M Hill presentation (referenced above) stated that 4,000 acre-feet/year of water in the Saugus Formation are currently not available due to Perchlorate pollution; and

WHEREAS, NCWD Well #11, two SCWC wells, and one Valencia Water Company well in the Saugus Formation have been taken out of service due to Perchlorate pollution; and

WHEREAS, the Winter 2003 "Water Currents" newsletter published by Castaic Lake Water Agency states that the four closed Saugus Formation wells have a combined maximum production of 14,500 acre-feet per year; and

WHEREAS, the area impacted by the Perchlorate pollution in the Saugus Formation has not been characterized as of the date of this resolution; and

WHEREAS, a Remedial Action plan for cleanup of Perchlorate in local groundwater is not projected to be complete until August 2005 and certification of final cleanup is not expected until August 2010, according to the November 2003 schedule from the Department of Toxic Substances Control; and

Recycled Water

WHEREAS, Table 1-4 (Exhibit A attached) references recycled water supply amounts up to 17,000 acre-feet per year, but existing facilities only supply 1700 acre-feet per year and new facilities are not planned or budgeted in the NCWD area; and

WHEREAS, the UWMP 2000 states that the Saugus Water Reclamation Plant (WRP) cannot be expanded and both the Valencia WRP and the proposed Newhall Ranch WRP exist on the western edge of the CLWA service area, limiting the areas to which recycled water could be practically provided; and

WHEREAS, to serve the eastern portion of the Valley with reclaimed water, a new WRP would be required; and

WHEREAS, the technical and economic feasibility determination for the potential recycled water use in the CLWA service area has not yet been finalized; and

SWP Water

WHEREAS, the current maximum CLWA "Table A" entitlement to State Water Project (SWP) water is 95,200 acre-feet per year; and

WHEREAS, according to the 2002 State Water Delivery Reliability Report, 90% of the time deliveries can be at or above 30% of the full Table A amount, and 80% of the time deliveries can be at or above 50% of the Table A amount; and

WHEREAS, the reliability criteria established in Chapter 4.0 of UWMP 2000 states that "this criterion requires water supply to be sufficient to meet projected demands 90 percent of the time;" and

WHEREAS, that, as stated in *SCOPE v. County of Los Angeles and Newhall Land and Farming Company* (2003) 106 Cal. App. 4th 715,131 Cal. Rptr 2d 186, the State Water Project (SWP) "entitlements are based on a state water system that has not been completed" and "there is a vast difference between entitlements and the amount of water that SWP can actually deliver;" and

WHEREAS, SWP water deliveries could be interrupted in an emergency; and

Un-Finalized Water Sources

WHEREAS, Table 1-4 (Exhibit A attached) includes supply numbers for new wells in the Saugus Formation, water banking/conjunctive-use, water transfers, and desalination, yet no finalized, approved plans or budgets for these items exist in the CLWA or NCWD area; and

WHEREAS, many of these supplemental supply projects would require extensive infrastructure improvements; and

WHEREAS, California Water Code Division 6 Part 2.6 Chapter 1 (the Urban Water Management Planning Act) Section 10631(c) states that the preparer of an UWMP shall "for any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climactic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable" and the UWMP 2000 does not contain detailed information to that end for the projected, but not implemented, new Saugus wells, water banking/conjunctive-use, water transfers, desalination, and recycled water sources; and

WHEREAS, without specific perennial yield figures for the Saugus aquifer, new wells in the Saugus aquifer can not be assumed to provide additional water, but rather only additional pumping points for the same total bank of water from which the current Saugus wells draw.

NOW, THEREFORE, BE IT RESOLVED that, based on the foregoing recitals, the NCWD Board of Directors resolves and makes the following determinations, reserving to itself the right to make changes as new facts, data or studies justify in the opinion of NCWD Board of Directors; for planning purposes, NCWD no longer has confidence in the water supply and availability numbers in Table 1-4 (and identical tables) in the UWMP 2000;

FURTHER RESOLVED, that in response to any inquiry from cities, county, developers or the public generally NCWD will provide the water supply and availability statistics as presented in Exhibit B attached to this resolution.

FURTHER RESOLVED, that the supply from the alluvial aquifer will be based on the perennial yield of 31,600-32,600 acre feet/year as established in the 1986 Slade report. Because the perennial yield is a long-term average based on wet and dry years, no differentiation will be made between wet and dry year. Pending characterization, containment and/or remediation, the current supply will be reduced by the amount of Perchlorate contaminated water (700-1000 acre feet/year at current estimate.) The contaminated water will be counted as "unfinalized supply," with restoration of water supply counted incrementally as remediation to drinking water standards occurs and individual well production is restored with DHS and DTSC approval.

FURTHER RESOLVED, that any increase in pumping not offset by imported supplies or other factors will be supported only for short terms, unless future comprehensive groundwater studies clarify that longer term pumping that pushes averages above the perennial yield will not harm the aquifer.

FURTHER RESOLVED that the numbers over the perennial yield values for the Alluvial Aquifer will not be used for any planning purposes other than emergency planning or when necessary to meet short term demands of existing customers.

FURTHER RESOLVED, pending characterization, containment and/or remediation; that the current supply (7,500-15,000) from the Saugus Formation will be reduced by the amount of Perchlorate-contaminated water, which is currently estimated at between 4,000-14,500 acre-ft. The contaminated water will be counted as "unfinalized supply," with restoration of water supply counted incrementally as remediation to drinking water standards occurs and individual well production is restored with DHS and DTSC approval.

FURTHER RESOLVED, that new columns for "unfinalized additional supply" were added to the planning table in Exhibit B to differentiate between water that is available and water that is only in the conceptual planning stages. Unfinalized additional supply means that conceptual plans have been made, but no budget, approved capital project, or contractual construction or purchase deadline exists. These supplies may be constrained, limited, or voided by economic or legal issues. Water from the UWMP 2000 categories of "Saugus formation new wells," "recycled water," "water

banking/conjunctive use," "water transfers" and "desalination" have been moved to the unfinalized supply columns until they are finalized.

FURTHER RESOLVED, that potential water from new Saugus Formation wells will not be considered new "finalized supply" until it can be shown that the formation has a perennial yield above the total supply specified in Exhibit B for the existing Saugus wells (7,500-15,000 acre-ft/year.)

FURTHER RESOLVED, that until adequate assurances exist, water in the "unfinalized additional supply" column of Exhibit B will not be considered as available.

PASSED AND ADOPTED this ____day of _____, 2004, by the Board of Directors of the Newhall County Water District.

_____
Lynne Plambeck, President of the
Board of Directors of the
NEWHALL COUNTY WATER DISTRICT
ATTEST:

_____
Kenneth J. Petersen, General Manager
NEWHALL COUNTY WATER DISTRICT

Attach: Exhibit A
Exhibit B

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

I, KARIN J. RUSSELL, Secretary of the Newhall County Water District, DO HEREBY CERTIFY that the foregoing is a full, true and correct copy of Resolution No. 2004-3 of the Board of Directors of Newhall County Water District adopted at a Special Meeting held on _____, 2004 and that the same has not been amended or repealed.

_____
Karin J. Russell, Secretary,
NEWHALL COUNTY WATER DISTRICT

DATED: _____, 2004

Exhibit A

Table 1-4
Total Existing and Planned Supplies
(acre-feet per year)

Source	Average/Normal Year	Dry-year
Local Supplies		
Groundwater		
Alluvial Aquifer	30,000-40,000	30,000-35,000
Saugus Formation	7,500-15,000	11,000-15,000
Saugus Formation (new wells)*	--	10,000-20,000
Stormwater*	--	--
Recycled Water*	1,700-17,000	1,700-17,000
Imported Supplies		
SWP Supplies	56,800-95,200	37,900-75,800
Water Banking/conjunctive-use*	--	105,000
Water Transfers*	5,200-8,700	3,500-6,900
Desalination*	2,000-5,000	2,000-5,000
Total Supplies	**103,200-180,900**	**201,100-279,700**

*Planned programs for future implementation.

Source: UWMP 2000

Exhibit A to NCWD Resolution 2004-3
Inital: _____
Dated: _____

Exhibit B

Total Existing and Planned Supplies
(acre-feet per year unless noted)

	Current and Finalized Future Supply				Existing Backup Dry Year Supply[8]		Unfinalized Additional Supply[1]			
	Average/Normal Year		Dry Year[2]				Average/Normal Year		Dry Year[2]	
Source	**Range[9]**	**Average**	**Range[9]**	**Average**		*Source*	*Range[9]*	*Average*	*Range[9]*	*Average*
Local Supply						*Local Supply*				
Groundwater						*Groundwater*				
Alluvial Aquifer	**30,750-31,750** [3]	**31,250**	**30,750-31,750** [3]	**31,250**		*Alluvial Aquifer*	*700-1000* [4]	*850*	*700-1000* [4]	*850*
Saugus Formation	**0-5,750** [5]	**2,875**	**0-5,750** [5]	**2,875**		*Saugus Formation*	*4,000-14,500* [4]	*9,250*	*4,000-14,500* [4]	*9,250*
Saugus Formation (new wells)						*Saugus Formation (new wells)*	*10,000-20,000* [6]	*15,000*	*10,000-20,000* [6]	*15,000*
Stormwater						*Stormwater*				
Recycled Water *(NOT potable)*	**1,700**	**1,700**	**1,700**	**1,700**		*Recycled Water (NOT potable)*	*15,300*	*15,300*	*15,300*	*15,300*
Imported Supply						*Imported Supply*				
SWP	**28,560-47,600** [7]	**38,080**	**28,560-47,600** [7]	**38,080**		*SWP*	*0-57,120*	*28,560*	*0-57,120*	*28,560*
Water Banking/conjunctive use					21000 af	*Water Banking/conjunctive use*			*0-84,000*	*42,000*
Water Transfers						*Water Transfers*	*5,200-8,700*	*6,950*	*3,500-6,900*	*5,200*
Desalination						*Desalinization*	*2,000-5,000*	*3,500*	*2,000-5,000*	*3,500*
Total Supply		**73,905**		**73,905**	21000 acre-feet (total, not per year)	*Total Additional Supply incl. Non-Potable only if all Future Projects Approved and Built* [9]		*79,410*		*119,660*
Total Potable Supply		**72,205**		**72,205**	21000 acre-feet (total, not per year)	*Total Additional Potable Supply only if all Future Projects Approved and Built* [9]		*64,110*		*104,360*

Note: All numbers are from UWMP 2000 unless otherwise noted below.

[1] Unfinalized additional supply means that conceptual plans have been made, but no budget, approved capital project, or contractual construction or purchase deadline exists. These supplies may be constrained or limited by economic or legal issues.

[2] Dry Year means a short term period during drought. Supplies listed in these columns should be viewed as contingency planning only and are not considered sustainable on a long-term basis.

[3] Perennial yield (31,600-32,600 af/yr per Slade, 1986) less average of range of loss (850 af/yr) due to perchlorate contamination.

[4] Estimated amount currently lost to perchlorate contamination per 12/2003 CH2MHill presentation and Winter 2003 CLWA "Water Currents."

[5] UWMP 2000-stated supply (7,500-15,000 af/yr based on operational yield) less average of range of loss (9,250 af/yr) from perchlorate contamination.

[6] New Saugus wells will not yield additional water supply beyond the perennial yield of the formation, which has not been quantified.

[7] Per 2002 DWR Reliability Report, 90% of the time deliveries can be made at or above 30% of the full Table A amount, and 80% of the time deliveries can be at or above 50% of the Table A amount. The range in the current supply column reflects 80-90% reliability and in some cases water deliveries will be lower than what is shown. Our current full Table A amount is 95,200 af/yr. 95,200 af/yr minus the average of the "current supply" range (38,080) is shown as unfinalized additional supply. SWP deliveries vary annually.

[8] An additional one-time stored excess of 21,000 acre-ft/ currently exists in a water bank for dry year supply. <u>This amount is not to be counted when planning for future projects.</u> This amount may not reoccur in the future, and is required by court settlements to be provided to current users only. The UWMP 2000 estimated a total of 105,000 acre-feet potential exists for water banking. The remainder (105,000 minus 21,000) is listed in the unfinalized supply column on this table.

[9] Where ranges exist, the midpoint of the range was used for calculating totals.

FILED
ENDORSED

03 JUN -6 PM 3:27

SACRAMENTO COURTS
DEPT. #53

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF SACRAMENTO

PLANNING AND CONSERVATION LEAGUE a California not for profit corporation, PLUMAS COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, a California public agency; CITIZENS PLANNING ASSOCIATION OF SANTA BARBARA COUNTY, INC., a California not for profit corporation,

Plaintiffs and Petitioners,

v.

DEPARTMENT OF WATER RESOURCES, a California State Agency, et al.,

Defendants and Respondents.

Case No. 95CS03216

ORDER PURSUANT TO PUBLIC RESOURCES CODE SECTION 21168.9

On remand from the Third District Court of Appeal on May 20, 2003, in Department 53 of the Sacramento Superior Court, the Honorable Loren E. McMaster, presiding, this proceeding came on for a status report and joint motion. Petitioners and Plaintiffs, Planning and Conservation League, Plumas County Flood Control and Water Conservation District, and Citizens Planning Association of Santa Barbara County ("Petitioners"), appeared through Antonio Rossmann and Roger B. Moore. Respondent and Defendant, Central Coast Water Authority (CCWA), appeared through Susan F. Petrovich of the Law Firm of Hatch & Parent. Respondent and Defendant, Department of Water Resources (DWR), appeared through Deputy Attorney General Marian E. Moe.

Robert S. Draper of O'Melveny and Myers, LLP and Clifford W. Schulz appeared, respectively, on behalf of the Metropolitan Water District of Southern California and Dudley Ridge Water District, entities that submitted answers to the First Amended Complaint subsequent to the Court of Appeal's final determination in this action and prior to any further order of this Court on remand.

In light of the direction from the Third District Court of Appeal on remand in Planning and Conservation League v. Department of Water Resources (2000) 83 Cal.App.4th 892, this Court hereby makes the following findings:

1. The parties to this lawsuit and other public agencies have engaged in extensive settlement negotiations, mediated by retired Judge Daniel Weinstein of JAMS Dispute Resolution, with the intent to avoid further litigation and associated expenses, to provide for an effective way to cooperate in the preparation of a new environmental impact report (EIR), and to make other specified improvements in the administration and operation of the State Water Project.

2. The mediation has resulted in an executed Settlement Agreement for approval by this Court, attached to this Order as Exhibit A.

3. DWR as lead agency has commenced the preparation of the new EIR.

4. As part of the Settlement Agreement, DWR and the State Water Project (SWP) contractors who are signatories to the Settlement Agreement have agreed that, pending DWR's filing of a return in satisfaction of the Writ of Mandate and this Court's dismissal of the Writ of Mandate, they will not approve any new project or activity (as defined in section VII.A of the Settlement Agreement) in reliance on the 1995 Environmental Impact Report for the Implementation of the Monterey Agreement.

5. This Order is made pursuant to the provisions of Public Resources Code section 21168.9 and pursuant to this Court's equitable powers. This Court finds that the actions described in this Order, including actions taken in compliance with the Writ of Mandate, comprise the actions necessary to assure DWR's compliance with Division 13 of the Public Resources Code. This Court further finds that this Order includes only those

mandates necessary to achieve compliance with Division 13.

THEREFORE, IT IS HEREBY ORDERED as follows:

1. This Court's Final Judgment denying the petition for writ of mandate, entered August 15, 1996, is reversed in accordance with the directive of the Third District Court of Appeal's decision in Planning and Conservation League v. Department of Water Resources (2000) 83 Cal.App.4th 892.

2. This Court's order granting the summary adjudication on the fifth cause of action, entered June 10, 1996, is vacated.

3. The Settlement Agreement attached as Exhibit A is hereby approved.

4. A Peremptory Writ of Mandate directed to Respondents Central Coast Water Authority and DWR shall issue under seal of this Court in the form attached hereto as Exhibit B.

5. In accordance with the Settlement Agreement and this Order, pending DWR's filing of the return in compliance with the Peremptory Writ of Mandate and this Court's Order discharging the Writ of Mandate, DWR and CCWA shall not approve any new project or activity (as defined section VII.A of the Settlement Agreement) in reliance on the 1995 EIR for the Implementation of the Monterey Agreement.

6. In the interim, until DWR files its return in compliance with the Peremptory Writ of Mandate and this Court orders discharge of the Writ of Mandate, the administration and operation of the State Water Project and Kern Water Bank Lands shall be conducted pursuant to the Monterey Amendments to the State Water Contracts, as supplemented by the Attachment A Amendments to the State Water Contracts (as defined in the Settlement Agreement) and the other terms and conditions of the Settlement Agreement.

7. Plaintiffs and petitioners shall recover such costs and attorney's fees as provided in prior court orders and in an amount as determined in the arbitration procedures agreed to in the Settlement Agreement, or as otherwise agreed to by the parties.

8. Except as provided, the Peremptory Writ of Mandate shall not limit or constrain the lawful jurisdiction and discretion of DWR. This Court retains jurisdiction until DWR files a return that complies with the terms of the Writ of Mandate, and this Court issues an order discharging the Writ of Mandate.

IT IS SO ORDERED.

Dated: JUN - 6 2003, 2003

LOREN E. McMASTER

Judge of the Superior Court

4/25/04

To: City of Santa Clarita, Planning Commission
From: Dr. Randy Martin, Bridgeport, Valencia
Re: Comment on Riverpart EIR and Development

I would like to limit my comments mostly to the noise element. The EIR does not clearly spell out the impact that the proposed development would have on the residents of Bridgeport, immediately adjacent to Newhall Ranch Road. 1

Residents of Bridgeport, especially those residents who reside on Windward Lane in the Cove, but also those in the other developments which are immediately adjacent to Newhall Ranch Road, will be significantly impacted by the proposed development. The EIR itself states that the noise from Newhall Ranch road would generate noise that would have a significan impact on the project residents located near the road, because the noise would exceed the City's normally acceptable noise standards as defined in the Noise and Land Use Compatibility Guidelines in the City's noise ordinance. 2

But apparently it is not enough for the Planning Commission, that the proposed development does not fall within the standards of the City's own Land Use Plan. Therefore, we must respectfully request that the EIR under discussion must be more complete. T be complete, we would also want to see decibel level studies for current Newhall Ranch Road noise at various hours throughout the day at the current level of usage. Then, for the EIR to be complete it must show the projected decibel levels for these same areas. 3

The study should show levels both outside the homes, in the yards, where children are playing and people are reading and relaxing on their balconies, and also inside the homes, especially late at night, and on Sunday, when most people are either sleeping or trying to relax. The studies should especially address the impact of large trucks and motorcycles on the noise levels, since these types of trucks are currently not using this road. The studies should specifically register noise levels at the stop lights, since noise is often greater during initial acceleration from a full stop. 4

Additionally, the EIR should address the safety issues of children utilizing the streets in this neighborhood. Computations should address how many vehicle trips will utilize the neighborhood streets of Bridgeport to "short cut" from Newhall Ranch Road to McBean. Currently, this is a favorite short cut for dragsters, and teens, sometimes in the middle of the night, speeding through our neighborhood. 5 6

Thank you very much for the opportunity to comment on the Riverpart EIR. The accurate and updated information requested should help you to make a more informed decision when it comes to the critical environmental resources of the River. 7

As a side note, the EIR should also address in it's Open Space element section, where residents who currently utilize this area for birding and hiking, can find a similar, unspoiled, riparian corridor within the City of Santa Clarita. 8

Letter No. 30

Friends of the Santa Clara River

660 Randy Drive Newbury Park, California 91320 (805) 498 - 4323

8-6-04

RECEIVED
PLANNING DIVISION
AUG 10 2004
PLANNING AND BUILDING SERVICES
CITY OF SANTA CLARITA

Community Development
City of Santa Clarita
23920 Valencia Blvd.
Santa Clarita, Ca. 91355

Re: River Park Project MC#02-175

Dear Sirs:

Please include the following correspondence between our attorney and the Department of Water Resources and their response regarding the timeline for the completion of the Monterey Agreement Environmental Impact Report. We continue to protest that you may not approve projects based on this water transfer were two environmental impact reports have been decertified. This would mean that the water transfer project is proceeding without any CEQA documentation. Such action is precluded by law. 1 2

Further, we also wish to state that none of these documents, nor the current EIR before you address the effects of an earthquake or levee break (such as recently occurred in the Sacramento Delta, news article attached). These emergencies were also not addressed in the Urban Water Management Plan 2000. We ask that the City address how they intend to manage such a water emergency under current water availability scenarios and how water supply would be affected under such an emergency with the additional strain caused by this project. 3 4 5

We ask that the City respond to the recommendations made by the two experts, Kathy Kelly and Jonas Minton who gave testimony regarding State Water project availability at your June 29th hearing. They both suggested that the City analyze the effect of cutbacks that would be required under the worst case historical delivery rate, 13% of Title A amounts in 1991, on existing businesses and residents in the Santa Clarita Valley. Since ground water sources are fully utilized, substantial cutbacks would be required. Even more cutbacks would be required if this project is approved. The City has not addressed this significant impact. 6

We incorporate by reference the testimony of these two experts, heard as Item 1 on June 29th , into the River Park hearing. Their testimony immediately preceded agenda item 2 on River Park the same evening. Many of the questions and responses on this presentation pertained to the River Park hearing, so it is proper to include this testimony in the River Park record. 7

Thank-you for your time.

Sincerely,
RON BOTTORFF, Chair

Attachments :

1. Correspondence from Alyse Lazar to DWR dated May 18th, 2004 re: Status of Monterey Agreement EIR
2. Correspondence from DWR to Alyse Lazar dated June 16th, 2004 re: Status of Monterey Agreement EIR
3. LA Times News Article on Levee break dated June 4th, 2004

LAW OFFICE OF
ALYSE M. LAZAR
Attorney at law
3075 East Thousand Oaks Blvd., Suite 100
Westlake Village, California 91362

Admitted to practice
STATE BAR OF CALIFORNIA
NEW YORK STATE BAR

Telephone: (805) 496-5390
Facsimile: (805) 496-7462

May 18, 2004

Lester Snow, Director
Department of Water Resources
Room 1115-1
P.O. Box 942836
Sacramento, California 94236

RE: New Monterey Agreement EIR

Dear Director Snow:

Pursuant to the Court decision in *Planning & Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892 (hereafter "*PCL*"), the Department of Water Resources is required to prepare a new Environmental Impact Report regarding all aspects of the Monterey Amendments. I understand that you will be overseeing this process.

The Settlement Agreement that was entered into between all of the parties to the *PCL* case on May 5, 2003 set forth various requirements for the EIR. According to Attachment E-1 of this Settlement Agreement, the parties specifically excluded the 41,000 afy entitlements purchased by Castaic Lake Water Agency ("CLWA") emanating from the Monterey Amendments from the list of final transfers. It is therefore my understanding that your office will be evaluating the environmental impacts of this 41,000 afy transfer as part of the Environmental Impact Report for your project (the Monterey Amendments Project.) In fact, page 11, paragraphs III C.4 of the Settlement Agreement mandates DWR to analyze the potential environmental effects relating to CLWA's project ("the Kern-Castaic Transfer").

As you may also be aware, the EIR prepared by CLWA for the 41,000 afy transfer was decertified by the Los Angeles Superior Court on November 1, 2002 in *Friends of the Santa Clara River v. Castaic Lake Water Agency*, Los Angeles County Superior Court Case No. BS 056954. In order for CLWA's new EIR to be legally sufficient and in conformance with the appellate court's decision, it must contain an analysis of the potential environmental effects of the Kern-Castaic Transfer on the entities that have and will continue to lose this 41,000 afy source of water due to the transfer as well as the impacts on the State Water Project ("SWP") system resulting from the movement of this water from its source in Kern County to Santa Clarita. Logically and in conformance with CEQA, both DWR's EIR and CLWA's EIR must contain an analysis of the impacts from this loss of water upon Kern County agricultural users as well as all others affected by the transfer.

I currently represent Friends of the Santa Clara River in the *Friends of the Santa Clara River v. Castaic Lake Water Agency*, litigation. In the Judgment Granting Peremptory Writ of Mandate in the Friends' case, the Court ordered that it " retains jurisdiction until respondent Castaic Lake Water Agency certifies an Environmental Impact Report that complies with the California Environmental

May 18, 2004 letter to Dir. Snow, Dept of Water Resources

Quality Act and is consistent with the views expressed by the Court of Appeal Opinion filed January 10, 2002, Case No. B 145283."

For these reasons, I am requesting that you provide me with a copy of any analysis performed to date by DWR regarding the potential environmental impacts of the Kern-Castaic transfer, whether in draft or final form.

Additionally, please advise me of the procedural steps that DWR will take before making a determination whether or not to approve the Kern-Castaic transfer as a "final" transfer and the criteria that will be utilized for making this determination. If there is a proposed schedule for the completion of the Monterey Amendments EIR and/or for these procedural steps for determining whether or not to approve the Kern-Castaic transfer as a long-term transfer, please provide me with a copy of same.

I would appreciate receiving this information from you by May 28, 2004. If you have questions regarding the above or would like to discuss the matter, please call me at (805) 496-5390. Thank you for your anticipated assistance. I look forward to hearing from you.

Very truly yours,

Alyse M. Lazar

cc: Delores Brown

STATE OF CALIFORNIA – THE RESOURCES AGENCY
ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF WATER RESOURCES
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

JUN 1 7 2004

Alyse M. Lazar, Esq.
3075 East Thousand Oaks Boulevard, Suite 100
Westlake Village, California 91362

Dear Ms. Lazar:

In response to your letter of May 18, 2004, the Department of Water Resources (DWR) is preparing an Environmental Impact Report (EIR) on the Monterey Amendments and the Settlement Agreement resulting from the Court of Appeal decision in *Planning and Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892.

DWR's treatment of the transfer of Table A amounts from Kern Country Water Agency to Castaic Lake Water Agency will be governed by the Settlement Agreement. As provided in Paragraph III.C.4 of the Settlement Agreement, the EIR will include an "analysis of the potential environmental impacts relating to (a) the Attachment E transfers, and (b) the Kern-Castaic Transfer, in each case as actions that relate to the potential environmental impacts of approving the Monterey Amendments." Section 1(O) of the Settlement Agreement defines the "Kern-Castaic Transfer" as "the transfer of 41,000 acre feet of water from Kern Country Water Agency to the Castaic Lake Water Agency, approved by DWR on March 31, 1999." DWR has not completed any draft or final analysis regarding these transfers. Attached is an estimated schedule for completion of the EIR.

The Settlement Agreement (Section III.E) also provides "with respect to Section III.(C)(4)(b) regarding the Kern-Castaic Transfer, the Parties recognize that such water transfer is subject to pending litigation. The Parties agree that jurisdiction with respect to that litigation should remain in that court and that nothing in this Settlement Agreement is intended to predispose the remedies or other actions that may occur in that pending litigation."

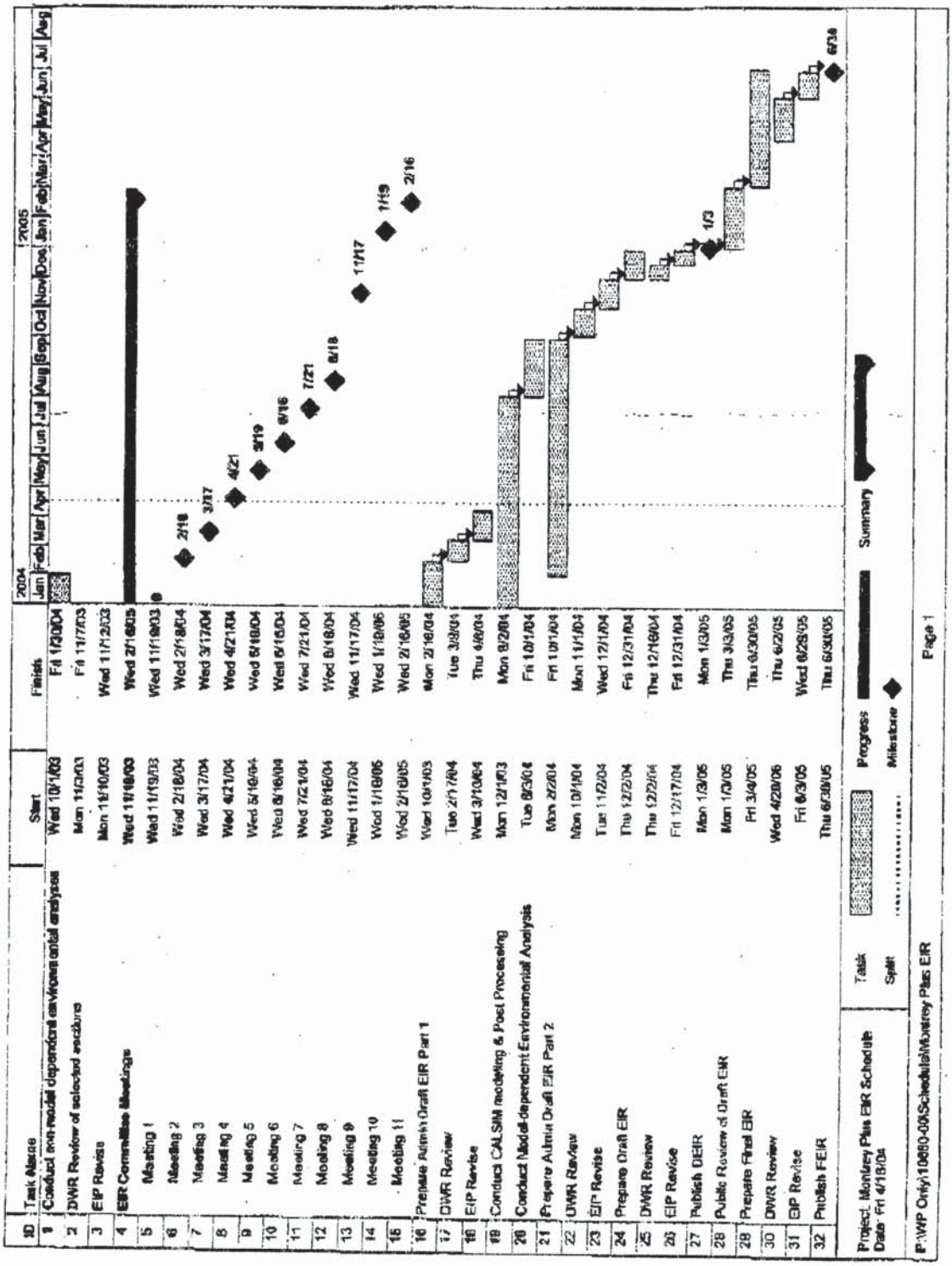
If you would like further information regarding the EIR on the Monterey Amendments and the Settlement Agreement, please contact Delores Brown at (916) 227-2407.

Sincerely,

Harold E. Johnson

for Lester A. Snow
Director

Attachment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Task Name
Start
Finish
2004
2005
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug
1 Conduct non-model dependent environmental analysis Wed 10/1/03 Fri 1/30/04
2 DWR Review of selected scenario Mon 11/24/03 Fri 11/7/03
3 EIP Revise Mon 11/10/03 Wed 11/12/03
4 EIR Committee Meetings Wed 11/19/03 Wed 2/16/05
5 Meeting 1 Wed 11/19/03 Wed 11/19/03
6 Meeting 2 Wed 2/18/04 Wed 2/18/04
7 Meeting 3 Wed 3/17/04 Wed 3/17/04
8 Meeting 4 Wed 4/21/04 Wed 4/21/04
9 Meeting 5 Wed 5/19/04 Wed 5/19/04
10 Meeting 6 Wed 6/16/04 Wed 6/16/04
11 Meeting 7 Wed 7/21/04 Wed 7/21/04
12 Meeting 8 Wed 8/18/04 Wed 8/18/04
13 Meeting 9 Wed 11/17/04 Wed 11/17/04
14 Meeting 10 Wed 1/19/05 Wed 1/19/05
15 Meeting 11 Wed 2/16/05 Wed 2/16/05
16 Prepare Admin Draft EIR Part 1 Wed 10/1/03 Mon 2/16/04
17 DWR Review Tue 2/17/04 Tue 3/8/04
18 EIP Revise Wed 3/10/04 Thu 4/8/04
19 Conduct CALSIM modeling & Post Processing Mon 12/1/03 Mon 8/2/04
20 Conduct Model-dependent Environmental Analysis Tue 8/3/04 Fri 10/1/04
21 Prepare Admin Draft EIR Part 2 Mon 2/2/04 Fri 10/1/04
22 DWR Review Mon 10/4/04 Mon 11/1/04
23 EIR Revise Tue 11/2/04 Wed 12/1/04
24 Prepare Draft EIR Thu 12/2/04 Fri 12/31/04
25 DWR Review Thu 12/2/04 Thu 12/16/04
26 EIP Revise Fri 12/17/04 Fri 12/31/04
27 Publish DEIR Mon 1/3/05 Mon 1/3/05
28 Public Review of Draft EIR Mon 1/3/05 Thu 3/3/05
29 Prepare Final EIR Fri 3/4/05 Thu 6/30/05
30 DWR Review Wed 4/20/05 Thu 6/2/05
31 EIP Revise Fri 6/3/05 Wed 6/29/05
32 Publish FEIR Thu 6/30/05 Thu 6/30/05
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Date: Fri 4/16/04
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Progress
Milestone
Summary
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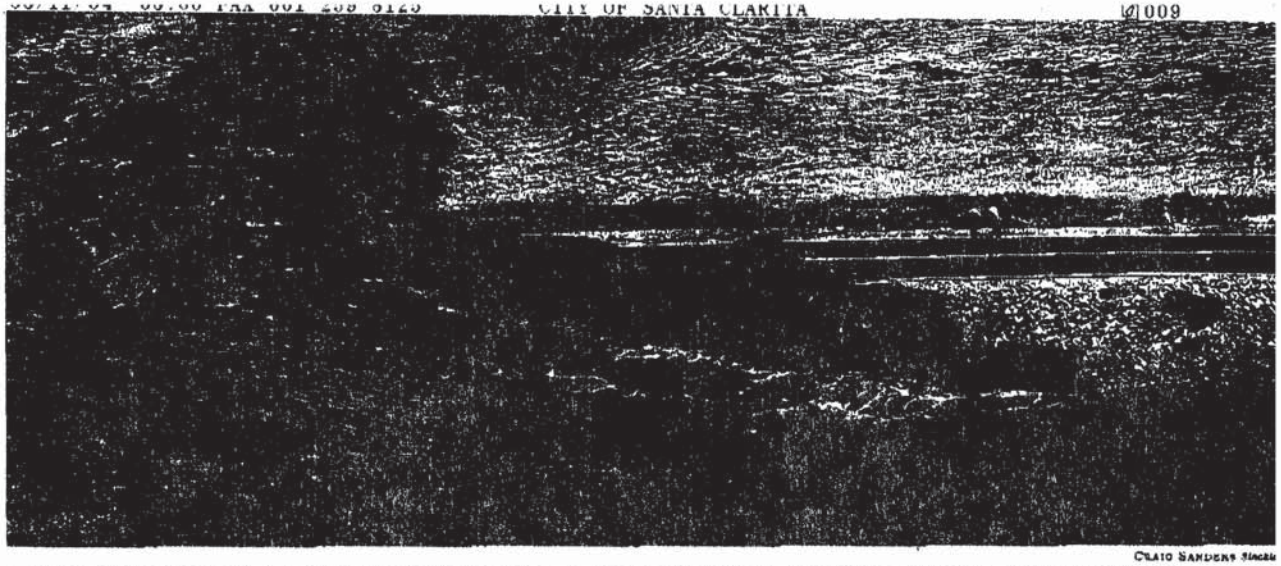
Page 1



CRAIG SANDERS Staff

A TORRENT: *Water pours through an estimated 300-foot break in a levee along the Middle River into low-level farmland about 20 miles west of Stockton.*

Levee Break Forces 300 to Evacuat

San Joaquin Valley farmland is flooded, shutting a rail line. Drinking water supplies for millions could be affected.

By SARA LIN
Times Staff Writer

A levee break in fields west of Stockton on Thursday morning prompted the evacuation of about 300 people from a farming community, and forced federal and state water agencies to slow the pumping of delta water for irrigation and drinking water.

The break, estimated at 300 feet long, was discovered about 8:30 a.m. on the Middle River along Bacon Island Road north of California 4, about 20 miles west of Stockton, said Connie Cassinetto, a spokeswoman for the San Joaquin County Office of Emergency Services.

The amount of freshwater rushing across the low-lying farmlands of man-made Bacon Island is enough to supply 150,000 families for one year. Authorities expect the change in water levels to cause salt water from San Francisco Bay to seep into the San Joaquin-Sacramento River Delta, threatening freshwater fish and the quality of drinking water supplies for cities, including Los Angeles.

The federal Bureau of Reclamation cut its water exports from the delta by 80%, said spokesman Jeff McCracken. The California Department of Water Resources halted its exports from the area completely.

"We need to wait until island flows have stabilized to get decent readings on what salinity levels look like," McCracken said.

After that, he said, state and federal water agencies probably would consider releasing water from storage facilities to freshen the delta.

The break occurred on a stretch known as Upper Jones Tract, close to a main rail line and several pipelines that carry water to the San Francisco Bay Area. The pipes, located a mile north of the break, were not affected by floodwaters. Officials said those pipelines have been submerged before.

At 1:30 p.m., officials at the Burlington Northern and Santa Fe Railway shut down one of its two main lines after water reached the edge of the track.

While trains were being operated at restricted speeds on the second line, officials said they would shut it down i crept closer. Forty trains pass through the area.

The railroad tracks, which wer on raised trestles where a levee b 1980, divide the island's 12,000 roughly in half and are keeping fl ters from contaminating the low tion of the island.

"Those levees in the delta are v and very fragile," said Don Strick spokesman for the Department of Resources.

Most levees were not built prop said, and were created more than tury ago by "farmers pushing d gether."

"Over the years," he said, "more put up dirt and rocks, and then peo a highway on it."

As a result, many of the man-m lands in that region sit more than below sea level.

California Highway Patrol offici a high-pressure fuel line in the floc was shut down, but there were mediate plans to close California 4.

"This mostly affects farmers equipment, and some migrant la borers," Cassinetto said.

Typically, fewer than 100 m workers live in camps in the are marily used to farm row crops suc falfa, she said.

County officials expected water through the break into the night engineers could plug it and begin ing water out.

"When these levees break, it's slow. It's not like a flood," Cassinet A levee can break at any time, she "They're just dirt."

ROBERT TURELL Los Angeles Times

ENGULFED: *Floodwaters surround a farmworker house about three miles from the levee. The occupants were among about 300 people who had to be evacuated.*

es Tell of Laci
i's Last Hours

Issues facing voters in November

The Nov. 2 general election ballot will lead with the race for U.S. president but will include 14 California measures, the last of which was qualified Thursday by the secretary of state.

Railroad -- A $9.95-billion bond ... strike and imposes more severe

Jury Deliberations Begin in Killing of Transgender Teen

Letter No. 31

4/29/04 PC Hearing

Dear Planning Commission members;

I said I would submit a letter signed by the residents of Gavilan Dr. (The street right by the planned Riverpark development) stating the actual sentiment of the residents and here it is (Enclosed).

In short everyone is vehemently against carving down the ridgeline as every foot that is removed the higher the decibels (Volume of noise) from 12 lanes of busy traffic (6 of Soledad and 6 of the proposed Newhall Ranch road) . High noise levels mean lower property values and noise is uncomfortable and stressful. I work out of my house and my office faces this potential noise source. This natural barrier also helps stop traffic pollution. 1

On top of that the residents of Gavilan Dr. as well as Emblem homes love that hill, love the wildlife and will be very upset to see it carved up by bulldozers (5 million Cubic ft.!), not to mention the dust, diesel and noise pollution in the air that this will cause.

The 300 or so grade school children from this project (Which I think is a conservative estimate) will again crowd Emblem School and create a hazard as Espuella, a small residential street cannot safely handle that amount of traffic. The school will only be about 200 yards from all this proposed grading and bulldozing exposing the children to the above mentioned pollution . 2 3 4

Why must we, the residents of this community, sacrifice, so the developers can make themselves wealthy ? 5

I have made copies of newspaper articles that are very alarming. I have lived in the area since 1960 and I am seeing this area being destroyed by over-development and the resident's existences being compromised by profit minded entities that care ONLY about profit.

PLEASE... do the right thing.

John Gonzalez 26604 Gavilan Dr Saugus CA 91350

John Gonzalez

WE, residents of Gavilan Dr (Saugus). declare the following .

We do not want the hill or ridgeline taken down any degree or amount as this is a natural barrier against traffic noise and noise from the shopping area . We will especially need it intact if the CROSS VALLEY connector goes through to help shield us from **12** lanes of traffic including in all probability increased truck noise going through gears from the intersection of Bouquet and Soledad and Newhall Ranch road. . Noise pollution will **lessen** our property values .

We DO NOT want the ridgeline changed as it is part of the aesthetics of our area.

We DO NOT want to tolerate the noise of bull-dozers and graders moving **5 million** cubic feet of dirt.

We do not want to breath the dust of such a project and risk respiratory diseases such as valley fever We do not want our children to breath this material as the area already has bad air quality and we do not want the children of Emblem school (only a few hundred feet from the proposed site) to breath this dusty air.

We do not want more school traffic that this project will cause (The 300 or so children from the new houses). The access to EMBLEM school is very limited causing a hazard for the children and causing congestion on this small residential street . People dropping off and picking up children park illegally on Gavilan Dr. causing safety problems as it is.

In general we would prefer these 1100 homes be built elsewhere and this land left alone .

John M Gonzalez 26604 Gavilan Dr
John M. Gonzalez
April Garland, 26604 Gavilan Pl., Saugus, CA 91350
April Garland
Karen Pearson 26617 Gavilan Dr, Saugus, CA
Karen Pearson
Michael Mulligan 26621 Gavilan Dr Saugus Ca
Michael Mulligan
Maria Delapaine 26608 Gavilan Dr. Saugus CA
James Delapaine 26608 Gavilan dr. Saugus CA

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DONA BALSZ Nora Balsz 26620 Gavilan Dr. 91350
HENRY BALSZ Henry Balsz 26620 GAVILAN DR 91350
Anita Nogales ANITA NOGALES 26614 GAVILAN DR
Frank L. Nogales FRANK G. NOGALES 26614 GAVILAN DR
Kay Wangelio KANG WANG etto 26611 Gavilan Dr 91350
Reynaldo Arroyo / Adriana G. Arroyo 26607 Gavilan Dr. 91350

Letter No. 32

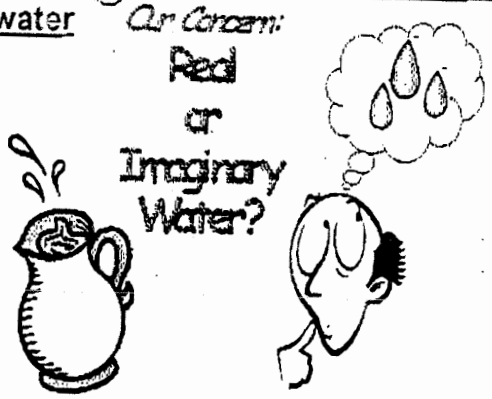
HC 11/14 7/15/04

Rec'd on Item 1 By Lynne Plambeck

You may have heard about our new Resolution on water availability. Here's the scoop!

What Our Resolution Does:

- Stops counting water from the five wells shutdown due to perchlorate pollution as "available"
- Clarifies the reliability of water supply we get from Northern California
- Makes clear that additional water supply from proposed projects like desalination of sea water will not be counted until that water is on hand



New building developments are approved by planners based in part on water supply. We have clarified our water numbers so that planners understand our water situation better. We don't want existing residents and businesses to suffer in the future because all the details weren't spelled out.

This action mirrors state law enacted by Senate Bills 610 and 221, which mandate that planning decisions for large projects must be based on finalized, rather than pending, water sources.

1

Final – Approved 1/29/04

RESOLUTION NO. 2004-3

RESOLUTION OF THE BOARD OF DIRECTORS OF

NEWHALL COUNTY WATER DISTRICT

REGARDING WATER SUPPLY AND DEMAND

PREAMBLE

This resolution provides notice to the public that the District intends to protect the rights of its current customers to safe, dependable and adequate domestic water supplies on an ongoing basis and in all water supply assessments and verifications, to utilize the best available knowledge concerning supplies, the current information on which is summarized in the following resolution. After much deliberation, the Board is proposing to adopt the following resolution to send the strongest message possible to the public:

1) That, at least as far as the District is concerned, there is not sufficient current supply of water to meet all current and future demands, especially in times of drought or other emergency;

2) That, as stated in *SCOPE v. County of Los Angeles and Newhall Land and Farming Company* (2003) 106 Cal. App. 4th 715,131 Cal. Rptr 2d 186, the State Water Project (SWP) "entitlements are based on a state water system that has not been completed. There is a vast difference between entitlements and the amount of water that SWP can actually deliver;"

3) That the Urban Water Management Plan 2000 being relied upon in granting entitlements to develop and build is inaccurate in its assessment of current supply; and

4) That in its actions regarding water service, the District will be guided by its decisions as to the available supply based upon the facts set forth in the accompanying resolution.

By adopting this resolution the District is not purporting to amend or change the current regional Urban Water Management Plan 2000 ("UWMP 2000"). By this resolution, however, the District does intend to put members of public and planning agencies with jurisdiction over the Santa Clarita Valley on notice that the continued granting of rights to develop property without proof of adequate water supplies and infrastructure is irresponsible. This resolution also is intended to make the District customers aware of the fact that any loss or damage resulting from city and county planning agencies ignoring the true facts regarding water supply and intentionally allowing additional growth, not supported by adequate supply, will be the responsibility of those planning agencies.

WHEREAS, State Water Project (SWP) water presently constitutes the majority of water served to NCWD customers, and in some areas is the exclusive water available; and

WHEREAS, the remaining water supplies of the District are primarily derived from the extraction of groundwater by wells overlying the Alluvial Aquifer and Saugus Formation; and

WHEREAS, the UWMP 2000 Table 1-4 "Total Existing and Planned Supplies" of water (Exhibit A to this Resolution) is among the factors used by planners to determine whether adequate water supplies exist to meet specific project demands; and

Alluvial Aquifer

WHEREAS, according to the December 10, 2003 CH2M Hill presentation titled "Groundwater Modeling Analysis, Upper Santa Clara River Basin" stated that 700-1000 acre-feet per year of water in the Alluvial Aquifer are currently not available due to Perchlorate pollution; and

WHEREAS, one Santa Clarita Water Company (SCWC) well in the Alluvial Aquifer has been taken out of service due to Perchlorate contamination; and

WHEREAS, the area impacted by the Perchlorate pollution in the Alluvial Aquifer has not been characterized as of the date of this resolution; and

WHEREAS, a Remedial Action Plan for local groundwater affected by Perchlorate pollution is not projected to be complete until August 2005 and certification of final cleanup is not expected until August 2010, according to the November 2003 schedule from the Department of Toxic Substances Control: and

WHEREAS, the December 1986 "Hydrogeologic Investigation: Perennial Yield and Artificial Recharge Potential of the Alluvial Sediments in the Santa Clarita River Valley of Los Angeles County, California" by Richard C. Slade ("Slade") studied 30 wells over a 28-year base period and found a practical perennial yield of 31,600 to 32,600 acre-feet per year from the Alluvial Aquifer before the Perchlorate contamination was found; and

WHEREAS, the 1990 Kennedy/Jenks/Chilton report "Conjunctive Use of the Saugus Aquifer: Castaic Lake Water Agency" stated "from the alluvial aquifer the safe yield is anticipated to be 32,500 acre-feet/year;" and

WHEREAS, many additional public agency reports during the period of 1993-1999 incorporated and referenced the 31,600-32,600 acre-feet per year safe perennial yield figure; and

WHEREAS, the July 2002 Slade report entitled "2001 Update Report: Hydrogeologic Conditions in the Alluvial and Saugus Formation Aquifer Systems" reiterated that perennial yield "represents a long-term average value for annual yield" and introduced the concept of "operational yield" which was defined as "a fluctuating value of pumpage that may be above or below the perennial yield in any given year, and that varies as a function of the availability of other water supplies. The basic intent of the operational yield value is that it should not exceed the perennial yield of the groundwater basin over multi-year wet and dry cycles;" and

WHEREAS, the 2002 Slade report did not quantify in detail a safe yield or a perennial yield, which is defined in the 1986 report as "the quantity of groundwater" that "can be pumped annually without any change in groundwater levels or net change in groundwater in storage over the Base Period" (28 years), and

WHEREAS, the 2002 Slade report did state that the Alluvial Aquifer "on a long-term average basis can be operated at an average pumping volume on the order of 10 percent higher than was reported as a 'practical or perennial yield' in 1986," but the report based that conclusion on "the combination of historical observations and current planning;" and

WHEREAS, the 2002 Slade report referred to "current planning" that included the UWMP 2000 and the future commitment via a MOU between the "Santa Clarita Valley Water Purveyors and the downstream United Water Conservation District to develop a numerical groundwater flow model in order to analyze in greater detail how this aquifer system can be operated;" and

WHEREAS, the numerical flow model is not complete as of the date of this resolution; and

WHEREAS, the 2002 Slade report cited increased recharge from Water Reclamation Plants as a reason for higher potential yields, but the Water Reclamation Plants are not located in areas that would recharge the eastern part of the Alluvial Aquifer system; and

WHEREAS, the 2002 Slade report did not address other factors such as loss of recharge areas due to development and increased flood control channeling; and

WHEREAS, the December 1986 Slade report (referenced above) stated "... urbanization has had a rather startling impact on the availability of areas for recharge.... All recharge to the aquifer system does not occur in the low-flow channels of the river and its tributaries, but infiltrates over much of the alluviated areas which are not within the flood channels of the Santa Clara River system. Paving of these areas has, and will continue to reduce the net effective area for natural recharge to the underlying groundwater system;" and

WHEREAS, the Alluvial Aquifer has been pumped above the safe perennial yield since 1994; and

WHEREAS, the alluvial groundwater level in the eastern basin has been dropping, which may be caused by weather patterns, increased development, increased pumping, or a combination of the foregoing and possibly other factors; and

Saugus Formation

WHEREAS, the December 2003 CH2M Hill presentation (referenced above) stated that 4,000 acre-feet/year of water in the Saugus Formation are currently not available due to Perchlorate pollution; and

WHEREAS, NCWD Well #11, two SCWC wells, and one Valencia Water Company well in the Saugus Formation have been taken out of service due to Perchlorate pollution; and

WHEREAS, the Winter 2003 "Water Currents" newsletter published by Castaic Lake Water Agency states that the four closed Saugus Formation wells have a combined maximum production of 14,500 acre-feet per year; and

WHEREAS, the area impacted by the Perchlorate pollution in the Saugus Formation has not been characterized as of the date of this resolution; and

WHEREAS, a Remedial Action plan for cleanup of Perchlorate in local groundwater is not projected to be complete until August 2005 and certification of final cleanup is not expected until August 2010, according to the November 2003 schedule from the Department of Toxic Substances Control; and

Recycled Water

WHEREAS, Table 1-4 (Exhibit A attached) references recycled water supply amounts up to 17,000 acre-feet per year, but existing facilities only supply 1700 acre-feet per year and new facilities are not planned or budgeted in the NCWD area; and

WHEREAS, the UWMP 2000 states that the Saugus Water Reclamation Plant (WRP) cannot be expanded and both the Valencia WRP and the proposed Newhall Ranch WRP exist on the western edge of the CLWA service area, limiting the areas to which recycled water could be practically provided; and

WHEREAS, to serve the eastern portion of the Valley with reclaimed water, a new WRP would be required; and

WHEREAS, the technical and economic feasibility determination for the potential recycled water use in the CLWA service area has not yet been finalized; and

SWP Water

WHEREAS, the current maximum CLWA "Table A" entitlement to State Water Project (SWP) water is 95,200 acre-feet per year; and

WHEREAS, according to the 2002 State Water Delivery Reliability Report, 90% of the time deliveries can be at or above 30% of the full Table A amount, and 80% of the time deliveries can be at or above 50% of the Table A amount; and

WHEREAS, the reliability criteria established in Chapter 4.0 of UWMP 2000 states that "this criterion requires water supply to be sufficient to meet projected demands 90 percent of the time;" and

WHEREAS, that, as stated in *SCOPE v. County of Los Angeles and Newhall Land and Farming Company* (2003) 106 Cal. App. 4th 715,131 Cal. Rptr 2d 186, the State Water Project (SWP) "entitlements are based on a state water system that has not been completed" and "there is a vast difference between entitlements and the amount of water that SWP can actually deliver;" and

WHEREAS, SWP water deliveries could be interrupted in an emergency; and

Un-Finalized Water Sources

WHEREAS, Table 1-4 (Exhibit A attached) includes supply numbers for new wells in the Saugus Formation, water banking/conjunctive-use, water transfers, and desalination, yet no finalized, approved plans or budgets for these items exist in the CLWA or NCWD area; and

WHEREAS, many of these supplemental supply projects would require extensive infrastructure improvements; and

WHEREAS, California Water Code Division 6 Part 2.6 Chapter 1 (the Urban Water Management Planning Act) Section 10631(c) states that the preparer of an UWMP shall "for any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climactic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable" and the UWMP 2000 does not contain detailed information to that end for the projected, but not implemented, new Saugus wells, water banking/conjunctive-use, water transfers, desalination, and recycled water sources; and

WHEREAS, without specific perennial yield figures for the Saugus aquifer, new wells in the Saugus aquifer can not be assumed to provide additional water, but rather only additional pumping points for the same total bank of water from which the current Saugus wells draw.

NOW, THEREFORE, BE IT RESOLVED that, based on the foregoing recitals, the NCWD Board of Directors resolves and makes the following determinations, reserving to itself the right to make changes as new facts, data or studies justify in the opinion of NCWD Board of Directors; for planning purposes, NCWD no longer has confidence in the water supply and availability numbers in Table 1-4 (and identical tables) in the UWMP 2000;

FURTHER RESOLVED, that in response to any inquiry from cities, county, developers or the public generally NCWD will provide the water supply and availability statistics as presented in Exhibit B attached to this resolution.

FURTHER RESOLVED, that the supply from the alluvial aquifer will be based on the perennial yield of 31,600-32,600 acre feet/year as established in the 1986 Slade report. Because the perennial yield is a long-term average based on wet and dry years, no differentiation will be made between wet and dry year. Pending characterization, containment and/or remediation, the current supply will be reduced by the amount of Perchlorate contaminated water (700-1000 acre feet/year at current estimate.) The contaminated water will be counted as "unfinalized supply," with restoration of water supply counted incrementally as remediation to drinking water standards occurs and individual well production is restored with DHS and DTSC approval.

FURTHER RESOLVED, that any increase in pumping not offset by imported supplies or other factors will be supported only for short terms, unless future comprehensive groundwater studies clarify that longer term pumping that pushes averages above the perennial yield will not harm the aquifer.

FURTHER RESOLVED that the numbers over the perennial yield values for the Alluvial Aquifer will not be used for any planning purposes other than emergency planning or when necessary to meet short term demands of existing customers.

FURTHER RESOLVED, pending characterization, containment and/or remediation; that the current supply (7,500-15,000) from the Saugus Formation will be reduced by the amount of Perchlorate-contaminated water, which is currently estimated at between 4,000-14,500 acre-ft. The contaminated water will be counted as "unfinalized supply," with restoration of water supply counted incrementally as remediation to drinking water standards occurs and individual well production is restored with DHS and DTSC approval.

FURTHER RESOLVED, that new columns for "unfinalized additional supply" were added to the planning table in Exhibit B to differentiate between water that is available and water that is only in the conceptual planning stages. Unfinalized additional supply means that conceptual plans have been made, but no budget, approved capital project, or contractual construction or purchase deadline exists. These supplies may be constrained, limited, or voided by economic or legal issues. Water from the UWMP 2000 categories of "Saugus formation new wells," "recycled water," "water

banking/conjunctive use," "water transfers" and "desalination" have been moved to the unfinalized supply columns until they are finalized.

FURTHER RESOLVED, that potential water from new Saugus Formation wells will not be considered new "finalized supply" until it can be shown that the formation has a perennial yield above the total supply specified in Exhibit B for the existing Saugus wells (7,500-15,000 acre-ft/year.)

FURTHER RESOLVED, that until adequate assurances exist, water in the "unfinalized additional supply" column of Exhibit B will not be considered as available.

PASSED AND ADOPTED this 29th day of January, 2004, by the Board of Directors of the Newhall County Water District.

Lynne Plambeck, President of the
Board of Directors of the
NEWHALL COUNTY WATER DISTRICT
ATTEST:

Kenneth J. Petersen, General Manager
NEWHALL COUNTY WATER DISTRICT

Attach: Exhibit A
Exhibit B

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

I, KARIN J. RUSSELL, Secretary of the Newhall County Water District, DO HEREBY CERTIFY that the foregoing is a full, true and correct copy of Resolution No. 2004-3 of the Board of Directors of Newhall County Water District adopted at a Special Meeting held on January 29, 2004 and that the same has not been amended or repealed.

Karin J. Russell, Secretary,
NEWHALL COUNTY WATER DISTRICT

DATED: January 31, 2004

Exhibit A

Table 1-4
Total Existing and Planned Supplies
(acre-feet per year)

Source	Average/Normal Year	Dry-year
Local Supplies		
Groundwater		
Alluvial Aquifer	30,000-40,000	30,000-35,000
Saugus Formation	7,500-15,000	11,000-15,000
Saugus Formation (new wells)*	–	10,000-20,000
Stormwater*	–	–
Recycled Water*	1,700-17,000	1,700-17,000
Imported Supplies		
SWP Supplies	56,800-95,200	37,900-75,800
Water Banking/conjunctive-use*	–	105,000
Water Transfers*	5,200-8,700	3,500-6,900
Desalination*	2,000-5,000	2,000-5,000
Total Supplies	**103,200-180,900**	**201,100-279,700**

*Planned programs for future implementation.

Source: UWMP 2000

Exhibit A to NCWD Resolution 2004-3
Inital: _____
Dated: January 31, 2004

Exhibit B

Total Existing and Planned Supplies
(acre-feet per year unless noted)

Current and Finalized Future Supply					Existing Back up Dry Year Supply[1]	Unfinalized Additional Supply[1]				
	Average/Normal Year		Dry Year[2]				Average/Normal Year		Dry Year[2]	
Source	Range[3]	Average	Range[4]	Average		Source	Range[5]	Average	Range[4]	Average
Local Supply						*Local Supply*				
Groundwater						*Groundwater*				
Alluvial Aquifer	30,750-31,750[3]	31,250	30,750-31,750[3]	31,250		*Alluvial Aquifer*	*700-1000*[4]	*850*	*700-1000*[4]	*850*
Saugus Formation	0-5,750[6]	2,875	0-5,750[6]	2,875		*Saugus Formation*	*4,000-14,500*[4]	*9,250*	*4,000-14,500*[4]	*9,250*
Saugus Formation (new wells)						*Saugus Formation (new wells)*	*10,000-20,000*[6]	*15,000*	*10,000-20,000*[6]	*15,000*
Stormwater						*Stormwater*				
Recycled Water (NOT potable)	1,700	1,700	1,700	1,700		*Recycled Water (NOT potable)*	*15,300*	*15,300*	*15,300*	*15,300*
Imported Supply						*Imported Supply*				
SWP	28,560-47,600[7]	38,080	28,560-47,600[7]	38,080		*SWP*	*0-57,120*	*28,560*	*0-57,120*	*28,560*
Water Banking/conjunctive use					21000 af	*Water Banking/conjunctive use*			*0-84,000*	*42,000*
Water Transfers						*Water Transfers*	*3,200-8,700*	*4,950*	*3,500-6,900*	*5,200*
Desalination						*Desalination*	*2,000-5,000*	*3,500*	*2,000-5,000*	*3,500*
Total Supply		73,905		73,905	21000 acre-feet (total, not per year)	*Total Additional Supply incl. Non-Potable only if all Future Projects Approved and Built*[9]		*79,410*		*119,660*
Total Potable Supply		72,205		72,205	21000 acre-feet (total, not per year)	*Total Additional Potable Supply only if all Future Projects Approved and Built*[9]		*64,110*		*104,360*

Note: All numbers are from UWMP 2000 unless otherwise noted below.

[1] Unfinalized additional supply means that conceptual plans have been made, but no budget, approved capital project, or contractual construction or purchase deadline exists. These supplies may be constrained or limited by economic or legal issues.

[2] Dry Year means a short term period during drought. Supplies listed in these columns should be viewed as contingency planning only and are not considered sustainable on a long-term basis.

[3] Perennial yield (31,600-32,600 af/yr per Slade, 1986) less average of range of loss (850 af/yr) due to perchlorate contamination.

[4] Estimated amount currently lost to perchlorate contamination per 12/2003 CH2MHill presentation and Winter 2003 CLWA "Water Currents."

[5] UWMP 2000 stated supply (7,500-15,000 af/yr based on operational yield) less average of range of loss (9,250 af/yr) from perchlorate contamination.

[6] New Saugus wells will not yield additional water supply beyond the perennial yield of the formation, which has not been quantified.

[7] Per 2002 DWR Reliability Report, 90% of the time deliveries can be made at or above 30% of the full Table A amount, and 80% of the time deliveries can be at or above 50% of the Table A amount. The range in the current supply column reflects 80-90% reliability and in some cases water deliveries will be lower than what is shown. Our current full Table A amount is 95,200 af/yr. 95,200 af/yr minus the average of the "current supply" range (38,080) is shown as unfinalized additional supply. SWP deliveries vary annually.

[8] An additional one-time stored excess of 21,000 acre-ft currently exists in a water bank for dry year supply. This amount is not to be counted when planning for future projects. This amount may not reoccur in the future, and is required by court settlements to be provided to current users only. The UWMP 2000 estimated a total of 105,000 acre-feet potential exists for water banking. The remainder (105,000 minus 21,000) is listed in the unfinalized supply column on this table.

[9] Where ranges exist, the midpoint of the range was used for calculating totals.

Letter No. 33

Received 6/15
9:32 p.m

THE HIGH DENSITY CONCERNS ARE MANY:

138 APARTMENTS NOT BUILT YET, BUT ALREADY OKED FOR MCBEAN AND NEWHALL RANCH ROAD THAT ARE NOT REFLECTED IN THE 91% RENTED FIGURE OF SURVEY.
490 APARTMENTS OKED BY L. A. COUNTY NEAR COPPERHILL, NOT BUILT YET, AND NOT REFLECTED IN THE 91% RENTED FIGURE.
867 THE 9% OF APARTMENTS NOT RENTED OF THE 9,640 APARTMENTS IN THE AREA, SINCE THERE IS A 91% RENTED RATE.
439 RIVER PROJECT SINGLE HOMES NOT BUILT YET.
744 RIVER PROJECT MULTI-FAMILY CONDOMINIUMS AND APARTMENTS NOT BUILT YET.

FOR A TOTAL OF 2,728 DWELLINGS NOT BUILT IF RIVER PROJECT GOES AT HIGH DENSITY, COUNTING OTHER PROJECTS OKED AND NOT BUILT, AND THE 9% VACANT APARTMENTS BUILT, BUT NOT RENTED.

1

Stacy Kelleher
submitted

Letter No. 34

Agenda Item: 2

From the desk of . . .

Karen Pearson
26617 Gavilan Dr., Santa Clarita, CA 91350. Ph. & Fax 661 296 4438

August 31, 2004

Planning Commission
City of Santa Clarita
23920 West Valencia Blvd.
Santa Clarita, CA 91355

Regarding the Riverpark Project

Dear Chairman and Planning Commission Members,

This is to request that protection be given to my backyard at 26617 Gavilan Dr. and to the back yards of my neighbors on Gavilan Drive who are living at 26607 and 26611 Gavilan Drive in the planning of this project. There is a plot of land behind our three houses that is a concern to us. We do not want any chance for the abysmal, inconsiderate, rude planning to occur that occurred with the construction of the Bouquet Center. I am referring to the fact that the hill was removed and land was plowed up to the lot lines and adjacent bedroom windows of the homes along Espuella--after which dumpsters were placed there. I now wake up to the loud rattle of dumpsters at approximately 6:15 AM every week as a result. The dumpsters are at the end of my back yard and not even under my window. Neither do we want any chance of the land being plowed out to make a parking lot. In short, we do not want the land changed in any way.

There has been some consideration of this land being deeded to us, but that creates a problem in that I have been told if there is ownership then we could not keep our neighbors from building sheds or dumping stuff up there. I do not want my privacy encroached upon and I do not want my view encroached upon and I believe neither do my neighbors. I have been told that it is unlikely that the city would like to own that piece of property. Consequently, I believe at this point the best bet is to give it an open space designation which totally disallows any buildings or unnecessary structures or any dumping or any digging away of the land for purposes of creating parking spaces. (I was present when a representative of Newhall Land and Farming suggested that the definition of open space include parking lots.) Fortunately, the city does not define open space that way, but just in case they change their mind due to the great influence of Newhall Land and Farming, I would request that it be declared open space and then add the insurance statement that it shall never become parking for either the Bouquet Center or the apartments or condominiums of the Riverpark Project. 1

I am not an expert in these matters. There may be some other solution that is even better than the above suggestion, but I am unaware of it. If you have a better solution please offer it. We will already be inhaling more pollution because of the road going through and enduring more dust from the digging of this project and enduring more noise when the apartments go up. We have lost so much from the Bouquet Center already that we believe we are due a lot of consideration at this point. Before the dumpsters came I used to have my phone lines lined with singing sparrows. The crows came with the dumpsters. The sparrows are gone. Enough is enough.

It is my understanding that the hill behind Gavilan Drive will not be cut down in height and from our view will stay the same. We also understand that there will be a wall built from the 2

wall behind the Bouquet Center to the hill to block noise and pollution and the kids from the condos from entering our back yards. That this wall shall start approximately where the north end of that northern most building in Bouquet Center ends. All of these were negotiated with Newhall Land and Farming. They have been cooperative and I believe this last problem with the small lot we share can also find a good solution.

2

Thank you for your consideration of these requests.

Sincerely,

Karen Pearson

Letter No. 35

8/31/04

Agenda Item:

Good Evening Planning Commissioners:

Connie Worden- Roberts.
Tonight, I am wearing two hats. First, I chair the Transportation Committees for both the Chamber of Commerce and the Valley Industrial Association. In this capacity I am pleased to report to you that for a number of years the Transportation Committees have addressed and reviewed the importance of a fully integrated transportation system to serve the Santa Clarita Valley. 1

One of the vital corridors we have studied is the Cross Valley Connector. We recognize that it is a critical link connecting SR 14 to Interstate 5 and SR 126. The construction of this corridor will relieve some of the pressure on Soledad Cyn. Road, and greatly facilitate getting across SCV. You may be interested in knowing that long before most of us resided in SCV, the Los Angeles County Public Works Dept., back in 1965, drew up a map with an extremely similar road in recognition of its ultimate importance to this Valley.

Who uses this road? Currently many who work in the Western portion of SCV including the industrial and town centers. Many companies identify fully 20 to 30% of their workers reside in either Canyon Country and or Antelope Valley. Currently they use Soledad Canyon Road or SR 14 in getting to and from their jobs. 2

Additionally, I serve on both the Chamber of Commerce and the Valley Industrial Assn. As a Board Member, I joined with the others in taking the unanimous vote by both boards to concur with the City Council's position over the past two years: that the completion of this roadway is the "number one priority for our city". Requests for transportation improvements remain at the very top of the list of citizen demands.

However, the proposal before you this evening addresses more than just a vital roadway! It incorporates a proven bank stabilization plan that will preserve the river mostly in its natural state. Unlike the City's General which allowed 3,000 housing units, this plan requests a total of 1128 -there are 424 SFU, 380 town homes and 324 apartments. Only one acre of commercial development is proposed. A significant park of 29 acres is planned and a multi-use trail corridor is planned. 440 acres of open space and replanting of oak trees will occur. 3

As a City we can be truly grateful for the help our local Congressman has given to our Valley in securing some Federal funding to assist in the construction of this vital roadway. What you may not know is that among other issues this roadway is also a defense corridor linking as it does Vandenberg Base and Edwards Air Force Base. In these troubled terrorist times, this is something we must acknowledge. When I spoke to the Congressional Committee in the Spring of 2004, on which Congressman McKeon sits, he concurred as did the Committee Chairman Ishtuk in understanding its regional significance and the need to construct it.

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For all of the positive features presented to you this evening, I urge the approval of the Riverpark development.

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Letter No. 36

Submitted by: Eric Sanchez 8/31/04

Agenda Item: 2

August 31, 2004

TO: City of Santa Clarita Planning Commission
23920 Valencia Blvd
Santa Clarita, CA 91355

FROM: Wishtoyo Foundation

RE: Comments on Cultural Resources Section of the Draft Environmental Impact Report (DEIR) for the proposed Riverpark Development Project

Dear Santa Clarita Planning Commission:

The Wishtoyo Foundation is submitting these comments with the hope that we might encourage the Riverpark Development Project Developers and Partners to recognize traditional Native American cultural and religious values as important, living parts of our Nation's heritage, and to develop the capability to sufficiently address any potential disruption of the traditional expression or maintenance of these values that might result from the development scheme.

It is the duty and responsibility of the developers to coordinate and consult regularly with Native American groups to identify and consider their concerns in their planning and decision-making and document fully all coordination and consultation efforts. In order for this public comment process to function as it should, developers must be sensitive to and respectful of the needs and values of all community members, particularly those members of the community whose ties to the land in question extend back through time immemorial. Additionally, the Wishtoyo Foundation sincerely hopes that this development project will avoid unnecessary interference with areas that are historically, culturally, or religiously significant to the Tataviam people, as it is on their ancestral lands that Riverpark project will be built. 1

Finally, the Wishtoyo Foundation encourages the project developers to protect sensitive and confidential information about Native American values, practices, and specific locations with which they are associated from disclosure to the public, to the greatest degree possible under the law and regulation. 2

INTRODUCTION

These comments are preliminary, in direct correlation to the preliminary nature of the Environmental Impact Report completed in March of 2004. These comments seek to address the inadequacy of the DEIR with regards to cultural resources located within the boundaries of the proposed development project and that are likely to be severely impacted by the Riverpark Development Project. The cultural resources portion of the DEIR is deficient in many respects. 3

First, the Riverpark DEIR fails to grasp the distinction between resources as cultural and resources as archeological. The failure of the DEIR to take into account this distinction has rendered both the assessment of the existence of significant resources located within the development area and the mitigation measures proposed to deal with potential impacts inadequate.

Second, the DEIR is inadequate because of its failure to consult with any members of the Tataviam community during the course of the DEIR's preparation. Under CEQA case law, consultation with the Native American Heritage Commission and tribal community members for whom the area slated for development is culturally significant is mandated when it is likely that cultural resources will be impacted by the project. Additionally, there are several federal laws that are govern consultation requirements for projects that are likely to impact Native American cultural resources. 4

Third, the cultural resource section of the DEIR is deficient for its failure to fully consider and plan for the event that more resources and/or ancestors may be unearthed during the development process. Major events in the region's history, such as the flood caused by the breaking of the St. Francis dam have altered the surface area such that it is likely that resources may remain concealed absent some disturbance such as grading. Therefore, the DEIR should prepare for the likelihood of the discovery of remains and culturally significant objects now rather than later and thus avoid a potential repeat of the recent situation at Playa Vista. (See recent local news articles regarding the desecration of more than 180 Tongva ancestral remains on a development site located off of Lincoln Blvd in Playa Vista.) 5

Finally, the mitigation measures proposed in the DEIR are inadequate for their failure to address ways in which impacts to cultural resources might be mitigated from a tribal perspective. Thus the DEIR does not meet the CEQA requirements regarding the exploration of potential mitigation measures. 6

CULTURAL RESOURCE PROTECTION LAWS OF POTENTIAL APPLICABILITY TO THE RIVERPARK DEVELOPMENT PROJECT

Cultural resources are protected under several state and federal laws. These laws were enacted to ensure consideration of historic values and to protect significant resources from destruction or theft. The major federal laws include: 7

The National Historic Preservation Act (NHPA), Archaeological Resources

Protection Act (ARPA), the Native American Graves Protection and Repatriation Act (NAGPRA), and the American Indian Religious Freedom Act of 1978 (AIRFA). State-level cultural resource protection is regulated through the provisions of Appendix K of the California Environmental Quality Act (CEQA). Paleontological resource protection is regulated through the 1906 Antiquities Act. Also of importance is the National Environmental Policy Act of 1969 (NEPA) which establishes a national policy for protection and enhancement of the human environment. Part of the function of the Federal Government, as stated in the Act, is to preserve Important cultural aspects of our national heritage and maintain whenever possible an environment which supports diversity and variety of individual choice. (P.L. 91-190; 83 Stat. 852; 42 U.S.C. 4321).

Based on the Developer's consultations with tribes, the California Native American Heritage Commission (NAHC), and other interested parties, and pursuant to 43 CFR 10.5(e) (1), the developers shall consider the following as Native American cultural items:

1. Human Remains
2. Associated funerary objects, which shall be understood to mean objects placed intentionally with human remains and still physically associated in placed with such remains. The location of objects within the grave fill or in immediate proximity to human remains shall be understood to evidence intentional placement with human remains.
3. Unassociated funerary objects, which shall be understood to mean objects intentionally placed with human remains but whose association has been disturbed through vandalism, erosion, plowing, rodent action, and other ground disturbing phenomena.
4. Sacred objects which shall be understood to include those classes of objects identified by Chumash/Tataviam religious leaders as needed in the practice of traditional Chumash/Tataviam religions by their present day adherents.
5. Sacred/historical places, which shall be understood to mean village sites, religious/ceremonial sites, food sites, burial sites, etc.

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The California Environmental Quality Act (Public Resources Code Sections 21000, et seq.) requires that before approving most discretionary projects the Lead Agency must identify and examine the significant adverse environmental effects which may result from that project. Where a project may adversely affect a unique archaeological resource, Section 21083.2 of the Act requires that the Lead Agency treat that effect as a significant environmental effect and prepare an environmental impact report (EIR). Section 21083.2 (c) stipulates that there is a duty to mitigate and that consideration shall be given to preserving California Native American culturally significant sites in place or left in an undisturbed state. When an archaeological resource is listed in or eligible to be listed in the California Register of Historical Resources, Section 21084.1 requires that any substantial adverse effect to that resource be considered a significant environmental effect. Historical resources included in a local register of historical resources, as defined in subsection (k) of Section 5020.1, are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. The fact that a

resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources, or not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 shall not preclude a lead agency from determining whether the resource may be an historical resource for purposes of this section. 7

The CEQA guidelines also provide some additional aid with determining sufficiency of the report. Section 15003(i) states that CEQA does not require technical perfection in an EIR, but rather adequacy, completeness, and a good-faith effort at full disclosure. A court does not pass upon the correctness of an EIR's environmental conclusions, but only determines if the EIR is sufficient as an informational document. (Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692) It is the belief of the compiler of this comment letter that the Draft EIR is not sufficient as an informational document, since the amount of work done on the Cultural Resources section is woefully inadequate and lacking in even the basic understanding of the term cultural resources. 8

THE DEIR'S FAILURE TO TAKE INTO ACCOUNT THE DISTINCTION BETWEEN CULTURAL AND ARCHEOLOGICAL RESOURCES RENDERS THE DOCUMENT INADEQUATE

The Riverpark DEIR makes an unfortunately all too common mistake with regard to its assessment of cultural resources located within the project boundaries. While the determinations made regarding whether sites are significant, whether they are likely to be impacted by the development project, and what the most appropriate mitigation measures may be, are probably sufficient to meet CEQA and federal requirements regarding archeological resources that are significant for their likely ability to provide information important to the scientific community or society as a whole, these determinations in no way reflect an adequate assessment of the importance of sites and objects located within the project bounds as cultural resources. Both federal and state laws recognize this distinction as they provide specific requirements and guidelines for cultural resources that are important to Indigenous people for their association with Indigenous history, culture, and practice. 9

In order for the DEIR to be sufficient in this regard, the developers must, at a bare minimum, consult with members of the Tataviam community regarding the importance of resources located within the development area. 10

THE DEIR IS INADEQUATE FOR ITS FAILURE TO COMPLY WITH STATE AND FEDERAL GUIDELINES REGARDING CONSULTATION WITH TRIBES AND INDIAN COMMUNITY MEMBERS

The Draft EIR plainly indicates that the developers of the Riverpark Development Scheme failed to adequately consult with Native Americans on this project. One person as an observer does not equal adequate consultation (see DEIR discussion regarding the presence of a single Native American monitor during grading.) Any and all developers in California must consult with the Native American Heritage Commission, which is mandated by CEQA. Developers who aspire to utilize federal moneys, grants, or assistance with land reclamation, i.e. usage of the Army Corps of Engineers, must also 11

consult with Native American tribes and interests, such as the federally recognized Santa Inez band of Chumash Indians, the local Tataviam (Fernandeno) band of mission Indians-whose land and archeological sites are the very ones in question, and with other interested Native community actors, which would include groups like the Wishtoyo Foundation. 11

Requirements Under CEQA

According to CEQA Guidelines, economic and social effects of a project can be used to determine the significance of changes caused by the project. If construction of a road and resulting noise increase disturbs religious practices, this is considered a significant effect on the environment. The Riverpark specific and general plans do not address this significant impact and instead conclude, without any supporting evidence, that these sites will not be impacted by the development. However, Riverpark is not equipped to make a judgment on this issue, at least certainly not without proper Native input, which has yet to be solicited by the developer. 12

The cultural resources portion of the Draft EIR is not consistent with CEQA requirements, as the duty to notify the Native American Heritage Commission was not fulfilled. This notification requirement was made explicit in the EPIC v. Johnson case, which held that the presence of cultural resources on a proposed development site created a mandatory consultation requirement. 13

In Epic v. Johnson, at issue was whether the California Department of Forestry had a legal duty to consult with NAHC before approving a proposed timber-harvesting plan. The court held that presence of an archeological site on the land proposed for timber harvesting mandated consultation with the NAHC. See Epic v. Johnson at 627. The court explained that CEQA mandates that agencies evaluating a project for environmental impacts consult with agencies having jurisdiction over affected natural resources. ID. 14

The court cited CEQA guidelines Appendix B, which lists NAHC as a public agency with specific expertise regarding places or religious significance to Native Americans, including archeological sites, to support the rule that the NAHC has jurisdiction by law over such natural resources. See ID at 625. The Court continued,

> The [Native American Heritage C]omission has jurisdiction to identify sites of special religious and spiritual significance to Native Americans and their heritage, to make recommendations regarding sacred places located on private lands, and to consider the environmental impact on property identified or reasonably identified as a place of special religious significance to Native Americans. see ID

The court's holding indicates the strength of CEQA's commitment to protect cultural resources. Consultation with the NAHC is not merely encouraged under CEQA, it is mandated. Furthermore, because the archeological sites found in the Riverpark development zone have been deemed as a Tataviam site of some importance, dating back 15

3500 years, the case for consultation with NAHC and local Native Americans regarding the Riverpark Development Project is even stronger. 15

Under Federal law, tribes and Native Americans in general are supposed to be consulted with when sites identified as American Indian have been found on a proposed project development site. Cultural resource inventory and evaluation, use allocations, National Register nominations, use permits, public interpretation, and protection projects may require consultation with Native American groups as appropriate to the nature of the cultural resources or the areas affected. Identification of tribal traditional life-way values can only be done through consultation with native people if accuracy and sufficiency is truly a goal of the developers. 16

National Historic Preservation Act Consultation Requirements

The 1992 amendments to the National Historic Preservation Act (NHPA) provide that properties of traditional religious and cultural importance to Indian tribes may be eligible for listing on the National Register of Historic Places. If a site (aka cultural property) is eligible for listing or is listed, it is subject to the 106 consultation process, which provides some measure of protection for sites that might be impacted by developments that involve and/or receive funding from federal agencies. Specifically, Section 106 requires federal agencies to take into account the effects their projects may have on "historic properties" (cultural resources), and they must allow a reasonable time period for the Advisory Council on Historic Preservation (the Council) to comment. The Section 106 regulations (36 CFR 800, Protection of Historic and Cultural Properties) outline a five-step review process that is conducted on a project-by-project basis. The five steps are the following:

Identify and evaluate historic properties.
Assess project effects. 17
Consult on mitigation measures.
Obtain Council comment.
Proceed with project.

Section 106 obligations apply to any "proposed Federal or federally assisted undertaking," and must be completed "prior to the approval of the expenditure of any Federal funds . . . or prior to the issuance of any license..." An "undertaking," which triggers the procedural steps of the NHPA, not defined in the NHPA initially, is defined under the 1992 NHPA Amendments as:

> [a] project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including:
> (A) those carried out by or on behalf of the agency;
> (B) those carried out with Federal financial assistance;
> (C) those requiring a Federal permit, license, or approval; and
> (D) those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency. (16 U.S.C. S 470f)

The regulations implementing Section 106 prior to the 1992 Amendments defined "undertaking" as: any project, activity, or program that can result in changes in the character or use of historic properties, if any such historic properties are located in the area of potential effects. The project, activity, or program must be under the direct or

indirect jurisdiction of a Federal agency or licensed or assisted by a Federal agency. Undertakings include new and continuing projects, activities, or programs and any of their elements not previously considered under Section 106. \{36 C.F.R. \'a7 800.2(o)

Furthermore, "Undertakings" include without limitation: (a)non-Federal activities carried out pursuant to a federal permit, lease or license; (b) the approval of a grant or loan of federal funds; (c) promulgation of regulations; (d) federal approval of state regulatory program under federal regulatory statutes such as the Surface Coal Mining and Reclamation Act; (e) development of management plans; (f) approval of an application for permit to drill on an oil and gas lease; (g) approval of a mine plan on federal lands; and (h) issuance of permits by state agencies pursuant to a delegation of authority from a federal agency. 17

Again, the Riverpark Development project will need certain permits or licenses to manage the Santa Clara river valley area, will no doubt require federal funds to operate, and issuance of permits by state agencies following the consent from the federal agency. In either a general or specific scope, the Riverpark Development plan falls under the undertakings model outlined in Section 106, meaning that there must be some protections for the historical sites located in the developmental zone. Even if federal involvement is "indirect," the NHPA may apply. In Indiana Coal Council, Inc. v Lujan, for example, the district court held that SMCRA permits issued by state regulatory agencies under a delegation from OSM triggered NHPA compliance requirements. Because OSM's involvement is not "de minimis", given OSM's oversight and funding of state regulatory programs, the "state permitting process is a federal undertaking. . . ." 18 19

Presumably, the same analysis would apply to other federal regulatory schemes which authorize delegation of regulatory primacy to tribes or states. In any event, with limited exceptions, the NHPA section 106 compliance processes applies to activities in which the federal government plays a permitting or oversight role.

Indiana Coal Council v. Lujan, 774 F. Supp. at 1401, Techworld Dev, Corp. v. D.C. Preservation League, 648 F. Supp. 106, 117 (D.D.C. 1986).

The sites on the Riverpark Development Scheme, especially CA LAN-351, first recorded in 1968, should at least be placed as eligible for listing to the National Register of Historic Places. Considering that CA LAN-351 is at least 3,500 years old, which is based on two different studies, Section 106 of NHPA would be applicable, especially if the developers are using or hope to use federal funds or seek aid from federal agencies, such as the Army Corp of Engineers. Of course, the developers have probably not looked into the classification of traditional cultural properties, which are defined as propert[ies] eligible for inclusion in the National Register because of [their] association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community. Traditional cultural properties (or TCPs) include, but are not limited to sacred sites, and may be wholly natural places with no evidence of human use. Thus, sacred sites and other places of traditional religious and cultural importance to tribes are eligible for 20 21

listing on the National Register. These sites would also be considered traditional cultural properties under the NPS Guidelines. 21

NAGPRA Requirements

Under the Native American Graves Protection and Repatriation Act, or NAGPRA, Section 3(c), developers and agencies cannot exhume, remove, or otherwise degrade Native American bones or cultural items on federal or Indian land without a permit issued pursuant to the Archeological Resources Protection Act (ARPA), which has to have been coordinated with the tribe(s) or groups(s) culturally affiliated with the remains, and which has to include provision or their disposition consistent with NAGPRA. 22

Under Section 3(d) of NAGPRA, if a Native American cultural item is encountered on land during construction for example, the party responsible for the project has to: cease the activity in the area of the discovery, make a reasonable effort to protect the items discovered; notify in writing, the head of the agency having primary management authority, and following notification and upon certification by the head of the agency that notification has been received, the activity may resume after 30 days of such certification (25 U.S.C. 3002[d])

The Riverpark Development Scheme is indeed on private lands, being funded by private interests, but not entirely, as state and federal funds and resources will no doubt be employed for the needs of the proposed community, such as transportation, services, sanitation, etc. Thus, NAGPRA and its provisions are clearly in their proper scope with this project. 23

In addition, the developer of the Riverpark Development scheme has failed to create any plan of action for managing Native American cultural items that may be encountered during the project, though they have mentioned that almost all the sites of relevance that have been found are deemed insignificant, which is significant in itself. 24

NAGPRA regulations (43 CFR 10) require developers and federal agencies to notify tribes likely to be culturally affiliated with the items likely to be discovered, as well as any identifiable lineal descendants of those who produced or valued such items, of the likelihood that such items will be excavated. The Draft EIR does not deal with these issues at all, nor is it apparent that the developers have taken reasonable steps to determine whether a planned activity may result in the excavation of human remains, funerary objects, sacred objects, or objects of cultural patrimony. 25

The developer, and any prospective state and federal agencies planning on conducting studies, construction, and business in the Riverpark development zone must identify tribes and others that may be cultural affiliated with any Native American cultural items that might be found on the lands subject to effect by the project. Notice must be in writing and with a clear description of the planned activity, its general location, the basis upon which it was determined that Native American cultural items may be excavated. and the basis for determining likely custody. The Notice must also propose a time and place for meetings or consultations (43 CFR 10.3[c] [1]). 26

The Riverpark developers and consultants state that they have a goal to preserve sites that have the potential to contain scientific information useful for the reconstruction of prehistoric lifeways in the Santa Clara Valley region, and/or artifacts or features that may be of religious importance to Native Americans.(RIVERPARK Draft EIR, pg. 1197). This rhetoric sounds disingenuous, as the developer has excluded well-respected scientists with expertise in California Indian archeology and local Chumash and Tataviam tribal members. The main scientific and archeological consulting firm utilized by the developer, W & S Consultants, does not represent an honest effort by the developer to insure that integrity in the archeological and cultural sites is maintained. W & S consultants are known for their work in the Ahmanson Ranch Project, which is acknowledged as a failure to understand the local geography, history, and cultural relevancy by the consulting firm. W & S consultants, in a similar fashion employed at the Riverpark Development Scheme, deemed six different sites on the Ahmanson Ranch as insignificant, though these sites proved to be quite significant for the local Chumash people. (See transcripts of public hearings on the Ahmanson Ranch proposed development project). It would seem as though history is repeating itself over again with the Riverpark development scheme. 27

CEQA does not require technical perfection in an EIR, but rather adequacy, completeness, and a good faith effort at full disclosure. See Kings County Farm Bureau v. City of Hanford (5th App. Dist. 1990) 221 Cal. App. 3d 692, 712. No effort, let alone a good-faith effort, has been made to discover the true extent of the archeological, cultural, historical, and religious resources located within the bounds of the proposed development area. Local Tataviam (Fernandeno) leaders and community members have been denied entrance onto the lands. They have not been consulted or even notified of the developments scope and destructive capabilities over their people's ancient sites and cultural items. Without a good faith effort to discover the baseline conditions with respect to cultural resources, the 2004 Draft EIR fails to comply with CEQA's mandate of a good faith effort at full disclosure. 28

The Draft EIR has described in its report that only one site can be designated as significant, labeling two-three other sites as insignificant and proposing that grading impacts on the remaining site would be less than significant. This is a preposterous and culturally insulting conclusion rendered by personal that do not hold the correct expertise, nor can they be considered to be qualified Native American consultation. While the 2004 Draft EIR relied on basic-level studies of the archeological sites on the development site, there was no ethnographic research of any kind conducted. Without ethnographic and ethnohistorical field work, how can the developers make any consideration of the importance of the lands they are about to develop over, or whether particular places in their development area are known to be burial places or sacred sites. This is the kind of work that still needs to be done, and was not conducted by W & S Consultants. 29 30

That is not to say that W & S Consultants should be the ones to conduct such a study. They have already demonstrated a general apathy and unwillingness to do even the basic and necessary work when dealing with Native peoples. Here is an excerpt from the Draft EIR that is meant to represent their ethnographic study: 31 32

Whether the Tataviam may have had exogamous clans and moieties, like the Cahuilla and Serrano to the east, is unknown. However, it is estimated that the Tataviam population was less than 1,000 at the time of Euro-American contact, and that only two or three of the largest villages existed throughout their territory. Although the Tataviam were one of the earliest groups contacted by Spanish missionaries, with a number of their villages briefly described by members of the Portol\'e1 expedition of 1769, a general lack of information on this group exists. By 1810, all Tataviam had been baptized at Mission San Fernando and were quickly absorbed by other groups through intermarriage. The last speaker of Tataviam died in 1916.
Pg. 1190, section 4.18 of the Cultural resources section of the Draft EIR.

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Of course, if one is to read this excerpt at face value, with little actual knowledge of native people or their current status, then one would be led to the conclusion that the Tataviam are extinct, or were in general a small, tiny, and insignificant band of Indians that were done away with long ago. Of course this is clearly not the case, as there remains many Tataviam/Fernandeno people living in both the Antelope and San Fernando Valleys, which was due to having been forcibly removed by private land owners, like the Newhall Family. There is an estimated 2300 Tataviam tribal members, and the tribe is currently seeking federal recognition. This would seem to demonstrate that the tribe is alive and kicking. In any case, this excerpt is a perfect example of relying only on weak archeological and ethnographic work done by W & S consultants. It would be best for the Developers to get new consultants for their cultural resource work.

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Even the scope of cultural resources was limited to only include items and sites found, though the landscape itself is deemed as important to Native American representatives. The plants and herbs utilized by local native people's for medicine and ceremonies, the Oak trees located on the site that could only be planted by people hundreds of years before European colonization, and the river itself as a lifeway through which animal and plant species dwell in that are within native stories and belief structures. The developers claim that the ancient Tataviam sites will be protected due to the open space areas that the developer has allowed for. In effect, the sites will be left in situ, meaning that they will not be altered or developed. However, even if some of the ancient sites are located in open space, this ignores the significant ways that Tataviam religious practices and ceremony will be impacted as a result of the development occurring near the sites. Not to mention that even though the site is to remain left intact and without disturbance, grading has already taken place that has altered the landscape of the site.

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AIRFA Requirements

The American Indian Religious Freedom Act (AIRFA) directs agencies and developers utilizing agency funding and resources to consult with tribes about anything that might affect their religious practices. The Developer at Riverpark must consult with native people about the proposed impacts that the development will have on the practice of traditional religious custom. The impacts of development on such aspects of religious

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practice as plant gathering for religious purposes, access to land at sacred sites, and integrity of the sites themselves all must be considered. 36

Executive Order 13007, issued on May 24, 1996, clearly indicates that it is priority of the US government that consultation with native Americans over the proposed development of sacred sites must happen. Developers and the state/federal agencies they wish to employ in their development scheme must accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners, where such accommodation is not clearly inconsistent with law, avoid adverse effect to the physical integrity of such sites, make the confidentiality of information on such sites a priority, implement procedures to carry out the provisions of the order, including provisions of providing notice to American Indians of actions that might affect sacred sites or access to or ceremonial use of such sites. 37

DEIR IS DEFICIENT FOR ITS FAILURE TO PLAN FOR THE LIKELIHOOD THAT MORE RESOURCES AND/OR ANCESTORS MAY BE UNEARTHED DURING THE DEVELOPMENT PROCESS

Furthermore, W & S consultants fail to address the possibility of more sites being found on the site due to man-made conditions. These conditions have altered the terrain of the land in unknown measure, which has to be taken into account when doing any study on the land and its possible development. While there may be those who suggest that such incidents are presently irrelevant to the present situation, history often has more to teach us then we often know. 38

The third local event of historical importance in Southern California was the collapse of the St. Francis Dam and the resulting flood of the Santa Clara River Valley on March 12 and 13, 1928. With the failure of the dam near midnight on the March 12th, water raged down San Francisquito Canyon, through the project site, to Castaic Junction, which it effectively leveled, and then on to Fillmore, Santa Paula and ultimately to the Pacific. The flood caused at least 336 deaths, and destroyed 990 homes and many acres of orchards. It is likely that prehistoric archaeological deposits would have been washed away or covered with alluvium.(RIVERPARK DRAFT EIR, pg.1192)

One such incident involved the destruction of a dam constructed by William Mullholland, who was attempting to bring water into Los Angeles. In certain ways, the current project is similar to what Mullholland proposed, since he believed there was a water shortage in LA, and the current developers believe there is a housing shortage. His development did not take into full account the ecological, engineering, or geological circumstances of the area. Perhaps history is repeating itself. 39

On March 12, 1928, one of California's worst catastrophes occurred. The St. Francis Dam broke. Huge torrents of water washed down the San Francisquito Canyon, killing many on the way. The official body count was estimated at 450 dead, which is only slightly less then the famous 1906 earthquake in San Francisco. The actual number was substantially higher, since San Francisquito Canyon was the home to hundreds of transients and illegal immigrants that were never accounted for. After the dam broke, the water took 5 1/2

hours for the water, all 12.5 billion gallons, to reach the ocean. At times, there was a wall of water as high as 140 feet. 900 buildings were destroyed. The problem was ignorance. The geology of the locality was ignored. The dam was built directly over the San Francisquito Fault. This fault, as with many other faults had "gouge." Fault gouge is broken rocks and debris along the fault. Water can easily seep through the gouge, as it did under the dam. After two years of water slowly eroding away the gouge, a gap large enough for water to flow through formed. Once this gap formed, water could instantly rush through, as it did at midnight on March 12, 1928. Association of Engineering Geologists, Southern California Section. Failure of the St. Francis Dam Association of Engineering Geologists, March 1978 Willman, Martha L., "Secret of the St. Francis Dam," Los Angeles Times March 12, 1978

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The breaking of the Dam caused a huge wall of water and silt to pour over the Santa Clarita valley, and through the present Riverpark Development Project Area. While the archeological consultants mention the event with a paragraph, it does not seem to be very in-depth, nor given much gravity as a possible factor to consider. It is entirely possible that more sites, objects, and remains are presently buried under the silt from the St. Francis Dam incident. According to the Draft EIR, the archeological consultants did the bare minimum research to investigate any possible sites or cultural resources, namely through their scanning method. They dug a few holes in select places. This does not seem to qualify as an adequate or sufficient study of the local lands, especially since they are about to be developed. We believe that it is likely that there is more to be found once construction, grading, and excavation starts, and that the developers have not adequately done the proper studies nor have they compiled a detailed plan of action to deal with these eventualities.

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PROPOSED MITIGATION MEASURES ARE INSUFFICIENT TO ADDRESS POTENTIAL IMPACTS TO CULTURAL RESOURCES LOCATED ON THE PROPERTY

Furthermore, the amount of mitigation measures employed by the developers and their consultants is neither sufficient, nor performed in good faith. They have merely made a listing of a handful of sites located on the property, and then go on to state that all but one are insignificant in terms of relevance and importance. This is coming from the same experts who worked on the Ahmanson Ranch Project, which has since been bought by the state and is considered a historically significant land area. Finally, they have failed to consult with the very people who hold the information necessary to make even a preliminary report both feasible and legitimate. This issue is outlined in the following section.

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Appropriate Mitigation plans and Alternatives.

Federal, state or local laws usually require a project's environmental impact to be assessed. The parties proposing the project must attempt to find ways to avoid or mitigate environmental damage before they can proceed. These requirements apply to projects on public land, and they often apply to projects on private property. Archaeological and cultural resources are considered a part of the environment. The Native American Heritage Commission maintains an inventory of sites in California that are important to

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Native Americans, and reviews environmental impact documents to protect these sites from damage or destruction. Native American cultural resources can be divided into four categories:

Native American skeletal remains and grave-related artifacts.
Different types of burials may occur in one geographic area inhabited by the same tribal group, especially if it was inhabited over an extended period of time. There is no way to generalize about the burial practices of California Native Americans; the possibility of discovering remains and methods for preventing or minimizing disturbance of burials must be evaluated individually for each project.

Traditional cultural sites.
Such as villages, campsites, gathering and harvesting areas, quarries, tool manufacturing areas, rock painting and carving areas, and burial grounds.

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Religious or spiritual sites.
Traditional locations for events or rites with spiritual significance. A dance-ground, a place for gathering traditional medicine items, or a place for an Indian doctor or shaman to gather strength might be a spiritual site. It could be a prominent peak, a rock formation, a quiet glen, or a cave.

Artifacts
Cultural remains left by past peoples. Artifacts often found in California may be made of fish or animal bone, shells of sea animals, stone or wood.

Providing administrative access to sensitive areas; making special land use designations; developing Cooperative Management Agreements with Native American communities and groups; stipulating for continuing Native American uses in leases, permits, and other land use authorizations; diverting or denying clearly incompatible land uses; and similar affirmative management solutions. Consultation should identify not only Native Americans' interests and concerns, but also their suggestions for potentially effective approaches to address them. Consultation is incomplete, and largely pointless, unless it is directed toward the identification of mutually acceptable solutions. With true and meaningful consultation, strategies could be developed for appropriate management response when lands and resources valued by Native Americans are threatened.

Perhaps the best way that Riverpark Developers can best mitigate the situation is to finally consult and investigate the Native perspective on the plans for the development. What is considered insignificant to one group is not necessarily the same for another, and it is important that the native voice be heard. A major step that still needs to be taken into account is a plan of action when and if Native remains are found in the proposed development area.

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All work must come to a halt if and when such remains, funerary objects, and/or cultural items are found or disturbed. Included in this plan must be adequate consultation with the native nations affiliated with the remains/objects, as well as with concerned parties like the NAHC and the Wishtoyo Foundation. This must be done in order to find some

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resolution as to what to do with the remains, and to insure that no mass desecration takes place. Another highly recommended suggestion is that new studies be conducted in the development zone. The reasons for this has already been mentioned: First, the San Francisquito damn disaster makes it probable and possible that there is still a great deal to be found, especially once construction begins, Second, the work done by W & S consultants is weak and insufficient. We highly recommend that new and qualified experts be brought in to do a new study and survey of the area. These experts must also have a great deal of knowledge on native history, lifeways, traditions, and present conditions. They must respect the native inhabitants of the land that is about to be developed, a development project which ultimately, is probably not for the benefit of the Tataviam people.

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"The Legislature further finds and declares that it is the policy of the state to: ... (g) Require governmental agencies ... to consider alternatives to proposed actions affecting the environment." (Pub.Resources Code, subd. (g).) "All ... boards ... shall ... certify the completion of an environmental impact report.... Such a report shall include a detailed statement setting forth ...: ... (d) Alternatives to the proposed project." (Pub.Resources Code, subd. (d).) Guidelines to CEQA state that the EIR shall describe "a range of reasonable alternatives to the project, or to the location of the project...." (Cal.Admin.Code, tit. 14, subd. (d).)

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While the Draft EIR does include some possible alternatives that are clearly superior in different ways, they are nevertheless rejected, not because they economically, environmentally, or socially inferior, but because the project objectives are not met. The numbers of housing units are diminished, which apparently cannot be even considered. Of course, this goes along with the self-propagating myth that there is a housing need in the area, and that constructing hundreds of fewer housing units doesn't meet the demand. In an ominous sign of things to come, the Draft EIR even mentions that all available open parcels of land may soon need to be developed to meet some unspecified population growth at some unspecified time in the future. This doesn't sound like an alternative that protects and promotes environmental and cultural protection and management. In any case, in every alternative proposed by the developers and their consultants, there is no mention of protection of the cultural resources in the area.

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However, a sign of hope does appear on page 1211 of the draft EIR, in which the consultants suggest to the developers that certain steps must be taken in the even that additional materials, objects, or possible burials are found:

all grading activities and surface modifications must be confined to only those areas of absolute necessity to reduce any form of impact on unrecorded (buried) cultural resources that may exist within the confines of the project area. In the event that resources are found during construction, activity shall stop and a qualified archaeologist shall be contacted to evaluate the resources. If the find is determined to be a historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available.

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Construction on other parts of the project will be subject to Public Resources Code (i). (RIVERPARK Draft EIR, pg. 1211).

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This point at least begins to take into account the possibilities that additional finds are possible. And there is even the advent of a framework on how to deal with additional finds should they be encountered. Of course, there is still a lot to be taken into account when dealing with this proposed mitigation effort. Who shall be qualified to be a proper archeologist on this project, who makes such a determination? Obviously, native people need to be brought in to see the site for themselves, and this is not mentioned in this mitigation example. But it is a useful step that perhaps can be built further upon.

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Specific knowledge of historical and contemporary Native American cultural values can be obtained only from the Native American community that possesses the values and information. The Riverpark Developers must demonstrate a good faith effort to elicit specific kinds of information from Native Americans. Published notices and letters will generally not prove sufficient to ensure that legal obligations to consult with Native Americans have been met.

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Native Americans may also be reluctant to share sensitive information regarding resource locations and values with agency officials. This is partly due to historical and contemporary depredations of Native Americans values, resources, and sacred sites. This is also partly because laws created to protect sacred sites have not been rigorously enforced, and the location of some sites have been made public under the Freedom of Information Act.

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Broad information, regarding the general nature of traditional values and the general location of culturally significant traditional places, should be asked for in the early planning stages. Improved relationships improve consultation. Once an effective working relationship has been built, information maybe easier to acquire, and trust can be established.

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CONCLUSION

It is important to note at this juncture that the Wishtoyo foundation does not automatically reject development that is based on reason and with clear objectives that take into account all voices and perspectives. The native perspective and voice has not been heard in this process so far, and the Draft EIR clearly demonstrates that there is little to no respect for the Native stance on culture places and resources. No matter what future outcome may arise from this present comments period, or whether the Draft EIR is endorsed, the Native voice must be heard, respected, and acted upon by the developers, agencies, and government officials alike. 55 56

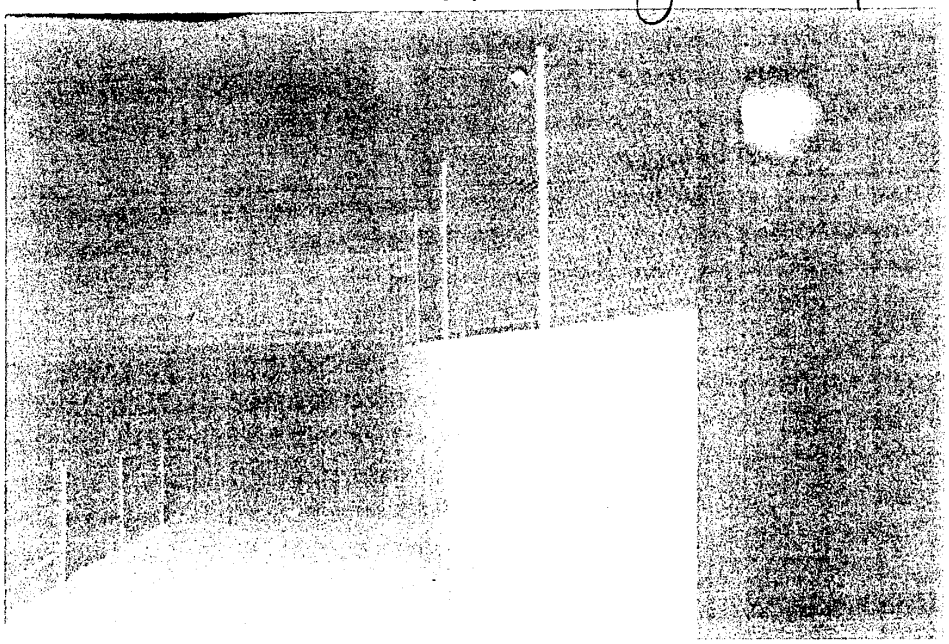
However, the significance of the area as a whole has not been adequately surveyed or appreciated by the developers or their archeological/cultural resources consultants. The Tataviam believe this area to be a major life-way area, where daily rites occurred on a regular and cyclical basis. Ceremonies for different intersections in one's life; birth, initiation, marriage, and death, occurred right on the river. Wherever trees can be found in the area, especially the blue oak trees, settlements of some sort are bound to have been located. In many locales, burials were consecrated and interned. In fact, burials have been found in recent enlargements and improvements of the nearby 126 and 5 freeways. There are markers, unknown to those untrained and uninitiated, which point to the sacred and historically significant areas of the Tataviam people, which continue to hold true today, though now it is private property. The whole area of this development is really an area of historical, cultural, and religious importance to the Tatviam people, and this must be recognized. Another proposal that may be helpful in the present discourse is the possible creation of a Native California Center, which would be helpful as a gathering place for local native people. It could be a center for learning for those without the proper information on Native Californians, for community gatherings, for remembering the stories of our elders, and for preserving the ways of our ancestors. 57 58

Since western expansion began, California tribes have fought to protect their cultural and religious sites from destruction, vandalism, and desecration. Hundreds of cultural and religious sites have been lost over the years, and tribes do not want to spend their futures retrieving stolen and desecrated items. Today, California tribes are not only fighting for the re-burial of their ancestors, the return of cultural items, and redress for violations of existing laws that result in the destruction of sacred sites; many tribes are becoming more pro-active in their efforts to save remaining sites. This comment letter, and the others like it, serves as a reminder of this effort. Hopefully, what has been written here will be seen as important by someone working with the developers, by someone planning this project, and by someone with conviction and integrity. Fairness must be added to an equation that has of yet remained un-equitable and unjust. Thank You for your consideration.

Sincerely

Eric Sanchez
Summer Associate, Wishtoyo Foundation

submitted by: Stacy Kuhnel



2 pages

Under Newhall Ranch Road
at
Back Bay in Bridgeport
and

City for safety reasons
needs
to
do
same
under Newhall Ranch Road
by
Lowell's. (See other Grading Photos #2)

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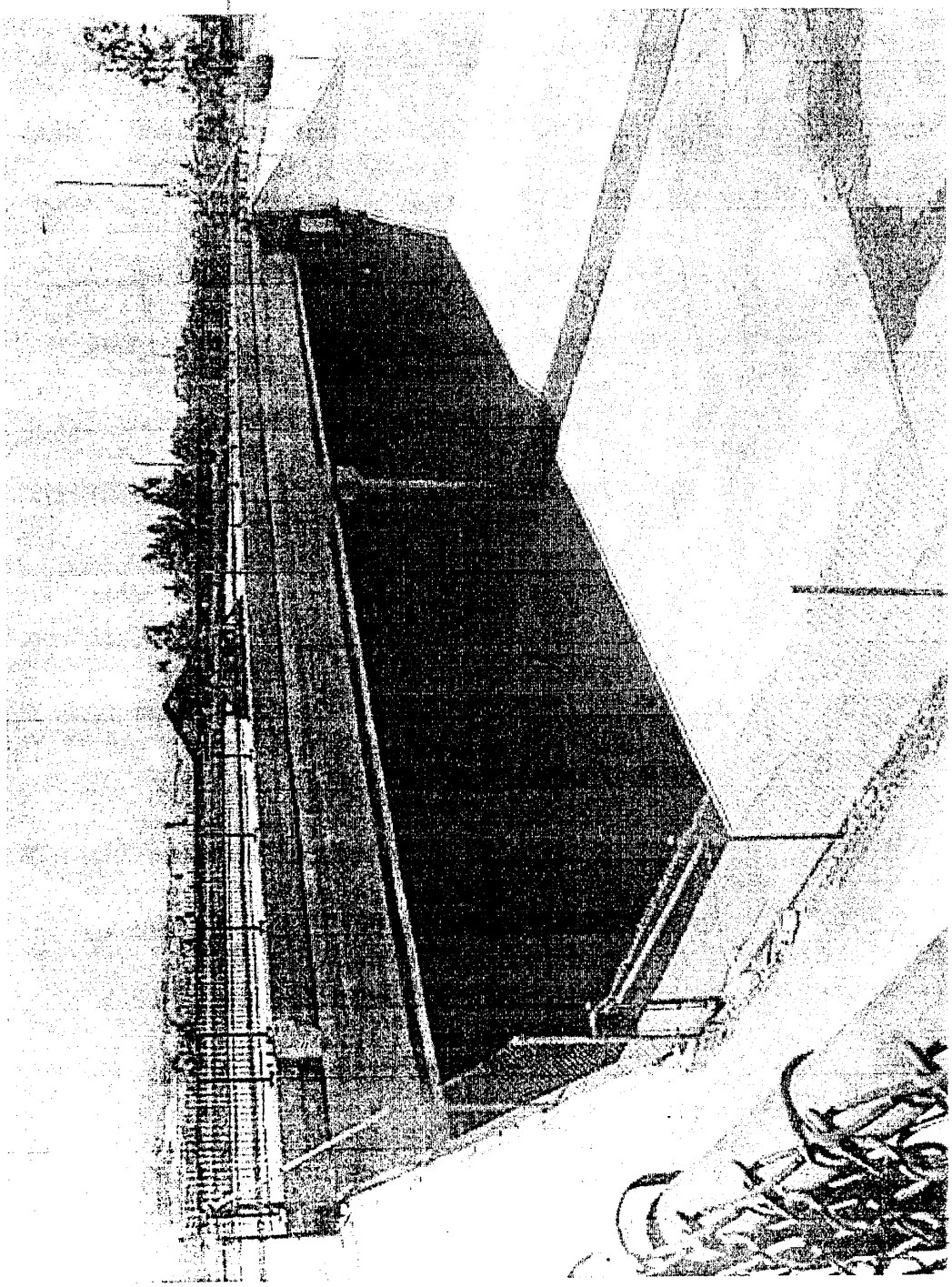

Letter No. 38

Lisa Goldwag Kassner
19701 Terri Drive
Santa Clarita, CA 91351-4815

City Planning Commission
City of Santa Clarita
23920 Valencia Blvd.
Santa Clarita, CA
FAX: 661/259-8125

Re: NO ON RIVER PARK DEVELOPMENT

Dear Planning Commission:

I am writing to urge you to reject the development of the River Park project. 1

I attended the meeting you held at the end of June, 2004. A man who wanted to put a car wash on Soledad Canyon Rd. across from the Edwards movie theater, was heavily critiqued for a variety of details about the effects of his development on the environment, the "look" of the area, and on his neighbors, and the traffic impacts. 2

Of much greater import related to all of these factors is the River Park project, but we haven't heard you critique it nearly the same way. 3 What about the environmental impacts -- on our air, our river, even our floodplain? 4 And the view of THAT area? How about the neighbors, all of us, who love this area and are seeing it being destroyed by rampant development, to our great dismay? 5 How about the traffic impacts, which would be many, many times greater than from a little car wash? 6

Please: if you care enough about these to protect us from a car wash, it is your responsibility to do the same with an 1100-home development. That would be the responsible thing as our Planning Commission. And when you see that the development doesn't live up to your requirements for that car wash, please just say no. 7

With thanks for your consideration,

Lisa Goldwag Kassner

Lisa Goldwag Kassner

Letter No. 39

,Mrs. Judy Reinsma
29750 San Francisquito Canyon Road
Saugus, CA 91390

August 31, 2004

Fax to: Santa Clarita City Planning Commission

Subject: Riverpark

It has all been said, again and again, but I will try once more.

RIVERPARK SHOULD NOT BE APPROVED !!!!!! 1

The negatives far outweigh the positives for the citizens of Santa Clarita.

It will increase traffic. 2 It will increase air pollution. 3 It will increase demand for domestic and landscape water. 4 It will decrease the recharge area of the Santa Clara River watershed. 5 It will further impact our schools. 6 It will destroy an aesthetically pleasing river landscape. It will further degrade the integrity of what this city could preserve as a jewel in its midst, the Santa Clara River. 7

The only positive I can see is that it will provide construction jobs while being built and it will increase the profits of Lennar, Inc. stockholders. The money it will bring in to complete the cross-valley connector road is not sufficient to warrant accepting the permanent destruction of what may well be our greatest asset, our river. The traffic it will add will mainly impact local streets; the connector will not alleviate this impact. 8 9

Los Angeles is currently spending millions to return its river to a natural state. People need undeveloped, natural, beautiful areas in their midst. We have one. Let's keep it 10

For an example of how beautiful a river-park can be, you should go to Chico, CA. They have a real river park and it is absolutely wonderful; the crown jewel of their city. We can have one too, if this city can summon the courage to accept what the original Master Planner gave us and protect it today, as well as for the generations of citizens to come. I urge you to be bold, be brave, be visionary and say no to Riverpark. 11 12

Sincerely,

Judy Reinsma

Judy Reinsma

Agenda Item: 2

Letter No. 40

From: Alice Constantine <missalimagoo@yahoo.com>
To: <tsullivan@santa-clarita.com>
Date: 8/31/04 1:44:40 PM
Subject: Planning Commission Mtg tonight

HI, My name is Alice Constantine and I own the home @ 27812 Haycreek Ave (off Ermine). I just moved in Dec 03 and really enjoy the quiet and peaceful feeling I get from the neighborhood. Now, it seems that the feeling will only end ever so soon. I am a believer that progree is a good thing. But, like all things in life we must have balance. We dont have the roads to handle the capacity now. How do they expect to handle 2200 more homes with each home having 2-3 cars. That means there will be about 5500 more vehicles to deal with on the same overcrowded roads. In addition, there will be all the construction of those homes interfering with the quiet and solitude we all love so much. The dust, dirt, noise, traffic is just too much!!! Our quiet little streets will become a freeway !!!!! I am not sure what the pricing of these homes will be but am curious as it might also affect the real estate value of the homes in my area. I am now considering moving to avoid this mess if it
becomes a reality
Alice Constantine
(661) 252-7169

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Do you Yahoo!?
New and Improved Yahoo! Mail - Send 10MB messages!

Agenda Item: 2

Letter No. 41

From: <Jawims@aol.com>
To: <tsullivan@santa-clarita.com>
Date: 8/31/04 3:12:03 PM
Subject: River Park Development

As a concerned resident of Santa Clarita, I want to express my opinion regarding both the River Park and Synergy Developments. While I am in favor of increased road development to ease congestion, and especially to allow for easier access to emergency vehicles, I am opposed to both of these developments. Not the whole development, but the size of both. We do not have the capacity at the existing Saugus elementary schools, (ie. Rio Vista, Skyblue or Plum Canyon), to accommodate developments of this size. Nor can our environment handle the never-ending building projects. We say we want to be family friendly, and environmentally friendly, however our actions do not "walk the talk." I've watched the development of Plum Canyon and have seen first hand the loss of wildlife, the deer crossing signs along Plum Canyon Road seem to be an unnecessary distraction. Let's be who we say we are, and really limit growth. I pray that you as a Planning Commission will heed the voices of your constituents and not the developers that don't have any vested interest in our valley except for their bottom line. Please vote to limit the size of these developments SIGNIFICANTLY!

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Thank you.

Jean Wims
Skyblue Mesa/Canyon High parent

Agenda Item: 2

Centre Pointe Business Park

9701.2272

August 31, 2004

Mr. Michael Berger, Chairperson
City of Santa Clarita - Planning Commission
23920 Valencia Blvd.
Santa Clarita, CA 91355

Dear Michael:

This evening you will be asked to approve Newhall's "River Park" project.

I have reviewed the plans and available documents. The planning is very good; the resulting project will enhance our community. This is a good project, proposed by a good community oriented builder/developer. 1

I recommend that you approve this project, not only because of its many positive community benefits but because it is the RIGHT & PROPER thing to do.

Yours truly,

Larry Rasmussen

Larry Rasmussen

Cc: Diane Trautman, Vice Chairperson
Tim Burkhart, Commissioner
Dennis Ostrom, Commissioner
Rick Winsman, Commissioner
Mayor Bob Kellar
Mayor Pro Tem Cameron Smyth
Councilman Frank Ferry
Councilwoman Laurene Weste
Councilwoman Marsha McLean

21070 Centre Pointe Parkway, Santa Clarita, California 91350
661.259.5606 Fax: 661.259.4065

Letter No. 43

28528 Sugar Pine Way, Saugus CA 91390-4121

Regina Colombo

Fax

To:	Santa Clarita Planning Commission	**From:**	Regina Colombo
Fax:	661-259-8125	**Pages:**	1
Phone:		**Date:**	8/31/2004
Re:	Riverpark Project	**CC:**	

☐ **Urgent** ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

• **Comments:**

Greetings:

I would attend the hearing at City Hall to voice my opposition to the Riverpark Project but, like most Santa Clarita residents, I commute and, traffic being what it is in our still fair city, I'm certain I wouldn't make it on time. So, I'm sending this fax instead.

Since I'm on the subject of traffic, it seems the rush hour congestion in Santa Clarita has reached critical mass. Adding more homes and businesses means adding more commuters to our already overcrowded roads. Of course, more cars results in more air pollution. And, given our already terrible air quality, I really can't see how any responsible arm of our City's government could in good conscience approve a project that would certainly aggravate this serious problem. 1

I'm also strongly opposed to further degradation of wildlife habitat, especially along our river, and destruction of more hillsides which are a big part of the natural beauty of our city. 2

I don't think that anything Santa Clarita might gain from this project in terms of additional tax revenue, etc., is worth the cost in terms of our quality of life. Please don't approve this project. 3

Sincerely,

Regina Colombo

Agenda Item: 2

Letter No. 44

Friends of the Santa Clara River
660 Randy Drive Newbury Park, California 91320 (805) 498-4323

March 2, 2004

City of Santa Clarita Planning Commission
City of Santa Clarita
23920 Valencia Blvd.
Santa Clarita, CA 91355
RE: Case No.: 02-175, VestingTentative Tract Map 533425, GPA 02-002, Oak Tree Permit etc.

Dear Commissioners,

Friends of the Santa Clara River has a history of offering the best information we can regarding sensitivity to environmental concerns and planning.

We anticipate receipt of the DEIR sometime this week. Though we have not received a DEIR yet, we have been informed that those who have toured the site and live in the immediate community are aware of plans to dramatically alter the natural character of the landscape in the last remaining natural river and upland areas. Though we have many concerns, the most disturbing information we are aware of is a plan to build in the floodplain. We are concerned about intrusion of roadways/bridges in the river and floodplain. We are concerned that maintenance of linkages for wildlife movement be studied and provided. The removal of any oak trees is strongly discouraged. Native American sites need to be preserved and celebrated as part of our community's collective heritage. We are concerned that native vegetation be preserved in unaltered areas and planted in developed areas. 1 2 3 4 5

In spite of providing information to encourage the City to provide natural buffers and back away from the river and leave it's tributaries natural, we have seen both concepts ignored repeatedly. We urge provision for substantial buffer areas. 6

We also understand that an alternative discussed in the DEIR includes avoidance of building in the floodplain. We strongly urge staff and the commission to choose this alternative in any final recommendation you present to the City Council. 7

The Valencia Natural River Management Plan (NRMP) is not simply a disappointment but a disgrace. Mitigations are visibly failing right in the center of the City, endangered species are routinely ignored in decision making, according to an article in the press even the City admits safeguards for retention of water on building sites fail routinely, treated water does not meet standards to protect river water quality, off road vehicles are ravaging the riverbed and it's banks in areas now owned by the City, monitoring and enforcement to avoid discharge of illegal fill is a farce. Meanwhile, the City continues to imagine that they can successfully fight Cemex with this sort of disregard of impacts that would be unacceptable farther up stream. 8

The challenge to minimize risks to the health and well-being of a community as part of the planning process is staggering but nonetheless the one addressed here. 9
We feel that the challenge is clear and should not be compromised nor should minimizing risks to the health and well-being of a community be confused with trying to balance the these risks against economic benefits. Erring on the side of caution should fall clearly in favor of a community's health and well being even when the economic consequences may be unfavorable, politically or otherwise. 10

We understand the City's role in providing housing for a growing community. Therefore we urge the Commission to study the risks to the health and well-being of this community and remember that the health of the natural landscape is the foundation for providing Clean Air, Clean Water and Species Diversity for Sustainability.

Respectfully

Barbara Wampole

Barbara Wampole
Vice Chair, Friends of the Santa Clara River

Item 4

Letter No. 45

California Native Plant Society

May 10, 2004

City of Santa Clarita
Department of Planning and Building Services
23920 Valencia Blvd. Suite 302
Santa Clarita, CA 91355

RE: Comments on the Riverpark Draft Environmental Impact Report SCH No. 2002091081

To Whom It May Concern:

The California Native Plant Society (CNPS) is a non-profit organization of more than 10,000 laypersons and professional botanists organized into 32 chapters throughout California, with three local chapters in Los Angeles County. The mission of the California Native Plant Society is to increase understanding and appreciation of California's native plants and to conserve them and their natural habitats, through education, science, advocacy, horticulture and land stewardship. The CNPS has been very involved in Santa Clara River Valley plant issues for years. The Santa Clara River Valley is a unique botanical resource because of the convergence of desert, coastal and montane biota in this region. Based on our experience, we offer the following comments on Riverpark Draft Environmental Impact Report SCH No. 2002091081

The CNPS can not support the project as proposed because of its significant, unmitigable impacts on the unique vegetation resources, the failure of the document as presented to minimize and mitigate to the maximum extent practicable the impacts to biological resources, and the failure of the document to fully evaluate the impacts to the plants and plant communities as described below. Our comments are divided into two categories: General Comments made up primarily of issues that the document fails to address and Document Specific Comments.

General Comments

The document fails to address the fragmentation issues to the plant communities and habitat. While piece by piece the plant communities will be substantially reduced, the CNPS requests that the overall evaluation of fragmentation be addressed in the document and evaluated for impacts. This analysis will allow for appropriate mitigation to be developed to minimize and mitigate this important issue. 1

The document fails to address the impacts of fire regulations and clearance activities on the areas of native habitat that will be adjacent to developed areas. The CNPS requests that this issue be addressed in the subsequent EIR, and that the fire clearance be included in the project "footprint". Then true impacts to the native communities and habitats will need to be re-evaluated and appropriate mitigation provided. This is especially important based on the presentation at previous City ~~Council~~ Planning meetings for this project, where the proponent is touting the value of clustered housing. While cluster housing does focus the project on the landscape, the "open space" between housing clusters will increase fragmentation (which leads to environmental degradation), and may often be the fuel reduction zone, which will further degrade biological resources. 2

"Hazing machines" need to be strictly forbidden on or near the project site. 3

Dedicated to the preservation of California native flora

Document Specific Comments

Page 4.6-6 states that the project site is approximately 695 acres, while the total acreage tallied from the 14 identified plant communities is 727.4 acres (pgs 4.6-9 – 4.6-17. It is necessary to have consistent acreages throughout the document to fully evaluate the actual amount of impact. Please explain the difference in acreages. 4

Page 4.6-6 also states that the plant community nomenclature follows (where applicable) CDFG's and the Manual of California Vegetation (Sawyer & Keeler-Wolf 1995). However, the plant communities identified do not use the series and association levels commonly found in the either of these treatments. The CNPS requests that the designations be revised to reflect common plant community treatments. 5

Page 4.6-38 3) Sensitive Plant Communities Present On-site. This section fails to comprehensively include all of the sensitive plant communities on the "List of California Terrestrial Natural Communities" from September 2003. Additional plant communities that occur on site and also on the list: 6

- 32.005.02 Riversidian Alluvial Fan Sage Scrub
- 78.000.00 Hollyleaf Cherry Woodland and Scrub Unique Stands [*Prunus ilicifolia*]. In checking with Keeler-Wolf (personal communication, 2004), old growth stands of *Prunus illicifolia* are rare.

Because the treatment of the existing communities do not reflect current community classifications, there is nothing to reference "riverwash" community. Occurring in the floodplain of the Santa Clara River, this "riverwash" community has the potential to represent a suite of rare plant communities including Riversidian Alluvial Fan Sage Scrub (mentioned above); 32.040.04 California Buckwheat Alluvial Fan or 32.070.00 Scalebroom Scrub 7

Furthermore, the mixed oak/grass area is of great botanical significance because of the number of oak species (4) that are all found within the 2.3 acres. 8

Pg 4.6-52 C. Construction Impacts

a) The CNPS requests that the locations of "temporary construction sites and the routes of all access roads shall be shown" in this document, as part of the CEQA process of full disclosure of all impacts. The types and amounts of vegetation that will be impacted even temporarily is required to be fully disclosed in the public document for public evaluation – not just by the jurisdictional agencies. 9

b)

c) While mulching of native vegetation provides some initial nutrient cycling, the common practice for facilitating regeneration of native plant communities and habitat is appropriate salvage, storage and re-distribution of topsoil. Topsoil salvage not only captures the existing seedbank present on site, but also captures all of the soil microorganisms that are essential in maintaining ecosystem functions. 10

d) In light of the fact that 98% of southern California's wetlands are extirpated (Bowler 1989), the CNPS finds the 1:1 mitigation for permanent removal of wetlands unacceptable. The impacts to the resource are the same whether or not the mitigation is done before project implementation or after. There fore, the CNPS requests that all impacts to wetlands regardless of their "habitat value" be mitigated at 3:1. 11

e) Where is the opportunity under CEQA for public review of the wetlands mitigation? The CNPS views the "Habitat restoration sites in the riverbed shall only be located in areas where the predominant habitats present are dry open floodplain, weedy herbaceous, or their functional equivalent" as a recipe for failed wetland mitigation. Why are the "highest priority habitat restoration sites should be new riverbed areas created during the excavation of uplands for bank protection" the only sites under consideration? 12

l) While the CNPS support Arundo removal, until the Santa Clara River watershed is systematically treated from the head of the watershed downstream, and when re-introduction is not longer an issue, the notion of removing Arundo to mitigate for mature wetland extirpation is not equitable mitigation. This type of "mitigation" will encourage the net loss of wetlands because the "mitigation" is does not preclude any potential, future re-infestation. In other words, the same Arundo "mitigation" area may be repeatedly used as mitigation for permanent extirpation of wetlands from a variety of projects, as it is re-infested from upstream propagules. As the mitigation proposal itself specifies "Removal areas shall be kept free of exotic plant species for five years after initial treatment" only. 13

Page 4.6-63 Planted Coastal Sage Scrub. No evaluation is provided for the basis of the planted Coastal Sage Scrub. The CNPS requests that a full discussion on why the Coastal sage Scrub was planted be evaluated in the document. It is likely that the CSS was planted as mitigation for the previously cut or graded for the installation of water lines and slope drains. Despite the paucity of understory and lack of success of the previous mitigation, the CNPS requests that appropriate mitigation for impacts to previous mitigation be addressed. Absent appropriate mitigation, a net loss of this diminishing community will result from this project. At a minimum a 3:1 successful mitigation (reestablishment of a functioning community) is required to offset impacts to the previous mitigation site. The determination of non-significant impact on Page 4.6-63 fails to disclose the mitigation history of the site and therefore is arbitrary and capricious. 14

Page 4.6-63 Riversidean Sage Scrub. The analysis is faulty because Riversidean Sage Scrub actually IS a sensitive plant community (CDFG 2003). Law requires appropriate mitigation for this sensitive plant community and the sensitive species that occur in it. 15

Page 4.6-65 Holly-leaf Cherry. The analysis is faulty because mature Holly-leaf Cherry stands ARE actually a sensitive plant community (CDFG 2003). Law requires appropriate mitigation for this sensitive plant community and the sensitive species that occur in it. 16

Page 4.6-66 Southern Willow Scrub. With approximately 80% of the sensitive plant community being impacted by the project, and the issue of wetlands loss in southern California, the CNPS fails to see how the proposed mitigation will off set the impact. Please explain. 17

Page 4.6-66 Southern Riparian Scrub. The CNPS fails to see how the preservation in perpetuity of part of the Riparian Scrub and "riverwash" mitigates the impact to the 30 acres. Impacts for the project require mitigation, not just a dedication of unbuildable lands (due to flood hazard) as open space. The dedication of open space requires an endowment in perpetuity to maintain the open space as a functioning ecosystem. Edge effects from the project will impact the "open space" introducing urbanizing woes of 18

exotic species introduction, ORV impacts, etc. The CNPS requests that appropriate mitigation for the impacts be addressed. 18

Page 4.6-68 Oaks. It is unclear exactly how many oaks will be impacted and how many will be retained in open space (not landscaped). Of the oaks impacted, what is the mitigation? How many of which species? The mitigation of oaks must not occur in landscaped areas, because oaks die a slow death in areas where artificial water regimes are in place. 19

Page 4.6-68 Developed Areas with Mixed Trees. The first sentence of the second paragraph contradicts itself. The Southern California Walnut is a sensitive species that is known from the site. Therefore, adequate mitigation is required. 20

Page 4.6-70. (a) Special-Status Plant Species. While 3 species are identified as CNPS List 4 species (California Walnut, Palmer's grappling hook and Peirson's morning glory), impacts to these species warrants full disclosure and mitigation under CEQA. Repeated dismissal of mitigation for these species continues their march towards greater range restriction and vulnerability for extinction. Minimization and mitigation will prevent the need for future listings under State or Federal Endangered Species Acts. Therefore, the CNPS requests that these species be addressed and accommodated to minimize impacts to them, and mitigation for any impacts. 21

Page 4.6-71. (a) Special-Status Plant Species. The CNPS supports the salvage and retention of the dead Heritage oaks due to the fact that dead "snags" provide niches for a variety of animals. The natural decomposing processes and organisms need to also be retained. 22

Page 4.6-87 (c). While mulching of native vegetation provides some initial nutrient cycling, the common practice for facilitating regeneration of native plant communities and habitat is appropriate salvage, storage and re-distribution of topsoil. Topsoil salvage not only captures the existing seedbank present on site, but also captures all of the soil microorganisms that are essential in maintaining ecosystem functions. Therefore, the CNPS requests that topsoil salvage in areas of native vegetation, storage and re-distribution be implemented to potentially improve the success of the mitigation. 23

Page 4.6-88 (d). In light of the fact that 98% of southern California's wetlands are extirpated (Bowler 1989), the CNPS finds the 1:1 mitigation for permanent removal of wetlands unacceptable. The impacts to the resource are the same whether or not the mitigation is done before project implementation or after. There fore, the CNPS requests that all impacts to wetlands regardless of their "habitat value" be mitigated at 3:1. 24

Page 4.6-90 (l). While the CNPS support Arundo removal, until the Santa Clara River watershed is systematically treated from the head of the watershed downstream, and when re-introduction is not longer an issue, the notion of removing Arundo to mitigate for mature wetland extirpation is not equitable mitigation. This type of "mitigation" will encourage the net loss of wetlands because the "mitigation" is does not preclude any potential, future re-infestation. In other words, the same Arundo "mitigation" area may be repeatedly used as mitigation for permanent extirpation of wetlands from a variety of projects, as it is re-infested from upstream propagules. As the mitigation proposal itself specifies "Removal areas shall be kept free of exotic plant species for five years after initial treatment" only. 25

(NRMP)?

Page 4.6-99 4.6.5. Where is the opportunity for public comment on the RMMP? The RMMP needs to be included in this EIR as part of the CEQA process. 26

? (NRMP)

Page 4.6-99 4.6.5. The CNPS does not consider additional surveys as mitigation to decrease impacts to sensitive plant species. Additional data on species numbers and location is incumbent upon the project proponent in their evaluation of impacts. Data however is not mitigation. Furthermore, the notion of mitigation of 1:1 impact; re-establishment does nothing to decrease the march of the species toward extinction. Translocation of rare species has a dismal failure record – 98% (CDFG – personal communication 2003). Additional mitigation is required for adequacy of the document. 27

Page 4.6-124 Unavoidable Significant Impacts. While the document clearly states that the impacts to biota are significant and unmitigable, the document does not clearly present how the project avoided these impacts "to the greatest extent practicable" as required by CEQA. The CNPS requests that the project be re-evaluated further for additional ways to reduce impacts to the biological resources. Issues not considered are pulling construction back from the floodplain of the Santa Clara River, off-site mitigation of upland impacts, landscaping with locally native species etc. 28

Thank you for the opportunity to submit these comments. Addressing and incorporating the suggestions presented here will enhance the CEQA document. If you have any questions, please feel free to contact me at (323) 654-5943.

Sincerely,

Ileene Anderson
Southern California Regional Botanist
California Native Plant Society

cc: David Chipping, Conservation Director,. CNPS
CDFG
ACOE

Letter No. 46

page 1

Karen Pearson M.S., M.F.C.C.

Marriage, Family & Child Counselor
Lic. No. MFC 14674
26617 Gavilan, Santa Clarita, CA. 91350 Phone No. (805) 296-4438

4/20/04

To: Planning Commission
City of Santa Clarita
23920 Valencia Blvd.
Santa Clarita, CA 91355

Re. Item # 3 Master Case No 02-175
(and Riverpark Plan in general.

There are many problems with this plan. Certainly transplanting 3 heritage oaks as described in ~~[illegible]~~ the proposal at the back of the room should not be done.

I note that this is a request to have 3 story buildings in area C. When I look at exhibit 22c (area D) I notice that also is showing 3 story buildings and there fore conclude that at some point Needhall Land and Farming will create those buildings to be 3 stories.

I am Very concerned about area D because it lies directly south of my back yard. I also strongly question the line of sight drawing which is exhibit 29 (b) in the booklet entitled Riverpark Innovative Application Compliance Report" dated April 16, 2004. That line of sight does not begin in my backyard which is directly north of Area D. I believe my view shed will be directly affected by this project.

1

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page 2

Karen Pearson M.S., M.F.C.C.

Marriage, Family & Child Counselor
Lic. No. MFC 14674
26617 Gavilan, Santa Clarita, CA. 91350 Phone No. (805) 296-4438

4/20/04 Comments on Item #3 cont.

I invite you all to come and visit my back yard so you can physically get a sense of the impact that this proposal will have on my quality of life. 4

First, it is absolutely unacceptable to shave back or cut down the height of the hill at the end of Gavilan Dr. This hill is part of the ambience of the entire neighborhood. In addition to its aesthetic contribution, it also provides a buffer for the noise and pollution that Newhall Ranch Road will generate. 5 6

Though the city had nothing to do with the planning of Bouquet Center, I believe its negative impact on the neighborhood should be kept in mind when considering this proposal by the same developer. Why allow them to once again, tromp on the quality of life of existing residents. 7

Once that hill was almost all the way to Bouquet Canyon Road. When I looked south I saw a view which was totally mature. Then the hill was cut back to make room for Bouquet Center. When I look in a southwesterly direction now I see the cement back of the northerly building of Bouquet Center. I do not know how tall that building is, but I resent the intrusion into my view shed. They didn't even have the courtesy to plant Cedar Trees around the perimeter of the center

page 3

Karen Pearson M.S., M.F.C.C.

Marriage, Family & Child Counselor
Lic. No. MFC 14674
26617 Gavilan, Santa Clarita, CA. 91350 Phone No. (805) 296-4438

4/20/04
Comment on Item #3 cont.
Farther, I resent that the light on the back of the building is a form of light pollution in the starry nights I love so much.
Worse, The planners of that center chose to place their dumpsters directly adjacent to the fence that divides the center from the neighborhood homes. In addition to the smell the once a week garbage pick up - often between 6:30 & 7:00 am is extraordinarily noisy.
So they cut back the lovely hill I loved so much and gave me all of the above.
Now they are proposing to cut more of the hill down and cut it further back! This would allow more noise pollution from the apartments and from Needham Rand Road. The latter adding to the already poisoned air I breathe. I believe you must hold the line on that hill for to further cut it back or shave it off gives new meaning to the phrase, "adding insult to injury."
Also, getting back to the request to extend the height of the planned apartment buildings not only threatens to destroy my view shed but add greater noise pollution, air pollution and light pollution than I am already subjected to. Please hold the line!
Thank you for your attention to my rights
Karen Pearson

7

8

Letter No. 47

Ken Pulskamp
Planning Commission
Council

RECEIVED
PLANNING DIVISION
JAN 20 2005
PLANNING & ECONOMIC DEVELOPMENT
CITY OF SANTA CLARITA

RECEIVED
JAN 18 2005
CITY COUNCIL
CITY OF SANTA CLARITA

24201 Colwyn Ave.
Newhall, CA 91321
January 13, 2005

City Council
Santa Clarita City Hall
23920 Valencia Blvd.
Santa Clarita, CA 91355

Re: Proposed Riverpark Development

Dear Council Members:

Please do not approve the above project. The river must be given its flood plain. Certainly, the situation at the moment should make that clear. We must do what we can to save our water supply, do what we can to stop the burden of excessive traffic and keep our air (the most polluted in L8s Angeles County) from becoming any dirtier and unsafe to breathe. 1 2 3 4

The citizens of this city are depending on you to represent all of us as well as future generations when you make this decision.

Yours truly,

Adrian and Jane Adams

Adrian and Jane Adams

Letter No. 48

cc: Planning
Ken Pulskamp

Friends of the Santa Clara River

660 Randy Drive, Newbury Park, California 91320-3036 • (805) 498-4323

January 19, 2005

Santa Clarita City Council
City of Santa Clarita
23920 Valencia Boulevard
Santa Clarita, CA 91355-2196

JAN 24 2005
CITY COUNCIL
CITY OF SANTA CLARITA

Re: Riverpark Project

Dear City Council Members,

Friends of the Santa Clara River offers the following comments on the Riverpark Project.

Once again, those of us who have attempted over the years to care for the Santa Clara River are confronted with a large development project which cannot avoid having significant and degrading impacts on the River ecosystem. 1

The unprecedented growth in the Santa Clara watershed over the last few decades has caused an array of cumulative impacts to flora and fauna, not to mention air quality, water quality, aesthetics, traffic and nearly every other category addressed by the California Environmental Quality Act. Continued encroachment by development into the River floodplain and terrace lands has resulted in habitat loss and fragmentation which have been cited by many experts as the major causes for the decline of species and loss of biological diversity (Noss, 1987; Beier and Loe, 1992; Beier et al, 2002; Forman et al, 2003). Further, the continued filling and channelization of the River has altered and is altering the hydrology of the watershed, increasing storm runoff and decreasing water quality (the River is now impaired for ammonia, chloride, coliform, nitrate/nitrite and organic enrichment). These cumulative impacts were not adequately addressed in the subject EIR nor in other EIRs for projects in the Santa Clara watershed. Continuing failure to address and to act on these impacts will, we believe, turn a large section of the River, in and around Santa Clarita, into a biological "dead zone". 2 3 4 5 6 7 8

The Santa Clara River is the largest and one of the last undammed and relatively natural riverine systems remaining in southern California. Considering the southern California region as a whole, the U. S. Fish and Wildlife Service (Faber et al, 1989) has estimated that 95 to 97 percent of riparian communities have been eliminated due to human influences. Damage occurs primarily because (1) the river is channelized by 9 10

10

hardening its banks; (2) riparian and terrace habitats have been lost and fragmented; (3) urban edge effects, including illegal ORV use, degrade riparian biological values; (4) adequate buffer zones protecting the riparian corridor have not been provided; and (5) the function of the river terrace area as wildlife habitat or wildlife corridor is eliminated.

11 12 13 14

We cite two scientific studies in support of our statement that urban development degrades adjacent biological resources. The first (Kelly et al, 1993) is a paper by two University of California Riverside scientists entitled "Buffer Zones for Ecological Reserves in California: Replacing Guesswork with Science". This paper shows that even nature reserves over a mile in width suffer urban edge effects at their centers - and of course the Santa Clara River riparian corridor is much narrower than these reserves and even more susceptible to such effects. The second (Rottenborn, 1999) is a paper by a Stanford University scientist entitled "Predicting the impacts of urbanization on riparian bird communities". This paper shows impacts to bird communities out to a distance of 500 meters, or over 1500 feet, from the urban edge.

15

More studies are definitely needed on the impacts of development on riparian ecosystems. For the Santa Clarita area, development is occurring on 20 miles of the River and tributaries. This is an experiment on a large scale, with the fate of the River ecosystem in the balance. Creating larger buffer zones to conserve more of the riparian community is a must. To quote from the closing sentence in the Stanford paper: "The single most important step that can be taken to conserve riparian communities in the face of urbanization is to minimize development in and along floodplains by maintaining broad buffers of undeveloped land between developed areas and riparian habitats."

16 17 18

The Riverpark project will have impacts bringing into play the City's General Plan policies on Significant Ecological Areas. Policy 5.3 under Goal 5 states "New development must be sensitive to the Significant Ecological Areas through utilization of creative planning techniques to avoid and minimize disturbance of these and other sensitive areas." **Only by creating an adequate buffer zone around Riverpark can this policy be effectively implemented.** We suggest that among the most creative planning techniques which could and should be used here is the development and adoption of a Floodplain/Terrace Avoidance Alternative for Riverpark. The EIR Alternative 2 is a step in that direction but considers only the Q50 floodplain instead of the floodplain and terrace areas which are steadily becoming rarer in the River corridor and which provide high quality habitat for such species as the spadefoot toad and arroyo toad.

19 20

Besides larger buffer areas, establishing the east terminus of the River trail

21

at Santa Clarita Parkway would greatly help in protecting riparian resources. Continuing the trail beyond the Parkway will negatively impact the eastern portion of the project area which has significant biological value. These impacts are related to increased disturbance by humans, off-highway vehicles and domestic animals. 21 22

Thank you for considering these comments.

Sincerely,

Ron Bottorff

Ron Bottorff, Chair

References:

Beier, P. and S. Loe, *A checklist for evaluating impacts to wildlife movement corridors,* Wildlife Society Bulletin 20:434-440, 1992.

Faber et al, *The Ecology of Riparian Habitats of the Southern California Coastal Region*: *A Community Profile*, U.S, Department of Interior Biological Report 85(7-27), September 1989.

Forman. R.T.T. *Land Mosaics: The Ecology of Landscapes and Regions*, Cambridge University Press, 1995.

Kelly, Patrick J. and John T. Rotenberry, *Buffer Zones for Ecological Reserves in California: Replacing Guesswork with Science*, in *Interface Between Ecology and Land Development in California*, Southern California Academy of Sciences, 1993.

Noss, R. F., *Protecting natural areas in fragmented landscapes,* Natural Areas Journal 7:2-13, 1987.

Rottenborn, S.C. *Predicting the impacts of urbanization on riparian bird communities*, Biological Conservation 88 (1999).

Letter No. 49

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: JANUARY 25, 2005 Agenda item number: 11

Agenda Title or Subject to be addressed: RIVERPARK PROJECT

Please check one: ☐ Support Recommendation ☑ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary):

I oppose development of flood plain as described for esthetics & environmental protect, but mostly (Cover) 1

Name: Mary Indermill

Street Address: 26340 IVIZEA PL City: VALENCIA

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: _____ Signature: _____

because the flood plain is vulnerable to floods.

The City of Santa Clarita and its council members could be liable for property loss and loss of life.

1

2

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: JAN 25, 2005 Agenda item number: #11

Agenda Title or Subject to be addressed: RIVERPARK PROJECT

Please check one: ☐ Support Recommendation ☑ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): MINE IS A CONCERN OF OUR QUALITY OF LIFE-ADDI ANOTHER HOUSING DEVELOPMENT (WHEN OVERCROWDING AND TRAFFIC AND POLLUTION IS BECOMING A PROBLEM) IS VERY SHORT-SIGHTED. THE LONG TERM DETRIMENTAL EFFECTS →

1

Name: MARC FLORES

Street Address: 22315 ESPUELLA DR. City: SAUGUS / SCV 91350

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: MYSELF Signature:

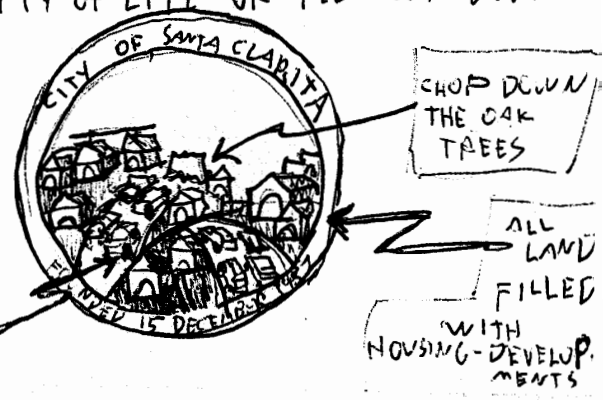
OF RIVERPARK ON OUR QUALITY OF LIFE OUTWEIGH THE QUICK, SHORT-TERM INFLUX OF REVENUE FR. THE DEVELOPERS. SCV HAS ENOUGH PROBLEMS WITH ITS CURRENT POPULATION DENSITY. INCREASING THAT POP. DENSITY BEFORE THE CITY HAS ACHIEVED SOME EQUILIBRIUM WILL JUST COMPLICATE AND INCREASE ITS PROBLEMS

1

2

- IF THE RESIDENTS WERE ALLOWED TO VOTE ON RIVERPARK, ALL THE NOTES AND SPEAKERS THAT SPEAK AGAINST RIVERPARK SHOULD TELL YOU THAT THE DEVELOPMENT IS UNWANTED AND THE PEOPLE WOULD VOTE AGAINST RIVERPARK.
- DO WE WANT TO PRESERVE OUR QUALITY OF LIFE OR FILL OUT EVERY OPEN SPACE WITH DEVELOPMENT?
- IF THIS HAPPENS, IT CHANGES WHAT SCV IS AND WHY IT IS "A GREAT PLACE TO LIFE", SO FAR...
- SHOULD WE REDESIGN THE CITY LOGO TO FIT WHAT IT'S BECOMING?

3



Letter No. 51

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: 1/25/05 Agenda item number: #11

Agenda Title or Subject to be addressed: RIVERPARK

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): RIVERPARK HAS THE potential TO be another La CONCHITA. This Newspaper article says it all. This is sprawl in UNSAFE locations (See newspaper article)

1

Name: John Gonzalez

Street Address: 26604 Gavilan Dr City: Saugus 91350

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: SCOPE – SAVE SCV Signature: John Gonzalez

BAFFLING BABY DEATHS U

Not-so-sweet RETURNS
MONEY & CAREERS

Published in the
Santa Clarita Valley
at 24800 Avenue Rockefeller, Valencia

Daily News
santaclarita.dailynews.com

SANTA CLARI

EDITION

MONDAY, JANUARY 24, 2005

Experts: Go with t

Development near rivers a risky v

By Susan Abram
Staff Writer

SANTA CLARITA — The storm water earlier this month that gathered and gushed through the Santa Clara River created new channels, destroyed riparian habitat and clogged up systems with debris that caused street flooding.

The scene offered a glimpse of how controlling a natural river through development and man-made concrete channels could lead to more destruction, biologists and geologists say.

"The answer to living near rivers is to not live near the rivers," said Frank Hovore, a local independent biologist. "It's when we put bridges across and narrow the span of a river, when we build a house on the edge or in the flood plain ... We choose to live in the path of potential tragedy and then blame nature or an agency. Think about how much the tragedy of these rains could have been prevented."

More than 20 housing developments have been built, proposed or planned along the Santa Clara River, according to a map created by the nonprofit Northern California-based group South Coast Wildlands. The group's mission is to help communities restore waterways to help save riparian areas and wildlife corridors, said the group's executive director, Kristeen Penrod, who constructed the map.

Nature watcher
natural river is cor
washes and channe
up buildings, such
River, water does
tunity to spread c
Instead, it rises
undermining tribu
all in its path.

During the rains
dozens of mobile h

Musicians jamming for tsunami relief

By Carol Rock

proceeds from the day went to Coffee

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SUPER BO
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SPORTS MONDAY

'A

WEATHER

Partly cloudy
Highs: 67-72
Lows: 44-49
Air quality:
Moderate

For details, see back of Money & Careers

DESIGNATED AREAS HIGHER 50¢

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lier this month,
s were destroyed

or heavily damaged, including one double-wide in Sand Canyon that fell into the raging Santa Clara River. Three neighboring homes also were threatened.

"I haven't seen the river in a couple of weeks, but certainly new channels have been cut and some of the riparian habitat has been washed out," said Dwayne Maxwell, senior biologist for the state's Department of Fish and Game. "We've gotten reports from several wildlife protection folks that say some of the

Please see RIVER / Page 4

Cities jointly pitch charms

By Eugene Tong

million from its hotel-occupancy tax and city officials hope for more this year. Marketing alliances of neighboring cities — Oxnard is roughly an hour west

useful in encouraging more and longer visits to both communities, Flippen said.

"By coming together, there's so much more to do," she said.

might spend a night."

The campaign's $70,000 budget is shared by the Santa Clarita Valley Tourism Bureau, the Oxnard Convention and

holds have annual incomes o more than $100,000 each.

Eugene Tong, (661) 257-5253
eugene.tong@dailynews.com

River poses threat

RIVER / From Page 1

aquatic species, such as the turtles that normally resided in tributaries, have been found on the beach."

Maxwell said he is uncertain about the extent of how development in the Santa Clarita Valley has affected the river.

Hovore said runoff and debris from the highways, rooftops and hillside homes caused the waters to produce a scouring affect along the sides of the river, destroying native plants.

But others see the future clearly, saying that officials are allowing people to build on five- and 10-year flood plains, said Amalie J. Orme, professor of geography at California State University, Northridge.

"I saw a lot of those housing areas (in Santa Clarita) underwater in 1978 and eventually it will come back to haunt you," she said. "We have to be more diligent in terms of where we permit development. I'm referring to Santa Clarita and to hillside development."

The Los Angeles Regional Water Quality Control Board has been concerned about planning and developing near riverbanks for more than a year.

On Thursday, the board will vote on a resolution to encourage planning agencies and developers to consider the potential impact on water quality early in the development planning process.

"The regional board strongly discourages direct hydromodification of water courses except in limited circumstances where avoidances or other natural alternatives are not feasible ..." according to the resolution.

"This resolution is an attempt by staff and our board to raise the bar in the development and planning community to say we are really serious," said Jonathan Bishop, executive officer for the water quality control board.

"We are going to be looking to start a process to strengthen our regulations. We've been working on this for a year. The impetus is a concern that as we continue our development in more pristine areas as a result of housing pressure, we are building on the last few natural streams. We don't want to get to the point where we have more Los Angeles Rivers."

Meanwhile, biologists and others say a lesson should be learned as a result of the storms and the subsequent flooding of roads.

"In historical times, this river could go where it wanted to go, but now we want to make it go through a straight line," biologist Hovore said. "Water is not something we should try to channelize and get rid of. It's such a lesson here. Don't develop along the banks of the rivers."

Staff Writer Kerry Cavanaugh contributed to this story.

Susan Abram, (661) 257-5255
susan.abram@dailynews.com

SENIOR CALENDAR

The following events will take place this week at the Santa Clarita Valley Senior Center, 22900 Market St., Newhall. For information, call (661) 259-9444.

MONDAY

Aerobics class, 8:30-9:30 a.m. in the dining room.

Bridge will be played, 9 a.m. in Room A1.

Chair exercise class, 9:45-10:15 a.m. in the dining room.

Senior citizen lunches will be served, 11:30 a.m. in the dining room. Cost: $2.

Computer training for the visually impaired will be offered, 11:30 a.m.-2 p.m. in Room A3.

Canasta will be played, 1-4 p.m. in Room A2.

Country-western line dancing will be taught, 2-3 p.m. Cost: $3.

Oil painting class, 6:30-9:30 p.m. in Room A3.

TUESDAY

T'ai chi ch'uan class, 8:30-9:30 a.m. and 3-4 p.m. in the dining room.

Bridge will be played, 9 a.m. Room A1.

Country-western line dancin will be taught, 9:30-10:30 a.n Cost: $3.

Creative-writing class, opent all ages, 1-2:30 p.m. Cost: $4 pe class.

Santa Clarita Senior Hams wi meet, 1-2 p.m. in Room A2.

Tap dancing will be taught, 2-3 p.m. in the dining room.

Watercolor class, 6:30-9:3(p.m. in Room A3.

Duplicate bridge will be played, 6:45-10 p.m. Call Kathy at (661) 253-1105 or Rand at (661) 295-4644.

Sierra Hillbillies Square Dance Club will offer an intermediate class, 7-9 p.m. in Rooms A1 and 2. Call (661) 252-2210 or (661) 255-0463.

WEDNESDAY

Aerobics class, 8:30-9:30 a.m. in the dining room.

Three-D origami class, 9-11 a.m. in Room A3.

Letter No. 52

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: Jan 25, 2005 Agenda item number: 11

Agenda Title or Subject to be addressed: Riverpark

Please check one: ☐ Support Recommendation ☑ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary):

Who assumes liability for flood insurance
is a flood plain. The Builder or City - also schools. 1

Name: Joseph Robidoux

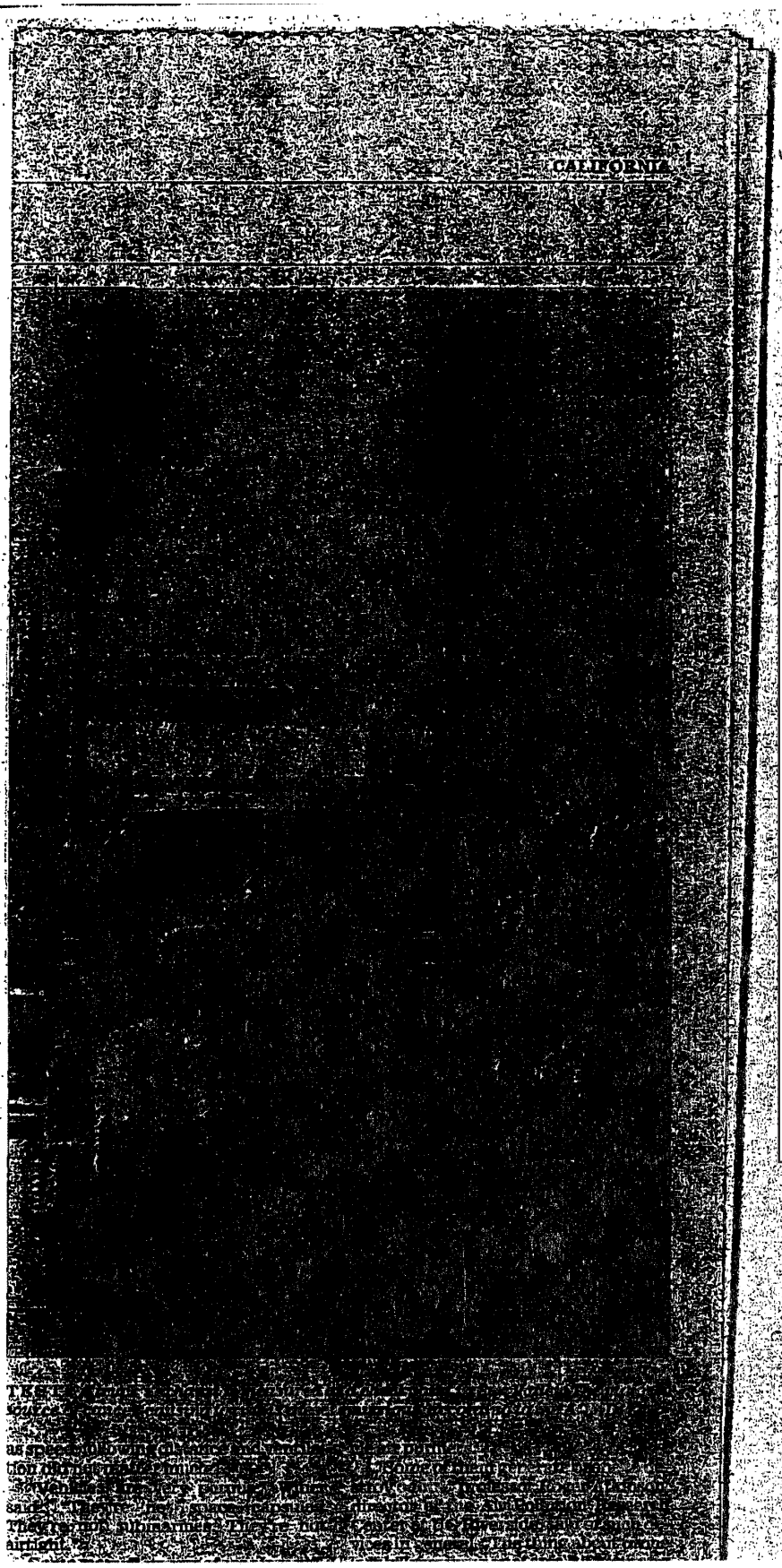
Street Address: 22552 Paraguay Dr City: Saugus

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: Self Signature: Joseph K Robidoux

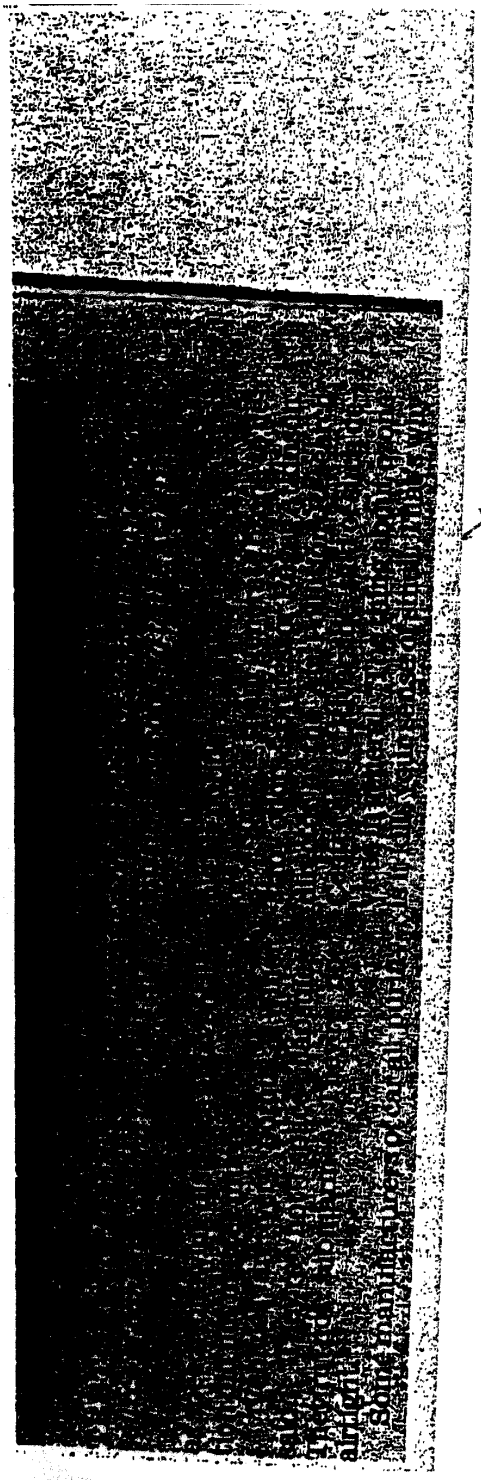
Letter No. 53



RECEIVED AND MADE A PART OF THE RECORD AT 11/25/ MEETING
ITEM NO. 11
FROM: JOHN STEFFEN

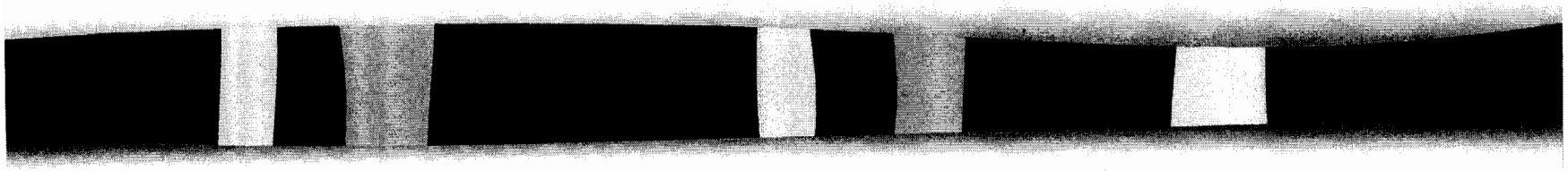
NOTE: THE COMMENTER SUBMITTED COMMENTS ON RED PAPER WHICH DOES NOT COPY WELL AND THE COPY IS CONSEQUENTLY ILLEGIBLE. HOWEVER, TAKING FROM THE ORIGINAL SUBMITTAL THE VERBIAGE ON THE SUBMITTAL READS AS FOLLOWS:

Truck exhaust is measured at a checkpoint in Sun Valley. The major source of cancer causing toxins is diesel emissions according to the AQMD.



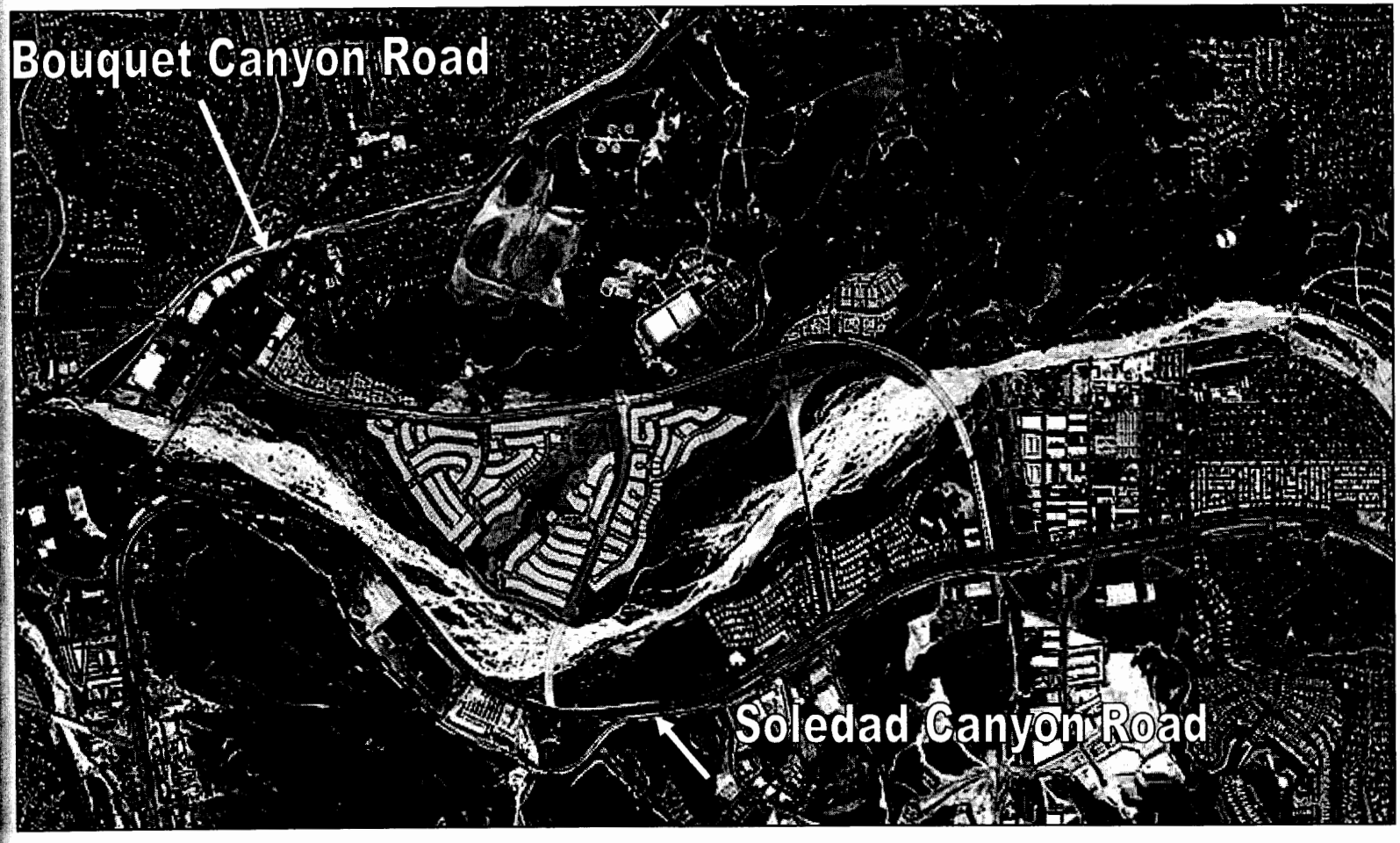
TO Susan
febo
2pages

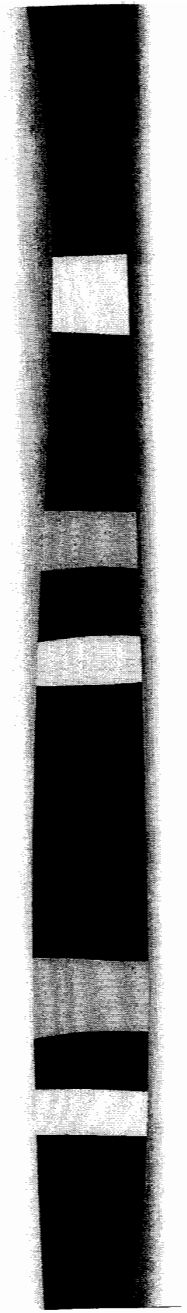
Riverpark
EIR Project



City Council
January 25, 2005

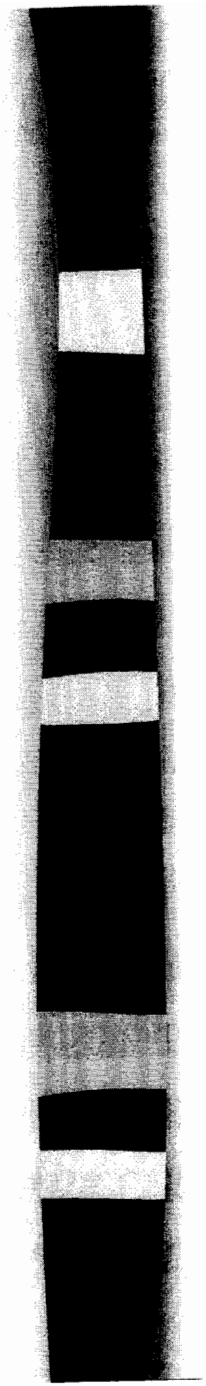
VICINITY MAP





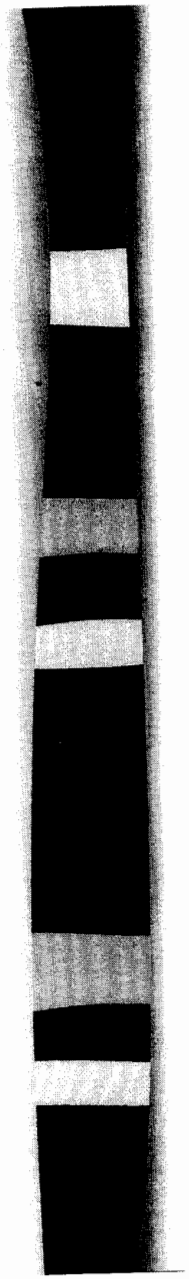
RIVERPARK EIR PROJECT

- **Purpose of tonight's meeting**
  - **Introduction of project**
  - **Open the public hearing**
  - **Provide direction to staff on project related issues**



PROJECT BACKGROUND

- **Riverpark Project**
  - **Application**
    - **Submitted on May 10, 2002**
    - **Requested approval of entitlements on a 695.4 acre site**
      - **General Plan Amendment, Zone Change, Vesting Tentative Tract Map, Conditional Use Permit, Hillside Review Permit, Oak Tree Permit, Adjustment, and an EIR**
    - **Staff processed the project that included several development review committee meetings and 11 Planning Commission meetings that went from February 2004 to December 2004**



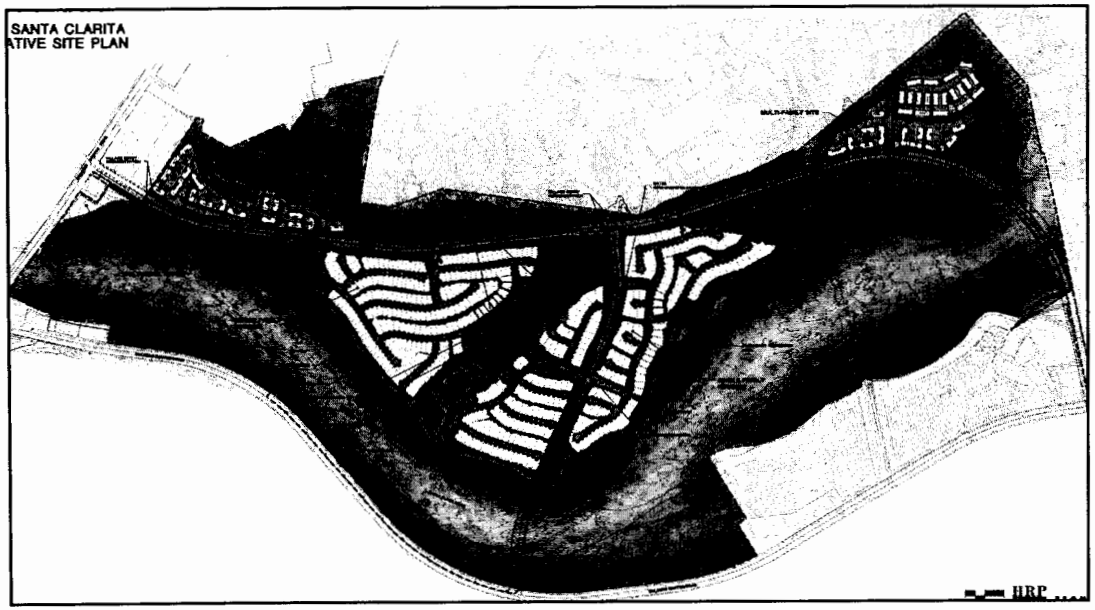
CURRENT PROJECT DESCRIPTION

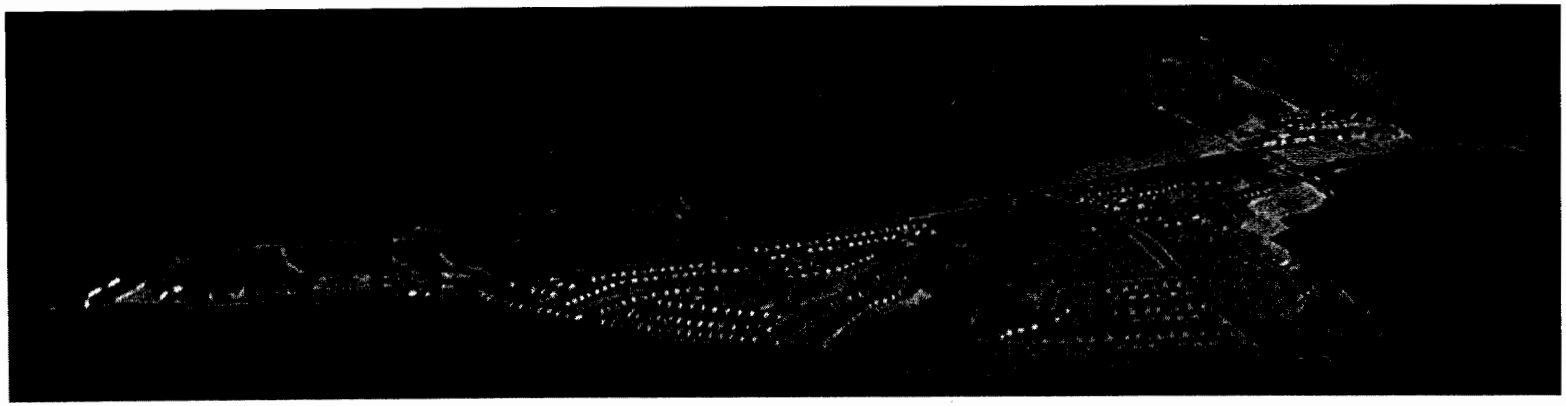
- **Current Project Summary**
  - **Substantial revisions have been made as a result of comments made from the following:**
    - **Public Agencies**
    - **Members of the public**
    - **Planning Commissioners**

■ Current Project Summary Cont.

– Residential/Commercial Component

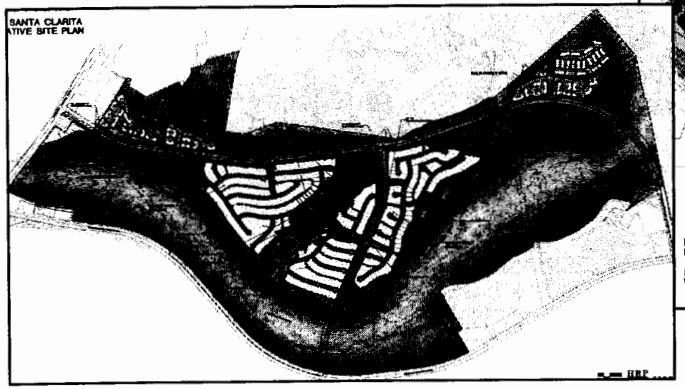
• 1,123 dwelling units/16,000 sq. ft.





Current Project Summary

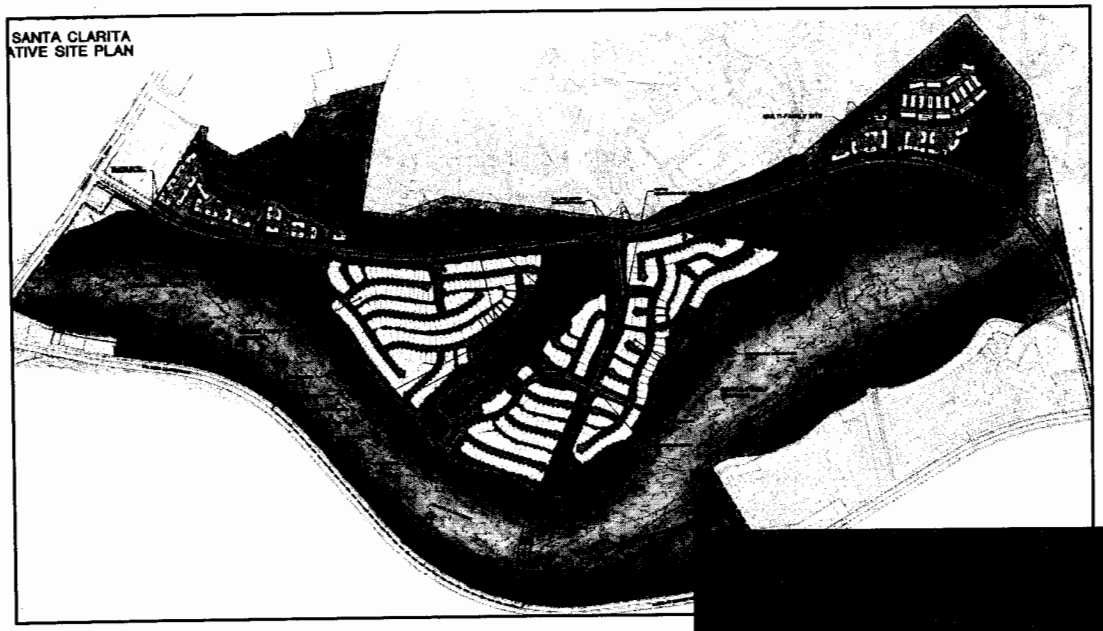
- Recreation/ Park Component
  - 29 acre Public Park (5 active acres)
  - Public Trail System
  - 7 Private Recreational Lots

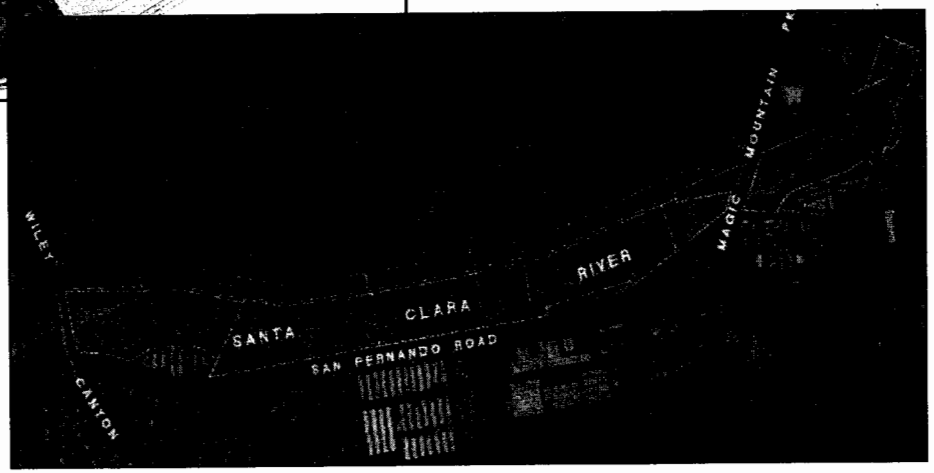


■ Current Project Summary Cont.

– Dedicated Open Space Component

• 350 acres (on-site)/130 acres (off-site)

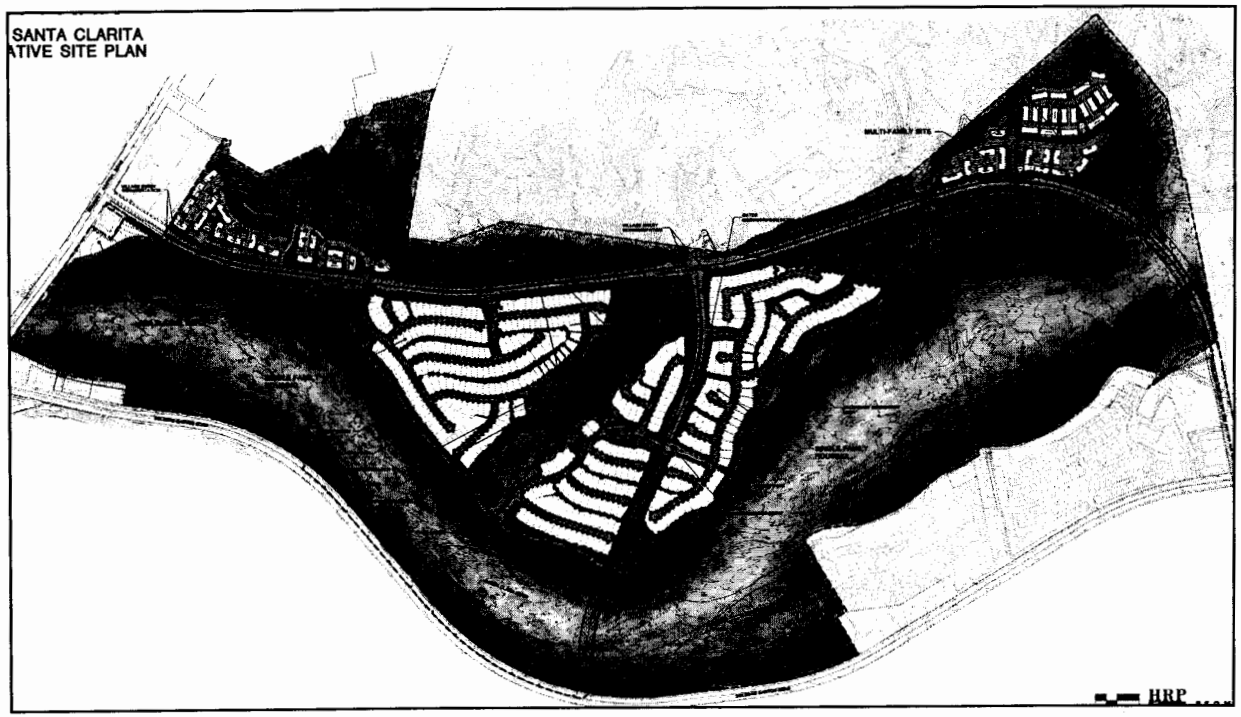




■ Current Project Summary Cont.

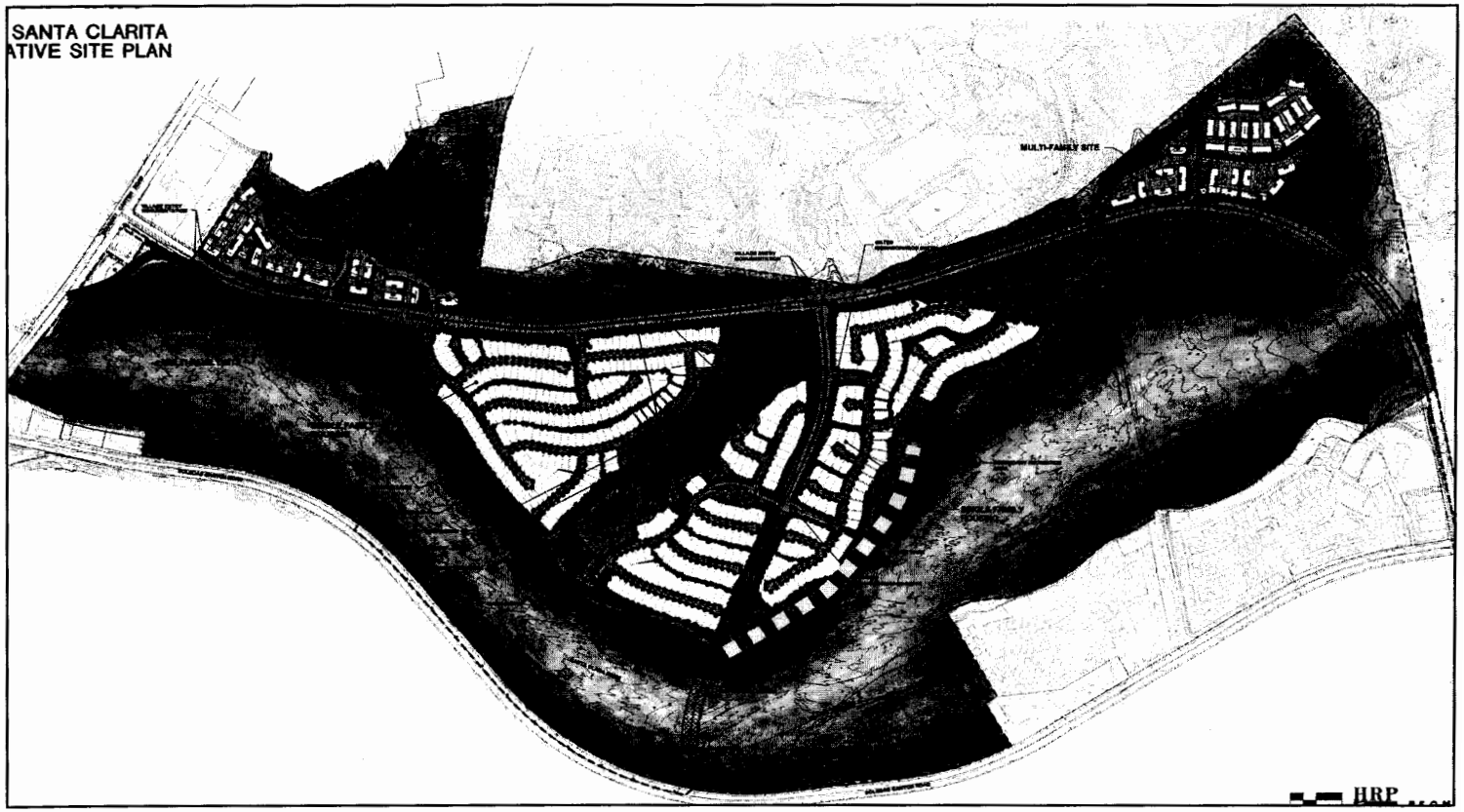
– Infrastructure

- **Newhall Ranch Road (including Newhall Ranch Road/Golden Valley Road Bridge)**



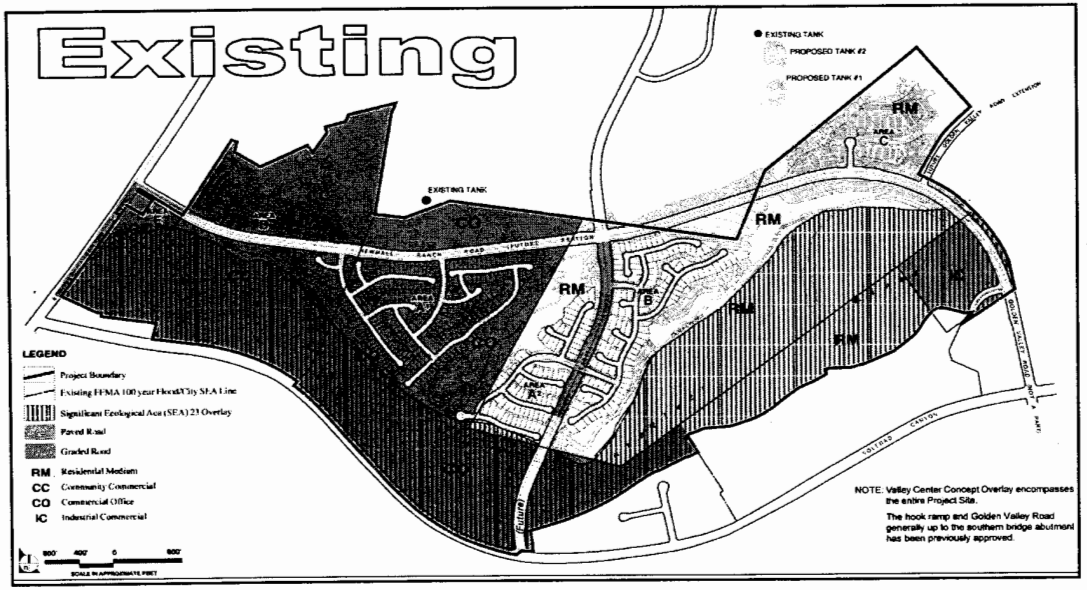
■ Current Project Summary Cont.

- **Bank Stabilization**
  - **Buried Bank Stabilization**
  - **Toe Protection**

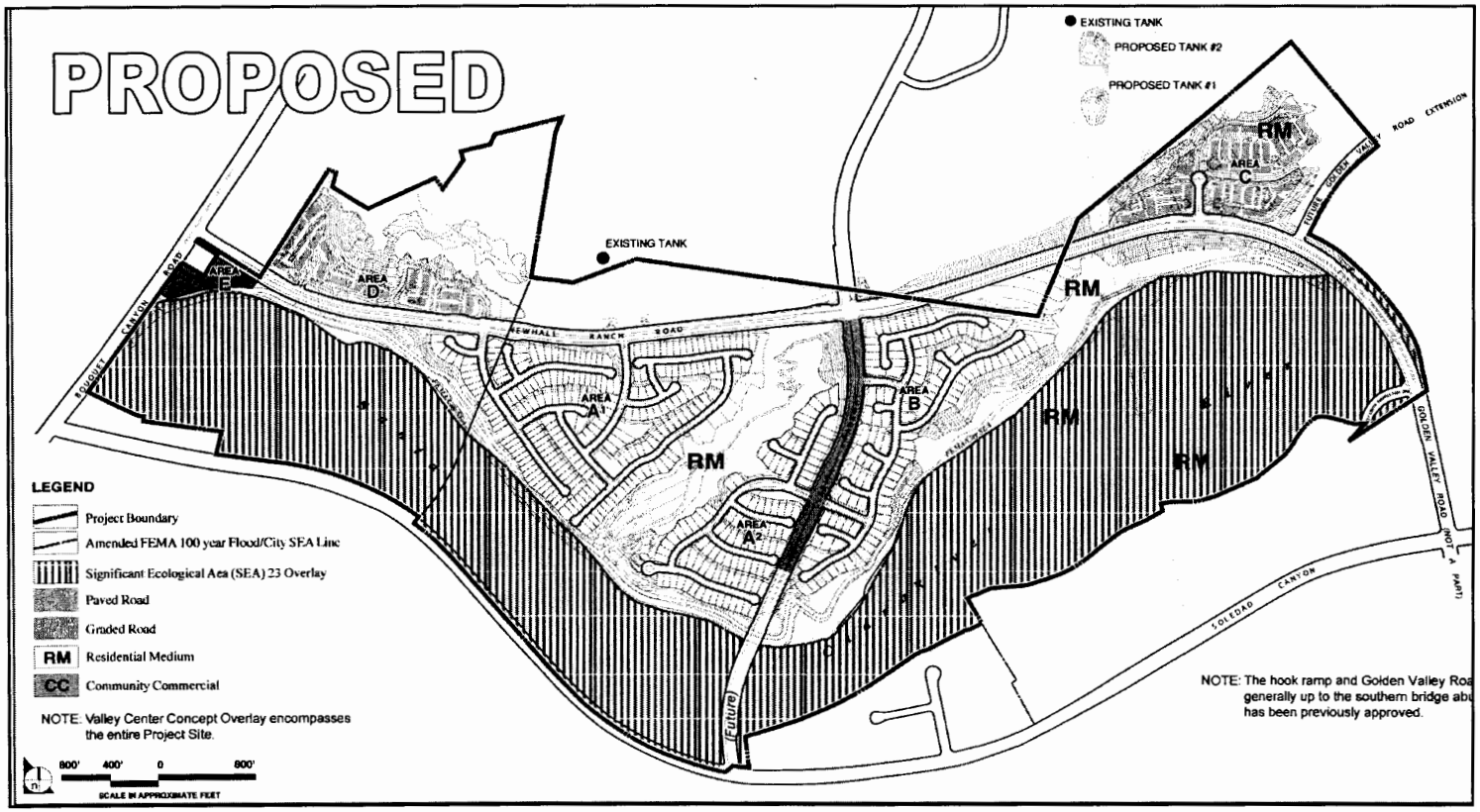


ENTITLEMENT DESCRIPTION

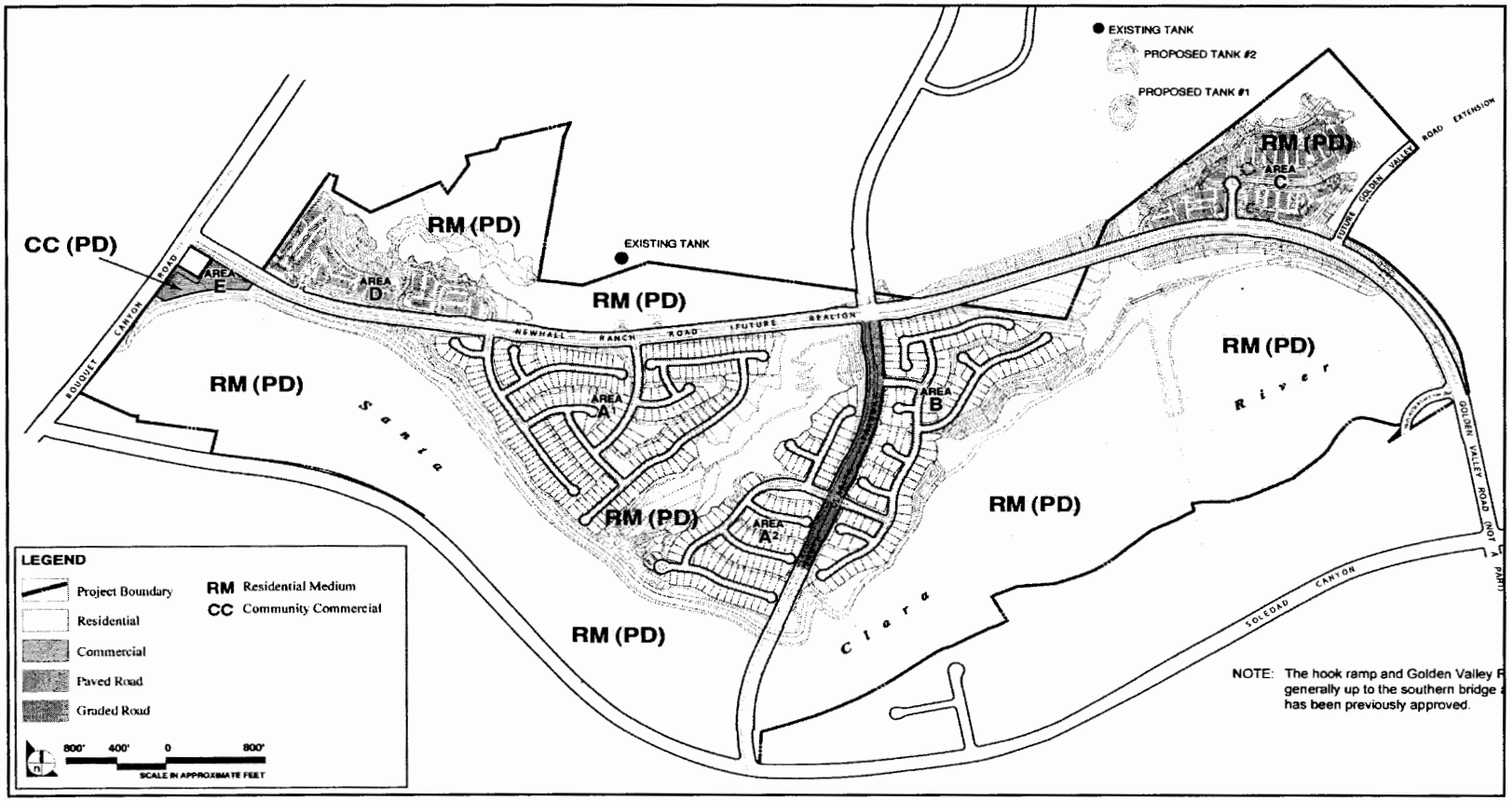
- **General Plan Amendment**
  - **From RM, IC, CC, CO (SEA, VCC), and CC (VCC)**
  - **Current GP allows up to 13,000,000 commercial square feet and up to 15,000 dwelling units**



■ General Plan Amendment
– To RM (SEA), RM (VCC) and CC (VCC)

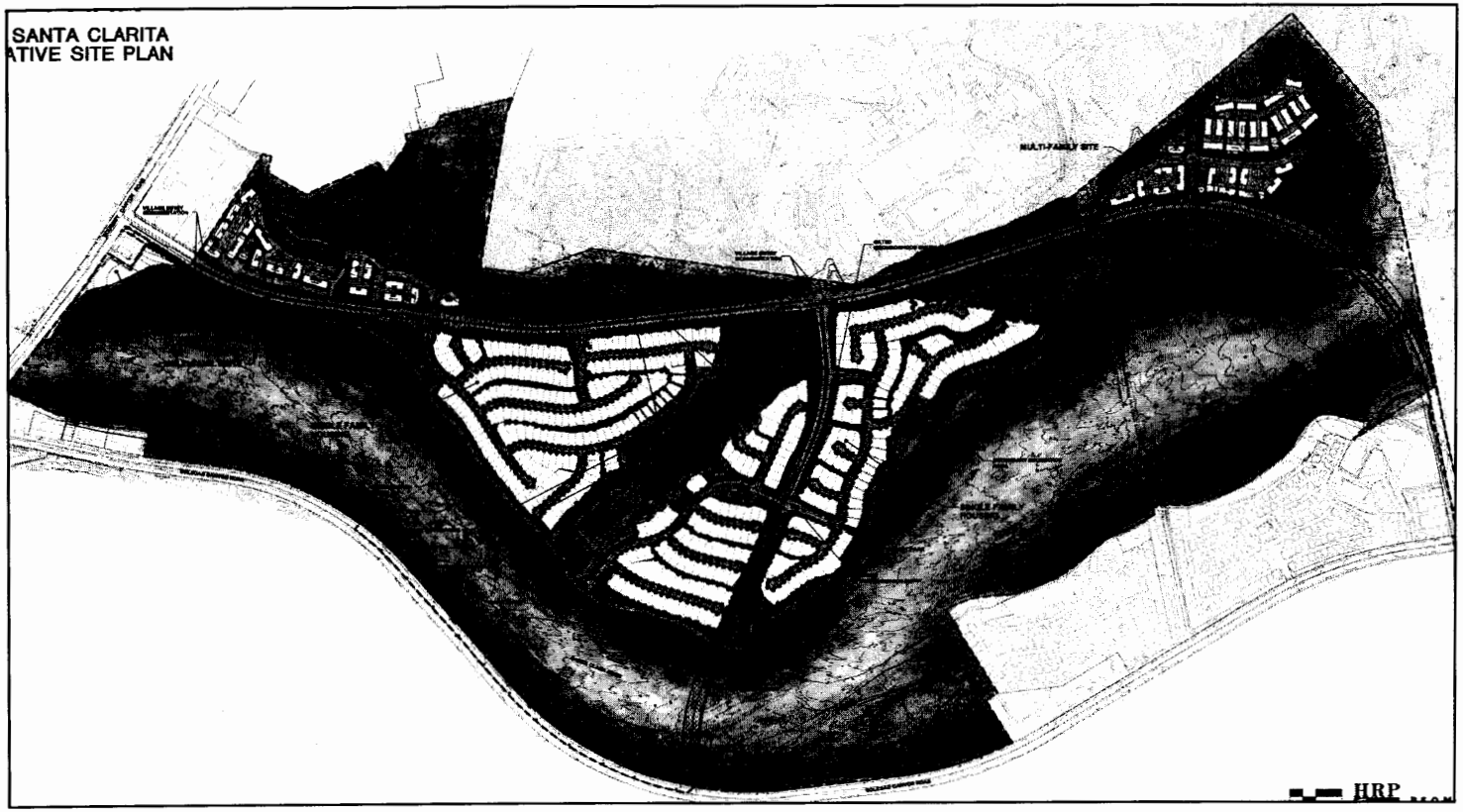


■ Zone Change
– To RM (PD) and CC (PD)

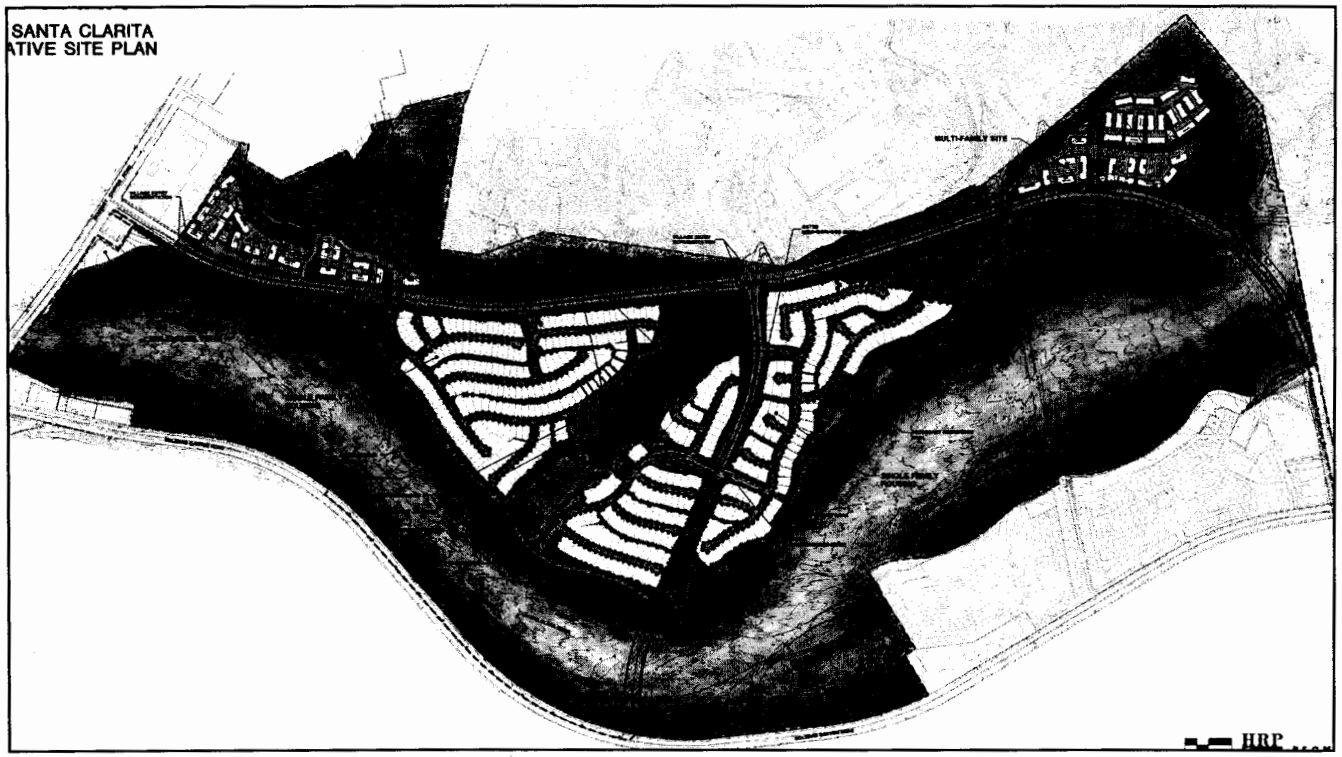


■ Vesting Tentative Tract Map

– Subdivision of the 695.4 acre site

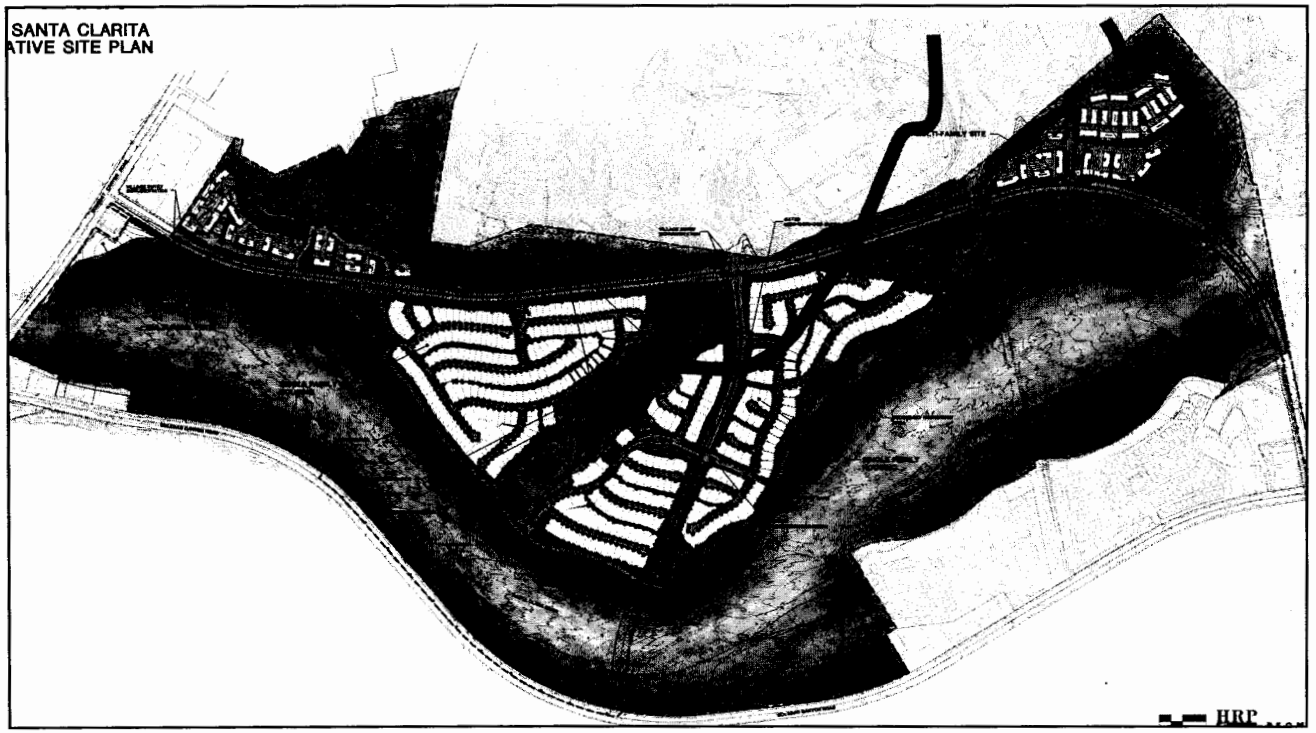


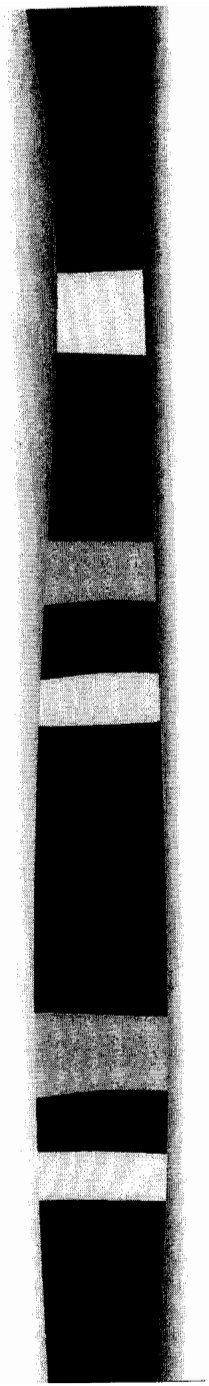
- **Conditional Use Permit**
  - **Planned Development Overlay**
  - **Multi-family buildings exceeding 35' in height**
  - **Hillside Innovative Application**
  - **Vehicular gating for Planning Areas A1, B, &C**



■ Hillside Review Permit

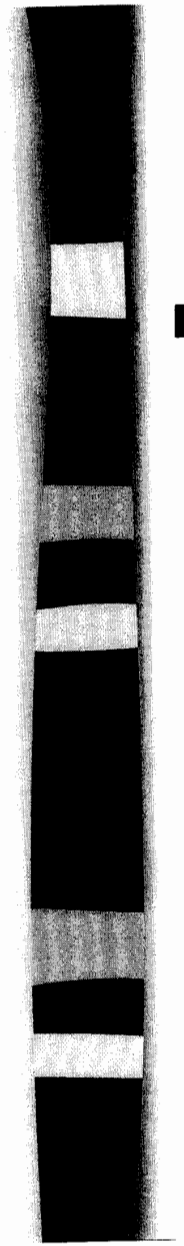
- – Development on slopes greater than 10%
  - • Site includes two secondary ridgelines
- – Innovative Design Request





- **Oak Tree Permit**
  - 16 Removals (87 total oaks on-site)
    - 13 are to be relocated (2 heritage)
    - 3 to be encroached upon
  - Mitigation
    - Dedication of 18.9 acres
    - 56 (24") oak trees (3 to 1 replacement)

- **Adjustment**
  - 20% reduction
    - 16' front yard setbacks with 20' long driveways
    - 7' sound walls along Newhall Ranch Road and Santa Clarita Parkway

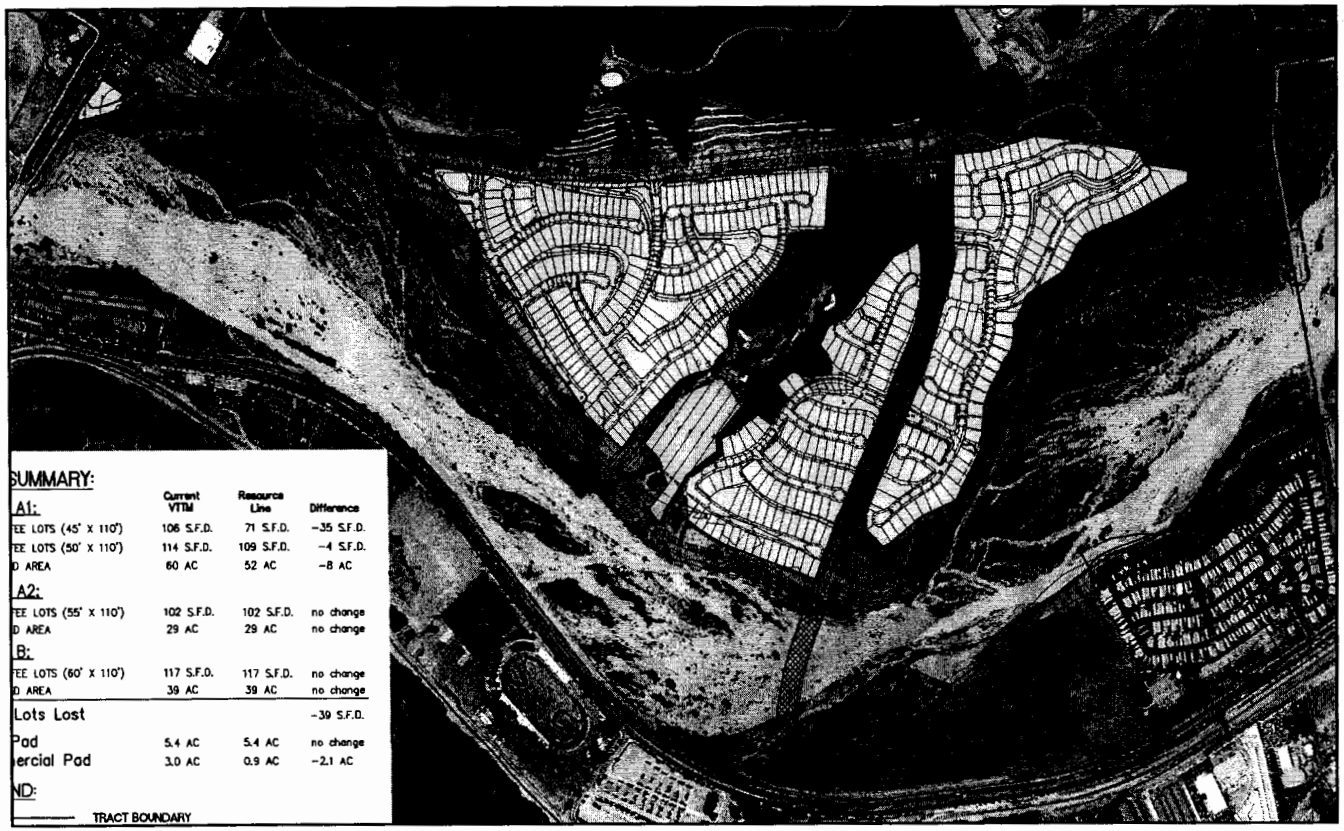


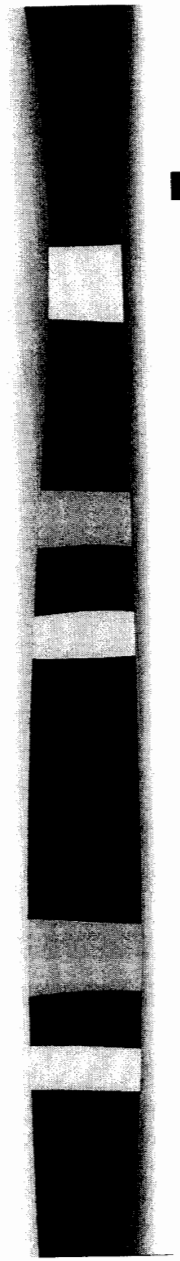
Environmental Impact Report

- **21 Environmental Topics Analyzed**
  - **Included Traffic, Flood, Noise, Education, Water, etc.**
  - **14 environmental topics were mitigated to less than significant**
  - **7 environmental topics were considered unavoidable significant impacts after mitigation**

PC's Recommendation

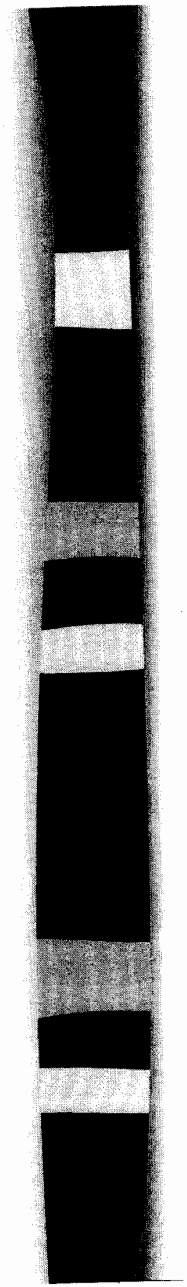
- **Revisions**
  - **Relocation of bank stabilization to preserve mature riparian resources**





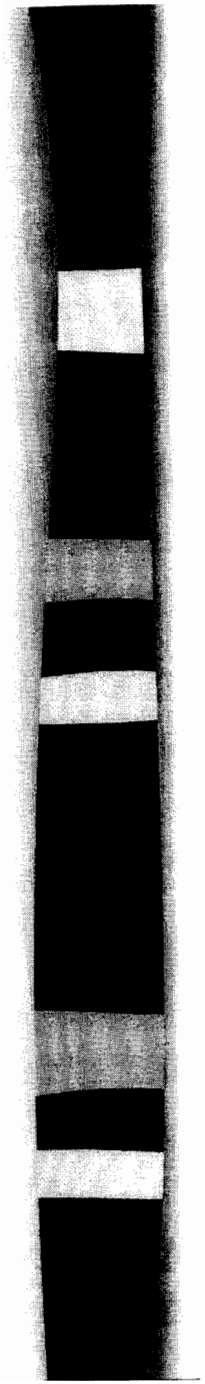
PC's Recommendation

- **Revisions**
  - **Allow vehicular gating**
  - **Reroute equestrian trail away from the River and over the Aqueduct**
  - **Construct Santa Clarita Parkway with 2 lanes until remaining lanes are warranted**
  - **Convert Area C apartments to a for-sale product**
  - **Revised Park Site Plan**
  - **Dedication of open space adjacent to Central Park**
  - **Subject to CLWA approval, construct a temporary trail from northern project boundary to an established dirt trail accessing Central Park**
  - **Redesign of Area D – eliminating grading on the nose of the ridgeline facing the Emblem neighborhood**



PC's Recommendation

- **Revisions cont.**
  - Dedication of 130 off-site acres
  - Enhanced landscaping along Newhall Ranch Road and Santa Clarita Parkway
  - Require applicant to pay for 25% of the cost of a pedestrian bridge over Newhall Ranch Road
  - Installation of two water guzzlers along the River
  - Enhance Pipeline corridor under the Newhall Ranch Road bridge for its potential use for on-site wildlife mobility
  - Final colored elevations and site plans to be approved by PC
  - Require NRR/GVR bridge and abutments to be subject to the CVC Aesthetics' Guideline Book
  - Provision for a decorative wall, landscaping, and use restrictions near the Emblem tract



PC's Recommendation

- **PC found that the project met the innovative findings**
  - **Employs a site design that tailors the development to the site and minimizes impacts to topography, Santa Clara River, and the central canyon on-site**
  - **Substantial benefits include:**
    - **Preservation/dedication of 450 acres of open space on-site**
    - **Dedication of 130 off-site acres**
    - **Extension of two miles of the Class I trail**
    - **Extension of two miles of trails along the Santa Clara River including bridging over the Pipeline**
    - **Dedication and improvement of the site's central canyon as a public park**
    - **Contribution through right-of-way dedication and B & T fees for the Cross Valley Connector**

Letter No. 54

NEWHALL LAND

A LENNAR/LNR COMPANY

March 22, 2005

RECEIVED AND MADE A
PART OF THE RECORD AT
3/22/05 MEETING
ITEM NO. 10
FROM: KAREN PEARSON

Karen Pearson
26617 Gavilan Drive
Santa Clarita, CA 91350

RE: AGREEMENT/ RIVERPARK PROJECT
MASTER CASE No. 02-175

Dear Ms Pearson:

Pursuant to our discussions, Newhall Land agrees to the following and agrees that any future owners shall be bound by the following:

1. Record a restriction on lot 526 of Vesting Tentative Tract Map 53425 (Riverpark) prohibiting grading, building, structures or parking on the lot as shown on the Emblem Exhibit dated 1/18/05 (attached). (This lot is surrounded on its north side and east side by residential fences, its west side by the Bouquet Center wall and its south side by the above proposed slump stone wall and will be preserved as open space. Karen Pearson's lot is adjacent to much of the north side of this lot.)

2. Construct a six foot high slump stone wall with vines and irrigation. Newhall Land will also provide landscaping and irrigation as shown on the attached Emblem exhibit dated 1/18/05 (attached) prior to occupancy of the residential units in Area D. This wall will be solidly attached to the hill such that people cannot pass between the fence and the hill to get from the Riverpark project to the lot described in the previous paragraph. It will also be attached to the fence which is behind the Bouquet Shopping Center such that people cannot pass between the fence and the wall.

3. A standard black wrought iron gate (5 ½ to 6 feet in height) shall be part of the slumpstone wall to allow for brush and debris maintenance, fire crews, landscape

1

THE NEWHALL LAND AND FARMING COMPANY
23823 VALENCIA BOULEVARD, VALENCIA, CALIFORNIA 91355-2194 • PHONE 661.255.4000 FAX 661.255.3960 WWW.NEWHALL.COM

landscape maintenance, or electrical repair access. The gate shall be locked at all time and only opened for the above referenced permitted maintenance activities.

4. Plant twenty 24 inch Box Trees as shown on the Emblem Exhibit dated 1/18/05. Irrigation will be provided to the satisfaction of the Director of Planning and Economic Development Services. The type of trees that shall be planted pursuant to the Exhibit may include but is not limited to a combination of the Scented Cedar, California Pepper Tree, and the African Fern Pine. All tree and shrub species shall be to the satisfaction of the Director of Planning and Economic Development Services.

5. Lot 526 shall be maintained by the Landscape Maintenance District (LMD) created for the Riverpark project and paid for by future Riverpark residents which shall include but not limited to weed and debris abatement. The City of Santa Clarita shall be responsible for the maintenance of the area indicated as being in the Landscape Maintenance District (LMD) . No costs for this LMD shall be levied on the existing property owners of the Emblem Tract.

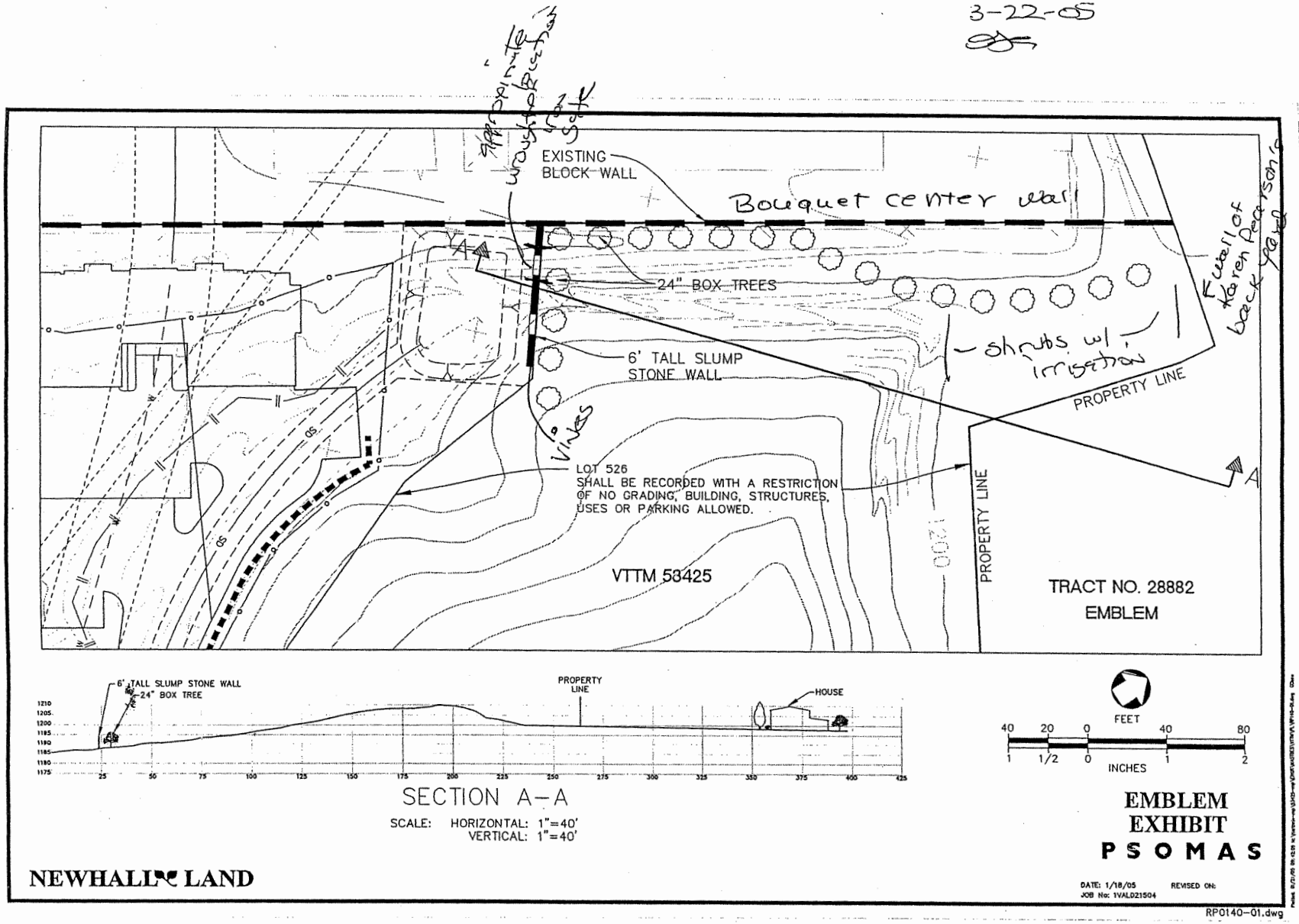
6. The crest of the hill, located within lot 526, which faces Emblem Elementary school and is directly adjacent to the homes along Gavelin Drive shall not be graded, bulldozed or altered and shall remain at its present height as illustrated on Vesting Tentative Tract Map 53425. The western end of nose of the hill shall remain as is as well.

1

As always, feel free to contact me at (661) 255-4003 if you have any questions regarding this letter or the Riverpark project.

Sincerely,

Glenn Adamick
Vice President, Forward Planning and Entitlements


3-22-05
EXISTING BLOCK WALL
Bouquet center wall
24" BOX TREES
6' TALL SLUMP STONE WALL
shrubs w/ irrigation
PROPERTY LINE
LOT 526
SHALL BE RECORDED WITH A RESTRICTION OF NO GRADING, BUILDING, STRUCTURES, USES OR PARKING ALLOWED.
VTTM 53425
PROPERTY LINE
TRACT NO. 28882
EMBLEM
6' TALL SLUMP STONE WALL
24" BOX TREE
PROPERTY LINE
HOUSE
1210
1205
1200
1195
1190
1185
1180
1175
25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 425
SECTION A-A
SCALE: HORIZONTAL: 1"=40'
VERTICAL: 1"=40'
FEET
40 20 0 40 80
1 1/2 0 1 2
INCHES
EMBLEM
EXHIBIT
PSOMAS
NEWHALL LAND
DATE: 1/18/05
JOB No: 1VAL021504
REVISED ON:
RP0140-01.dwg

Letter No. 55

Petition to the Santa Clarita City Council Requesting a Landscape Maintenance District

This is a request that the hill between Emblem residents and the proposed Riverpark Development and that portion of land that belongs to this development and borders the residents on the western side of Gavilan Drive be included in a Landscape Maintenance District or LMD if this proposed development is approved. We further request that this LMD and all of the other agreements made between Newhall Land and Farming and existing residents of the Emblem tract be made part of the conditions of approval. This should provide greater certainty for the aforementioned lot and the maintenance of the hill than what would be provided by a Homeowners Association. We request this, with the understanding that Newhall Land and Farming agrees that the property levies for this LMD will be made to specified residents and owners in the Riverpark Development and none of the levies will be made against existing owners of the Emblem tract and that the LMD will reflect this. We also wish to stipulate that the agreements that have been made to maintain the existing height of the hill and to maintain the property adjacent to the property owners on the western side of Gavilan Drive shall be kept by the LMD.

1

Name	Address	Phone #
Karen Pearson (Print) yes	26617 Gavilan Dr.	296-4438 (if you choose)
Karen Pearson (Signature)	Santa Clarita, CA 91350	
ANITA NOGALES (Print) ✓	26614 GAVILAN DR	297 2496 (if you choose)
Anita Nogales (Signature)	SANTA CLARITA, CA 91350	
Francisco G. Nogales (Print) Signature ✓	26614 Gavilan DR. 91350	297-2496 (if you choose)
FRANCISCO G NOGALES (Signature)	Santa Clarita, 91350	
DORIS H SCHONERT (Print) ✓	26603 GAVILAN DR	296-2660 (if you choose)
Doris H Schonert (Signature)	SANTA CLARITA, CA 91350	
Kenneth G Schonert (Print) ✓	26603 Gavilan Dr	296-2660 (if you choose)
Kenneth G Schonert (Signature)	Santa Clarita CA 91350	

Petition prepared by Karen Pearson, resident of the Emblem tract: 26617 Gavilan Drive, Santa Clarita, CA 91350.
661 296 4438

Gav

Petition to the Santa Clarita City Council Requesting a Landscape Maintenance District

This is a request that the hill between Emblem residents and the proposed Riverpark Development and that portion of land that belongs to this development and borders the residents on the western side of Gavilan Drive be included in a Landscape Maintenance District or LMD if this proposed development is approved. We further request that this LMD and all of the other agreements made between Newhall Land and Farming and existing residents of the Emblem tract be made part of the conditions of approval. This should provide greater certainty for the aforementioned lot and the maintenance of the hill than what would be provided by a Homeowners Association. We request this, with the understanding that Newhall Land and Farming agrees that the property levies for this LMD will be made to specified residents and owners in the Riverpark Development and none of the levies will be made against existing owners of the Emblem tract and that the LMD will reflect this. We also wish to stipulate that the agreements that have been made to maintain the existing height of the hill and to maintain the property adjacent to the property owners on the western side of Gavilan Drive shall be kept by the LMD.

Name	Address	Phone #
HENRY BALSZ (Print)	26620 GAVILAN DR.	297-1981 (if you choose)
Henry Balsz (Signature)	Santa Clarita, CA	
DONA L. BALSZ (Print)	26620 GAVILAN DR	297-1981 (if you choose)
Dona L Balsz (Signature)	Santa Clarita, CA	
(Print)	Santa Clarita CA	661 510 3386 (if you choose)
MICHAELA LAWLER (Signature)		
MICHAEL W. ABERNETHY (Print)	26600 GAVILAN DRIVE	661 297 6380 (if you choose)
(Signature)	SAUGUS CA 91350	
Reynaldo Arroyo (Print)	26607 Gavilan Dr.	(661) 297.7451 (if you choose)
Reynaldo Arroyo (Signature)	Saugus, Ca 91350	

Petition prepared by Karen Pearson, resident of the Emblem tract: 26617 Gavilan Drive, Santa Clarita, CA 91350.
661 296 4438

GaV

Petition to the Santa Clarita City Council Requesting a Landscape Maintenance District

This is a request that the hill between Emblem residents and the proposed Riverpark Development and that portion of land that belongs to this development and borders the residents on the western side of Gavilan Drive be included in a Landscape Maintenance District or LMD if this proposed development is approved. We further request that this LMD and all of the other agreements made between Newhall Land and Farming and existing residents of the Emblem tract be made part of the conditions of approval. This should provide greater certainty for the aforementioned lot and the maintenance of the hill than what would be provided by a Homeowners Association. We request this, with the understanding that Newhall Land and Farming agrees that the property levies for this LMD will be made to specified residents and owners in the Riverpark Development and none of the levies will be made against existing owners of the Emblem tract and that the LMD will reflect this. We also wish to stipulate that the agreements that have been made to maintain the existing height of the hill and to maintain the property adjacent to the property owners on the western side of Gavilan Drive shall be kept by the LMD.

Name	Address	Phone #
ADRIANA ARROYO ✓	26607 GAVILAN DR.	(661)297-74
Print)		(if you choose)
Adriana Arroyo ✓	Saugus, Ca 91350	
ignature)		
SYDELL STOKES	25715 Hogan Dr. B-1	254-6750
Print)		(if you choose)
Sydell Stokes	Santa Clarita, CA 91355	
Signature)		
Print)		(if you choose)
Signature)		
Print)		(if you choose)
Signature)		
Print)		(if you choose)
Signature)		

Petition prepared by Karen Pearson, resident of the Emblem tract: 26617 Gavilan Drive, Santa Clarita, CA 91350.
661 296 4438

Gav

Letter No. 56

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: 3/22/05 Agenda item number: 10

Agenda Title or Subject to be addressed: Riverpark

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary):

We don't need to make my neighborhood into traffic central. I'm not against low density 1100 & flattening the hill is - ungodly + dangerous because of the flood plain

Name: Diana Shaw

Street Address: 21832 Grove Park Dr City: Saugus

1

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: myself Signature: Diana Shaw

Letter No. 57

yes

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: 3/22/05 Agenda item number: 10 (Riverpark)

Agenda Title or Subject to be addressed: RIVER PARK

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): CITY IS PLANNING TOO MANY HOUSES. OVER POPULATION IS NOT HELPING THE COMMUNITY. ALL THE PROBLEMS HAVE BEEN VOICED. PLEASE LISTEN.

Name: John Gonzalez

Street Address: 26604 Gavilan Dr City: Saugus

1

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: SAVESCV.COM Signature: John Gonzalez

Letter No. 58

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: March 22, 2005 Agenda item number: 10

Agenda Title or Subject to be addressed: Riverpark "Development" ← misuse of the word!!

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary):

When will it dawn on you that we are already way over developed? The traffic is horrible, and we are losing our open spaces on a monthly basis. Enough is enough.

Name: Richard Squires

Street Address: 26800 Espuma Dr City: Santa Clarita

1

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: Myself Signature: Richard Squires

Letter No. 59

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: 3/22/05 Agenda item number: 10

Agenda Title or Subject to be addressed: RIVERPARK PROJECT

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): 1100 units behind Vons, and so close to the flood plain, is foolishness. Bouquet Cyn Rd. is overcrowded now. Growth is good—Overbuilding is destructive. 1

Name: Phil Althouse

Street Address: 21832 Grovepark Dr. City: Saugus

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: me Signature: Phil Althouse

Letter No. 60

✓

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: 3-22-05 Agenda item number: 10

Agenda Title or Subject to be addressed: River Park

Please check one: ❑ Support Recommendation ❑ Oppose Recommendation ❑ Neutral

Written Comment (Use other side if necessary): I am concerned about the destruction of the wild life habitat, increased traffic and loss of another of our hillsides. 1

Name: Joyce Evans

Street Address: 25339 Via Pacifica City: Valencia

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: _____ Signature: Mrs. Joyce Evans

Letter No. 61

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: March 22, 2005 Agenda item number: 10

Agenda Title or Subject to be addressed: Riverpark Project

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary):

1

Name: Valerie Johnson

Street Address: 23110 Calvello Dr. City: Valencia

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: _____ Signature: Valerie Johnson

Letter No. 62

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: March 22, 2005 Agenda item number: 10

Agenda Title or Subject to be addressed: Riverpark

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): I would like to see "Riverpark" become parkland/open space with a nature center where field trips by school children could occur. Students already

Name: Mary Herr

Street Address: 27564 Elder View Dr. City: Valencia 91354

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: _____ Signature: Mary A. Herr

1

visit CLWA; this nature center would be a great opportunity for children to learn river ecology. A nature center in the middle of town would make it easier for families to hike + experience nature. Preserving the river should be a high priority — it is beautiful to drive by, bike + walk along and it's free + requires little upkeep. Save the river! Please also make sure that the Newhall/Bouquet intersection doesn't become as bad as the Valencia/Bouquet intersection.

Thank you!

1

2

3

Letter No. 63

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: March 22, 2005 Agenda item number: 10

Agenda Title or Subject to be addressed: Riverpark

Please check one: ❑ Support Recommendation ☒ Oppose Recommendation ❑ Neutral

Written Comment (Use other side if necessary):

Dear City Council: Please reconsider what has been recommended to you. With what LA County is planning to be allowed to be built here plus the air pollution that we (Over) 1

Name: Judith McClure

Street Address: 2911 [illegible] Drive City: Canyon Country

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: ______ Signature: Judith McClure

think will result plus the building in the flood plain that you are allowing, 1000 more homes is simply too many in the very heart of our city. Please rethink this housing project!!! It's just too much!

1

2

Letter No. 64

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: 3-22-05 Agenda item number: 10

Agenda Title or Subject to be addressed: RiverPark

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): I am resident of Emblem Track having Riverpark near us will bring more traffic where it is gridlocked on Bouquet Now morning + night. We do (1)

Name: Louise Hartwell

Street Address: 22570 Los Tigres Dr City: Santa Clarita (2)

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: _____ Signature: _____

not want our hill cut down it does not need to be lowered 2
Also Embden School will be crowed. We have one way
in + one way out. Our roads will not stand up to 3
that much traffic.

Letter No. 65

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: 3-22-05 Agenda item number: 10

Agenda Title or Subject to be addressed: River Park Project

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): I oppose the destructive development known as Riverpark as it is now proposed. Take development out of flood plain. Allow for a wildlife corridor to the River. 1 2

Name: FRANK Ford 3

Street Address: 24603 Cordova Ct City: Valencia

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: _____ Signature: _____

Please listen to the majority of the Actopo Citizens — they don't want sprawl

Letter No. 66

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: 3-22-05 Agenda item number: 10

Agenda Title or Subject to be addressed: _____

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): As far as I can see there are no real creeks or rivers left. Certainly no space left for natural river ecology. When is development over development?

Name: Lacy Bates + Ed Fella

Street Address: 25682 Alvarado City: Valencia

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: _____ Signature: _____

1

Letter No. 67

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: March 22, 2005 Agenda item number: #10

Agenda Title or Subject to be addressed: Riverpark

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): In light of what LA County is intending to allow to be built and in that Newhall wants to build in the flood plain – PLEASE reconsider your decision. 1

Name: Mr. Roger McClure

Street Address: 29111 Lotusgarden Drive City: Canyon Country

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: _____ Signature: [signature]

Letter No. 68

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: 3-22-05 Agenda item number: 10

Agenda Title or Subject to be addressed: River Park Project

Please check one: ☐ Support Recommendation ☐ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): This project will destroy natural habitat & cause unbearable traffic & pollution. At the very least move homes back from flood plain. 1 2

Name: Carol Winkler

Street Address: 26893 Bouquet Canyon, C-341 City: Saugus

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: _____ Signature: _____

Letter No. 69

yes

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: March 22 2005 Agenda item number: 10

Agenda Title or Subject to be addressed: RiverPark Project

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): Comments attached

Friends of the Santa Clara River opposes close of public comment & approval proceedings until our concerns are addressed including buffer zones & floodplain protections

Name: Barbara Wample

Street Address: 28006 San Martinez Grande Cyn Rd City: Castaic

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

Vice Chair I declare that the foregoing is true and correct.

Representing: Friends of the Santa Clara River Signature: Barbara Wample

Friends of the Santa Clara River
660 Randy Drive Newbury Park, California 91320 (805) 498 - 4323

January 19, 2005

RECEIVED AND MADE A
PART OF THE RECORD AT
3/22/05 MEETING
ITEM NO. 10
FROM: BARBARA WAMPOLE

Santa Clarita City Council
City of Santa Clarita
23920 Valencia Boulevard
Santa Clarita, CA 91355-2196

Re: Riverpark Project

Dear City Council Members,

Friends of the Santa Clara River offers the following comments on the Riverpark Project.

Once again, those of us who have attempted over the years to care for the Santa Clara River are confronted with a large development project which cannot avoid having significant and degrading impacts on the River ecosystem.

The unprecedented growth in the Santa Clara watershed over the last few decades has caused an array of cumulative impacts to flora and fauna, not to mention air quality, water quality, aesthetics, traffic and nearly every other category addressed by the California Environmental Quality Act. Continued encroachment by development into the River floodplain and terrace lands has resulted in habitat loss and fragmentation which have been cited by many experts as the major causes for the decline of species and loss of biological diversity (Noss, 1987; Beier and Loe, 1992; Beier et al, 2002; Forman et al, 2003). Further, the continued filling and channelization of the River has altered and is altering the hydrology of the watershed, increasing storm runoff and decreasing water quality (the River is now impaired for ammonia, chloride, coliform, nitrate/nitrite and organic enrichment). These cumulative impacts were not adequately addressed in the subject EIR nor in other EIRs for projects in the Santa Clara watershed. Continuing failure to address and to act on these impacts will, we believe, turn a large section of the River, in and around Santa Clarita, into a biological "dead zone". 1

The Santa Clara River is the largest and one of the last undammed and relatively natural riverine systems remaining in southern California. Considering the southern California region as a whole, the U. S. Fish and Wildlife Service (Faber et al, 1989) has estimated that 95 to 97 percent of riparian communities have been eliminated due to human influences. Damage occurs primarily because (1) the river is channelized by hardening its banks; (2) riparian and terrace habitats have been lost and fragmented; (3) urban edge effects, including illegal ORV use, degrade riparian biological values; (4) adequate buffer zones protecting the riparian corridor have not been provided; and (5) the function of the river terrace area as wildlife habitat or wildlife corridor is eliminated.

We cite two scientific studies in support of our statement that urban development degrades adjacent biological resources. The first (Kelly et al, 1993) is a paper by two University of California Riverside scientists entitled "Buffer Zones for Ecological Reserves in California: Replacing Guesswork with Science". This paper shows that even nature reserves over a mile in

width suffer urban edge effects at their centers - and of course the Santa Clara River riparian corridor is much narrower than these reserves and even more susceptible to such effects. The second (Rottenborn, 1999) is a paper by a Stanford University scientist entitled "Predicting the impacts of urbanization on riparian bird communities". This paper shows impacts to bird communities out to a distance of 500 meters, or over 1500 feet, from the urban edge.

More studies are definitely needed on the impacts of development on riparian ecosystems. For the Santa Clarita area, development is occurring on 20 miles of the River and tributaries. This is an experiment on a large scale, with the fate of the River ecosystem in the balance. Creating larger buffer zones to conserve more of the riparian community is a must. To quote from the closing sentence in the Stanford paper: "The single most important step that can be taken to conserve riparian communities in the face of urbanization is to minimize development in and along floodplains by maintaining broad buffers of undeveloped land between developed areas and riparian habitats."

The Riverpark project will have impacts bringing into play the City's General Plan policies on Significant Ecological Areas. Policy 5.3 under Goal 5 states "New development must be sensitive to the Significant Ecological Areas through utilization of creative planning techniques to avoid and minimize disturbance of these and other sensitive areas." Only by creating an adequate buffer zone around Riverpark can this policy be effectively implemented. We suggest that among the most creative planning techniques which could and should be used here is the development and adoption of a Floodplain/Terrace Avoidance Alternative for Riverpark. The EIR Alternative 2 is a step in that direction but considers only the Q50 floodplain instead of the floodplain and terrace areas which are steadily becoming rarer in the River corridor and which provide high quality habitat for such species as the spadefoot toad and arroyo toad.

1

Besides larger buffer areas, establishing the east terminus of the River trail at Santa Clarita Parkway would greatly help in protecting riparian resources. Continuing the trail beyond the Parkway will negatively impact the eastern portion of the project area which has significant biological value. These impacts are related to increased disturbance by humans, off-highway vehicles and domestic animals.

Thank you for considering these comments.

Sincerely,

Barbara Wample for Ron Bottorff

Ron Bottorff, Chair Vice chair

References:

Beier, P. and S. Loe, A checklist for evaluating impacts to wildlife movement corridors, Wildlife Society Bulletin 20:434-440, 1992.

Faber et al, The Ecology of Riparian Habitats of the Southern California Coastal Region: A Community Profile, U.S, Department of Interior Biological Report 85(7-27), September 1989.

Forman. R.T.T. Land Mosaics: The Ecology of Landscapes and Regions, Cambridge University Press, 1995.

Kelly, Patrick J. and John T. Rotenberry, Buffer Zones for Ecological Reserves in California: Replacing Guesswork with Science, in Interface Between Ecology and Land Development in California, Southern California Academy of Sciences, 1993.

Noss, R. F., Protecting natural areas in fragmented landscapes, Natural Areas Journal 7:2-13, 1987.

Rottenborn, S.C. Predicting the impacts of urbanization on riparian bird communities, Biological Conservation 88 (1999).

Letter No. 70

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: MARCH 22, 2005 Agenda item number: 10

Agenda Title or Subject to be addressed: RIVERPARK DEVELOPMENT

Please check one: ☐ Support Recommendation ☑ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): DESPITE THE "QUICK CASH" AND REVENUE (SHORT TERM) THAT RIVERPARK WILL BRING. IT WILL BE AT THE LONG TERM EXPENSE OF A DECREASE IN THE QUALITY OF LIVING THAT WILL IMPACT NOT ONLY THE IMMEDIATE NEIGHBORHOODS BUT ALL THE WAY DOWN →

1

Name: MARC FLORES

Street Address: 22315 ESPUELLA DR. City: SAUGUS SCV

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: SELF Signature:

BOUQUET CYN. AND THE REST OF THE SCV. THINGS ARE GREAT NOW AND LIVING IN SCV IS STILL GREAT BUT IT IS HARD TO IGNORE THE FACT THAT IT IS BECOMING MORE CROWDED AND MORE AND MORE UNPLEASANT THE MORE HOUSING DEVELOPMENTS (INCL. RIVERPARK) ARE BUILT. THE RESIDENTIAL/COMMERCIAL/LIFE QUALITY EQUILIBRIUM IS IN DANGER OF BEING FURTHER DISRUPTED BY THE RIVERPARK DEVELOPMENT. PLEASE DENY AND TURN DOWN RIVERPARK, ALL OF IT. 2

ALSO, EVEN THOUGH ADDING MORE RESIDENTS INCREASES THE TAX BASE AND REVENUE, THE EXPENSE AND BEAURACRACY NEEDED TO SUPPORT THE INCREASED POPULATION ~~CANCELS~~ CANCELS A TAX REVENUE INCREASE.

Letter No. 71

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: 3-22-2005 Agenda item number: 10

Agenda Title or Subject to be addressed: RIVER PARK

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): ENOUGH IS ENOUGH
TRY JUST SAYING NO.
GOD WILL THANK YOU.

1

Name: BRUCE MCFARLAND

Street Address: 24307 MAGIC MTN PKWY City: VALENCIA

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: SELF Signature:

Letter No. 72

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: 3-22-05 Agenda item number: 10

Agenda Title or Subject to be addressed: Riverpark project

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary):

1

Name: KEN Johnson

Street Address: 23110 Calvello Dr. City: Valencia

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: _____ Signature: Ken Johnson

Letter No. 73

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: 3/22/05 Agenda item number: 10

Agenda Title or Subject to be addressed: RIVER PARK & RIVER PARKING LOT

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary):

SINCE MOVING INTO THE SANTA CLARITA VALLEY JUST OVER A YEAR AGO, I HAVE SEEN THIS AREA BEGIN TO DECLINE IN QUALITY BECAUSE OF OVERBUILDING, INCREASED DENSITY AND POLLUTION. 1

Name: JULIAN KRAININ

Street Address: 25211 SUMMERHILL LANE City: STEVENSON RANCH

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: MYSELF Signature: Julian Krainin

Letter No. 74

City of Santa Clarita - Request to Register Written Comments

Please complete the following information to register your written comments to the City Council, in lieu of speaking orally. Your comments will be considered part of the official proceedings. **(Please print)**

Meeting date: March 22, 2005 Agenda item number: 10

Agenda Title or Subject to be addressed: Riverpark

Please check one: ☐ Support Recommendation ☒ Oppose Recommendation ☐ Neutral

Written Comment (Use other side if necessary): As a local teacher and 25 year resident, I can't believe you are even considering putting this "development" in the heart of our →

1

Name: Katherine Squires

Street Address: 26800 Espuma Dr. City: Saugus

Council requires that persons registering written comments who represent other individuals, groups or organizations disclose that relationship.

I declare that the foregoing is true and correct.

Representing: N/A Signature: Katherine Squires

community. Traffic will be worse & schools will be overcrowded.

1

TOPICAL RESPONSE 1: GROUNDWATER SUPPLIES AND "OVERDRAFT" CLAIMS

Comments have stated that the groundwater supplies referenced in the Draft EIR exceed the "safe yields" of the Alluvial aquifer and the Saugus Formation and that water levels are decreasing, resulting in an "overdraft" condition. Associated with these comments is the stated concern that by relying on an "overdrafted" groundwater basin, the water purveyors in the Santa Clarita Valley have "overstated" available groundwater supplies.

Based on these comments, the City conducted additional consultation with Castaic Lake Water Agency (CLWA), the wholesale water agency for Santa Clarita Valley, and the Santa Clarita Water Division of CLWA, the retail water purveyor designated to serve the Riverpark site. As confirmed by the Draft EIR, and updated plans, studies and reports prepared by qualified experts, which are listed below under the heading, **Local Groundwater Supplies**, there is no evidence of any historic or recent trend toward permanent water level or storage decline in the basin. Consequently, there has been no overdraft of either aquifer system. Based on the entire record, therefore, the City has determined that the Riverpark project can appropriately rely on the groundwater supplies identified in both the EIR and the SB 610 Water Supply Assessment and that projected groundwater supplies, in conjunction with other supply sources, are sufficient to satisfy the water demand of the Riverpark project, in addition to existing and planned future water uses in the Santa Clarita Valley.

1. LOCAL GROUNDWATER SUPPLIES

The Draft EIR analyzed local groundwater supplies, and that analysis was based on, among other studies

(a) A technical memorandum (Slade Memorandum) prepared by Richard C. Slade & Associates (Slade), dated November 16, 2000, which is located in **Appendix A**;[1]

[1] Richard C. Slade has conducted extensive assessments of the hydrogeological characteristics, conditions and capabilities of the Santa Clarita Valley's Alluvial and Saugus aquifers. Mr. Slade holds a Bachelors degree in geology from the University of California, Los Angeles and a Masters in Science degree in engineering geology from the University of Southern California. Mr. Slade is also a registered geologist in California, Arizona and Idaho, a certified engineering geologist in California, and a registered professional hydrogeologist with the American Institute of Hydrogeology. Mr. Slade has worked fulltime in the groundwater field in both the public and private sector since 1967.

(b) Letter (Scalmanini Letter) from Joseph C. Scalmanini, Luhdorff & Scalmanini Consulting Engineers (Scalmanini), dated December 15, 2000, which is located in **Appendix A**;[2]

(c) An updated report prepared by Slade entitled, *2001 Update Report Hydrogeologic Conditions in the Alluvial and Saugus Formation Aquifer Systems*, dated July 2002 (*2001 Update Report*) (See **Appendix A** to the Final EIR);

(d) *2002 Santa Clarita Valley Water Report*, dated April 2003 (referred to as *2002 Water Report* and found in **Appendix A** to the Final EIR);

(e) *2003 Santa Clarita Valley Water Report*, dated May 2004 (referred to as the *2003 Water Report* and found in **Appendix A** to the Final EIR).

(f) SB 610 Water Supply Assessment prepared for the project (See Appendix 4.8 of the Draft EIR), including correspondence from the Santa Clarita Water Division of CLWA confirming its SB 610 analysis for the Riverpark project and clarifying the water demand factors used within its service area, and the letter from CLWA, dated October 13, 2004, regarding the status of the 2000 UWMP. All of this correspondence is included in **Appendix A** to the Final EIR.

Based on these studies, and the operating experience of the Santa Clarita Valley water purveyors, the Draft EIR concludes that the Alluvial aquifer and the Saugus Formation are operating within sustainable yields and, as such, those yields are not overstated and will not deplete or "dry-up" or "overdraft" the groundwater basin (See Riverpark Draft EIR, Section 4.8, pp. 4.8-3437 [Alluvial aquifer], pp. 4.8-39–42 [Saugus Formation]). The same conclusion was reached in litigation before the California Public Utilities Commission, Regarding Valencia Water Company, Decision 01-11-048, November 29, 2001 (See **Appendix A** to the Final EIR).[3]

a. Alluvial Aquifer

The information presented in the Draft EIR is supported by the Slade Memorandum.[4] In that technical memorandum, Slade analyzed the groundwater production and operational yield of the Alluvial

---

2 Joseph C. Scalmanini is a partner with the firm of Luhdorff & Scalmanini, Consulting Engineers. Scalmanini's responsibilities for his firm include oversight and direction of the firm's work with respect to the investigation, development and management of groundwater and water resources throughout California. Mr. Scalmanini holds a Bachelor of Science degree in Mechanical Engineering from Santa Clara University (1967), and a Master of Civil Engineering degree, with a focus in groundwater hydrology and water resources engineering from the University of California, Davis (1984).

3 While neither Riverpark nor the Santa Clarita Water Division were parties to the litigation, the litigation is pertinent because both the Santa Clarita Water Division and Valencia Water Company (defendant in the litigation) draw from the same groundwater resources. In addition, several of the plaintiff/protestants in the litigation, including Friends of the Santa Clara River, Santa Clarita Organization for Planning the Environment, and the Sierra Club, were parties to the litigation and have commented on the same issues in the Riverpark Draft EIR as done in the CPUC litigation.

4 The Slade Memorandum was a technical study that was prepared for the 2000 UWMP. Apart from the 2000 UWMP, the Slade Memorandum is used as support for the groundwater supplies reported in the Draft EIR for the Riverpark project (See Section 4.8, Water Service, in the Draft EIR).

aquifer, and found no evidence of overdrafting of the aquifer system. Specifically, Slade concluded that

> "a. Alluvial water levels have repeatedly recovered over time following droughts of various durations (including the very long-term drought of approximately 1945 through 1966), and there is no evidence for permanent overdraft or dewatering of this aquifer system.
>
> b. Even with groundwater production at or above 40,000 AF/yr (such as 1951, 1955, 1960 and 1964), all of which occurred during the very long-term drought of 1945 through 1966), groundwater levels in alluvial wells have recovered regardless of the timing (date) of this amount of production relative to the accumulated rainfall departure curve.
>
> c. As a result of the above, it is considered to be hydrogeologically feasible to utilize groundwater extractions from the alluvial aquifer system at the rate of 30,000 AF/yr to 40,000 AF/yr in normal (average) rainfall conditions. During dry periods, alluvial aquifer production should be reduced to the range of 30,000 AF/yr to 35,000 AF/yr." (See Slade Memorandum, dated November 16, 2000, and located in **Appendix A**.)

In addition, Scalmanini was asked to review and comment on the work performed by Slade in his technical memorandum. Based on that review, Scalmanini found that the Alluvial aquifer was operating within its yield and would not result in overdraft or depletion of groundwater resources if pumped at the levels identified in the Slade Memorandum. Specifically, Scalmanini referenced the Santa Clarita Valley groundwater supply projections for the two aquifer systems. For the Alluvial aquifer, the groundwater supply projections were 30,000 to 40,000 AFY in average/normal years, and 30,000 to 35,000 AFY in dry years. For the Saugus Formation, they were 7,500 to 15,000 AFY in average/normal years, and 21,000 to 35,000 AFY in dry years. Scalmanini then determined that these groundwater supply projections will not result in any obvious overdraft or depletion of groundwater resources in the Santa Clarita Valley. Specifically, Scalmanini found that

> "[b]ased on a combination of historical operating experience with the Alluvium and a general assessment of pumping and recharge in the Saugus Formation, we would expect that those ranges of pumping will likely be within the perennial yields of the two aquifer systems, and will not result in any obvious overdraft or depletion of ground-water resources in the area.
>
> The Alluvial aquifer system is the easier of the two to address since it has historically (over the last 50 years) been pumped in numerous years and for extended periods in the ranges cited in the UWMP without undesirable results, i.e., without any evidence of overdraft. In other words, the Alluvium has been managed within its perennial yield, while pumping in the broad range of nearly 20,000 AFY to more than 42,000 AFY. Although there have been seasonal and longer term intermittent lowering of ground-water levels in response to both variations in pumping and variations in precipitation (and associated recharge), the long-term trend in Alluvial ground-water levels has been stable, with no persistent trend toward lower water levels and associated

> depletion of ground-water storage. While the cited ranges for Alluvial pumpage in various year-types suggest that, overall, the average extraction will be greater than the perennial yield reported by Slade in 1986, recent high Alluvial pumping and sustained high ground-water levels suggest that an updated perennial yield analysis would result in a higher value of perennial yield than that reported by Slade nearly 15 years ago. Ultimately, however, the exact number is not as important as operating in a range of production that does not cause undesirable results such as chronic ground-water level decline; the ranges cited in the UWMP would certainly fit that criterion. In any case, in light of the range of historical pumping from the Alluvium and the lack of any chronic ground-water level depression as a result of that pumping, it appears sound to plan on long-term ground-water supplies from the Alluvium in the general ranges of pumping included in the UWMP, which are consistent with what has been successfully practiced over the last 50 years." (See Scalmanini Letter, dated December 15, 2000, p. 2.)

Since preparing the Slade Memorandum, Slade completed his *2001 Update Report* (See **Appendix A**), which further evaluated the hydrogeologic conditions in both the Alluvial aquifer and the Saugus Formation.[5] In that report, Slade updated the alluvial groundwater production and operational yield, and specifically responded to "overdraft" claims. Specifically, as discussed by Slade below, the annual groundwater production from the Alluvial aquifer for at least the past 10 years has been averaging above the "practical or perennial yield" of 31,600 to 32,600 acre-feet per year, which was calculated by Slade in his prior report in 1986; and, this increase in average production has occurred without any undesirable conditions such as lowered water levels that might be indicative of "overdraft:"

> "C. Groundwater Production and Operational Yield
>
> Since the mid-1940s, annual groundwater production from the alluvium has ranged from a low of approximately 20,000 acre-feet per year (AF/yr) in 1983, to a high of at least 44,000 AF/yr in 1955. The historically largest alluvial extractions occurred between 1951 and 1960, and between 1991 and 2000 (both are 10-year periods, during which the average annual pumpage was approximately 37,000 AF/yr and 35,000 AF/yr, respectively.
>
> The annual groundwater production from the alluvial aquifer over the last ten years has averaged approximately 35,000 AF/yr, about 10 percent higher then the 'practical or perennial yield' of 31,600 to 32,600 AF/yr calculated in the Slade 1986 Report. However, this increase in average production has occurred without any onset of undesirable conditions such as lowered water levels that might be indicative of overdraft. The primary reason that the alluvial aquifer has been able to supply groundwater in volumes that are well in excess of its previously estimated perennial yield for the past ten years is that imports of SWP water into the Valley have risen from approximately 1,100 AF/yr in 1980 to over 32,000 AF/yr in 2000. Much of this additional water is returned to the alluvial aquifer in the form of discharge from the two WRPs located along the Santa Clara River." (See **Appendix A** to the Final EIR [*2001 Update Report*, July 2002, p. iv].)

---

5 A complete copy of the Slade *2001 Update Report* is provided as **Appendix A** to this Final EIR.

As stated above, Slade identified the primary "reason" that the Alluvial aquifer has been able to supply groundwater in volumes that exceeded his 1986 prior estimate of the Alluvial's "perennial yield." The identified reason is the annual importation of State Water Project (SWP) water supplies into the Santa Clarita Valley since 1980.

The importance of introducing annual SWP water supplies into the Santa Clarita Valley since 1980 was the subject of a technical memorandum, prepared by CH2MHill, addressing the effect of urbanization on aquifer recharge in the Santa Clarita Valley.[6] In that technical memorandum, CH2MHill discussed the general effects of urbanization on groundwater recharge and the specific effects on the Santa Clarita Valley. CH2MHill highlighted the importance of the importation of SWP water supplies to Santa Clarita Valley in finding that urbanization has not reduced recharge to groundwater, nor depleted the amount of groundwater that is in storage within the Valley's basin. In its "summary of findings," CH2MHill concluded that

> "[i]n the Santa Clarita Valley, stormwater runoff finds its way to the Santa Clara River and its tributaries, whose channels are predominantly natural and consist of vegetation and coarse-grained sediments (rather than concrete). The stormwater that flows across paved lands in the Santa Clarita Valley is routed to stormwater detention basins and to the river channels, where the porous nature of the sands and gravels forming the streambeds allow for significant infiltration to occur to the underlying groundwater.
>
> Increased urbanization in the Valley has resulted in the irrigation of previously undeveloped lands. The effect of irrigation is to maintain higher soil moisture levels during the summer than would exist if no irrigation were occurring. Consequently, a greater percentage of the fall/winter precipitation recharges groundwater beneath irrigated land parcels than beneath undeveloped land parcels. In addition, urbanization in the Santa Clarita Valley has occurred in part because of the importation of State Water Project (SWP) water, which began in 1980. SWP water use has increased steadily, reaching nearly 44,500 acre-feet (AF) in 2003. Two-thirds of this water is used outdoors, and a portion of this water eventually infiltrates to groundwater. The other one-third is used indoors and is subsequently routed to local water reclamation plants (WRPs) and then to the Santa Clara River (after treatment). A portion of this water flows downstream out of the basin, and a portion infiltrates to groundwater.
>
> Records show that groundwater levels and the amount of groundwater in storage were similar in both the late 1990s and the early 1980s, despite a significant increase in the urbanized area during these two decades. This long-term stability of groundwater levels is attributed in part to the significant volume of natural recharge that occurs in the streambeds, which do not contain paved, urban land areas. On a long-term historical basis, groundwater pumping volumes have not increased due to urbanization, compared with pumping volumes during the 1950s and 1960s when water was used primarily for agriculture. Also, the importation of SWP water is another process that contributes to recharge in the Valley. *In summary, urbanization has been accompanied*

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6 See **Appendix A** to the Final EIR, Technical Memorandum prepared by John Porcello, CH2MHill, dated February 22, 2004.

> *by long-term stability in pumping and groundwater levels, plus the addition of imported SWP water to the Valley, which together have not reduced recharge to groundwater, nor depleted the amount of groundwater that is in storage within the Valley*." (*Emphasis added*) (See **Appendix A** to the Final EIR [Technical Memorandum prepared by John Porcello, CH2MHill, dated February 22, 2004, p. 1].)

In addition, Scalmanini's work has specifically responded to comments, which have insisted that the Alluvial aquifer's previously estimated "perennial yield" should be treated as a "not to exceed" volume. To the contrary, Scalmanini has consistently stated that such an approach is technically flawed because it fails to recognize that the perennial yield of an aquifer system is a long-term average value, and that "overdraft" cannot be concluded simply because recent pumping of an aquifer has exceeded a long-term average number, even if for several years. Scalmanini has further explained that, in any valid determination of perennial yield, there is a recognition that aquifer systems experience wet and dry cycles, when recharges higher or lower than long-term averages, and that pumpage from an aquifer system can vary, in some cases significantly, above and below a stated perennial yield number from year to year, depending on water demands in the same wet and dry cycles. For these reasons, both Scalmanini and Slade have more recently relied upon the identification of an "operational" yield with respect to the management of pumping in an aquifer system.

For example, in his *2001 Update Report*, Slade thoroughly explained the disadvantages associated with interpreting "perennial yield" as a fixed number, and, for that reason, has elected to use the more descriptive "operational yield" terminology in order to avoid confusion:

> "One of the disadvantages of utilizing perennial yield as a basis for managing the pumpage from an aquifer system is that it represents a long-term average value for annual yield. There is a potential for the perennial yield value to be interpreted as a 'not-to-exceed' volume, with a related potential for pumpage above the perennial yield value in any given year to be incorrectly interpreted as 'overdraft'. A recently advanced concept intended to deal with such misinterpretations is that of operational yield. *Operational yield* can be defined as a fluctuating value of pumpage that may be above or below the perennial (or average) yield in any given year, and that varies as a function of the availability of other water supplies. The basic intent of the operational yield value is that it should not exceed the perennial yield of the groundwater basin over multi-year wet and dry cycles.
>
> The operational yield concept includes flexibility of groundwater use by allowing increased pumping during dry periods and increased recharge (direct or in-lieu) with supplemental water when it is available in wet/normal rainfall periods. The operational yield protects the aquifer by helping to assure that groundwater supplies are adequately replenished on a long-term basis from one wet/dry cycle to the next. *In the Valley, historical groundwater data demonstrate that the alluvium has been, and continues to be developed within its long-term sustainability (i.e., no continuous lowering of water levels, no notable trend toward degradation of groundwater quality, etc.).*

> It is evident from observation of the response of the alluvial aquifer system to average pumping over the last several decades, and response to pumping in individual years, that pumping from the alluvium can be performed at a higher average pumping rate and over a wide range of yearly pumping rates without inducing undesirable conditions that would be indicative of overdraft, i.e., long-term continuous and progressive decline in water levels and storage. This observation is particularly evident since the initiation of supplemental SWP water deliveries in 1980. As a result, the operational yield of the alluvial aquifer, or the yearly yield for operating purposes, could range from an individual annual pumping volume as low as about 20,000 AF to an individual annual pumping volume as high as about 45,000 AF. The ultimate goals would be to avoid short-term adverse impacts as a result of year-to-year fluctuations in pumping, and to avoid long-term adverse impacts such as continuously lowered water levels and reduced amounts of groundwater in storage.
>
> Recognition of the historical response of the alluvium to the wide range of annual pumping and the higher average rate of pumping in recent years has led to the following two plans regarding operation of this aquifer system: 1) development of an Urban Water Management Plan (UWMP) in 2000 that includes water supply from the alluvial aquifer within both the long-term yearly operational range and the recent (last ten years) average pumping capacity; and 2) commitment via a Memorandum of Understanding (MOU) process between the Santa Clarita Valley Water Purveyors, Castaic Lake Water Agency (CLWA), and the downstream United Water Conservation District to develop a numerical groundwater flow model in order to analyze in greater detail how the alluvium can be operated in the future to optimize its yield without adverse impact to either the aquifer (avoidance of depressed water levels and depleted storage) or the environment associated with this aquifer (avoidance of decreased stream flows, avoidance of depleting riparian vegetation, etc.).
>
> In summary, the combination of historical observations and current planning has led to the present conclusion that the alluvial aquifer system can be operated over a wide range of pumping volumes in any given year. As summarized in the 2000 UWMP, the operation of the alluvial aquifer will typically be in the 30,000 to 40,000 AF/yr range for most wet and normal rainfall years, with an expected reduction into the range of 30,000 to 35,000 AF/yr in dry years.
>
> Given that the rate of alluvial groundwater extraction over the past ten years has averaged approximately 35,000 AF/yr and no long-term or permanent decline in water levels or groundwater in storage has occurred, the range of pumping proposed for the alluvial aquifer in the most recent UWMP is well within the operational yield of the aquifer." (See **Appendix A** to the Final EIR [*2001 Update Report*, July 2002, pp. iv-vi].)

As part of his *2001 Update Report*, Slade specifically stated that his report was undertaken to provide an "update" to his earlier 1986 report on the Alluvial aquifer and his 1988 report on the Saugus Formation. Because Slade's report updated his findings, conclusions and recommendations regarding the hydrogeologic conditions of both the Alluvial aquifer and the Saugus Formation, Slade also specifically stated that his updated report "supersedes those previous work products [i.e., earlier 1986 and 1988 reports] and is intended to provide the water purveyors in the Valley with a *current* assessment that the geologic and hydrogeologic conditions within the local groundwater basin." (Id., at p. i; *Emphasis added*) Accordingly, the City does not believe it is appropriate for comments to rely on earlier, outdated reports that have been superseded. In short, the best available data regarding the

hydrogeologic conditions in the Alluvial aquifer and the Saugus Formation is found in Slade's *2001 Update Report*.

The City has considered the above information in connection with its independent assessment of the groundwater supplies of the Alluvial aquifer. The City finds that the information constitutes substantial evidence supporting the findings presented in the Draft EIR.

b. Saugus Formation

The Draft EIR reports that the Saugus Formation is expected to provide a source of supply ranging from 7,500 to 15,000 acre-feet in average/normal years, to 11,000 to 15,000 acre-feet in dry years, and up to 35,000 acre-feet for one to three consecutive dry years, when shortages to CLWA's SWP water supplies could occur. Furthermore, the projected yield of the Saugus Formation is not considered to be "overstated" or "overdrafted." As stated, the projected groundwater supplies from the Saugus Formation are prepared by qualified experts for the Santa Clarita Water Valley purveyors.

The groundwater projections for the Saugus Formation, which are presented n the preceding paragraphs, are supported by the Slade Memorandum and the Scalmanini Letter. For example, Slade concluded, based on his work, that there is no evidence of "overdraft" or "de-watering" of the Saugus Formation, and that the projected pumping of the Saugus Formation was feasible, particularly because of the relatively large areal extent and substantial vertical depth of the Saugus Formation:

> "d. For the historic annual amounts of groundwater production from the Saugus Formation (to date, up to 15,000 Af/yr), there is no relationship between non-pumping (static) water levels in individual Saugus Formation wells and total groundwater extraction by those wells.
>
> e. Saugus Formation hydrographs, which in some cases date to the early-1960s, reveal both seasonal and long-term fluctuations in water levels over time; these water levels respond to changes in rainfall/recharge conditions in the region. Current water levels in Saugus Formation wells are at or near their historic highs. *There is no evidence for permanent over-draft or dewatering of the Saugus Formation Aquifer system.*
>
> f. Because of its relatively large areal extent and substantial vertical depth, the Saugus Formation conservatively contains on the order of 1 million AF of groundwater in storage in the depth zone of 500 ft to 2500 ft and/or the base of fresh water within the formation.
>
> g. Historic and current depths to water and the known amount of historic water level fluctuations in Saugus Formation wells, even recognizing the resulting pumping rates and specific capacities of the wells, are considered small compared to the depths of these wells and to the future amount of available drawdown in each well.

h. As a result of all the above conditions, it is considered to be hydro-geologically feasible to increase production from Saugus Formation aquifers for short-term periods (e.g., for a few years) even during drought conditions. At this time, increasing maximum production in a staged or ramped process from 15,000 AF/yr to 25,000 and then to 40,000 AF/yr for such short-term periods is considered to be hydrogeologically feasible. This staged increase in Saugus Formation production to 40,000 AF/yr for short-term periods amounts to a maximum increase of 25,000 AF/yr over the known historic maximum groundwater extractions from this formation. This 25,000 AF/yr increase represents only a very small percentage of the total amount of groundwater calculated to be present in storage in the depth range of 500 ft to either 2500 ft or the base of fresh water within the Saugus Formation." (*Emphasis added*) (see **Appendix A** to the Final EIR Slade Memorandum, pp. 7-8, dated November 16, 2000.)

In addition, Scalmanini reviewed Slade's analysis, and after conducting general water balances of the Saugus Formation, Scalmanini concluded that the projected Saugus groundwater supplies constituted a reasonable plan and that such projections would not result in permanent water level declines or reductions in groundwater storage (i.e., overdraft):

"The Saugus Formation is the more difficult of the two aquifers in the area to assess, both in terms of dry period water supply and long-time dependability, primarily because there is no historical operating experience in the range of dry-year Saugus pumping cited in the UWMP. The memorandum in Appendix C includes a brief discussion of historical pumpage (up to a maximum of nearly 15,000 AFY, and an average of slightly more than 7,000 AFY over the last 20 years), limited historical water levels (no long-term change or other evidence of overdraft, with current levels comparable to pre-development levels), and ground-water storage (on the order of one million af in storage in the depth zone of 500 to 2,500 feet). Based on these conditions and a couple of other considerations (large areal extent and substantial vertical depth of the Saugus, and typically deep well completions with sufficient available drawdown in wells), it is concluded that it is hydrogeologically feasible to increase pumpage from the Saugus for short-term periods in a ramped manner from 15,000 to 25,000 to 40,000 AFY. The memorandum is not specific with regard to pumping outside the 'short-term' periods when pumpage might be increased; however, it implies that increased pumpage would occur only during dry periods, and that pumpage would decline to lower values in wet and normal periods such that the long-term stability in water levels and storage discussed in the memorandum would be maintained.

Our impression of the concerns expressed about the UWMP overstating the availability of ground water and the potential for pumpage at the yields in the UWMP to deplete or 'dry up' the aquifer is that they are primarily concerned with the preceding increase in short-term, i.e., dry period, pumpage from the Saugus. While we agree that it is likely, based on the various considerations discussed in the appendix, that the Saugus can support such an increase in pumpage without substantially affecting the significant storage in the aquifer and without any significant constraints by such factors as well completion depths and screen intervals, the key question not discussed in the appendix is whether the Saugus can be expected to recover (recharge) from the short-term dry-period increases in pumpage. To generally address the latter concern as part of our review, we prepared several general water balances of the Saugus based on the ranges of pumping included in the UWMP and the recharge potential previously reported for the Saugus (Slade, 1988). While our water balance approach was very general in

nature, it provides a useful indication that the Saugus should be in general balance and, more importantly, that the short-term dry-period increases in Saugus pumpage will not be permanent reductions in ground-water storage. In summary, we examined a range of pumping scenarios for the Saugus as follows, all based on the water supply summaries in Tables 1-4, 2-1, and 4-2 in the UWMP:

- pumpage in the middle of the 7,500 - 15,000 AFY range (11,250 AFY) in all average/normal years, and dry year pumpage in the middle of the 21,000–35,000 AFY range (28,000 AFY).
- historical average pumpage (7,500 AFY) in average/normal years, and ramped increase in dry year pumpage as indicated in Table 4-2.
- historical average pumpage (7,500 AFY) in average/normal years, and maximum Saugus pumpage (35,000 AFY) in all dry years.
- historical maximum pumpage (15,000 AFY) in all average/normal years, and ramped increase in dry year pumpage as indicated in Table 4-2.

All the preceding scenarios show general long-term balances, with the reductions to historical average pumpage or even to historical maximum pumpage in average/normal years sufficient to allow ground-water storage to recover such that the short-term dry period increases in pumpage do not represent permanent reductions in ground-water storage. Based on the information included in the UWMP, complemented by the general water balance assessment described above, we would conclude that the Saugus ground-water supply component in the UWMP is a reasonable plan for use of that aquifer system for a small part of the overall water supply, while also utilizing it on a renewable (recharged) basis to meet short-term dry period reductions in other water supplies." (See **Appendix A** to the Final EIR [Scalmanini Letter, pp. 2–4].)

Since completion of the Slade Memorandum and the Scalmanini Letter, Slade completed his *2001 Update Report* regarding the hydrogeologic conditions of both the Alluvial and Saugus aquifers. As to the Saugus Formation, Slade conducted further analysis of the basin and concluded that:

"B. Groundwater in Storage

The amount of groundwater in storage in the Saugus Formation was calculated to be approximately 1.41 million AF, using an upper limit of 500 ft below ground surface (bgs) as part of the calculations, as reported by Slade in the original 1988 Report on the Saugus Formation aquifer system (Slade, 1988 Report). More recent information on the thickness of the alluvium and the degree of potential drawdown interference between adjacent Saugus Formation and alluvial water wells has led us to adjust this upper limit from 500 ft bgs to 300 ft bgs. Updated calculations of groundwater in storage reveal a value of approximately 1.65 million AF, an increase of about 18% more than the 1.41 million AF calculated in the original Slade 1988 Report. This increase is due almost entirely to raising the upper limit of our depth zone for calculations from 500 ft to 300 ft bgs.

C. Groundwater Production and Operational Yield

Groundwater production from the Saugus Formation has averaged approximately 8,600 AF/yr from 1991 to 2000, with the highest ever historical production of approximately 15,000 AF/yr occurring in 1991, towards the end of a multi-year drought. No long-term continuous or permanent decline in either water levels or

> the amount of groundwater in storage has occurred under this historical range of pumping. In summary, the combination of historical observations and current planning has led to the present conclusion that the Saugus Formation aquifer system can be operated on a long-term average basis in the range of 7,500 to 15,000 AF/yr. Infrequently, during dry periods of one to three years, pumping extractions from the Saugus Formation can be ramped up from 15,000 to 25,000 AF/yr, and ultimately to 35,000 AF/yr if dry conditions continue. These latter increases would be temporary and would return to or below the historical range of 7,500 to 15,000 AF/yr once rainfall patterns returned to normal.
>
> As summarized in the 2000 UWMP, the operation of the Saugus Formation aquifer system will typically be in the 7,500 to 15,000 AF/yr range for most years of normal or wet conditions, with possible short-term increases in dry periods into the 15,000 to 35,000 AF/yr range. It is recommended that a program of enhanced water level and water quality monitoring accompany this incremental temporary "ramp-up" in groundwater production from the Saugus Formation. However, such a temporary increase in pumping over and above historic levels is unlikely to have an adverse impact on the Saugus Formation aquifer system, and in particular is unlikely to induce a permanent loss of groundwater from storage or a decline in water quality." (See **Appendix A** to the Final EIR [*2001 Update Report*, July 2002, pp. Vii–viii].)

The City has considered the above information in connection with its independent assessment of the groundwater supplies of the Saugus Formation. The City finds that the information constitutes substantial evidence supporting the findings presented in the Draft EIR.

2. OTHER RELATED COMMENTS

a. Comments Regarding Riparian Vegetation and Other Impacts

Other comments have stated that overdraft conditions may impact endangered and sensitive species in and along the Santa Clara River. As threshold matters, these comments are not supported by specific documentation or substantial evidence to support the claims asserted. (See Pub.Res.Code §21153[c] and *CEQA Guidelines* §15086[c], requiring comments to be supported by specific documentation; See also Pub.Res.Code §21080[e], *CEQA Guidelines* §15384, which define "substantial evidence.") The comments also are not specific to location or type of species, making it difficult to provide a more specific and thorough response.

However, as described above, there are no overdraft conditions, and, therefore, the assumption made in these comments is inaccurate. Furthermore, the generalized comments appear to be contrary to the extensive survey data of the riparian vegetation along the Santa Clara River compiled by the City's environmental consultant, Impact Sciences, Inc., and other qualified consultants and included in the

Draft EIR. None of the consultant studies provided to the City report a "die-off" of riparian vegetation, or "diminished" surface water needed to support endangered or sensitive aquatic species due to observed "overdraft" conditions. As discussed below, CLWA also has recently adopted a regional groundwater management plan that includes monitoring of groundwater levels throughout the basin, and provisions associated with the operation of the basin in order to avoid overdraft conditions of the type with which these comments are concerned.

b. Comments Regarding Water Wells In the Eastern Reaches of the Basin

Comments have claimed that water levels in wells have reached historic lows in the eastern areas of the basin. Again, however, the comments are not substantiated by applicable documentation or any substantial evidence. As discussed below, the best available data also conflicts with these comments.

First, at pages 4.8-7–8, the Draft EIR demonstrates that the increased importation of SWP surface water supplies by CLWA to its service territory since 1980 has significantly increased the flow of surface water and groundwater in the Santa Clara River watershed, notably in the form of return flow and discharges from existing water treatment plants in the Santa Clarita Valley. As a result, there is no "decrease in surface flows" in the Santa Clara River. To the contrary, substantially more water is now in the river and the underlying Alluvial and Saugus aquifer system. Those flows help to maintain alluvial groundwater recharge and high surface water flows downstream to Ventura County.

Second, the CH2MHill technical memorandum, discussed above, confirms that urbanization in the Santa Clarita Valley has been accompanied by long-term stability in pumping and groundwater levels, along with the addition of imported SWP water to the Valley since 1980, which together have not reduced recharge to groundwater, nor depleted the amount of groundwater that is in storage within the Valley.[7]

Third, the pumping of groundwater from both the Alluvial aquifer and Saugus Formation has not resulted in any adverse effects such as permanent water level declines or degradation of groundwater quality. As stated in the Draft EIR, the current management practice of the Santa Clarita Valley water purveyors is to prioritize the use of the Alluvial aquifer because of the aquifer's ability to rapidly recharge, store and produce good quality water on an annual basis. Like most groundwater basins, it is possible to intermittently stress the alluvial system (i.e., pump in excess of a "perennial yield" value for one or more years without adverse effects). Short-term withdrawal in excess of the so-

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7 See **Appendix A** to the Final EIR (Technical Memorandum prepared by John Porcello, CH2MHill, dated February 22, 2004).

called "perennial yield" may temporarily lower groundwater levels; however, subsequent decreases in pumping and natural recharge results in a rapid return of groundwater levels and associated refilling of groundwater storage with no harm to the resource. Historical groundwater data collected from both the Alluvial aquifer and the Saugus Formation over many hydrologic cycles demonstrate that groundwater elevations return to normal in average or wet years following periods of abnormally low rainfall. (See Riverpark Draft EIR, pp. 4.8-37 [Alluvial aquifer] and 4.8-42 [Saugus Formation].)

In addition, specific to the east end of the local groundwater basin, Slade recently prepared a technical memorandum in response to claims that groundwater levels in water wells in the "eastern reaches and tributaries" of the Santa Clara River are declining, which is an indication of "overdraft."[8] In that technical memorandum, Slade provided direct evidence on current water level conditions in the eastern reach of the Santa Clara River. Slade also assessed changes in groundwater levels over time by assessing the hydrograph for a Santa Clarita water company municipal-supply well, located along the river approximately six miles east of Bouquet Junction. The well is generally referred to as "Lost Canyon Well No. 2."

Based on the data, Slade found that the "alluvial aquifer system is *not* in overdraft because water levels show a rapid and significant rise following periods of rainfall. In a strict sense, if the aquifer system were in 'overdraft,' then water levels would show a continuous decline even during hydrologically 'wet' periods during a long time period; the water level data do not show any such decline over the entire period of water level record." (Id., p. 3) Slade also noted that "even though water levels have declined in previous drought years [referring to wells in the eastern reaches of the basin], those water levels have returned in the past to historic high water levels." (Id.) Consistent with his technical memorandum, Slade recently reported to the Newhall County Water District that the east end of the Alluvial aquifer "continued to display a very strong correlation with a cumulative rainfall departure trends; levels declined temporarily in dry times but recover very rapidly and to a large degree in more normal or wet rainfall periods."[9]

Finally, as discussed below, CLWA adopted a groundwater management plan, which specifically addressed these comments and concerns at the regional level. CLWA's groundwater management plan has acknowledged, based on groundwater elevation data and streamflow data, supplemented by a basin-wide numerical groundwater model, that groundwater levels vary during cycles of below-normal and above-normal rainfall. Over longer time periods, the long-term fluctuations in groundwater levels

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8 See **Appendix A** to the Final EIR (Technical Memorandum prepared by Richard C. Slade & Associates, LLC, dated March 12, 2004).

9 See **Appendix A** to the Final EIR (Letter from Slade to Newhall County Water District, Board of Directors, dated January 29, 2004).

show that, after a drought period, water levels have returned to levels at or above those that occurred prior to the drought. These findings are consistent with technical analysis by Slade in his *2001 Update Report* that there is no evidence of long-term continuous or permanent declines in water levels in either the Alluvial aquifer or the Saugus Formation. CLWA's groundwater management plan also includes "Primary Plan Elements" to monitor groundwater levels throughout the basin ("Primary Plan Element 1"), and to operate the basin in an on-going manner to avoid "overdraft" ("Primary Plan Element 3").

c. Comments Concerning the County's General Plan and Area Plan

One comment stated that reliance on groundwater from an "overdraft" basin is contrary to the Los Angeles County General Plan, the Santa Clarita Valley Areawide Plan, and the City's General Plan. The City does not find any substantial evidence to support these comments for the reasons set forth in this topical response, the Draft EIR, and the supporting documents.

First, the comment does not identify any portion of the City's General Plan (or any other plan) to support the claim. Therefore, it is difficult to provide a detailed response. However, the City notes that Los Angeles County's Santa Clarita Valley Areawide Plan (a component of the County of Los Angeles General Plan) does contain a policy stating that it is not permissible to rely on local groundwater sources past their safe yield limits (Area Plan Water Supply Policy 1.1). But, for the reasons stated in the Draft EIR and this topical response, the City has determined that both the Alluvial aquifer and the Saugus Formation are not in "overdraft."

In fact, the best available data indicates that both the Alluvial aquifer and the Saugus Formation continue to operate within their operational yields. As shown in this topical response, the development and use of local groundwater resources has not resulted in any degradation of the local groundwater basins. As a result, there has been no "violation" of the City's General Plan (or any other plan), as such plans relate to water supply policies.

d. Other Evidence Supporting the City's Findings

(1) CLWA Groundwater Management Plan

On December 10, 2003,[10] CLWA adopted a Groundwater Management Plan (GWMP) for its service area, in accordance with Water Code §§10750 et seq. (commonly known as AB 3030). As part of the GWMP, several "Primary Plan Elements" have been adopted, consistent with on-going water resource management activities of CLWA and other retail water purveyors in the Santa Clarita Valley. The stated intent of the GWMP is to ensure that local groundwater supplies from both the Alluvial aquifer and the Saugus Formation continue to be utilized under acceptable aquifer conditions (i.e., avoidance of overdraft conditions). (GWMP, p. 22) To implement that intent, the GWMP requires (a) the monitoring of groundwater levels, quality, production and subsidence ("Primary Plan Element 1"); (b) identification and management of recharge areas and establishment of a wellhead protection program ("Primary Plan Element 2"); (c) the on-going assessment and determination of basin yield and the avoidance of overdraft ("Primary Plan Element 3"); and (d) continuation of conjunctive use operations within the basin ("Primary Plan Element 5").

In addition, the GWMP includes the development of a numerical groundwater flow model. (GWMP, pp. 29, 35–37.) The groundwater flow model is intended to be utilized in continuing to understand and quantify the yield of the basin under varying hydrologic conditions, so that local groundwater supplies can continue to be managed to meet existing and projected water demand and, at the same time, to avoid groundwater uses at levels that would result in overdraft conditions. (Id.)

The numerical groundwater flow model construction and calibration process is complete. In addition, a report documenting the construction and calibration of the model has been reviewed and approved by the Department of Toxic Substances Control (DTSC). The City also has been advised that Board members of CLWA, Valencia Water Company and Newhall County Water District have been given presentations concerning the status of the modeling effort.

Therefore, the City finds that both the GWMP and the groundwater flow model represent regional planning efforts by CLWA and other retail water purveyors in the Santa Clarita Valley, in conjunction with other local, state and federal agencies, to ensure that local groundwater supplies continue to be

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10 See CLWA Ordinance No. 34 and CLWA's Groundwater Management Plan for the Santa Clara River Valley Groundwater Basin, East Subbasin, December 2003, prepared at the direction of CLWA by Luhdorff & Scalmanini, Consulting Engineers. Both the ordinance and GWMP are incorporated by reference and available for public review and inspection at CLWA's offices, located at 27234 Bouquet Canyon Road, Santa Clarita, CA 91350-2173.

monitored and managed so that the groundwater basin can continue to be a reliable water supply source without significant concern that the resources will be "overdrafted" or negatively impacted.

(2) CPUC Litigation

In addition to the above information, the California Public Utilities Commission (CPUC) has previously rejected comments and claims that the Alluvial aquifer and the Saugus Formation cannot be "pumped" to the ranges identified by CLWA and the retail water purveyors without creating "overdraft" conditions. After a lengthy adjudicatory hearing involving conflicting facts, the CPUC found that

> "22. Perennial yield of an aquifer is that amount of groundwater that can be pumped from the aquifer over a long period of time without causing an undesirable result.
>
> 23. The record indicates that pumping from the Alluvial aquifer has been and continues to be within the aquifer's perennial yield and that the aquifer is not and has not been in overdraft.
>
> 24. The management practice of Valencia and other local water purveyors is to maximize use of the Alluvial aquifer in combination with imported SWP supplies in normal years while keeping the Saugus aquifer full and available for use during dry years.
>
> 25. The WMP's estimates of water supply available from the Alluvia aquifer, in a range of 32,500 to 40,000 AFY, are consistent with current management practices and well within the aquifer's perennial yield.
>
> 26. The WMP's estimate of base water supply available from the Saugus Formation, in a range of 11,000 to 20,000 AFY, are consistent with current management practices and supported by recent experience.
>
> 27. The WMP's estimate that up to 30,000 AFY above the lower estimate of base water supply is available from the Saugus Formation as short-term firming supply in up to three consecutive dry years is supported by expert analysis." (See **Appendix A** to the Final EIR [CPUC Decision 01-11-048 November 29, 2001, pp. 38–39])

The CPUC also rejected a contention that the Saugus Formation would be in overdraft by the year 2011, implicitly rejecting any contention of any current overdraft. (Id., p. 28)

In light of its factual determinations, the CPUC concluded as a matter of law that the "range of supplies" identified "as available from the Alluvial aquifer and Saugus Formation was reasonable." (Id., p. 43) The CPUC decision addressed Valencia Water Company's Water Management Plan; however, the groundwater supply projections included in that plan for both the Alluvial aquifer and Saugus Formation were similar to those included in the *2002 Water Report* and the Draft EIR. As a

result, the City views the CPUC's factual and legal findings as further support for the information presented in this EIR.

TOPICAL RESPONSE 2: GROUNDWATER SUPPLIES AND PERCHLORATE

Comments raise issues and concerns regarding the detection and impact of ammonium perchlorate (perchlorate) in four municipal water supply wells located in the Saugus aquifer, and one such well in the Alluvial aquifer. Comments state that, because these wells have been removed from active water supply service due to the presence of perchlorate, the available pumping capacity from the Saugus and Alluvial aquifers has been reduced, but the Draft EIR does not account for the "reduced" groundwater supplies. As a result, the comments claim that the groundwater supply figures in the Draft EIR are "overstated." Similarly, comments claim that the Riverpark project cannot rely on groundwater supplies impacted by perchlorate, because it would violate the requirements of Senate Bill 610 (SB 610).[1] (Costa, Chapter 643, Stats. 2001)

This response will address the perchlorate comments and the impact of perchlorate on groundwater supplies in the Santa Clarita Valley. The reason that the discussion will address the entire Santa Clarita Valley is because all four retail purveyors in the Valley, including the Santa Clarita Water Division of CLWA are interconnected and draw from the same groundwater supplies.

As discussed below, the Draft EIR fully disclosed the presence of perchlorate in municipal-supply wells in both the Saugus Formation and the Alluvial aquifer, and identified the treatment technologies that are available to restore the deactivated wells to full production. In response to claims that groundwater supplies should be reduced due to the closure of the five impacted production wells, according to CLWA and other local retail purveyors, the number and distribution of production wells in the Santa Clarita Valley and the availability of State Water Project (SWP) water acquired in 1999 provide reliable water supplies that are available to meet current and near-term water demand in the valley during both average/normal years and in dry years.

In dry years, the above supplies would be supplemented by approximately 50,000 AF of SWP water that CLWA has banked in Kern County with the Semitropic Water Storage District through interim banking arrangements. This water is available until 2012-2013 and, as such, provides dry-year reliability for Santa Clarita Valley water supply in the next approximately nine years. Prior to expiration of this Semitropic Interim Banking Arrangement, CLWA has stated that it will implement

[1] SB 610 amended Section 21151.9 of the Public Resources Code (CEQA), and Sections 10631, 10656, 10910, 10911, 10912, and 10915 of the Water Code, repealed Section 10913 of the Water Code, and added an amended Section 10657 of the Water Code. (See Draft EIR Appendix 4.8)

long-term reliability enhancement programs, which were addressed in the earlier *2000 Urban Water Management Plan* (2000 UWMP), and which will be further addressed in the update to that plan in 2005.

In the long term, actions to contain and treat the perchlorate-contaminated groundwater will be in place well before calendar year 2010. Therefore, the water supply identified in the *2003 Santa Clarita Valley Water Report*[2] (*2003 Water Report*), and in the earlier 2000 UWMP, still constitutes an available and reliable water supply to meet increasing levels of demand over the long term (2020). Specifically, in the long term, water supplies will be available at the levels shown in the *2003 Water Report* (and the earlier 2000 UWMP), because those sources consist of SWP supplies, recycled water and local groundwater, including full restoration of the Saugus Formation well capacity. The long-term plan is to return some of the impacted Saugus Formation production wells to service, and to replace others with one or more replacement wells. The testing to contain and treat perchlorate-contaminated water will commence by the end of this year, with implementation of treatment currently expected to be in place within two years.

CLWA and other Santa Clarita Valley retail purveyors have advised the County and City that the technology to remove perchlorate exists and is already in use in California and elsewhere. CLWA and the retail purveyors intend to use this proven technology to clean up the water where perchlorate has been detected. CLWA and other retail purveyors continue to work with the Whittaker-Bermite site owners and the regulatory agencies (State Department of Toxic Substances Control [DTSC], state Department of Health Services [DHS] and the U.S. Army Corps of Engineers [ACOE]) to characterize, contain and treat the perchlorate-contaminated groundwater, so that water from the deactivated municipal-supply wells (Saugus, 4 wells; Alluvial, 1 well) can be returned to service.

Accordingly, the City has determined, based on the entire record, that the Riverpark project can appropriately rely on groundwater supplies identified in the Draft EIR and the SB 610 analysis. In addition, the City has determined, based on the entire record, that projected water supplies will be sufficient to satisfy water demand of the Riverpark project, in addition to existing and planned future uses in the Santa Clarita Valley.

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2 Please see **Appendix A** to the Final EIR for a copy of the *2003 Water Report*.

1. PERCHLORATE CONTAMINATION HAS BEEN FULLY DISCLOSED AND HAS BEEN DETERMINED TO HAVE A LESS THAN SIGNIFICANT IMPACT ON GROUNDWATER SUPPLIES

The Draft EIR included a thorough discussion of the groundwater quality in both the Alluvial aquifer and the Saugus Formation. (See Riverpark Draft EIR, Section 4.8, Water Service, pp. 4.8-37–38; 4.8-43–51)

Based on the analysis presented, the Draft EIR concluded that there is no evidence of any historic or recent trend toward permanent water level or storage decline in the local Alluvial or Saugus aquifers, and no evidence that the perchlorate discovered in local groundwater has limited the amount of water local purveyors have planned to deliver from these sources. (See Riverpark Draft EIR, Section 4.8, Water Service, pp. 4.8-37; 4.8-42)

a. Alluvial Aquifer

As to the Alluvial aquifer, the Draft EIR, at pp. 4.8-37–38, contained a discussion of perchlorate in the Alluvial aquifer, and included a figure depicting the former Whittaker-Bermite site, which has been identified as the source of the perchlorate contamination (Figure 4.8-17). At p. 4.8-38, the Draft EIR disclosed that, in 2002, perchlorate was detected in one Alluvial aquifer municipal supply well, located near the former Whittaker-Bermite site, and all other Alluvial wells operated by the water purveyors in the Santa Clarita Valley continue to be uncontaminated and used for municipal water supply service; and that, as part of regular operations, the uncontaminated wells are sampled routinely and perchlorate has not been detected in any of them:

> "Perchlorate is used in the manufacture of rocket propellants, munitions and fireworks. The alleged source of perchlorate is a facility in the Santa Clarita Valley known as the Whittaker-Bermite site. Each local water purveyors regularly collects groundwater samples from the numerous municipal-supply wells in the Alluvial aquifer. *In 2002*, as part of ongoing monitoring of wells for perchlorate contamination, *perchlorate was detected in one Alluvial well* located near the former Whittaker-Bermite facility that has been the primary focus of potential perchlorate contamination that has impacted four Saugus wells since 1997. The *detected concentration* at the Alluvial well (*up to 5.9 ug/l*) slightly exceeded the Action Level for perchlorate (*4 ug/l*) and the well has been inactivated for municipal water supply. All other alluvial wells operated by the purveyors *continue to be used* for municipal water supply service (*2002 Santa Clarita Valley Water Report*, p.17). The wells will *continue to be sampled, tested, and monitored for possible detection of perchlorate*, and any other contaminants. The sampling, testing and monitoring of the numerous municipal-supply wells in the Alluvial aquifer actually serve as an *early warning device* for the possible detection (and ultimate treatment) of perchlorate and other contaminants. For further information regarding perchlorate and other contaminants in

> the Santa Clarita Valley's other aquifer, Saugus Formation, please refer to the section below." (*Emphasis added*) (See Riverpark Draft EIR, Section 4.8, pp. 4.8-37–38)

CLWA and other retail purveyors in Santa Clarita Valley have advised both the County and City that the closure of the one Alluvial well does not adversely affect the capacity of the groundwater produced from the Alluvial aquifer, because other operating wells in the Alluvial produce sufficient quantities of groundwater, all of which are unaffected by perchlorate. In addition, CLWA and other retail purveyors have confirmed that technology exists to treat groundwater to remove the perchlorate and to return it to drinking water quality. CLWA has also reported to the County and City that the purveyors have placed a high priority on remediation of perchlorate over the long term, to restore the affected well to service, and to ensure that treatment methods are available to reduce perchlorate concentrations to low or non-detectable levels if any other wells in the Alluvial aquifer are later impacted.

As reported in the *2003 Water Report* (**Appendix A** to the Final EIR), the Alluvial aquifer has an estimated storage capacity of 240,000 acre-feet (AF). Based on Slade and Scalmanini technical reports and the Slade *2001 Update Report* (**Appendix A** to the Final EIR), in average/normal years, the operational yield of the Alluvial aquifer, for long-range planning purposes, is in the range of 30,000–40,000 acre-feet per year (AFY). In dry years, the technical reports and studies project a reduction in pumping in the Alluvial aquifer into the range of 30,000–35,000 AFY. In 2003, total pumpage from the Alluvial aquifer was approximately 33,600 AF, a decrease of about 4,500 AF from the preceding year. (*2003 Water Report*, p. 15) This pumping volume was consistent with the range reported in the *2003 Water Report* and the earlier 2000 UWMP. This pumping volume did not result in any overall change in on-going groundwater conditions (i.e., water levels, water quality, etc.) in the aquifer.

At present, there are a total of 32 active municipal supply wells located in the Alluvial aquifer. (Figure 4.8-17) The deactivation of one Alluvial well is considered to be a *de minimis* impact on production, particularly when considering that only about 565 AF of groundwater was pumped from the one deactivated Alluvial well in 2001 prior to the detection of perchlorate. In addition, CLWA's Santa Clarita Water Division has reported that it intends to rely on other available water resources, particularly SWP supplies, to account for the 565 AF of lost groundwater production, until the perchlorate treatment program is initiated.

CLWA also has reported that it would be inappropriate to reduce groundwater supply projections due to the detection of perchlorate found in the one Alluvial well. As to the Alluvial aquifer, CLWA has stated that

> "[r]educing groundwater supply projections for the one well that has been shut-in due to perchlorate contamination is inappropriate and unnecessary because sufficient additional well capacity exists to fully utilize the whole supply. That said, remediation of the perchlorate over the long term is necessary to ensure no additional wells are detrimentally impacted by the contamination."[3]

In terms of treatment, the Draft EIR, at pp. 4.8-48–4.8-51, contained extensive discussion of the existing and effective technologies to treat perchlorate in water in order to meet drinking water standards. Consistent with the information presented, CLWA recently reported that

> "[t]echnology exists to treat groundwater to remove the perchlorate and return it to drinking water quality. This technology is already in use in other parts of California, most notably in the nearby San Gabriel Valley (La Puente Valley County Water District). This treatment process has received all necessary state approvals.
>
> The La Puente treatment plant is a state-of-the-art facility approved by the California Department of Health Services for the removal of perchlorate from water supplies. The plant removes perchlorate and other contaminants from a nine square mile pollution plume (much larger than the plume area sourced by the Whittaker-Bermite site), disinfects the water to drinking water standards and then serves it to customers.
>
> CLWA and the purveyors, including NCWD, have developed a plan for beginning the treatment process necessary for removal of the perchlorate…as soon as possible, so that [all] affected wells can be restored to service. Thus, the supplies associated with the local aquifers, since they can be returned to use by treatment, constitute a finalized supply, or should be footnoted as being only temporarily unavailable."[4]

Based on the data presented in the Draft EIR, the Slade and Scalmanini technical reports, the Slade *2001 Update Report*, the *2002* and *2003 Water Reports* (all are located in **Appendix A** to the Final EIR) and this topical response, the Alluvial groundwater supplies are appropriately reported, and reducing the Alluvial groundwater supply projections for the one well that has been deactivated due to perchlorate contamination is not appropriate, because the number and distribution of other operating production wells in combination with SWP supplies can be counted on to produce additional quantities of groundwater lost due to the five impacted wells, all of which are unaffected by perchlorate.

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3 See CLWA's letter to Newhall County Water District, dated January 8, 2004; CLWA's letter to Newhall County Water District, dated January [28], 2004, including the attached presentation made by Dan Masnada, General Manager, to the CLWA Board of Directors. Copies of this correspondence are included in **Appendix A** to the Final EIR.

4 See **Appendix A** to the Final EIR (Letter from CLWA to Newhall County Water District Board of Directors, dated January 8, 2004, attachments and related documents).

In addition, timely implementation of the pump containment and treatment plan will enhance groundwater supply reliability in the long term. As stated, testing to contain and treat the perchlorate-contaminated water will commence by the end of the year, with implementation of treatment expected to be in place within two years.

b. Saugus Formation

As to the Saugus Formation, at pp. 4.8-42–4.8-48, the Draft EIR contained a discussion of perchlorate in the Saugus Formation. At p. 4.8-44, the Draft EIR disclosed that perchlorate has been detected in four wells in the eastern part of the Saugus Formation, near the former Whittaker-Bermite site, and that the water purveyors in Santa Clarita Valley have reported the presence of perchlorate in the Saugus Formation for several years.

As reported in the *2003 Water Report*, p. 19 (**Appendix A** to the Final EIR), the Saugus Formation has an estimated storage capacity of about 1.65 million AF. In average/normal years, for long-term planning purposes, the *2003 Water Report* includes pumping from the Saugus in the range of 7,500–15,000 AFY. In dry years, the report calls for pumping from the Saugus in the range of 21,000–35,000 AFY for two to three consecutive dry years, if reductions to CLWA's SWP water supplies occur in those dry years. This future planned pumping would be followed by periods of lower pumpage (7,500–15,000 AFY in average/normal years as noted above) in order to allow recharge of water levels and storage in the Saugus Formation. (See *2003 Water Report*, pp. 18–20, located in **Appendix A** to the Final EIR)

In 2003, approximately 4,700 AF of groundwater was pumped from the Saugus Formation, even though the *2003 Water Report* (and the earlier 2000 UWMP) indicates planned use ranging from 7,500–15,000 AF during an average/normal year, and even more in a dry year. (*2003 Water Report*, pp. 19–20) The Saugus Formation was not utilized to the levels reported in the *2003 Water Report* (and the earlier 2000 UWMP), because the purveyors have voluntarily reduced pumping from Saugus non-impacted wells until the remedy is installed, which is expected to be in place starting with testing at the end of this year and implementation within two years. During this interim period, there is sufficient SWP water and local groundwater from Alluvial production wells to meet current and near-term water demand for the Santa Clarita Valley.

At present, there are a total of 12 municipal supply wells located in the Saugus Formation (Figure 4.8-17 of the Draft EIR). Since preparation of the Draft EIR, one additional Saugus municipal-supply well has been installed, bringing the total number of Saugus municipal-supply wells to 13. The temporary

inactivation of four of the 13 Saugus municipal supply wells is considered to be a *de minimis* impact on groundwater supplies in the Santa Clarita Valley for several reasons.

First, although four wells in the Saugus Formation are deactivated due to perchlorate, the other nine Saugus municipal supply wells are operational and produce water that meets drinking water standards. These other Saugus wells continue to be routinely sampled and perchlorate has not been detected. In addition, as stated in the Draft EIR, at p. 4.8-42, the long-term trend in the Saugus Formation (over the last 35–40 years) shows relatively stable groundwater levels,[5] and there is no trend toward a sustained decline in Saugus water levels or storage, which would be indicative of overdraft conditions.

Second, the combined annual capacity of the nine municipal supply wells in the Saugus Formation can produce about 25,000 AFY. This production capacity covers the 7,500–15,000 AF projected to be pumped from existing wells in the Saugus Formation in average/normal years, without reliance on the four impacted Saugus wells, which have been deactivated due to the detection of perchlorate. In addition, in the current and near term, SWP supplies and local groundwater produced in other uncontaminated portions of the basin have obviated the need to pump water from the Saugus Formation to the levels reported in the *2003 Water Report* (and the earlier 2000 UWMP).

Finally, the estimated annual production capacity of the nine Saugus wells (about 25,000 AFY) is also within the range of the future planned pumping of the Saugus Formation in dry years. Based on technical reports and studies, the containment and treatment of perchlorate-contaminated groundwater, in combination with the drilling of Saugus replacement wells, will fully restore Saugus Formation well capacity in the near term (i.e., well before 2010). The Saugus replacement wells are located a considerable distance from the former Whittaker-Bermite site, and will be capable of supplying groundwater in useable quantities and of acceptable quality for municipal supply purposes.

CLWA also recently reported that it would be inappropriate to reduce groundwater supply projections due to the detection of perchlorate found in the four Saugus wells. As to the Saugus Formation, CLWA stated that

> "[r]educing groundwater supply projections for the four wells that have been shut-in due to perchlorate contamination is inappropriate and unnecessary because sufficient additional well capacity exists to pump at least 15,000 acre-feet per year. That said,

5 See Final EIR, **Appendix A** (*2003 Water Report* [Figure III-8]).

> remediation of the perchlorate over the long term is necessary to ensure no additional wells are detrimentally impacted by the contamination."[6]

CLWA and local retail purveyors have advised the City that considerable progress has been made on plans for containing the perchlorate emanating from the former Whittaker-Bermite site, as contemplated in the Environmental Oversight Agreement entered into with DTSC in February 2003. Under that agreement, DTSC provides review and oversight of the response activities being undertaken by the water agencies relating to the perchlorate contamination in the five closed municipal-supply wells.

As part of that effort, CLWA and the water purveyors have advised the City that one of the reports contemplated in the Environmental Oversight Agreement already has been submitted to DTSC in 2004. The report, dated 2004, and approved by DTSC, documented the construction and calibration of a groundwater flow model for the Santa Clarita Valley. A second report presents a modeling analysis of the plan to contain perchlorate that is present in the Saugus Formation. CH2MHill is the entity that has prepared both of the reports contemplated by the Environmental Oversight Agreement.[7]

The proposed perchlorate containment plan consists of pumping from two of the Saugus municipal-supply wells that were shut down because of elevated concentrations of perchlorate found in the groundwater from those wells. The two wells, owned and operated by the Santa Clarita Water Division of CLWA, are identified as the Saugus 1 and Saugus 2 wells and located near the northwestern boundary of the former Whittaker-Bermite site. The proposed plan contemplates pumping the two wells at sufficiently high rates to allow perchlorate, which is migrating from the nearby Whittaker-Bermite site, to be contained by these wells, thereby, controlling migration toward other portions of the Saugus Formation. The water pumped from these two wells will be treated to remove perchlorate prior to entering the potable water conveyance system.

Returning the wells to service with treatment requires issuance of a DHS permit before the water can serve as a potable supply. Before issuing such a permit, DHS will require studies and engineering work to demonstrate that pumping the wells and treating the water will be protective of human health.

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6 See **Appendix A** to the Final EIR (Letter from CLWA to Newhall County Water District, dated January [28], 2004 and attachments).

7 As stated, both reports were prepared by CH2MHill, submitted to DTSC for review and approval, and DTSC has approved both reports. The two reports are as follows: (a) *Regional Groundwater Flow Model for the Santa Clarita Valley: Model Development and Calibration*, prepared for the Upper Basin Water Purveyors, April 2004 and (b) *Draft Analysis of Perchlorate Containment in Groundwater Near the Whittaker-Bermite Property, Santa Clarita, California*, prepared for the Upper Basin Water Purveyors, September 2004. The two reports are incorporated by this reference and available for public review at CLWA, 27234 Bouquet Canyon Road, Santa Clarita, California 91350-2173.

According to CLWA, testing to contain and treat the contaminated water will commence by the end of the year, with implementation of treatment expected to be in place within two years.

On-site clean up (i.e., source control) is already underway at the former Whittaker-Bermite site. This on-site clean up at the source of the contamination is closely monitored by DTSC.

In addition, treatment technology is currently available to remove perchlorate from groundwater supplies. For example, treatment plants are currently in operation at several locations, including:

(a) La Puente Valley Water District (2,500 gallons per minute [gpm]);

(b) San Gabriel Valley Water Company, El Monte (7,800 gpm);

(c) California Domestic Water Company, Whittier (5,000 gpm) (system built, first phase of startup underway; expected operational by 2/04);

(d) City of Riverside (2,000 gpm);

(e) West San Bernardino Water District, Rialto (2,000 gpm);

(f) City of Rialto (2,000 gpm);

(g) City of Colton (3,500 gpm);

(h) Fontana Union WC (5,000 gpm);

(i) City of Pomona (10,000 gpm);

(j) Aerojet, CA Sacramento GET D facility (1,000 gpm); and

(k) Aerojet, CA Sacramento GET 8 facility (2,000 gpm).[8]

The proposed plan also includes a groundwater quality monitoring program that will be implemented conjunctively with the pump and treat program, to identify any changes in groundwater quality that might adversely affect the treatment process.

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8 See *Perchlorate Contamination Treatment Alternatives, Draft*, prepared by Office of Pollution Prevention and Technology Development, for DTSC and California EPA, dated January 2004. This report is incorporated by reference and available for public inspection at CLWA, 27234 Bouquet Canyon Road, Santa Clarita, California 91350-2173.

Based on the data presented in the Draft EIR, the Slade and Scalmanini technical reports, the Slade *2001 Update Report*, the *2003 Water Report* and this topical response, the Saugus groundwater supplies are appropriately reported, and reducing the Saugus groundwater supply projections for the four wells that have been deactivated due to perchlorate contamination is not appropriate because the number and distribution of other operating production wells in combination with SWP supplies can be counted on to produce additional quantities of groundwater lost due to the five impacted wells, all of which are unaffected by perchlorate. In addition, timely implementation of the pump containment and treatment plan will enhance groundwater supply reliability in the long term. As stated, testing to contain and treat the perchlorate-contaminated water will commence by the end of the year, with implementation of treatment expected to be in place within two years.

2. OTHER ACTIONS

a. Legal Action

CLWA and the local retail purveyors filed suit against the current and prior owners of the Whittaker-Bermite facility. The lawsuit requests that the current and prior owners pay all necessary costs of response, removal of the perchlorate contamination, remediation action costs, and other damages associated with the perchlorate contamination. CLWA and the local retail purveyors have been required to incur substantial response costs and other expenses as a direct result of the lost production from the five deactivated wells caused by perchlorate contamination due to operations at the former Whittaker-Bermite facility. Due directly to that contamination, CLWA has used SWP water to make up for lost groundwater production—water that otherwise could have been returned or banked.

In late summer 2003, CLWA, the local retail water purveyors and Whittaker entered into an interim settlement agreement, in which the parties agreed to work cooperatively for a minimum of one year to further define long-term costs and possibly achieve a long-term settlement. The interim settlement agreement specifies that Whittaker and its insurers will reimburse certain past costs as well as fund studies and prepare cost estimates for the clean-up plan that will restore water production and capacity of the impacted wells and protect other wells from future contamination. The interim settlement provided for a one-year stay of the lawsuit between the parties and has been amended to extend the stay through January 31, 2005. This has allowed the parties to focus on the final elements of the clean-up plan, which will be submitted to the regulatory agencies later this year. The parties have also begun good faith negations to reach a complete settlement.

b. Groundwater Banking

As stated above, to enhance reliability of water supplies, in 2002 and 2003, CLWA successfully banked over 50,000 AF of SWP water in Kern County with the Semitropic Water Storage District. This water is available until 2012–2013 and, as such, provides dry-year reliability for Santa Clarita Valley water supplies for the next nine+ years. Plans to implement long-term reliability programs, as reported in the 2000 UWMP, will be the subject of an updated urban water management plan in 2005.

c. CLWA Groundwater Management Plan

CLWA adopted a Groundwater Management Plan (GWMP) for its service area, in accordance with Water Code §§10750 et seq. (commonly known as AB 3030), on December 10, 2003.[9] The GWMP, at p. 16, stated that the "most notable groundwater quality issue in the basin centers around the detection and impact of perchlorate" on four Saugus wells and one Alluvial well. In response to the identified groundwater quality issue, the GWMP, most notably through "Primary Plan Elements" 1 and 8, has incorporated both short-term and long-term groundwater quality considerations in managing the groundwater basin. Primary Plan Element 1 calls for groundwater quality monitoring and assessment. Primary Plan Element 8 further implements the identification, investigation, and mitigation of groundwater contamination, including perchlorate. At p. 17, the GWMP specifically found that the perchlorate impacts "do not preclude the ability to pump groundwater in accordance with existing water supply plans," and noted that "activities to characterize the contamination, and ultimately to control…and treat it, have been initiated in order to return the impacted wells' pumping capacity to water supply service." Primary Plan Element 8 was specifically included in the GWMP to address groundwater contamination issues in the basin. As part of the further identification and mitigation of perchlorate contamination, the GWMP, at Primary Plan Element 8, summarized the on-going perchlorate investigation by CLWA and others to ultimately recover the currently unavailable groundwater capacity resulting from the temporary inactivation of the impacted wells (Saugus, four wells; Alluvial, one well). According to the GWMP, at p. 34, recovery of the groundwater capacity "may be accomplished by some combination of the reactivation of impacted wells and new well construction." In summary, at pp. 34 and 35, the GWMP stated:

> "[t]he primary purpose for technical investigation of the perchlorate contamination by CLWA and the other municipal purveyors is to ultimately recover the currently unavailable water supply capacity that has resulted from the inactivation of

[9] See CLWA Ordinance No. 34 and CLWA's Groundwater Management Plan for the Santa Clara River Valley Groundwater Basin, East Subbasin, December 2003, prepared at the direction of CLWA by Luhdorff & Scalmanini, Consulting Engineers. Both the Ordinance and GWMP are incorporated by this reference and available for public review at Valencia Water Company, 24631 Avenue Rockefeller, Valencia, California.

> impacted wells. Conceptually, that may be accomplished by some combination of reactivation of impacted wells and new well construction. CLWA has joined with the U.S. Army Corps of Engineers in a study to develop information about the contamination. CLWA and the retail water purveyors have also independently commissioned an assessment to conclude what treatment technology is appropriate for removal of perchlorate from pumped groundwater; they have also independently commissioned the application of a *numerical groundwater flow and quality model* to determine an optimal pumping program for 1) perchlorate removal from the aquifer, 2) control of its migration in the aquifer, and 3) restoration of impacted pumping capacity for water supply. With data derived from that work, CLWA and the other purveyors are preparing to submit an application to the state Department of Health Services, by late 2004, for a permit to return to pumping from the locally impaired Saugus Formation. The proposed pumping would be combined with approved wellhead treatment to render the treated water suitable for municipal supply. In addition to the latter objective to recover currently inactivated water supply, the proposed pumping would be designed and operated to remove contaminated groundwater and to control any further migration of contaminated groundwater toward other Saugus wells to the west. CLWA and the retail water purveyors then expect to be able to design and implement, alone or in concert with responsible parties, a contamination control and treatment program at or near their impacted wells that can, in part, make groundwater available for municipal or other beneficial use. They also expect that such a program will provide some hydraulic and associated water quality protection for other parts of the aquifer system to keep contamination from impacting other wells or other parts of the aquifers in which water supply wells might be completed." (*Emphasis added*)

In addition, CLWA will utilize water quantity and quality data gathered from the approved Memorandum of Understanding, dated August 20, 2001, between the Santa Clara River Valley Upper Basin Water Purveyors and United Water Conservation District in Ventura County, and the groundwater flow and quality model, in preparing periodic updates to the adopted GWMP.

Based on the Draft EIR and the above information, the City finds that (a) the detection of perchlorate in the groundwater basin is being appropriately monitored by CLWA, the retail purveyors and other agencies (including the DTSC, DHS and ACOE); (b) the planning for remediation of perchlorate is substantially underway; (c) it is reasonably likely that the perchlorate will be controlled and remediated in the near term (i.e., two-year estimate), so as to return the deactivated wells to production; and (d) there is sufficient amounts of groundwater in uncontaminated portions of both the Alluvial aquifer and Saugus Formation to pump to the levels reported in the *2003 Water Report* (and the earlier 2000 UWMP). The pumping plan for the groundwater basin is based on the *2002* and *2003 Water Reports*, the Slade and Scalmanini technical reports, the Slade *2001 Update Report*, the GWMP and other documents.

Aside from the above information, the CPUC previously rejected claims that perchlorate in the municipal supply wells "limits" groundwater supplies and that CLWA and other retail purveyors

should have "reduced" those supplies in order to account for the perchlorate contamination. These same claims appear to have been reiterated in various comment letters submitted in connection with the Riverpark project. Therefore, as discussed below, the City's findings are further supported by reference to the decision made by the CPUC.

d. CPUC Litigation

In December 1999, Valencia Water Company applied to the California Public Utilities Commission (CPUC) for approval of an updated Water Management Plan (WMP), an application that subsequently incorporated two "advice letters" to expand its service territory in the Santa Clarita Valley. These items were the subject of litigation before the CPUC and petitions for writ of review by the California Supreme Court, in the form of protests to the application filed with the CPUC by several entities, including the Sierra Club, Santa Clarita Organization for Planning the Environment, Friends of the Santa Clara River and the County of Ventura. While the Riverpark project site was not directly affected by the litigation, the outcome is nevertheless pertinent to Riverpark because the litigation addressed resources common to both Valencia and the Santa Clarita Water Division of CLWA, the proposed water provider for the project, including perchlorate detection is groundwater used by both purveyors.

After considering a number of conflicting factual issues, including available groundwater supplies and the impact of perchlorate on those supplies, the CPUC approved the application in November 2001, rejecting the claims advanced by the complainants, and determining that the evidence supported Valencia's WMP's analysis of groundwater supplies and perchlorate. Specifically, the CPUC found that

> "[p]lanning for remediation is substantially under way, and production facilities sufficiently remote from the contamination site can be relied upon for the quantities of water that the WMP assumes will be available from the Saugus Formation. Furthermore, the close monitoring of the situation by the water purveyors, CLWA, the California Department of Toxic Substances Control (DTSC), and the U.S. Army Corps of Engineers, reasonably ensures a prompt response to any change in the situation." (See Final EIR, **Appendix A** [CPUC Decision 01-11-048 November 29, 2001, p. 30])

In findings of fact, after a lengthy adjudicatory hearing, the CPUC also found that

> "29. Valencia, the other local purveyors, CLWA, the property owner, the California Department of Toxic Substances Control, and the U.S. Army Corps of Engineers are all actively involved in efforts to characterize the extent of perchlorate contamination on and off the Porta Bella property [i.e., the former Whittaker-Bermite site] and to implement remediation efforts.

30. Effective and practical *methods* are available and *in current use* for high-volume *treatment* of water supplies contaminated by perchlorate, allowing for the restoration of such water supplies for public use and convenient disposal of waste products.
31. Large *areas* within the Santa Clarita Valley are *viable* for *additional* Saugus Formation production *wells* and sufficiently distant form the perchlorate-affected wells to allow pumping without practical effect on the incidence of perchlorate.
32. It is *reasonable* to anticipate that the water *purveyors* of the Santa Clarita Valley will effectively *remediate* the perchlorate problem originating at the…property in a timely manner so as to preserve their ability to rely on the Saugus Formation as a dry-year firming resource.
33. Hydrology expert Scalmanini testified that the *groundwater* components of the WMP's supply *estimates* were '*very conservative*' and his testimony was not effectively refuted." (*Emphasis added*) (See Final EIR, **Appendix A** [CPUC Decision 01-11-048 November 29, 2001, pp. 39–40])

A petition for writ of review was denied by the California Supreme Court in 2002. These findings support the information presented in both the Draft EIR and this topical response.

e. SB 610 Issue

As stated above, comments have stated that the Riverpark project cannot rely on groundwater supplies impacted by perchlorate, because it would violate SB 610 requirements found in Water Code. The City does not concur with these comments.

Initially, it should be noted that SB 610 reports are informational documents provided to the lead agency to assist in the preparation of a water supply analysis. The lead agency (here, the City) considers the SB 610 report along with other information and expert reports in preparing the EIR section on water supply and reaching conclusions concerning impacts. The standard the City is required to apply is whether there is substantial evidence in the whole of the record to support its conclusions concerning water supply, not just the adequacy and completeness of the SB 610 report.

Water Code §10910 is one of the provisions implementing SB 610. This law requires a city or county that determines a project is subject to CEQA to identify any public water system that may supply water for the project. (Water Code §10910[a][b]) At the appropriate time in the CEQA process, the city or county, acting as the lead agency, must request that the public water system determine whether the projected water demand associated with a proposed project was included as part of the most recently adopted UWMP, pursuant to the Urban Water Management Planning Act. (Water Code §10910[c][1])

If the projected water demand associated with the project was accounted for in the most recently adopted UWMP the public water system may incorporate the requested information from the UWMP in preparing the elements of the water supply and demand assessment required by Section 10910(d), (e), (f) and (g). (Water Code §10910[c][2])[10]

Furthermore, the law requires the water supply and demand assessment to include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project. (Water Code §10910[d][1]) The identification of existing water supply entitlement, water rights, or water service contracts held by the public water system must be demonstrated by providing information related to (a) written contracts or other proof of entitlement to an identified water supply; (b) copies of a capital outlay program for financing delivery of a water supply that has been adopted by the public water system; (c) federal, state and local permits for construction of necessary infrastructure associated with delivering the water supply; and (d) any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply. (Water Code 10910[d][2][A]–[D])

In this case, the City, acting as lead agency, requested certain information from Santa Clarita Water Division to assist the City in preparing the Draft EIR for the Riverpark project. The Santa Clarita Water Division prepared a SB 610 Water Supply Assessment, pursuant to SB 610 requirements, in response to the City's request for information.[11]

In the SB 610 analysis, at p. 13, Santa Clarita Water Division identified the existing and available water supply sources to serve projects within its service area, including the Riverpark project. Existing water supply sources expected to be used by Santa Clarita Water Division to serve the Riverpark project include a combination of SWP water delivered through CLWA and local groundwater supplies from the Alluvial aquifer and the Saugus Formation.

The contracts establishing entitlement to SWP supplies (i.e., SWP Table A Amount, Semitropic Bank Account and Flexible Storage Account) are identified in the SB 610 analysis. At p. 8, as to SWP supplies, the SB 610 analysis relied on and incorporated by reference (a) the water supply contract between DWR and CLWA, including amendments; (b) the SWP Delivery Reliability Report, prepared by DWR (2003); (c) the 2003 Point of Delivery Agreement among DWR, CLWA and Kern County Water

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10 In this case, it was determined that the 2000 UWMP demand projections were based on projected development in both the County and City of Santa Clarita and that those projections anticipated and took into account the level of development proposed by the Riverpark project. (See Riverpark Draft EIR, Appendix 4.8, p. 7)

11 See Riverpark Draft EIR, Appendix 4.8 (SB 610 Water Supply Assessment for the Riverpark Project, prepared by Santa Clarita Water Division of Castaic Lake Water Agency, August 7, 2003).

Agency regarding the Semitropic Groundwater Storage Program; (d) CLWA's adopted Capital Improvement Program (2003); and (e) the *2002 Santa Clarita Valley Water Report* in order to further substantiate SWP supplies.[12] In addition to both the Draft EIR and the SB 610 analysis, each of the referenced documents has thoroughly analyzed SWP supplies, and the reliability of those supplies.

In addition, as to groundwater supplies, both CLWA and the retail purveyors have disclosed that the Santa Clarita Valley groundwater basin is unadjudicated. As a result, neither Santa Clarita Water Division nor the other purveyors have "water rights" as would be the case in an adjudicated basin, which mandates specified groundwater supplies. However, historically, local groundwater has been pumped from the Alluvial aquifer, with records extending back to the 1950s, including some data available from as far back as 1930, and from the Saugus Formation since the early 1960s. Both the Draft EIR and the SB 610 analysis have thoroughly addressed the use and availability of local groundwater supplies by CLWA, Santa Clarita Water Division, and other purveyors in the Santa Clarita Valley.

As applied to groundwater, Water Code §10910(f) states that if a water supply for a proposed project includes groundwater, then specific additional information must be included in the SB 610 analysis. Consistent with these requirements, at pp. 15–20, the SB 610 analysis provides the information required in Section 10910(f) by relying on, among other documents, the Slade *2001 Update Report* and the *2003 Water Report*.

Based on the above analysis, the City has determined that CLWA has existing water entitlements, rights and contracts to meet demand as needed over time (including the Riverpark project), and has committed sufficient capital resources and planned investments in various water programs and facilities to serve the retail purveyors in the Valley, including Santa Clarita Water Division. The City also has determined that Santa Clarita Water Division's water entitlements and rights to water supplies, in addition to imported SWP supplies provided by CLWA, are sufficient to serve the subject service area. In addition, both CLWA and Santa Clarita Water Division have plans in place that have identified operational strategies, combined with flexible management approaches, to ensure short-term and long-term water availability.

Accordingly, the City has determined that the Riverpark project can appropriately rely on groundwater supplies identified in the Draft EIR and the SB 610 analysis, and that the requirements of Sections 10910 of the Water Code (SB 610) have been satisfied. In addition, the City has determined,

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12 For copies of these agreements, reports and plans, please refer to **Appendix A** to the Final EIR.

based on the entire record, that projected water supplies will be sufficient to satisfy the demands of the Riverpark project, in addition to existing and planned future uses in the Santa Clarita Valley.

f. Status of the 2000 UWMP

In the Riverpark Draft EIR, Section 4.8, Water Services, at p. 4.8-27, the EIR summarized the status of the litigation regarding the 2000 UWMP. In that section, the EIR pointed out that the 2000 UWMP was the subject of litigation and that the trial court had ruled that the UWMP was adequate under the Urban Water Management Planning Act and other laws and regulations. The EIR also pointed out that the petitioners had appealed the trial court's ruling.

Since completion of the Draft EIR, the Court of Appeal for the Fifth District issued its opinion on September 22, 2004. The opinion reversed the judgment of the Kern County Superior Court upholding the adequacy of the 2000 UWMP, and remanded the case to the Superior Court with directions to vacate approval of the 2000 UWMP. The court decision focused on the 2000 UWMP's discussion of the ammonium perchlorate contamination detected in impacted wells in the Santa Clarita Valley groundwater basin. Specifically, the court found that the 2000 UWMP should have addressed the time needed to implement the available method for treating the perchlorate-contaminated water, and it should have described the reliability of groundwater supplies during that implementation period.

City staff has received correspondence from Dan Masnada, General Manager, CLWA, dated October 13, 2004, alerting the City to the recent court decision.[13] The purpose of the letter from CLWA is to inform the City that continued reliance on the source information used in preparing the 2000 UWMP is still appropriate and that several steps were being taken to address the concerns raised in the court decision.

In CLWA's letter, CLWA points out that, because the court decision was required to focus only on the 2000 UWMP and the information available at that time, it could not consider the significant progress that CLWA, local retail water purveyors and others have made to respond to the perchlorate contamination. CLWA has also advised the City that the planning for remediation of perchlorate has progressed significantly over the past four years, since the UWMP was adopted.

13 For a copy of this letter, please see **Appendix A** to the Final EIR.

As discussed in the CLWA letter, CLWA has advised the City that the recent court decision invaliding the 2000 UWMP has not affected CLWA's and the purveyors' ability to meet existing and projected Santa Clarita Valley water demand through available and reliable water supplies, including SWP water and local groundwater.

Based on the information presented above, the EIR and entire record, the following assessment of the Valley's water supplies can be made:

(a) **Current and Near-Term Assessment**. The number and distribution of production wells in Santa Clarita Valley and the availability of SWP water provides sufficient, reliable water supplies that are available to meet current and near-term Santa Clarita Valley water demand during both average/normal and dry years.

In average/normal weather years, groundwater production from existing wells not impacted by perchlorate in combination with SWP water deliveries, are available to deliver over 100,000 acre-feet per year (AFY), which equates to almost the level of water demand in 2020, as projected in the 2000 UWMP. (Currently, the total water demand in the Santa Clarita Valley is less than 85,000 AFY.)

In dry weather years, shortfalls in SWP supplies can and will be supplemented by approximately 50,000 AF of SWP water that CLWA has banked in Kern County with the Semitropic Water Storage District through short-term banking arrangements. This water is available until 2012-2013 and, as such, provides dry-year reliability for Santa Clarita Valley water supplies for the next nine± years. In addition, prior to expiration of the Semitropic short-term banking arrangements, CLWA has reported that it will implement long-term reliability enhancement programs, as described in the 2000 UWMP. For example, CLWA recently signed Memorandums of Understanding (MOUs) with two water agencies that operate banking programs. The MOUs constitute the initial steps in implementing these long-term programs.

(b) **Long-Term Assessment**. Actions to contain and treat the perchlorate-contaminated groundwater will be in place well before calendar year 2010; therefore, the water supply identified in the 2000 UWMP still constitutes an available and reliable water supply to meet increasing levels of demand over the long term (through 2020). Specifically, in the long term, water supplies will be available at the levels shown in the 2000 UWMP because those sources consist of SWP supplies, groundwater banking programs, recycled water and local groundwater, including full restoration of Saugus Formation well capacity. The long-term plan is to install treatment and return two of the impacted Saugus Formation production wells to service in addition to drilling two or more replacement wells, which will fully restore the impacted capacity. The testing to contain and treat the perchlorate-contaminated water will commence by the end of this year, with implementation of treatment expected to be in place within two years.

Information regarding the current status of the efforts by CLWA and the local water purveyors to address the perchlorate contamination in the impacted municipal-supply wells, and to contain and treat perchlorate-contaminated groundwater, is found in a recent report prepared by CH2MHill for the Upper Basin water purveyors entitled, *Draft Analysis of Perchlorate Contaminant in Groundwater Near the Whittaker-Bermite Property, Santa Clarita, California*, dated September 2004 (the

CH2MHill report). This report is incorporated by reference and available for public inspection at CLWA, 27234 Bouquet Canyon Road, Santa Clarita, California 91350-2173.

Although the report is designated "draft," it has been approved by the DTSC. Based on DTSC's review of the recommendations contained in that report, DTSC concurs that perchlorate from the former Whittaker-Bermite property will be contained by implementing the proposed "pump and treat" program set forth in that report.

TOPICAL RESPONSE 3: SWP SUPPLIES - RELIANCE ON THE 41,000 AFY WATER TRANSFER

Comments have objected to the Riverpark project relying upon water supplies that include Castaic Lake Water Agency's (CLWA) purchase of an additional 41,000 acre-feet per year (AFY) of State Water Project (SWP) Table A Amount[1] from the Kern County Water Agency (KCWA) and another water district, as part of a permanent water transfer approved by the Department of Water Resources (DWR). Comments have stated that the permanent 41,000 AFY water transfer to CLWA cannot be relied upon due to pending litigation. Comments have also claimed that the EIR for the 41,000 AFY water transfer has been decertified and, therefore, that CLWA is not entitled to rely on the additional SWP water supplies until CLWA completes a new EIR. Other comments have asserted that CLWA cannot even prepare a new EIR for the 41,000 AFY water transfer unless and until DWR first completes a separate EIR in connection with the settlement of the Monterey Agreement litigation.

Each of these issues was addressed in the Draft EIR. Pages 4.8-56–80 of the Draft EIR contain a thorough discussion of SWP water supplies and CLWA's SWP Table A Amount, including the additional 41,000 AFY water transfer, the environmental review and litigation associated with that transfer, and the status of CLWA's water transfer acquisition under the Monterey Agreement. Based on the Draft EIR and the entire record, and after considering the comments challenging CLWA's reliance on the 41,000 AFY water transfer, the City agrees with CLWA that it is appropriate for CLWA to have included, and to continue to include, the 41,000 AFY water transfer as part of CLWA's available SWP water supplies. Accordingly, the City finds that it is appropriate for the Riverpark project to rely on those SWP supplies in the water service portion of the Draft EIR.

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1 As stated in the Draft EIR, at p. 4.8-57, at the inception of the SWP, DWR entered into individual water supply contracts with agricultural and urban water suppliers (SWP contractors) throughout California. The contracts were the method used to fund construction and operation of the SWP facilities for the delivery of water to the SWP contractors. Each such contract sets forth the annual amount of water to which an SWP contractor is contractually entitled, which is stated in "Table A" to the contract. However, the amount of SWP water actually available for delivery in any year may be an amount less than the contractor's maximum Table A Amount due to hydrology and a number of other factors. The Table A Amount was previously referred to as "SWP entitlement." As stated by the Court of Appeal in *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2003) 106 Cal.App.4th 715, SWP "entitlements" are not equivalent to actual deliveries of water because, as stated above, the amount of SWP water actually available for delivery in any given year may be an amount less than the Table A Amount (previously referred to as "entitlement"), due to hydrology and a number of other factors. In addition, the amount of SWP water actually available for delivery in any given year may be reduced due to such factors, including drought periods.

1. THE RECORD SUPPORTS CLWA'S ABILITY TO USE AND RELY UPON THE 41,000 AFY WATER TRANSFER

As stated in the Draft EIR, at p. 4.8-61, imported SWP supplies have been a supplemental source of supply to the Santa Clarita Valley since 1980. CLWA is a SWP contractor with a current maximum annual SWP Table A Amount of 95,200 AFY. (Id.) In 1999, CLWA purchased an additional 41,000 AFY of Table A Amount from KCWA and another water district, which brought its total SWP Table A Amount to 95,200 AFY. This purchase is generally referred to as the "41,000 AFY water transfer." The history associated with CLWA's 41,000 AFY water transfer was thoroughly disclosed in the Draft EIR. For example, at p. 4.8-61, the Draft EIR summarized the permanent 41,000 AFY transfer as follows:

> "The CLWA/WRMWSD water transfer has been completed, CLWA has paid approximately $47 million for the additional Table A Amount, the monies have been delivered, the sales price has been financed through CLWA by tax-exempt bonds, and DWR has increased CLWA's SWP maximum Table A Amount to 95,200 AFY because it was a permanent transfer/reallocation of SWP Table A entitlement between SWP contractors." (See Riverpark Draft EIR, p. 4.8-61.)

At p. 4.8-61–4.8-62, the Draft EIR also summarized the EIR process initiated by CLWA to address the environmental effects of the 41,000 AFY water transfer, as well as the associated CEQA litigation, challenging the adequacy of CLWA's EIR on the 41,000 AFY water transfer:

> "Prior to completion of the CLWA/WRMWSD water transfer, the proposed transfer was the subject of environmental review by the water agencies. The agencies selling the 41,000 acre-feet of SWP Table A Amount to CLWA assessed the environmental consequences of the proposed transfer within their service area in a Final EIR, dated June 1998. This EIR was certified in 1998 and has never been the subject of judicial review. As a result, the EIR is conclusively presumed to be valid. (Pub.Res.Code §21167.2)
>
> CLWA also prepared a supplemental Final EIR, which assessed the environmental effects of CLWA's acquisition of the 41,000 acre-feet within its service area. The Board of Directors of CLWA certified the Supplemental Final EIR in March 1999. Thereafter, in April 1999, a lawsuit was brought challenging the adequacy of the EIR under CEQA (*Friends of the Santa Clara River, et al. v. Castaic Lake Water Agency, et al.*, Case No. BS 056954 [Friends Decision, **Appendix A**). The trial court ruled in favor of CLWA and upheld the adequacy of the EIR under CEQA.
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> In October 2000, the plaintiffs filed an appeal. As discussed above, the appellate court reversed the trial court's judgment and ordered CLWA's *EIR decertified. However, the appellate court did not order CLWA to void its approval of the water transfer.* Instead, the appellate court remanded the matter to the trial court for further proceedings. After a hearing on September 24, 2002, the trial court concluded that CLWA could utilize the 41,000 AFY to which it is entitled...." (*Emphasis added*)

Although the Draft EIR made it clear that the court in the 41,000 AFY water transfer litigation did not invalidate that transfer, comments, nonetheless, have claimed that CLWA cannot rely on those additional SWP supplies until there is a certified EIR addressing the environmental effects of the 41,000 AFY water transfer. As discussed below, the City has concluded that in light of the record it is appropriate to include the 41,000 AFY water transfer in water supply planning, despite potential uncertainty arising from litigation.

As stated above in the quotation from the Draft EIR, in *Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.4th 1373, the Court of Appeal ordered the trial court to decertify CLWA's EIR for the 41,000 AFY water transfer solely on the ground that it had tiered-off the subsequently decertified Monterey Agreement EIR. (Id. 95 Cal.App.4th at 1388) In doing so, however, the Court of Appeal also examined all of the other arguments raised by the project opponents and found them to be without merit. The Court of Appeal specifically held that, "if the…tiering problem had not arisen," the court would have affirmed the earlier trial court judgment upholding the adequacy of CLWA's EIR. (Id.) Moreover, despite the tiering problem, the Court of Appeal refused to invalidate the 41,000 AFY water transfer, or to require that the trial court stop or enjoin the water transfer pending completion and certification of a new EIR. (Id.) Instead, the Court of Appeal left it up to the trial court to decide whether to allow CLWA to continue to utilize the 41,000 AFY pending completion and certification of the new EIR:

> "Like the court in PCL, *supra*, 83 Cal.App.4th at p. 926 and footnote 16, we leave to the trial court's discretion whether to enjoin all or portions of respondent's project pending completion of an adequate EIR. The trial court is in a better position than this court to determine factually the current status of the PCL litigation or of a new Monterey Agreement EIR.…*The trial court* shall issue a *writ* of mandate *vacating* the *certification* of the *EIR, shall retain jurisdiction until respondent certifies an EIR complying with CEQA consistent with the views expressed in this opinion*, and *shall consider such orders it deems appropriate under Section 21168.9*."[2] (*Emphasis added*) (Id. at p. 1388)

As directed by the Court of Appeal, the trial court, after comprehensive briefing on the factual issues, exercised its discretion and denied the project opponents' request to invalidate or enjoin the 41,000 AFY water transfer. The trial court ruled that CLWA was not prohibited from using the water to which it was entitled, but allowed the project opponents to later renew their application to prohibit the use of such water based on evidence that the actual use of the additional water supplies is "improper." (See

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2 The details associated with the CEQA litigation involving CLWA's 41,000 AFY water transfer were also disclosed in detail by CLWA in its Draft Water Supply Reliability Plan, dated September 17, 2003, at pp. 3–5, which is found in **Appendix A** to the Final EIR. The trial court judgment and related transcript in that litigation are included in **Appendix A** to the Final EIR.

Riverpark Final EIR, **Appendix A**, p. 2, ¶6 [Judgment Granting Peremptory Writ of Mandate].) Specifically, the trial court stated that:

> "*Petitioner requests that the court also prohibit respondent from using any of the 41,000 acre-feet of additional water allotted to it from the subject State Water Project.* Petitioner contends that the said water will be used to approve new development that will not be able to be reversed if a Final Environmental Impact Report is not certified. Respondent contends that such a prohibition would prevent it from meeting the existing water needs in the area it services. Both contentions appear to be speculative at this time. *Respondent will not be prohibited from using the water to which it is entitled, but Petitioner may renew its application for such prohibition based upon evidence of the actual use of such additional water for purposes it considers improper*." (*Emphasis added*) (Id.)

Petitioners then appealed the trial court's judgment and, again, requested that the use of the 41,000 AFY be prohibited. However, on December 1, 2003, in an unpublished opinion, the Court of Appeal affirmed the trial court's judgment that CLWA's use of the 41,000 AFY is not prohibited.[3] Because the 41,000 AFY was a permanent water transfer, because DWR includes the 41,000 AFY in calculating CLWA's share of SWP Table A Amount, and because the courts have not prohibited CLWA from using or relying on those additional SWP supplies, the City has determined that it remains appropriate for the Riverpark project to include those water supplies in its water supply and demand analysis, while acknowledging and disclosing the potential uncertainty created by litigation.

In the meantime, CLWA completed preparation of the new Draft EIR for the 41,000 AFY water transfer project. This new EIR evaluates the potential environmental impacts of the 41,000 AFY water transfer, along with the rights for storage and delivery of water associated with this transfer through SWP facilities.

In light of the information presented in the Draft EIR and the entire record, the City believes that CLWA was entitled to use, and may continue to use, the additional SWP water supplies from the 41,000 AFY water transfer pending certification of the new EIR pursuant to CEQA, absent a subsequent order to the contrary from the Los Angeles Superior Court, which maintains jurisdiction over the 41,000 AFY water transfer proceedings.

For all the above reasons, the City has determined that the Riverpark project can appropriately rely on CLWA's SWP annual Table A Amount (including the 41,000 AF) identified in the Draft EIR and the SB 610 analysis. The City also has determined, based on the entire record, that the projected SWP

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3 For a copy of the unpublished opinion, see Appendix 4.8 to the Draft EIR (*Friends of the Santa Clara River v. Castaic Lake Water Agency*, 2003 WL 22839353, p. 3).

supplies, in conjunction with other supply sources, will be sufficient to satisfy the demands of the Riverpark project, in addition to existing and planned future uses in the Santa Clarita Valley.

2. NEITHER THE MONTEREY AGREEMENT LITIGATION NOR THE RELATED SETTLEMENT AGREEMENT PRECLUDE CLWA FROM USING OR RELYING ON THE 41,000 AFY WATER TRANSFER

As stated above, comments have stated that the Monterey Agreement litigation and the related settlement agreement prohibit CLWA from using or relying on the 41,000 AFY water transfer, unless and until DWR completes preparation of a new EIR for the Monterey Amendments. The comments do not refer to the extensive discussion of the Monterey Agreement litigation and related issues in the Draft EIR. The comments also do not adequately explain why the Monterey Agreement litigation or settlement agreement would prohibit CLWA from utilizing its entire annual SWP Table A Amount (including the 41,000 AFY). Based on the information presented in the Draft EIR and the entire record, the City does not concur with these comments. The City has determined that CLWA's use of the 41,000 AFY water transfer is not impacted by either the Monterey Agreement litigation or the related Settlement Agreement.[4]

At pp. 4.8-57–60, the Draft EIR contains a thorough discussion of the Monterey Agreement, the environmental review process for that agreement and the CEQA litigation challenging the adequacy of the EIR for the Monterey Amendments. As stated in the Draft EIR, in 1994, disputes arose among DWR and many agricultural and urban SWP contractors regarding the availability and distribution of water through SWP facilities. (Id.) To avoid potential litigation, those parties met in Monterey, California to attempt to resolve on-going disputes and, after negotiations, they agreed to a statement of principles, which became known as the "Monterey Agreement." (Id.)

The Monterey Agreement established principles to be incorporated into contract amendments (the Monterey Amendments) between DWR and the SWP contractors. (Id.) The three primary objectives of the Monterey Amendments were to "(i) to increase the reliability of all SWP contractors' water supplies; (ii) to stabilize the rate structure in order to improve the financial viability of the SWP; and (iii) to increase water management flexibility for all SWP contractors." (Id.)

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4 For a discussion of CLWA's position regarding the 41,000 AFY water transfer and the fact that the Monterey Settlement Agreement does not impact that water transfer, please see **Appendix A** to the Final EIR (Letter from CLWA's General Manager, Dan Masnada, to Newhall County Water District's General Manager, Ken Petersen, dated March 30, 2004).

In an effort to more effectively manage SWP resources, without constructing new SWP facilities, the Monterey Amendments included, among other benefits, the permanent transfer of 130,000 AFY of SWP Table A Amount from agricultural to urban SWP contractors. (See Riverpark Draft EIR, p. 4.8-58) The water transfer agreements for the additional annual SWP Table A Amount "…are effective upon execution (DWR Bulletin No. 132-96, August 1997, Ch. 1, p. 5) and, therefore, are considered permanent water reallocations of SWP Table A water." (Id., p. 4.8-58.)

As stated in the Draft EIR, "[t]he Monterey Agreement gave rise to potentially significant environmental effects requiring additional analysis under the California Environmental Quality Act." (Id., p. 4.8-59) As a result, a program EIR was prepared to address the environmental impacts associated with implementation of the Monterey Agreement. (Id.) The certified final program EIR for the Monterey Agreement was challenged in CEQA litigation in 1995. At pp. 4.8-59–60, the Draft EIR summarized the results of that litigation as follows:

> "The Sacramento Superior Court upheld the adequacy of the EIR. Before and after the trial court's decision, DWR and the agricultural and urban SWP contractors who had executed the Monterey Agreement began implementing various amendment provisions, including the completion of permanent transfers of Table A Amounts among agricultural and urban SWP contractors. The trial court's decision was subsequently appealed. On appeal, the petitioners sought a Writ to prevent further implementation of the Monterey Agreement during the appeal. However, the appellate court denied the requested Writ. (DWR Bulletin No. 132-98, November 1999, Ch. 6, p. 2.)
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> The appellate court reversed the trial court's decision. The appellate court held that the Program EIR for the Monterey Agreement was improperly prepared by the Central Coast Water Agency, as 'lead agency' under CEQA, rather than by DWR, which should have been the 'lead agency.' The appellate court also found that the EIR did not sufficiently discuss implementation of a 'no project' alternative. The court then concluded that a new EIR must be prepared and certified. Finally, the court held that the trial court improperly dismissed the plaintiffs' challenge to DWR's transfer of title to the Kern Water Bank from DWR to Kern County Water Agency."

Importantly, although the appellate court in the Monterey Agreement litigation invalidated certification of the Monterey Agreement EIR, it did not invalidate the Monterey Agreement itself; instead, the appellate court directed that the trial court consider whether the Monterey Agreement should remain intact pending preparation of a new EIR. (Id.) Specifically, the appellate court stated:

> "We reverse the judgment and remand the cause to the trial court. The trial court shall…issue a writ of mandate vacating the certification of the EIR….The trial court shall consider such orders it deems appropriate under Public Resources Code Section 21168.9, subdivision (a), consistent with the views expressed in this opinion, and shall retain jurisdiction over this action until DWR certifies an EIR in accordance with CEQA standards and procedures that meets the substantive

> requirements of CEQA." (See **Appendix A**, PCL Decision, *Planning & Conservation League v. Department of Water Resources* [2000] 83 Cal.App.4th 892, 926.)

In a related footnote, the appellate court stated:

> "We earlier *declined to stay implementation of the Monterey amendments*.…Consequently, the *project was permitted to proceed* pending disposition of this appeal. The record does not reflect the current status of the project and, in the absence of such information, *we shall issue no orders concerning further implementation of the project*. The trial court, acting under the authority provided by Public Resources Code Section 21168.9, is the more appropriate forum to consider and rule upon requests to enjoin all or portions of the project pending the completion of administrative and judicial proceedings necessitated by our opinion." (*Emphasis added*) (Id., p. 926, fn. 16)

On May 5, 2003, DWR, the Planning and Conservation League, the SWP contractors and other entities entered into a Settlement Agreement of the Monterey Agreement litigation. The Settlement Agreement did not set aside, invalidate, or otherwise vacate the Monterey Agreement Amendments. In addition, no court orders have been issued to stay, set aside, or invalidate the Monterey Agreement Amendments. To the contrary, in the Settlement Agreement, the parties agreed that the SWP would continue to be administered and operated in accordance with both the Monterey Amendments and the terms of the Settlement Agreement entered into between the parties. Specifically, the Settlement Agreement provides that:

> "Pending the Superior Court's issuance of an order discharging the writ of mandate in the underlying litigation, the Parties will jointly request that the Superior Court enter an order approving this Settlement Agreement, and an order, pursuant to California Public Resources Code Section 21168.9, *authorizing on an interim basis the administration and operation of the SWP…in accordance with the Monterey Amendments*, [and] *the terms of this Settlement Agreement*…." (*Emphasis added*) (Settlement Agreement, dated May 5, 2003, p. 9.)

On June 6, 2003, the Sacramento Superior Court issued the requested order pursuant to Public Resources Code §21168.9. The trial court's order approved both the Settlement Agreement, and the administration and operation of the SWP pursuant to the Monterey Amendments and the terms of the approved agreement.[5]

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5 See **Appendix A** to the Final EIR (Order pursuant to Public Resources Code Section 21168.9, dated June 6, 2003, p. 2-3).

The approved Settlement Agreement specifically referenced CLWA's 41,000 AFY water transfer and related litigation, and provided that "...*nothing* in this Settlement Agreement is intended to predispose the remedies *or other actions* that may occur in that pending litigation." (*Emphasis added*) (Id., p. 12) In other words, the Settlement Agreement specifically deferred to the Los Angeles County Superior Court the determination of whether or not to enjoin CLWA's use of the 41,000 AFY water transfer:

> "*Acknowledgement and Agreement Regarding Kern-Castaic Transfer [the 41,000 AFY water transfer].* With respect to Section III(C)(4)(b) regarding the Kern-Castaic Transfer, the Parties *recognize that such water transfer is subject to pending litigation in the Los Angeles County Superior Court* following remand from the Second District Court of Appeal (See *Friends of the Santa Clara River v. Castaic Lake Water Agency*, 95 Cal.App.4th 1373, 117 Cal.Rptr. 2d 54 (2002); *review denied* April 17, 2002.) The Parties agree that jurisdiction with respect to that litigation should remain in that court and that *nothing in this Settlement Agreement is intended to predispose the remedies or other actions that may occur in that pending litigation*." (*Emphasis added*) (Id., Section III[E], p. 12.)

Therefore, contrary to the above comments, which attempt to place a cloud over the validity of CLWA's 41,000 AFY water transfer, the terms of the Monterey Settlement Agreement make it clear that nothing in that agreement was intended to impact or affect the Los Angeles County Superior Court's determinations relating to CLWA's 41,000 AFY water transfer. Additionally, as stated above, the actions taken by both the trial court and appellate court in that litigation have confirmed CLWA's right to prepare the new EIR. In short, nothing in the Monterey Agreement litigation or the Settlement Agreement affects CLWA's water transfer, or the preparation of its new EIR addressing the impacts of that water transfer.

Other comments have stated that the Settlement Agreement requires the new Monterey Agreement EIR to analyze CLWA's 41,000 AFY water transfer, and that the water from that transfer should not be relied upon until DWR completes its new EIR. The City does not concur with these comments.

First, nothing in either the Settlement Agreement or the related court orders precludes CLWA from using or relying on the 41,000 AFY water transfer, which remains intact. Both the trial court and the appellate court in the 41,000 AFY litigation have confirmed that CLWA may continue to use the 41,000 AFY under the water transfer, pending preparation of the new EIR, or a subsequent order issued by the Los Angeles County Superior Court.

Second, nothing in the terms of the Monterey Settlement Agreement preclude CLWA from proceeding with its own EIR to address the environmental implications of the 41,000 AFY water transfer. If the

Settlement Agreement had intended such a result, then it is reasonable to assume that provisions would have been included in that agreement making it clear that CLWA could not proceed with its own EIR on the water transfer, as it is required to do so under the order issued by the Los Angeles County Superior Court.[6] In fact, no such provisions were included in the Settlement Agreement, because such provisions would have interfered with the jurisdiction of another court in the separately pending 41,000 AFY litigation (*Friends of the Santa Clara River v. Castaic Lake Water Agency* [2002] 95 Cal.App.4th 1373, and *Friends of the Santa Clara River v. Castaic Lake Water Agency*, 2003 WL 22839353 [unpublished opinion]).

Third, although the Settlement Agreement requires the new Monterey Agreement EIR to analyze the potential environmental effects relating to Castaic's 41,000 AFY water transfer; it does not, and cannot, preclude CLWA from conducting its own environmental review of that transfer. Indeed, CLWA is required by court order to prepare a new EIR to address the environmental implications of the 41,000 AFY water transfer. In the meantime, however, there are no court orders precluding CLWA from using or relying on that water supply. And, CLWA is in the process of completing the new EIR to address the environmental impacts of the water transfer, without tiering or relying in any way on the decertified Monterey Agreement EIR. In short, CLWA's new EIR will provide the environmental analysis for the 41,000 AFY water transfer, which is required by CEQA and the orders and opinions issued in the 41,000 AFY litigation. Also, nothing in CEQA or any law, regulation or agreement constrains or limits CLWA's discretion to proceed with its own EIR on its 41,000 AFY water transfer.

In summary, the potential uncertainty created by the litigation and the preparation of the Monterey Agreement EIR do not render it inappropriate for CLWA to consider the 41,000 AFY in its water supply planning.

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6 In the judgment granting the Writ of Mandate setting aside CLWA's certification of the 41,000 AFY EIR, the trial court specifically retained "…jurisdiction until respondent Castaic Lake Water Agency certifies an Environmental Impact Report that complies with the California Environmental Quality Act and is consistent with the views expressed by the Court of Appeal Opinion, filed January 10, 2002, Case No. B145283." (See Riverpark Final EIR, **Appendix A** [Judgment Granting Peremptory Writ of Mandate, dated October 25, 2002, p. 2, ¶3].)

TOPICAL RESPONSE 4: NEWHALL COUNTY WATER DISTRICT RESOLUTION

One of the comment letters on the Riverpark Draft EIR attached and referenced a resolution of the Board of Directors of the Newhall County Water District (NCWD) regarding water supplies in the Santa Clarita Valley (Resolution No. 2004-3). Despite that only comment letter referenced NCWD Resolution 2004-3, and that topical responses are generally reserved for multiple comment letters addressing the same or similar topic, this particular topical response is provided in order to fully address NCWD Resolution 2004-3, and the issues relating to that resolution.

NCWD Resolution 2004-3, approved on a 3-2 vote, challenges the water supply figures used for the Santa Clarita Valley. The resolution calls for limits on groundwater pumping, takes groundwater contaminated with ammonium perchlorate from the list of available water supplies, and discounts water supply figures for both State Water Project (SWP) supplies and new water sources.[1]

This response summarizes sections of NCWD Resolution No. 2004-3 and references the actions taken by the Castaic Lake Water Agency (CLWA) and the City of Santa Clarita (City) in response to that resolution. Based on the information presented below, and the water analysis contained in the Riverpark Draft EIR, including the supporting data provided in the entire record, the City will continue to rely on the Draft EIR for the Riverpark project, the SB 610 Water Supply Assessment, the annual water reports for the Santa Clarita Valley, and other documents, in assessing the availability of water supplies for the Valley, because no credible corroborating evidence to the contrary has been provided.

1. RESOLUTION NO. 2004-3 AND RELATED RESPONSES

The text provided below summarizes portions of the NCWD Resolution, followed by pertinent information presented by CLWA, which the City finds credible.

a. Resolution/Alluvial Aquifer

The NCWD Resolution makes reference to the Alluvial aquifer, stating that 700–1,000 acre-feet of water in the Alluvial aquifer is not currently available due to the detection of ammonium perchlorate. A December 1986 report prepared by Richard C. Slade & Associates (Slade) is used to establish a perennial yield of 31,600 to 32,600 AFY from the Alluvial aquifer before the detection of perchlorate. In addition, a

[1] For a copy of NCWD Resolution No. 2004-3, please see **Appendix A** to the Final EIR.

1990 Kennedy/Jenks/Chilton report is used to support a "safe yield" of 32,500 acre-feet per year from the Alluvial aquifer. Other reports dated 1993–1999 are said to make reference to the "31,600–32,600 acre-feet per year safe perennial yield figure" for the Alluvial aquifer.

The resolution also refers to Slade's updated report entitled, *2001 Update Report: Hydrogeologic Conditions in the Alluvial and Saugus Formation Aquifer Systems* (*2001 Update Report*). The resolution states that Slade's *2001 Update Report* does not "quantify in detail a safe yield or a perennial yield" for the Alluvial aquifer. Referencing the earlier 1986 Slade report, the resolution attempts to draw a correlation between increased urbanization and its impact on the availability of natural recharge areas. The resolution concludes by stating that the Alluvial aquifer has been "pumped above the safe perennial yield since 1994" and that the groundwater levels in the eastern basin have been dropping, indicating an overdraft condition.

(1) Response

In response to references in the resolution to impacts on the production capability of the Alluvial aquifer due to perchlorate, please refer to Riverpark Draft EIR, pp. 4.8-37–38 and **Topical Response 2: Groundwater Supplies and Perchlorate**.

In response to references in the resolution to urbanization and its impact on natural recharge areas, please refer to **Appendix A** to the Final EIR (Technical Memorandum prepared by John Porcello, CH2MHill, dated February 22, 2004). In that technical memorandum, CH2MHill addressed the effects of urbanization on aquifer recharge in the Santa Clarita Valley. CH2MHill highlighted the importance of the importation of SWP water supplies to Santa Clarita Valley in finding that urbanization has not reduced recharge to groundwater, nor depleted the amount of groundwater that is in storage within the Valley's basin. (Id.)

In response to references in the Resolution to dropping water levels in the eastern basin, please refer to **Topical Response 1: Groundwater Supplies and "Overdraft" Claims**. In addition, please see **Appendix A** to the Final EIR (Technical Memorandum prepared by Richard C. Slade & Associates, LLC, dated March 12, 2004). In that technical memorandum, Slade responded to allegations that groundwater levels in water wells in the "eastern reaches and tributaries" of the Santa Clara River are declining, which is an indication of "overdraft." In that technical memorandum, Slade provided evidence on current water level conditions in the eastern reach of the Santa Clara River. Slade also assessed changes in groundwater levels over time by assessing the hydrograph for a Santa Clarita water company municipal-supply well, located along the river approximately 6 miles east of Bouquet Junction. The well is generally referred to as "Lost Canyon Well No. 2."

Based on the data, Slade found that the "alluvial aquifer system is not in overdraft because water levels show a rapid and significant rise following periods of rainfall. In a strict sense, if the aquifer system were in 'overdraft,' then water levels would show a continuous decline even during hydrologically 'wet' periods during a long time period; the water level data do not show any such decline over the entire period of water level record." (Id., p. 3.) Slade also noted that "even though water levels have declined in previous drought years [referring to wells in the eastern reaches of the basin], those water levels have returned in the past to historic high water levels." (Id.) Consistent with his technical memorandum, Slade recently reported to the Newhall County Water District that the east end of the Alluvial aquifer "continued to display a very strong correlation with a cumulative rainfall departure trends; levels declined temporarily in dry times but recover very rapidly and to a large degree in more normal or wet rainfall periods."[2]

In addition, CLWA has directly responded to the points raised in Resolution No. 2004-3 regarding the Alluvial aquifer. CLWA's response is repeated below:

> "Alluvial Aquifer
>
> 1. While a portion of the Saugus Formation and Alluvial aquifer is currently not available due to perchlorate contamination, technology exists to treat groundwater to remove the perchlorate and return it to drinking water quality. This technology is already in use in other parts of California, most notably in the nearby San Gabriel Valley (La Puente Valley County Water District). This treatment process has received all necessary state approvals.
>
>   The La Puente treatment plant is a state-of-the-art facility approved by the California Department of Health Services for the removal of perchlorate from water supplies. The plant removes perchlorate and other contaminants from a nine square mile pollution plume (much larger than the plume area sourced by the Whittaker-Bermite site), disinfects the water to drinking water standards and then serves it to customers.
>
>   CLWA and the purveyors, including NCWD, have developed a plan for beginning the treatment process necessary for removal of the perchlorate from the Saugus Formation as soon as possible, so that the affected wells can be restored to service. Thus, the supplies associated with the local aquifers, since they can be returned to use by treatment, constitute a finalized supply, or should be footnoted as being only temporarily unavailable.
>
> 2. As most people are aware, science improves though time. New information and data are incorporated into scientific investigations as they build upon one another. This is why the estimates in the 1972 U.S. Geological Survey report have been updated by noted hydrologist Richard Slade, first in 1986 and more recently in 2002. The proposed resolution cites Mr. Slade and seems to call into question his assessments of capacity of the aquifers in the local groundwater basin over time. The fact is, more and better data is available today than in 1972 or 1986.

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2 See **Appendix A** to the Final EIR (Letter from Slade to Newhall County Water District, Board of Directors, dated January 29, 2004).

> In fact, in the *2001 Update Report - Hydrologic Conditions in the Alluvial and Saugus Formation Aquifer Systems* (dated July 2002), Mr. Slade states 'this report supercedes those previous work products and is intended to provide the water purveyors in the Valley with a current assessment of the geologic and hydrologic conditions within the local groundwater basin.'
>
> 3. The term 'safe perennial yield' is not a defined term commonly used by hydrologists. The Alluvial aquifer is being pumped within the operational yield as defined by Richard Slade (2002).
>
> 4. The groundwater basin underlying the Valley is typical of most. During dry years, well levels go down. During wet years, they go up. This is a basic principle of hydraulics. Since southern California has been dry for the last few years, well levels, particularly along the edges and tributary canyons of groundwater basins, have fallen. This is true for many areas in southern California and is not limited to the Santa Clarita Valley. It is not caused by 'overpumping'. It is caused by Mother Nature. When the next good wet year arrives, well levels will return to their previous higher levels."[3]

CLWA is also critical of the NCWD Resolution for understating available groundwater supplies by "going back in time" to data and reports from 1986, rather than utilizing updated technical data from 2001 from the same hydrogeologist. By picking and choosing certain groundwater data that has since been updated and revised, bias appears to be injected into what is supposed to be an objective planning process. This is also exacerbated by their confusing water supply well capacities and groundwater supply volumes. CLWA also concludes that the NCWD Resolution has needlessly and erroneously reduced groundwater supply volumes by subtracting the production capacity of five wells that have been closed due to perchlorate contamination, although more than enough wells are online to produce the volumes of groundwater projected by CLWA. This error is further compounded by their refusal to acknowledge the technology to clean up the contamination exists and will soon be brought online, thus returning the wells to production.

In addition, it should be noted that this issue was litigated to conclusion before the California Public Utilities Commission in 2001 in an action against Valencia Water Company. The findings of the decision are contrary to the position taken in the NCWD Resolution. (*Re Valencia Water Company*, Opinion Approving Water Management Program and Authorizing Service Area Expansion, D.01-11-048, dated November 29, 2001.) In particular, the CPUC found

> "23. The record indicates that pumping from the Alluvial Aquifer has been and continues to be within the aquifer's perennial yield and that the aquifer is not and has not been in overdraft….

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3 See **Appendix A** to the Final EIR (Letter from CLWA to NCWD Board of Directors, dated January 8, 2004, and related attachments).

> 25. The [Valencia Water Management Plan's] estimates of water supply available, in a range of 32,500 to 40,000 AFY, are consistent with current management practices and well within the aquifer's perennial yield." (Id., p. 39.)

The CPUC went on to conclude as a matter of law that "[t]he range of supplies the WMP projects as available from the Alluvial Aquifer and Saugus Formation is reasonable." (Id., p. 43.)

The CPUC denied motions for rehearing and the California Supreme Court declined an appeal of the protestants to review the decision. (*Re Valencia Water Company*, D.02-04-002, dated April 4, 2002, petitions for writ of review denied, S. 105292 and S.105571 [Cal. S. Ct., filed June 19, 2002].) More recently, the CPUC denied an application for rehearing of its denial of the petition for modification. (*Re Valencia Water Company*, D.03-10-063, dated October 16, 2003.) Petitioners based that application for rehearing on the Court of Appeal decision in *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (SCOPE). The CPUC denied the application for rehearing, though it did stay its prior decision insofar as it approved water service to the project challenged in the SCOPE litigation, one of four covered by the territorial expansion that was one of the subjects of the CPUC litigation. The CPUC, however, did not change any of its earlier findings of fact or conclusions of law with respect to Alluvial aquifer.

While the City was not a party to the CPUC litigation, the issue is pertinent here because NCWD and Valencia Water Company both draw their respective water supplies from the same groundwater and State Water Project resources.

b. Resolution/Saugus Formation

The NCWD Resolution refers to a "December 2003 CH2MHill presentation [which] stated that 4,000 AFY of water in the Saugus Formation" is not available due to the detection of ammonium perchlorate. The Resolution refers to the four municipal supply wells in the Saugus Formation that have been taken out of service by the water agencies due to perchlorate contamination. The resolution also refers to a CLWA newsletter regarding the loss of production from the Saugus municipal supply wells. The resolution states that the area impacted by perchlorate in the Saugus Formation has not yet been "characterized," that the "remedial action plan" for clean-up of the perchlorate "is not projected to be complete until August 2005," and that actual "clean-up is not expected until 2010."

(1) Response

In response to references in the NCWD Resolution to impacts on the production capability of the Saugus Formation due to perchlorate, please refer to Riverpark Draft EIR, pp. 4.8-43–51 and **Topical Response 2: Groundwater Supplies and Perchlorate**.

In response to the status of efforts to remediate the perchlorate contamination from the groundwater basin, please refer to **Topical Response 2: Groundwater Supplies and Perchlorate**.

In addition, CLWA has responded to the points raised in the resolution regarding the Saugus Formation and the detection of perchlorate. CLWA's response is repeated below:

> "1. While a portion of the Saugus Formation and Alluvial aquifer is currently not available due to perchlorate contamination, technology exists to treat groundwater to remove the perchlorate and return it to drinking water quality. This technology is already in use in other parts of California, most notably in the nearby San Gabriel Valley (La Puente Valley County Water District). This treatment process has received all necessary state approvals.
>
> The La Puente treatment plant is a state-of-the-art facility approved by the California Department of Health Services for the removal of perchlorate from water supplies. The plant removes perchlorate and other contaminants from a nine square mile pollution plume (much larger than the plume area sourced by the Whittaker-Bermite site), disinfects the water to drinking water standards and then serves it to customers.
>
> CLWA and the purveyors, including NCWD, have developed a plan for beginning the treatment process necessary for removal of the perchlorate from the Saugus Formation as soon as possible, so that the affected wells can be restored to service. Thus, the supplies associated with the local aquifers, since they can be returned to use by treatment, constitute a finalized supply, or should be footnoted as being only temporarily unavailable."[4]

In a presentation made by Dan Masnada, General Manager of CLWA, to CLWA's Board of Directors at its January 28, 2004 regular meeting, Mr. Masnada corrected a number of the points made in the NCWD Resolution regarding Saugus Formation water supplies. In response to the resolution, Mr. Masnada stated that

> "Although four wells are shut-in due to perchlorate contamination, the supply is not lost. All water in the [Santa Clarita Valley] is treated in some form or fashion. Restoring these wells to beneficial use necessitates treatment and attendant costs, which will be borne by those that caused the pollution (not [Santa Clarita Valley] residents).

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4 See **Appendix A** to the Final EIR (Letter from CLWA to NCWD Board of Directors, dated January 8, 2004, related attachments and other documents).

> Reducing groundwater supply projections for the four wells that have been shut-in due to perchlorate contamination is inappropriate and unnecessary because sufficient additional well capacity exists to pump at least 15,000 acre-feet per year. That said, remediation of the perchlorate over the long term is necessary to ensure no additional wells are detrimentally impacted by the contamination.
>
> About 5,000 acre-feet per year is currently being pumped from the Saugus. In the near term, any significant increase in pumping from this supply would only occur in dry years. Possible use of this supply at higher levels on a more consistent basis would only occur in the long term, well after remediation and treatment of the perchlorate contamination has been implemented. That said, remediation of the perchlorate over the long term is necessary to ensure no additional wells are detrimentally impacted by the contamination."[5]

In addition, it should be noted that this issue was litigated to conclusion before the California Public Utilities Commission in 2001 in an action against Valencia Water Company. The findings of that decision are contrary to the position taken by NCWD in the resolution. (*Re Valencia Water Company*, Opinion Approving Water Management Program and Authorizing Service Area Expansion, D.01-11-048, dated November 29, 2001) In particular, the CPUC found that Valencia's "reliance on groundwater from the Saugus Formation is within reasonable limits, and we reject [the] contention that the Saugus Formation will be in overdraft by the year 2011…." (Id. at p. 28), and the CPUC found that

> [t]he record supports [Valencia's] analysis of the perchlorate problem. Specifically, planning for remediation is substantially under way, and production facilities sufficiently remote from the contamination site can be relied upon for the quantities of water that the WMP assumes will be available from the Saugus Formation. Furthermore, the close monitoring of the situation by the water purveyors, CLWA, the California Department of Toxic Substances Control, and the U.S. Army Corps of Engineers, reasonably ensures a prompt response to any changes in the situation. (Id. at 29)

The CPUC denied motions for rehearing and the California Supreme Court declined an appeal of the plaintiffs to review the decision. (*Re Valencia Water Company*, D.02-04-002, dated April 4, 2002, petitions for writ of review denied, S. 105292 and S.105571 [Cal. S. Ct., filed June 19, 2002]) More recently, the CPUC denied an application for rehearing of its denial of the petition for modification. (*Re Valencia Water Company*, D.03-10-063, dated October 16, 2003) Petitioners based that application for rehearing on the Court of Appeal decision in *Santa Clarita Organization for Planning the Environment v. County of Los Angeles.* The CPUC denied the application for rehearing, though it did stay its prior decision insofar as it approved water service to the project challenged in the SCOPE litigation, one of four covered by the territorial expansion that was one of the subjects of the CPUC litigation. The CPUC, however, did not change any of its earlier findings of fact or conclusions of law with respect to the Saugus Formation.

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5 See **Appendix A** to the Final EIR (Letter to NCWD Board of Directors from CLWA, dated January [28], 2004, along with CLWA's January 8, 2004 letter, and a copy of Mr. Masnada's presentation).

While the City was not a party to the CPUC litigation, the issue is pertinent here because NCWD and Valencia Water Company both draw their respective water supplies from the same groundwater and State Water Project resources.

c. Resolution/SWP Water

The resolution challenges the reliability of the delivery of SWP supplies. In essence, the resolution reduced CLWA's SWP supplies to a "midpoint" of 38,080 AFY—for every year, without regard to whether it is considered average/normal year conditions or dry year conditions. In reaching the "midpoint," NCWD did not rely on DWR's published reporting or modeling of SWP delivery reliability.

(1) Response

In response to references in the NCWD Resolution to SWP supplies, please refer to Riverpark Draft EIR, pp. 4.8-56–80. The City also has considered the *SWP Delivery Reliability Report*, dated May 2002, prepared by DWR. (See **Appendix A** to the Final EIR.) The Draft EIR utilized results from DWR's modeling efforts in assessing SWP delivery reliability as well. (See Draft EIR, pp. 4.8-74–75, including Table 4.8-9.)

DWR's modeling effort is known as DWRSIM. The DWRSIM modeling simulates SWP and CVP operations and was conducted by DWR for the CALFED Bay-Delta Program EIS/EIR. One of the model's inputs is a time series of monthly runoff based on historic hydrologic data from 1922 through 1994 (73 years), with that hydrologic data adjusted to reflect a current and future level of upstream land and water use. DWRSIM estimates the amount of water the SWP could deliver to SWP Contractors in each month over the 73 years of operation, for a given set of facilities and operating constraints, and for a given level of SWP Contractor demand. The results are interpreted as the capability of the SWP to meet the assumed SWP demand, over a range of hydrologic conditions. The results from the DWRSIM model runs were determined by the City to provide the best estimates of SWP delivery reliability that were available when the Riverpark Draft EIR was prepared.

Since the DWRSIM model studies were conducted, the modeling tool that DWR uses to simulate operations has evolved (first to CALSIM I, and more recently to CALSIM II). Although the modeling tool itself has changed, the criteria used by DWR in the models to simulate SWP operations have not significantly changed. In addition, although DWR has completed a more recent assessment of SWP delivery reliability in its *SWP Delivery Reliability Report* using CALSIM II, the results of these studies are generally comparable to the results of the DWRSIM modeling, as used in the Riverpark Draft EIR.

DWR, the operator of the SWP, relies on the use of CALSIM II modeling (see **Appendix A**) to project that 75 percent of SWP supplies can be delivered to its SWP Contractors in average years, 39 percent of such supplies can be delivered in dry years, and possibly as low as 20 percent during single critical dry year conditions (which occurs about once every 70 years). Under DWR's prior modeling effort, DWRSIM, DWR indicates that 59 percent of SWP supplies can be delivered to its SWP Contractors in average years, 39 percent of such supplies can be delivered in dry years, and 20 percent can be delivered in a critical dry year. To be conservative, the Riverpark Draft EIR used the 59 percent projection of average year SWP deliveries, rather than the higher 75 percent projection provided under CALSIM II modeling. (See Riverpark Draft EIR, p. 4.8-75.)

By utilizing DWR's modeling, the Riverpark Draft EIR (at pp. 4.8-74–75, including Table 4.8-9) discloses that the SWP Contractors' maximum Table A Amount (previously referred to as "SWP entitlement") is not equivalent to actual deliveries of water because the amount of SWP water actually available for delivery in any given year may be less than the Table A Amount, due to hydrology and a number of other factors. In addition, the DWR modeling shows that the amount of SWP Table A Amount actually available for delivery in any given year may be *reduced* due to such factors, including drought conditions (e.g., average years, dry years and critical dry years).

In addition, CLWA has directly responded to the points raised in the NCWD Resolution regarding SWP delivery reliability. CLWA's response is repeated below:

> "SWP Water
>
> 6. According to the terms of the Monterey Agreement Settlement, the word 'entitlement' has been replaced by 'Table A Amount.' All of NCWD's documents referring to SWP supplies should reflect this.
>
> 7. Attached is Figure 1 from the SWP Delivery Reliability Report (DWR 2002). Please note that the horizontal axis is entitled 'Time at or above.' This means that each SWP contractor can expect to be allocated at least the corresponding percentage of its Table A Amount in a given year type (not 'only' that amount). Using the examples cited in the proposed resolution: 90% of the time, the allocation will be at least 30%. 80% of the time, it will be at least 50%. Please also note on Figure 1 that 50% of the time, the allocation is at least 80% of the Table A Amount. Proper interpretation of this graph is of critical importance to NCWD and its customers; otherwise NCWD would be effectively ignoring available SWP water supplies that its existing (and future) customers are paying for and have the right to receive.
>
> Also attached is Table 2 from the report. This table shows the average, maximum and minimum deliveries in all water year types for the three demand studies DWR ran to produce the report. These are the percentages that a water supplier should use to assess overall reliability of delivery of SWP supplies in various types of water years. The most conservative study is the '2021 B Study,' which assumes that all SWP contractors are requesting full supplies in each year type. Please note that the overall delivery reliability of the State Water Project on a long-term average basis is 76% of the Table A Amounts. Timely

> implementation of CLWA's long-term reliability plan will make this amount of SWP water fully available to the Valley."[6]

According to CLWA, the NCWD Resolution is unsuitable in a number of ways, especially in its understatement of available water supply. The Resolution discounts the availability of SWP supply to a level far below what is actually available, which DWR calculates to be 76 percent of the SWP contract amounts. The NCWD Resolution utilizes a range of 30 to 50 percent without any technical justification.

In addition, it should be noted that this issue was litigated to conclusion before the California Public Utilities Commission in 2001 in an action against Valencia Water Company. The findings of that decision are contrary to the position taken by NCWD in the resolution. (*Re Valencia Water Company*, Opinion Approving Water Management Program and Authorizing Service Area Expansion, D.01-11-048, dated November 29, 2001.) The CPUC denied motions for rehearing and the California Supreme Court declined an appeal of the plaintiffs to review the decision. (*Re Valencia Water Company*, D.02-04-002, dated April 4, 2002, petitions for writ of review denied, S. 105292 and S.105571 [Cal. S. Ct., filed June 19, 2002].) More recently, the CPUC denied an application for rehearing of its denial of the petition for modification. (*Re Valencia Water Company*, Decision 03-10-063, dated October 16, 2003.) Petitioners based that application for rehearing on the Court of Appeal decision in *Santa Clarita Organization for Planning the Environment v. County of Los Angeles.* The CPUC denied the application for rehearing, though it did stay its prior decision insofar as it approved water service to the project challenged in the SCOPE litigation, one of four covered by the territorial expansion that was one of the subjects of the CPUC litigation. The CPUC, however, did not change any of its earlier findings of fact or conclusions of law with respect to supplies from the SWP.

While the City was not a party to the CPUC litigation, the issue is pertinent here because NCWD and Valencia Water Company both draw their respective water supplies from the same groundwater and State Water Project resources.

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6 See **Appendix A** to the Final EIR (Letter from CLWA to NCWD Board of Directors, dated January 8, 2004, and related attachments).

d. Resolution/Non-Finalized Water Sources

The NCWD Resolution is critical of the following water supplies identified in the 2000 UWMP: new wells in the Saugus Formation, water banking/conjunctive use, water transfers, and desalinization. The Resolution refers to these water sources as "un-finalized."

(1) Response

In response to references in the Resolution to other water sources, please refer to Riverpark Draft EIR, pp. 4.8-79–89. In addition, please see Riverpark Draft EIR, pp. 4.8-89–98, which summarizes water supplies available to the CLWA service area.

CLWA has also directly responded to the points raised in the resolution regarding other water sources. CLWA's response is repeated below:

> "'Non-Finalized' Water Sources
>
> 8. The proposed resolution cites Urban Water Management Planning Act Section 10631(c). Attached is the first portion of this section of the Act. Please note Section 10631(b), which instructs agencies to identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier. Section (c) relates to the reliability of existing supplies, and instructs agencies to describe, for any existing water source that may not be available at a consistent level of use, given various factors, plans to replace that source. Unfortunately, the proposed resolution cites Section (c) while ignoring the applicability of Section (b).
>
> 9. This citation in the proposed resolution lacks discussion of prudent and proven water management techniques involving pumping during 'dry periods,' or some other language that allows for pumping within the operational yield of the Alluvial aquifer for periods longer than one year. Limiting such pumping to an outage on the SWP system could needlessly have a negative impact on NCWD's customers during a dry period.
>
> 10. The Alluvial aquifer should be pumped at the operational yield levels described by Slade (2002). This citation lacks discussion of the nature of the conjunctive use that occurs in the Valley with the importation of SWP supplies. For instance, if the Valley was experiencing a local dry period, but ample SWP supplies were available from northern California, NCWD could draw upon those supplies instead of the Alluvial aquifer.
>
> 11. New Saugus Formation wells would allow pumping rates to increase on an instantaneous basis, more than presently exists. This ability to pump would serve as an emergency or dry year supply, and would thus not impact the operational yield of the aquifer.[7]

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7 See **Appendix A** to the Final EIR (Letter from CLWA to NCWD Board of Directors, dated January 8, 2004, and related attachments).

In a presentation made by Mr. Masnada to CLWA's Board of Directors at its January 28, 2004 regular meeting, he concluded that the NCWD Resolution significantly understated the amount of water available in the Santa Clarita Valley, that it unnecessarily impaired NCWD's ability to meet its mission and serve its customers, and that it attempts to undermine the Santa Clarita Valley's collaborative and cooperative regional UWMP process. In further response to the resolution, Mr. Masnada stated that

> "Again, the purported 'current and finalized future' supply shown in Exhibit B to the proposed resolution is significantly understated and does not even acknowledge the amount of water that is being used today. Exhibit B shows a supply of 62,685 acre-feet per year when recent [Santa Clarita Valley] usage has been as high as 85,031 acre-feet (2002).
>
> Understatement of existing supplies could result in having to acquire additional supplies to meet supposed current needs in addition to future demands. This would unnecessarily result in higher water rates for existing NCWD customers (as well as its future customers), which already have the highest rates in the [Santa Clarita Valley].
>
> Of greatest concern to CLWA is that adoption of the proposed resolution by NCWD could unnecessarily confuse land use planning agencies because it would result in two sets of 'water numbers' for the [Santa Clarita Valley]. This contradicts the clear intent of the UWMP Act, which urges that UWMPs be prepared on a regional basis. CLWA urges NCWD to continue to participate in the cooperative effort to prepare the 2005 UWMP Update. Known changes to the plan include, but are not limited to, (1) inclusion of the SWP Delivery Reliability Report, (2) status of the perchlorate contamination clean-up effort and remedies, (3) implementation of CLWA's Groundwater Management Plan and (4) implementation of CLWA's short-term and long-term banking programs to firm up SWP supply reliability."[8]

In addition, it should be noted that this issue was litigated to conclusion before the California Public Utilities Commission in 2001 in an action against Valencia Water Company. The findings of that decision are contrary to the position taken by NCWD in the resolution. (*Re Valencia Water Company*, Opinion Approving Water Management Program and Authorizing Service Area Expansion, D.01-11-048, dated November 29, 2001) In particular, based on its findings of fact, the CPUC concluded as a matter of law that the sources and magnitude of dry-year firming supplies, including banking, relied on by Valencia and that Valencia's estimate of recycled water supply is reasonable. (Id. at p. 43, conclusions of law 8-9.) The CPUC denied motions for rehearing and the California Supreme Court declined an appeal of the plaintiffs to review the decision. (*Re Valencia Water Company*, D.02-04-002, dated April 4, 2002, petitions for writ of review denied, S. 105292 and S.105571 [Cal. S. Ct., filed June 19, 2002].) More recently, the CPUC denied an application for rehearing of its denial of the petition for modification. (*Re Valencia Water Company*, D.03-10-063, dated October 16, 2003.) Petitioners based that application for rehearing on the Court of Appeal decision in *Santa Clarita Organization for Planning the Environment v. County of Los Angeles*. The CPUC denied the application for rehearing, though it did stay its prior decision insofar as it

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8 See **Appendix A** to the Final EIR (Letter to NCWD Board of Directors from CLWA, dated January [28], 2004, along with CLWA's January 8, 2004 letter, and a copy of Mr. Masnada's PowerPoint presentation).

approved water service to the project challenged in the SCOPE litigation, one of four covered by the territorial expansion that was one of the subjects of the CPUC litigation. The CPUC, however, did not change any of its earlier findings of fact or conclusions of law with respect to alluvial aquifer.

While the City was not a party to the CPUC litigation, the issue is pertinent here because NCWD and Valencia Water Company both draw their respective water supplies from the same groundwater and State Water Project resources.

2. OTHER ACTION RELATIVE TO THE NCWD RESOLUTION

The legal sufficiency of the NCWD Resolution is currently the subject of litigation. (See *LB/L Suncal Northlake LLC v. Newhall County Water District*, LASC No. BS089750, filed April 27, 2004.)

CONCLUSION

On January 13, 2004, the City adopted Resolution No. 04-10 opposing the Resolution No. 2004-3.[9] In addition, in April 2004, NCWD's General Manager, Kenneth J. Petersen, resigned from his position. Mr. Petersen, a professional engineer, who joined NCWD out of retirement in April 2002, stated that he disagreed with the policy as outlined in NCWD Resolution No. 2004-3. Mr. Petersen also stated that he was never asked to provide the NCWD Board members with figures on water supplies prior to the adoption of NCWD Resolution No. 2004-3. According to Mr. Petersen, NCWD Resolution No. 2004-3 used statistics that some of the Board members extracted themselves from earlier reports. Notably, there were no professional water consultants present on behalf of the NCWD Board when NCWD Resolution No. 2004-3 was presented and ultimately adopted.

9 See **Appendix A** to the Final EIR (City of Santa Clarita Resolution No. 04-10). In addition, please see **Appendix A** to the Final EIR (copies of letters submitted in response to Resolution No. 2004-3, and news articles concerning the Board of Directors' adoption of Resolution No. 2004-3).

TOPICAL RESPONSE 5: AIR QUALITY

Air Quality impacts are discussed in the Draft EIR in Section 4.4, Air Quality, and in Appendix 4.4 materials. Additional air quality analyses are contained in Final EIR **Appendix B**, and are discussed in the **"Revised Draft EIR Pages."**

Implementation of the Riverpark project would generate both construction-related and operation-related pollutant emissions. Construction-related emissions would be generated by on-site stationary sources, on- and off-road heavy-duty construction vehicles, and construction worker vehicles. Operation-related emissions would be generated by on-site and off-site stationary sources and by mobile sources. During the 51-month construction phase, emissions of carbon monoxide (CO), volatile organic compounds (VOC), oxides of nitrogen (NO_x) and particulate matter (10 micron) (PM_{10}) would exceed thresholds of significance recommended by the South Coast Air Quality Management District (SCAQMD) for approximately 13, 36, 26, and 12 months, respectively. At project buildout, operational emissions of CO, VOC, NO_X, and PM_{10} would exceed SCAQMD thresholds, primarily due to mobile source emissions.

No project land use would be exposed to CO hotspots, and the project would not cause a CO hotspot at other locations of sensitive receptors in the project study area, such as the Emblem Tract. (See specifically Final EIR **Appendix B,** *Riverpark Development Project Carbon Monoxide "Hotspots" Modeling* [August 2004].) In addition, population growth attributed to the project is within growth forecasts contained in the Growth Management Chapter of the *Regional Comprehensive Plan and Guide* (RCPG), which forms the basis for the land use and transportation control portions of the SCAQMD's 2003 *Air Quality Management Plan* (AQMP). Because the project is within the growth forecasts for the region, it would, consequently, be consistent with the AQMP, indicating that it would not jeopardize attainment of state and federal ambient air quality standards in the Santa Clarita Valley or throughout the South Coast Air Basin.

Feasible mitigation measures would be implemented that would reduce construction-related and operational-related emissions to the maximum extent feasible. However, no feasible mitigation currently exists which would reduce the project's construction-related emissions of CO, VOC, NO_x, or PM_{10} to below the SCAQMD's recommended thresholds of significance. No feasible mitigation exists to reduce the project's operational emissions of CO, VOC, or NO_x to less than significant levels. Therefore, the project's construction-related and operation-related emissions would be considered unavoidably significant, and a Statement of Overriding Considerations would be necessary if the City were to approve the project.

The SCAQMD's criterion of annual emission reductions of one percent for CO, VOC, NO_x, PM_{10}, and oxides of sulfur (SO_x), was used to assess cumulative air quality impacts. Through site planning,

proposed design features, and with implementation of the mitigation measures recommended in this section, the project would reduce wintertime emissions of CO, VOC, NO_x, and PM_{10} by 75.3, 91.8, 29.5, and 85.3 percent, respectively. During the summer, these emissions would be reduced by 4.6, 17.7, 9.3, and 4.2 percent, respectively. Therefore, the project would not be considered to contribute to significant cumulative air quality impacts based on the cumulative project thresholds of significance of the SCAQMD's *CEQA Air QualityHandbook*, and the fact that the project's population forecast is consistent with the SCAQMD's 2003 AQMP. However, because the project's project-level operational-related CO, VOC, NO_x, and PM_{10} emissions would exceed the SCAQMD's project-specific thresholds of significance, even with all feasible mitigation, it is concluded that project implementation will result in a cumulatively significant and unavoidable air quality impact. This conclusion is considered a conservative and "worst-case" approach for assessing the project's cumulative air quality impacts.

Since the Draft EIR was prepared and released for public review, the project has been revised to reduce the total number of residential units from 1,183 to 1,123, including without limitation, the conversion of Planning Area C from apartments to condominiums, and to reduce the commercial acreage from three acres to one acre. This reduction in the size of the project will concomitantly reduce traffic trips generated by the project and therefore reduce air quality impacts.

Finally, since the Draft EIR was released to the public, a supplemental regional air quality analysis has been undertaken. The regional air quality analysis was prepared by Environ International Corporation and is presented in **Appendix B** to the Final EIR. The regional air quality analysis addressed specifically the issue of whether significant ambient concentrations of ozone and particulate matter (PM) in the Santa Clarita Valley (SC Valley) result from local emissions, and thus, significantly worsen air quality. The regional air quality analysis concluded that significant ambient levels of ozone and PM in the SC Valley do not result from local emissions, and that "[t]he great majority of ozone and PM pollution in the SC Valley is created by sources of emissions outside the SC Valley." Therefore, the air quality in the Santa Clarita Valley is predominately dominated by emissions transported into the Santa Clarita Valley from other areas in the South Coast Air Basin, and not by emissions generated by uses and activities in the Santa Clarita Valley itself. The City understands that a similar air quality study undertaken by the South Coast Air Quality Management District reaches similar conclusions (Final EIR **Appendix B**, Environ report, p. ES-1); however, that study has not yet been released.

TOPICAL RESPONSE 6: TRAFFIC

Traffic impacts are discussed in the Draft EIR in Section 4.3 Traffic/Access.

The Draft EIR concludes that, although many of the project's impacts can be mitigated to below significance, it will still have significant impacts to the four below listed intersections that cannot be mitigated to below significance:

Pre-Interim Year (Occupancy of up to 500 units, without Newhall Ranch Road/Golden Valley Road Bridge)

- Valencia Boulevard/Magic Mountain Parkway.

Interim Year/Full Buildout of Project

- Valencia Boulevard/Magic Mountain Parkway;
- Bouquet Canyon Road/Soledad Canyon Road;
- Seco Canyon Road/Bouquet Canyon Road; and
- Whites Canyon Road/Soledad Canyon Road.

The Draft EIR states that the City has determined that the above-identified intersections are presently built-out, with the exception of the Bouquet Canyon Road/Soledad Canyon Road intersection. Improvements to this intersection have commenced, and upon completion will result in this intersection being presently built-out. The City of Santa Clarita General Plan Circulation Element states, "Existing street improvements are, in some cases, not able to be modified due to right-of-way limitations and existing development." The General Plan acknowledges that benefits of improvements at such intersections are not outweighed by a combination of the potential time and cost of actions necessary to acquire the property, the physical and economic costs to businesses at the affected intersections, and the social costs that could occur if the affected businesses were forced to relocate.

The Riverpark project results in the acceleration of the construction of the last, unfunded, unbuilt portion of the Cross Valley Connector. This improvement is required to be constructed and operational before the project's 501st occupancy. Section 4.3, Traffic/Access, of the Draft EIR illustrates the benefits to the Valley's roadway network that this roadway will provide. One of the significant benefits associated with the Cross Valley Connector includes a substantial reduction in vehicle trips on Soledad Canyon Road. The Draft EIR indicates that Soledad Canyon Road, directly east of Bouquet Canyon Road, presently

carries 57,000 vehicles per day. In the Interim Year with Project Scenario, which includes the completion of the Cross Valley Connector and the buildout of Riverpark, the number of vehicle trips on this portion of Soledad Canyon Road is significantly reduced, to 36,000 vehicle trips. Therefore, acceleration of the construction of the Cross Valley Connector by the Riverpark project, through its right-of-way dedication and B&T contribution, will result in the substantial improvement of traffic conditions in the Santa Clarita Valley, including emergency vehicle movement.

As explained in the Draft EIR's Section 4.3, Traffic/Access, at pp. 4.3-18 and 18, a method in which to model the improvement of surrounding intersections due to the implementation of the Cross Valley Connector involves the comparison of two scenarios: Scenario 1 – Interim Year/No Riverpark project and No Cross Valley Connector (Riverpark portion); and Scenario 2 – Interim Year/Riverpark project and Cross Valley Connector (portion through Riverpark). The Interim Year is generally ten years into the future and would include additional traffic generated by projected ambient growth during that time frame. Therefore, without the Cross Valley Connector, currently congested local intersections such as Bouquet Canyon Road and Soledad Canyon Road will be forced to accommodate significantly more traffic in the future, even without the project.

The respective intersections and the comparison are as follows:

- Bouquet Canyon Road/Soledad Canyon Road – In Scenario 1, the intersection of Bouquet/Soledad would operate at Level of Service (LOS) D in the AM peak hour and LOS F in the PM peak hour. In Scenario 2, this intersection would operate at an LOS C in the AM peak hour and LOS E in the PM peak hour, a marked improvement over operating conditions in Scenario 1. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- McBean Parkway/Newhall Ranch Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS D in the PM peak hour. In Scenario 2, the respective LOS in the AM and PM peak hour remain at the same grade (LOS D), with minor improvement. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- Bouquet Canyon Road/Newhall Ranch Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS E in the PM peak hour. In Scenario 2, the LOS would improve, though remain at LOS D in the AM peak and improve in the PM peak hour to LOS D. Overall, intersection operations would improve in Scenario 2 as compared to Scenario 1. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- Valley Center Drive/Soledad Canyon Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS D in the PM peak hour. In Scenario 2, this intersection would operate at LOS B in the AM peak hour and LOS B in the PM peak hour, again a significant improvement as compared to Scenario 1. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

The Cross Valley Connector will be built regardless of whether or not the project is approved, though the timing of this needed improvement would likely be significantly delayed if the project were not approved. The Riverpark project, in the City's opinion, accelerates the City's ability to complete the

Cross Valley Connector through the project's dedication of needed right-of-way and its substantial Bridge and Thoroughfare Fee District (B&T) contribution. Please see Draft Riverpark EIR Section 4.3, Traffic/Access, pp. 4.3-39, 45, and 46. As shown in the following cost breakdown, approval of the Riverpark project results in a nearly 50 percent reduction in the City's remaining obligation to construct this segment of the roadway (six-lane road, four-lane bridge). Additional B&T funds, state, and federal grant funds, and other funding sources would be utilized to make up the difference.

Cost Breakdown Based on 2003 Estimates
Cross Valley Connector
(Bouquet to Soledad Flyover)
Six-Lane Road/Four-Lane Bridge

	No Riverpark	With Riverpark
Design	$ 3,000,000	$ 3,000,000
* **ROW Acquisition**	$ 10,000,000	$ 0
Construction	$ 26,500,000	$ 26,500,000
Contingency /Overhead	$ 10,000,000	$ 10,000,000
Subtotal		$ 39,500,000
** **B&T Contribution**	N/A	- $ 13,842,160
Total	**$ 49,500,000**	**$ 25,657,840**

* ROW acquisition cost expected to be higher – based upon 2000 estimate and based upon past ROW acquisition on similar projects being higher than estimated

**B&T obligation cited above is based upon 1,183 residential units and a 3-acre commercial site.

TOPICAL RESPONSE 7: URBAN WATER MANAGEMENT PLAN, AS AMENDED, AND RELATED ISSUES

This topical response has been prepared to address comments received on the recent action taken by Castaic Lake Water Agency (CLWA) and the Santa Clarita Valley local retail water purveyors (Santa Clarita Water Division of CLWA, Newhall County Water District and Valencia Water Company) to readopt, as amended, the *2000 Urban Water Management Plan* (2000 UWMP) after a public hearing held on January 24, 2005. This topical response also addresses comments received concerning whether the amended 2000 UWMP or a court case that led to the preparation of the amendment, impacts the water supply and demand analysis conducted for the Riverpark project. Finally, this topical response addresses the City's independent review of the amended 2000 UWMP and an independent water supply assessment prepared for the Newhall County Water District.

In late September 2004, the Court of Appeal for the Fifth District concluded that the 2000 UWMP did not fully meet the requirements of the Urban Water Management Planning Act (UWMP Act).[1] Specifically, the Court concluded that the 2000 UWMP should have addressed "the time needed to implement the available method for treating the [perchlorate] contaminated water [in the local groundwater basin]," and described "the reliability of the groundwater supply during that [treatment] implementation."[2]

In response to the recent court decision, CLWA and the retail water purveyors in the Santa Clarita Valley directed the joint preparation and completion of the "Groundwater Perchlorate Contamination Amendment and Other Amendments" (Amendment) to the 2000 UWMP. The Amendment provides information responsive to, and consistent with, both the Court of Appeal's decision and the UWMP Act. The focus of the Amendment is on updating the significant progress made by CLWA, the local water purveyors and others, in responding to the perchlorate-contaminated groundwater in portions of the Saugus Formation and Alluvial aquifer, the two aquifer systems that comprise the local Santa Clara River Valley East Groundwater Subbasin. This subbasin is the source of the local groundwater used to meet portions of the Santa Clarita Valley's potable water supply.

The City Engineering staff independently reviewed the Riverpark EIR, and determined that the water supply and demand assessment is adequate under the California Environmental Quality Act and was not impacted by the recent court decision involving the 2000 UWMP. The Riverpark EIR presents a thorough water supply and demand assessment of both the project and other projects planned in the area.

1 The UWMP Act is found in Water Code Sections 10610 through 10657.

2 For a copy of the published Court of Appeal decision (*Friends of the Santa Clara River v. Castaic Lake Water Agency* (2004) 123 Cal. App. 4th 1), please see Final EIR **Appendix A**.

Engineering staff concluded that the Riverpark EIR presents a stand-alone water supply and demand assessment supported by numerous water-related reports, studies and other data which were not invalidated by the September 2004 Court of Appeal decision. This assessment updated the water picture for the Santa Clarita Valley.

In addition, Engineering staff reviewed the Riverpark EIR water supply and demand assessment for consistency with the Amendment to the 2000 UWMP. Based on that review, staff has confirmed that (1) the Riverpark EIR presents a stand-alone water supply assessment of the Riverpark project, in conjunction with other projects in the Santa Clarita Valley, and it correctly concludes that an adequate supply of water exists for both the Riverpark project and other development in the Santa Clarita Valley; (2) the Riverpark EIR already contains a detailed analysis of perchlorate-contaminated groundwater in the local subbasin, even absent the information presented in the Amendment to the 2000 UWMP; and (3) the Amendment to the 2000 UWMP provides additional information regarding remediation of the perchlorate-contaminated groundwater, consistent with the information previously presented in the Riverpark EIR.

A summary of the Amendment to the 2000 UWMP is presented below.[3]

1. GROUNDWATER PERCHLORATE CONTAMINATION AMENDMENT AND OTHER AMENDMENTS

a. Introduction

The Amendment to the 2000 UWMP was prepared by CLWA and Santa Clarita Valley retail water purveyors to revise or replace selected sections of the 2000 UWMP in response to the recent court decision, which concluded that the 2000 UWMP did not fully meet the requirements of the UWMP Act. The Amendment, which has been independently reviewed by City staff, addresses the time needed to implement perchlorate treatment, and describes the reliability of the groundwater supply during treatment implementation. The Amendment was the subject of a noticed public hearing at CLWA on January 24, 2005.

b. Background and Summary of Amendment Findings

In all cases (near-term operation and long-term operation scenarios for all hydrologic conditions) total existing supply will be sufficient to meet projected demand for the Riverpark project and the Santa

3 For a copy of the Amendment to the 2000 UWMP, please see Final EIR **Appendix A.**

Clarita Valley as a whole, and the conclusions reached in the Riverpark EIR regarding water supply and demand remain unchanged. The water purveyors' treatment plan for perchlorate is scheduled to come on line in 2006, at which time treated well water would become available. In the near term, the treatment plan projects that the impacted water will remain unavailable through 2006, and, during that time, the non-impacted groundwater and other available supplies will be sufficient to meet near-term supply water requirements of the Santa Clarita Valley. After treatment, the total groundwater capacity will be sufficient to meet the normal and dry-year conditions as provided in the long-term operating plan for groundwater supply. Before plan completion, issuance of a permit by the state Department of Health Services (DHS) will be required to verify that water is considered potable and safe for delivery to customers.

The Amendment focuses on the following:

- Restoring the impacted water supply capacity in the perchlorate-contaminated wells;
- Controlling the movement of perchlorate-contaminated groundwater and protecting other municipal supply wells;
- Selecting treatment methods;
- Restoring the perchlorate-impacted groundwater to safe drinking water standards; and
- Analyzing the reliability of the local groundwater supplies, both during the interim of the containment treatment period (2006) and through the 20-year planning horizon of the 2000 UWMP.

As indicated above, the Amendment determines that, in all cases (near-term operation and long-term operation scenarios for all hydrologic conditions), total existing supply will be sufficient to meet projected demand.

c. Alluvial Aquifer

Reliability of Aquifer: According to the Amendment to the 2000 UWMP, existing active wells operating in the Alluvial aquifer have a full-time source capacity of nearly 56,000 acre-feet per year (AFY), based on the pumping capacity from wells not contaminated by perchlorate. This is confirmed to be more than sufficient to meet the total planned Alluvial pumping of 30,000–40,000 AFY, which includes the planned municipal use of Alluvial groundwater (20,000–25,000 AFY), as reported in the *2003 Santa Clarita Valley Water Report*.[4]

4 The *2003 Santa Clarita Valley Water Report* is located in Final EIR **Appendix A**.

Treatment and Protection of Alluvial Aquifer Water: According to the Amendment, the plan for integrated control of contamination migration and restoration of impacted pumping well capacity is mainly focused on stopping migration of perchlorate at the source in the northern Alluvium. At present, one municipal supply well has been removed from service due to the detection of perchlorate. On-going monitoring of the active Alluvial municipal wells located near the Whittaker-Bermite property has shown no detection of perchlorate. However, the proximity to other impacted private Alluvial wells in the Whittaker-Bermite site and prevailing groundwater flow prompted the Amendment to include provisions to respond to Alluvial perchlorate contamination, should it occur.

d. Saugus Formation

Reliability of the Formation: According to the Amendment, existing active wells operating in the Saugus Formation presently have a full-time source capacity of about 24,000 AFY, based on the combined pumping capacity from active wells not contaminated by perchlorate. This is confirmed to be more than sufficient to meet the total planned use in normal years of 7,500–15,000 AFY, as reported in the *2003 Santa Clarita Valley Water Report*. Combined with other available sources, it is more than sufficient to meet water demands through the currently scheduled time frame for restoration of impacted Saugus capacity.

Treatment and Protection of Saugus Formation Water: According to the Amendment, the program and schedule for the plan to restore impacted capacity and control migration of perchlorate calls for completion in 2006.

The Amendment also confirms that, between now and completion in 2006, a groundwater flow model was used to determine whether existing active Saugus wells were likely to be contaminated by perchlorate migration prior to treatment and contamination control measures. The model determined that in order to assure that perchlorate contamination did not affect active Saugus wells during the interim period, an overall operating plan would allow currently active downgradient Saugus wells to remain active on a generally low planned pumping schedule. Once treatment has restored capacity, normal planned operations for utilizing groundwater from the Saugus Formation would resume.

e. Groundwater Contamination Treatment Plan

According to the Amendment, during the planning for remediation of perchlorate and restoration of impacted well capacity, imported water from CLWA and non-impacted groundwater production facilities will offset quantities of water otherwise projected to be available from the Alluvial and Saugus wells. The state Department of Toxic Substance Control (DTSC) will oversee on-site investigations and

clean-up activities. The first objective of the remediation plan is to control subsurface flow and protect downgradient wells. The second objective is restoration of some or all contaminated water supplies.

The Amendment notes that the treatment program is expected to be online by the end of 2006. The treatment plan projects that the impacted water will remain unavailable through 2006, during which time the non-impacted groundwater supply and other available supplies will be sufficient to meet near-term water requirements. Afterward, the total groundwater capacity will be sufficient to meet the normal and dry-year conditions as provided in the long-term operating plan for groundwater supply. Before plan completion, issuance of a permit by DHS will be required to verify that water is considered potable and safe for delivery to customers.

f. Reliability Assessment

The Amendment states that the reliability analysis prepared by CH2MHILL of production wells located near the Whittaker-Bermite property considers the impact on water supply operations while the planning, design and construction of treatment and other restoration activities are implemented. Therefore, all hydrologic conditions (normal, single dry-year, and multiple-dry year) were assessed based on two sets of operational scenarios: (1) near-term conditions (2005–2007 to include the transition of local groundwater supplies from impacted to restored) and (2) long-term conditions (2007–2020 through the end of the planning horizon for the plan). In all cases (near-term operation and long-term operational scenarios for all hydrologic conditions), total existing water supply will be sufficient to meet projected water demand for the Santa Clarita Valley.

g. Stetson Water Supply Assessment Summary

In the River Park Final EIR, Volume VII (December 2004), Topical Response 4 was prepared to respond to comment letters that attached or referenced a resolution of the Board of Directors of the Newhall County Water District (NCWD) regarding water supplies in the Santa Clarita Valley. Since completion of the Final EIR (Volume VII), NCWD requested and funded preparation of an independent water supply assessment to assist NCWD in determining if currently available and reasonably feasible future water supply sources will be sufficient to meet future water demands resulting from anticipated growth in the Santa Clarita Valley. NCWD retained the services of Stetson Engineers, Inc., a water resources engineering firm, to complete the water supply assessment.

In December 2004, NCWD voted to accept the *Final Draft Water Supply Assessment*, dated November 29, 2004, prepared by Stetson Engineers, Inc. (Stetson Report). City staff has independently reviewed the

Stetson Report, and has determined that it provides additional information regarding the water supplies and demands in the Santa Clarita Valley and that the information in that report is generally consistent with the information previously presented in the Riverpark EIR. It is also generally consistent with the information presented in the Amendment to the 2000 UWMP. A summary of the Stetson Report is presented below.

Based on a review of relevant water supply contracts, agreements, financing plans, water studies and other reports, the Stetson Report concludes that sufficient water supplies are available to meet the current and projected water demands over the next 20 years of the water purveyors in the Santa Clarita Valley, including NCWD.

The Stetson Report assesses both available water supplies and the development of feasible new water supplies, and determines that such supplies are adequate to meet and exceed future demands for the next 20 years under all of the hydrologic conditions considered (normal, single-dry, and multiple-dry years). In reaching these conclusions, the Stetson Report took into account the groundwater supplies impacted by perchlorate contamination, and the progress made to date on remedial actions for the containment of groundwater contamination, and the removal of perchlorate from impacted groundwater supplies, including wellhead treatment for impacted municipal supply wells. The findings in the Stetson Report are generally consistent with the findings reported in the recently released Amendment to the 2000 UWMP.

In December 2004, NCWD issued a press release reporting its acceptance of the Stetson Report. In the press release, based on the Stetson Report, Steve Cole, Acting General Manager for NCWD, stated that NCWD is pleased to be "able to continue to provide adequate water to serve our customers' needs."[5]

5 For a copy of both the NCWD Press Release, dated December 7, 2004, and the Stetson Report, please see Final EIR **Appendix A**.

1. LETTER RECEIVED FROM ELIZABETH ERICKSON, CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION, DATED MARCH 16, 2004

Summary of Responses

Given the technical nature of the responses, it was thought prudent that for **Comment Letters 1** and **2**, that a summary of each response be provided to assist the lay reader.

Response 1: The commenter asked how the project would increase the concentrations and loads of nutrients, salts, coliform bacteria, and historic pesticides. Although a water quality technical report was prepared for the project it must be acknowledged that for some pollutants of concern, while some water quality data may exist for the pollutant, the current limits of technology and other factors result in accuracy issues that make the data too unreliable for use in quantitative modeling. However, there is sufficient sampling data in the Los Angeles area is available to permit meaningful modeling of nutrients: total phosphorus (TP), nitrate nitrogen (nitrate), and total kjeldahl nitrogen (TN) and chloride (a salt, and the only salt for which the downstream reaches of the Santa Clara are impaired). The response provides a discussion of constituent impacts for nutrients, salts, coliform bacteria, and historic pesticides. The response outlines the conclusion of the Draft EIR that there will be no significant impacts to the above noted constituents.

Response 2: The commenter asked for the amount of runoff generated by the project during both dry and wet years. This response directs the reader to the runoff amounts discussion in the Draft EIR. This response also notes that with project improvements that there would be no dry weather flows discharged to the Santa Clara River.

Response 3: The commenter requested information pertaining to the amount of increased or decreased percolation. The response directs the reader to technical studies prepared for the project, which predict that the decrease in infiltration is expected to be about 100 acre-feet per year. However, this assumes no losses due to evapotranspiration or infiltration in the proposed structural best management practices (BMPs). As stated in the Draft EIR and the water quality technical report, these BMPs would be designed to capture approximately 80 percent of the average annual runoff volume from the site, or 253 acre-feet. In the Santa Clarita Valley (SC Valley), stormwater runoff from developed areas is routed through detention basins or other treatment BMPs to the river channel, where the porous nature of the sands and gravels forming the streambed allow for significant infiltration to occur to the underlying groundwater.

Increased irrigation in the SC Valley associated with urban development has resulted in the irrigation of previously undeveloped lands. The effect of irrigation is to maintain higher soil moisture levels during the summer than would exist if no irrigation were occurring. Consequently, a greater percentage of the fall/winter precipitation recharges groundwater beneath irrigated land parcels than beneath undeveloped land parcels. Because reductions in stormwater infiltration in the developed condition are not substantial reductions in percolation are less than significant.

Response 4: The commenter requested estimates of the net change in groundwater and surface water flows. In drought conditions, there will be no surface water runoff pre or post development. The Draft EIR estimates the post-development discharge rate from surface water contributions in cubic feet per second in Section 4.20, Floodplain Modifications, at p. 4.20-38. The Draft EIR concludes that the proposed project would not result in a significant adverse increase the average flows in the river downstream of the project. With regard to groundwater flows, in drought conditions there will be no post-development change in the groundwater contribution. Further, efficient irrigation systems and use of drought-tolerant materials in landscaping plans required as project design features are designed prevent over-watering, assuring that irrigation does not significantly or adversely surcharge groundwater volumes. In flood conditions soils are saturated, resulting in runoff of stormwater and precluding infiltration and deep percolation. As a result, no significant additional groundwater recharge is expected to be associated with the 10-year, 50-year, and 100-year events as a result of the project.

Response 1

As described in Appendix 4.8 of the Draft EIR, WQTR, prepared by PSOMAS, dated February 2004, and pp. 4.8.1-46–48 of the Draft EIR, an empirical model is used to quantify water quality impacts for various pollutants of concern. The data required by the model to estimate pollutant loads and concentrations quantitatively consists of flow composite storm event sample data, which measures of the average water quality during the event. To obtain such data usually requires automatic samplers that collect data at a frequency that is proportionate to flow rate. Flow sample data that is accurate and sufficient to provide meaningful model results is not available for all potential pollutants of concern. Further, for some pollutants of concern, while some water quality data may exist for the pollutant, the current limits of technology and other factors result in accuracy issues that make the data too unreliable for use in quantitative modeling.

In preparing the Draft EIR quantitative analysis, sufficient flow composite sampling data in the Los Angeles area is available to permit meaningful modeling of nutrients (TP, nitrate, and TN) and chloride (a salt, and the only salt for which the downstream reaches of the Santa Clara are impaired). Therefore,

the Draft EIR sets forth a quantitative estimate of pre and post development loads and concentrations for these nutrients and salts (see Draft EIR Section 4.8.1, Water Quality, at p. 4.8.1-38, 4.8.1-52, and 4.8.1-72).

These quantitative estimates for nutrients and chloride also serve as indicators for other pollutants of concern, and the behavior of other pollutants of concern can be assessed based on the behavior of these quantitatively modeled constituents, even though empirical data for the specific constituent may not permit modeling of the specific substance. By way of example, the quantitative chloride results serve as indicator data for the behavior of other pollutants of concern consisting of, or related to minerals or salts, including boron, SAR, and sulfates. See Draft EIR Table 4.8.1, text p. 4.8.1-47, and 4.8.1-78. Similarly, the quantitative analysis results for TP, nitrate, and TN serve as indicator data for the behavior of other nutrients or nutrient-related constituents of concern, including ammonia, dissolved oxygen, biochemical oxygen demand, and biostimulatory substances (see Draft EIR Table 4.8.1, Table 4.8.1-17, text Draft EIR p. 4.8.1-53, and pp. 4.8.1-78–8).

The following summarizes the information analyzed in the Draft EIR Section 4.8.1, Water Quality, and the WQTR with respect to nutrients, and salts:

Nutrients: TP and TN (estimated as TKN + nitrates) loads and concentrations were quantified for both the existing condition and the post-developed condition in the WQTR. Pollutant removal estimates for nitrates were not possible given available data (see Draft EIR Section 4.8, Appendix 4.8, WQTR - Table 12 for loads, Table 13 for concentrations and Table 16 for comparisons with Basin Plan objectives). Implementation of project BMPs is predicted to render the post-development nitrogen level to be within the level of the Santa Clara River Basin Plan objectives. The project, post-development, will have lower concentrations and loads than in the existing condition for phosphorous (see Draft EIR Section 4.8.1, at p. 4.8.1-39). As a result, water quality impacts with respect to nutrients are determined to be less than significant.

Salts (chloride): Salts were represented by Chloride; loads and concentrations were quantified for both the existing condition and the post-developed condition in the WQTR. The objectives of the Santa Clara River Basin Plan would not be exceeded post-development even without any implementation of BMPs. With BMPs, the chloride levels are expected to be less than the objectives of the Santa Clara River Basin Plan (see Draft EIR Section 4.8.1, Water Quality, Appendix 4.8, WQTR - Table 12 for loads, Table 13 for concentrations, and Table 16 for comparisons with Basin Plan objectives). As a result, water quality impacts with respect to salts are determined to be less than significant.

As set forth in the WQTR and Draft EIR text at pp. 4.8.1-46–48 and pp. 4.8.1-81–82, changes in coliform bacteria, pathogen and legacy pesticide levels associated with development cannot be meaningfully evaluated quantitatively for a number of reasons. As discussed in the Draft EIR, the limited amount of available data for bacteria are not suitable for computer modeling because the monitoring consists of collecting grab samples due to necessarily short holding times. Grab samples are not representative of average bacteria levels over an entire storm. To assure accurate predictions, modeling conducted as part of the Draft EIR relied on annual average storm-event concentrations rather than grab samples. Attempting to model bacteria based on the available monitoring data for bacteria would require speculation. Moreover, there are numerous sources of pathogens, including birds and other wildlife, as well as domesticated animals and pets that could impact testing results and preclude accurate correlation of land use type and monitoring data. Therefore, adequate, defensible, quantitative analysis of coliform bacteria and pathogens is not possible at this time.

With respect to legacy pesticides, concentrations in urban runoff are often below detection limits for most commercial laboratories and, therefore, statistically reliable data on pesticide concentrations is not available to develop meaningful quantitative estimates for this pollutant of concern. Please see Draft EIR p. 4.8.1-47 and pp. 4.8.1-82–84. Therefore, adequate, defensible, quantitative analysis of historic pesticides is not possible at this time.

Due to the lack of statistically reliable monitoring data, pathogens and legacy pesticides were analyzed qualitatively using literature information and best professional judgment (see Draft EIR Section 4.8.1, Water Quality at p. 4.8.1-52, WQTR). California Environmental Quality Act (CEQA) does not require quantitative analysis of impacts, particularly when such analysis would not present accurate results.

The following summarizes the information qualitatively analyzed in the Draft EIR Section 4.8.1, Water Quality and the WQTR with respect coliform bacteria and historic pesticides.

Coliform Bacteria: As previously mentioned, quantitative analyses require both adequate EMC and pollutant removal data, which is currently unavailable. However, water quality impacts of the project with respect to coliform bacteria and pathogens were evaluated qualitatively in accordance with CEQA. As discussed in the Draft EIR Section 4.8.1, Water Quality, while the conversion of open spaces or agriculture to urban development may result in some increase in pathogen levels, source and treatment control BMPs would help control coliform levels.

Additional BMPs that contribute to control of pathogens to be employed in the project include:

(1) Availability of pet waste collection bags ("mutt mitts");

(2) Distribution of pet waste educational material;

(3) Adequate connection and maintenance of sanitary sewer lines; and

(4) Maintenance of BMPs for removal of bacteria and all pollutants associated with sediment in the water quality basins, which occurs through periodic removal and proper disposal of accumulated sediments in the water quality basins. With implementation of the BMPs required pursuant to the Draft EIR, water quality impacts with respect to coliform bacteria and pathogens are determined to be less than significant.

Pesticides. As previously discussed, meaningful and accurate quantitative modeling of pesticides is not currently possible. However, water quality impacts of the project with respect to pesticides were evaluated qualitatively in accordance with CEQA. As discussed in the Draft EIR, the open space areas proposed for residential development are in a natural condition and are not known to have been maintained with pesticides. As discussed in Section 4.15, Human Made Hazards, and Appendix 4.15 of the Draft EIR, historic photos were reviewed to determine the extent of past agricultural activities. The review of photos found that only a portion within the western part of the site has been farmed, and the remainder of the proposed project site has been generally undeveloped since 1900. Pesticides applied prior to this date are likely degraded or mobilized off site. Pesticides used on the portion of the site historically devoted to agricultural and the off site agricultural areas that drain onto the site may contain legacy pesticides. However, the potential health risk of these potential legacy pesticides was assessed in Section 4-15 of the Draft EIR by evaluating a health risk assessment prepared in 1990 for the nearby Valencia Town Center. This property was previously owned by the same agricultural company as the project site, so it was assumed the same agricultural practices were performed at each site. The health risk assessment found that the total lifetime cancer risk to residents, visitors, and workers were below one in a million due to low-level pesticide residue in the soil. This information indicates that transport of legacy pesticides off site into receiving waters is relatively unlikely, even during the construction phase.

In addition, as discussed in Section 4.8.1, Water Quality, of the Draft EIR, pesticides, which tend to cling to sediment, will be controlled with recommended source-control and structural BMPs during both the construction and post-construction phases. During construction, compliance with the General Construction Activity Storm Water Permit and preparation of a Stormwater Pollution and Prevention Plan (SWPPP) to control construction related water quality impacts would control discharges of pesticides. The key elements of the SWPPP will address erosion control sediment control, and proper application, control storage and use of pesticides in landscaping activities. Compliance with the MS4 Permit, and preparation of a standard urban stormwater mitigation plan in compliance with the Draft

EIR requiring implementation of post-construction BMPs, including efficient irrigation, implementation of an integrated fertilizer and pesticide application and management plan, and structural BMPs that capture sediment, will control post-development discharges of pesticides. Given the history of limited legacy pesticide use on the property, and the BMPs that must be implemented as project design features, water quality impacts with respect to pesticides will be less than significant.

Response 2

The estimated increase in stormwater runoff volume is provided in the Draft EIR Section 4.8.1, Water Quality, at p. 4.8.1-71 and in Table 11 of the WQTR. See Draft EIR Appendix 4.8. An assessment of dry weather flows is presented on p. 83 of the WQTR, as well as in the *Additional Hydrology and Water Quality Analyses for the Riverpark Project Technical Report*, prepared by GeoSyntec, dated October 13, 2004, attached as **Appendix G** of the Final EIR. Dry weather flows will be eliminated through infiltration and evapotranspiration in the water quality treatment basins and swales within the project boundary. No dry weather flows will be discharged to the Santa Clara River.

Response 3

As shown in the WQTR, under existing conditions, 98 percent of the tributary watershed is open space. Under project conditions, 65.2 percent of the tributary watershed remains open space. Per the percent impervious tables provided in Table 5, and acreages in Table 10, there are an additional 88 acres of impervious areas—an increase of approximately 10 percent. Based on the estimated change in runoff volumes presented in Table 11 of the WQTR, the decrease in infiltration is expected to be about 100 acre-feet per year. However, this assumes no losses due to evapotranspiration or infiltration in the proposed structural BMPs. As stated in the Draft EIR and the WQTR, these BMPs would be designed to capture approximately 80 percent of the average annual runoff volume from the site, or 253 acre-feet. We can conservatively assume that 20 percent of this treated runoff is infiltrated based on the following factors: The International Stormwater BMP Database is a peer-reviewed database that contains a wide range of BMP effectiveness studies that are reflective of diverse land uses (ASCE/EPA, 2000). An analysis of the monitored inflow and outflow data contained in the International Stormwater BMP Database showed a stormwater volume reduction on the order of 30 percent for dry extended detention basins and 38 percent for biofilters (i.e., vegetated swales, filter strips, and bioretention facilities). Based on this analysis, a conservative estimate is that approximately 10 percent to 20 percent of the project's stormwater inflow to the water quality basins, bioretention areas, and vegetated swales will infiltrate and/or evapotranspire. Assuming 20 percent of this treated runoff is infiltrated, the actual reduction in infiltration would be

closer to 50 acre-feet per year (see *Additional Hydrology and Water Quality Analyses for the Riverpark Project Technical Report*, prepared by GeoSyntec, dated October 13, 2004, attached the Final EIR as **Appendix G**).

As stated in Appendix 4.8 of the Draft EIR in a Technical Memorandum prepared by CH2MHill entitled, *Effect of Urbanization on Aquifer Recharge in the Santa Clarita Valley*, urbanization in the SC Valley, including the Riverpark project and associated increase in impervious surface and decreases in infiltration, will not significantly reduce recharge to groundwater, nor deplete the amount of groundwater that is stored in the SC Valley. In the SC Valley, stormwater runoff flows to the Santa Clara River and its tributaries, whose channels are predominately natural and consist of vegetation and coarse-grained sediments. The stormwater runoff from developed areas is routed through detention basins or other treatment BMPs to the river channel, where the porous nature of the sands and gravels forming the streambed allow for significant infiltration to occur to the underlying groundwater.

Increased irrigation in the SC Valley associated with urban development has resulted in the irrigation of previously undeveloped lands. The effect of irrigation is to maintain higher soil moisture levels during the summer than would exist if no irrigation were occurring. Consequently, a greater percentage of the fall/winter precipitation recharges groundwater beneath irrigated land parcels than beneath undeveloped land parcels. Because reductions in stormwater infiltration in the developed condition are not substantial, and based on the technical analysis of the effects of urbanization on groundwater recharge developed by CH2MHill, reductions in percolation are less than significant.

Response 4

With respect to a net change in cubic feet per second of surface water contributions, in drought conditions there is no rain to contribute to surface water runoff. Further, due to implementation of efficient irrigation, swales and extended detention basins as project design features, dry weather runoff is expected to be infiltrated and evapotranspirated, and would not be discharged to the Santa Clara River. See *The Additional Hydrology and Water Quality Analysis for the Riverpark Project*, prepared by GeoSyntec, dated October 13, 2004. Therefore, in drought conditions, there will be no surface water runoff pre or post development. The Draft EIR estimates the post-development discharge rate from surface water contributions in cubic feet per second in Section 4.20, Floodplain Modifications, at p. 4.20-38. The Draft EIR concludes that the proposed project would not result in a significant adverse increase the average flows in the river downstream of the project. In addition, the implementation of the Drainage Concept for the project would meet the flood control requirements of the City and the Flood Control and Watershed Management Divisions of the Los Angeles County Department of Public Works and would reduce any drainage impacts to less than significant (see Draft EIR Section 4.2, Flood).

With respect to a net change in groundwater contribution, it should be noted that flow rates (cubic feet per second) are typically not used as a groundwater hydrology measure. In drought conditions there will be no post-development change in the groundwater contribution because dry weather discharges will be fully mitigated prior to reaching the alluvial soils of the Santa Clara Riverbed by evapotranspiration or shallow infiltration (that does not reach groundwater aquifers) (see **Response 3**, above). Further, efficient irrigation systems and use of drought-tolerant materials in landscaping plans required as project design features are designed prevent over-watering, assuring that irrigation does not significantly or adversely surcharge groundwater volumes. In the 10-year, 50-year and 100-year flood conditions soils are saturated, resulting in runoff of stormwater and precluding infiltration and deep percolation. As a result, no significant additional groundwater recharge is expected to be associated with the 10-year, 50-year, and 100-year events as a result of the project. On an average annual basis, as discussed in **Response 3**, above, total infiltration is expected to decrease by about 50 acre-feet per year, but deep percolation and groundwater recharge within the regional aquifer is not expected to be significantly affected as a result of the project.

2. LETTER RECEIVED FROM ELIZABETH ERICKSON, CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION, DATED MARCH 22, 2004

Given the technical nature of the responses, it was thought prudent that for **Comment Letters 1** and **2** only that a summary of each response be provided to assist the lay reader.

Response 1: The commenter asked how the project would increase the concentrations and loads of nutrients, salts, coliform bacteria, and historic pesticides. Although a water quality technical report was prepared for the project, it must be acknowledged that for some pollutants of concern, while some water quality data may exist for the pollutant, the current limits of technology and other factors result in accuracy issues that make the data too unreliable for use in quantitative modeling. However there is sufficient sampling data in the Los Angeles area is available to permit meaningful modeling of nutrients: TP, nitrate, and TN and chloride (a salt, and the only salt for which the downstream reaches of the Santa Clara are impaired). The response provides a discussion of constituent impacts for nutrients, salts, coliform bacteria, and historic pesticides. The response outlines the conclusion of the Draft EIR that there will be no significant impacts to the above noted constituents.

Response 2: The commenter requested the amount of runoff generated by the project during both dry and wet years. This response directs the reader to the amounts discussion in the Draft EIR. This response also notes that with project improvements that there would be no dry weather flows discharged to the Santa Clara River.

Response 3: The commenter requested information pertaining to the amount of increased or decreased percolation. The response directs the reader to technical studies prepared for the project, which predict that the decrease in infiltration is expected to be about 100 acre-feet per year. However, this assumes no losses due to evapotranspiration or infiltration in the proposed structural BMPs (BMPs). As stated in the Draft EIR and the water quality technical report, these BMPs would be designed to capture approximately 80 percent of the average annual runoff volume from the site, or 253 acre-feet. In the SC Valley, stormwater runoff from developed areas is routed through detention basins or other treatment BMPs to the river channel, where the porous nature of the sands and gravels forming the streambed allow for significant infiltration to occur to the underlying groundwater.

Increased irrigation in the SC Valley associated with urban development has resulted in the irrigation of previously undeveloped lands. The effect of irrigation is to maintain higher soil moisture levels during the summer than would exist if no irrigation were occurring. Consequently, a greater percentage of the

fall/winter precipitation recharges groundwater beneath irrigated land parcels than beneath undeveloped land parcels. Because reductions in stormwater infiltration in the developed condition are not substantial, reductions in percolation are less than significant.

Response 4: The commenter requested estimates of the net change in groundwater and surface water flows. In drought conditions, there will be no surface water runoff pre or post development. The Draft EIR estimates the post-development discharge rate from surface water contributions in cubic feet per second in Section 4.20, Floodplain Modifications, at p. 4.20-38. The Draft EIR concludes that the proposed project would not result in a significant adverse increase the average flows in the river downstream of the project. With regard to groundwater flows, in drought conditions there will be no post-development change in the groundwater contribution. Further, efficient irrigation systems and use of drought-tolerant materials in landscaping plans required as project design features are designed prevent over-watering, assuring that irrigation does not significantly or adversely surcharge groundwater volumes. In flood conditions soils are saturated, resulting in runoff of stormwater and precluding infiltration and deep percolation. As a result, no significant additional groundwater recharge is expected to be associated with the 10-year, 50-year, and 100-year events as a result of the project.

Response 5: The commenter indicated that there was a lack of quantitative estimates with regard to cumulative impacts and other anticipated projects within the next decade. Although possible, the results of any kind of modeling effort would be a rough estimate at best. In order to calculate the cumulative impacts, specific project data would be required and that data is not available at this time.

Response 1

As described in Appendix 4.8 of the Draft EIR, Water Quality Technical Report (WQTR), prepared by PSOMAS, dated February 2004, and pp. 4.8.1-46–48 of the Draft EIR, an empirical model is used to quantify water quality impacts for various pollutants of concern. The data required by the model to estimate pollutant loads and concentrations quantitatively consists of flow composite storm event sample data, which measures of the average water quality during the event. To obtain such data usually requires automatic samplers that collect data at a frequency that is proportionate to flow rate. Flow sample data that is accurate and sufficient to provide meaningful model results is not available for all potential pollutants of concern. Further, for some pollutants of concern, while some water quality data may exist for the pollutant, the current limits of technology and other factors result in accuracy issues that make the data too unreliable for use in quantitative modeling.

In preparing the Draft EIR quantitative analysis, sufficient flow composite sampling data in the Los Angeles area is available to permit meaningful modeling of nutrients: TP, nitrate, and TN and chloride (a salt, and the only salt for which the downstream reaches of the Santa Clara are impaired). Therefore, the Draft EIR sets forth a quantitative estimate of pre and post development loads and concentrations for these nutrients and salts (see Draft EIR Section 4.8.1, Water Quality at pp. 4.8.1-38, 4.8.1-52, and 4.8.1-72).

These quantitative estimates for nutrients and chloride also serve as indicators for other pollutants of concern, and the behavior of other pollutants of concern can be assessed based on the behavior of these quantitatively modeled constituents, even though empirical data for the specific constituent may not permit modeling of the specific substance. By way of example, the quantitative chloride results serve as indicator data for the behavior of other pollutants of concern consisting of, or related to minerals or salts, including boron, SAR, and sulfates. Please see Draft EIR Table 4.8.1, text p. 4.8.1-47, and 4.8.1-78. Similarly, the quantitative analysis results for TP, nitrate, and TN serve as indicator data for the behavior of other nutrients or nutrient-related constituents of concern, including ammonia, dissolved oxygen, biochemical oxygen demand, and biostimulatory substances (see Draft EIR Table 4.8.1, Table 4.8.1-17, text Draft EIR p. 4.8.1-53, and 4.8.1-78–81).

The following summarizes the information analyzed in the Draft EIR Section 4.8.1, Water Quality, and the WQTR with respect to nutrients, and salts:

Nutrients: TP and TN (estimated as TKN + nitrates) loads and concentrations were quantified for both the existing condition and the post-developed condition in the WQTR. Pollutant removal estimates for nitrates were not possible given available data (see Draft EIR Section 4.8, Appendix 4.8, WQTR - Table 12 for loads, Table 13 for concentrations and Table 16 for comparisons with Basin Plan objectives). Implementation of project BMPs is predicted to render the post-development nitrogen level to be within the level of the Santa Clara River Basin Plan objectives. The project, post-development, will have lower concentrations and loads than in the existing condition for phosphorous (see Draft EIR Section 4.8.1, at p. 4.8.1-39). As a result, water quality impacts with respect to nutrients are determined to be less than significant.

Salts (chloride): Salts were represented by chloride; loads and concentrations were quantified for both the existing condition and the post-developed condition in the WQTR. The objectives of the Santa Clara River Basin Plan would not be exceeded post-development even without any implementation of BMPS. With BMPS, the chloride levels are expected to be less than the objectives of the Santa Clara River Basin Plan (see Draft EIR Section 4.8.1, Appendix 4.8, WQTR - Table 12 for loads, Table 13 for concentrations

and Table 16 for comparisons with Basin Plan objectives). As a result, water quality impacts with respect to salts are determined to be less than significant.

As set forth in the WQTR and Draft EIR text at pp. 4.8.1-46–48, and pp 4.8.1-81–82, changes in coliform bacteria, pathogen and legacy pesticide levels associated with development cannot be meaningfully evaluated quantitatively for a number of reasons. As discussed in the Draft EIR, the limited amount of available data for bacteria are not suitable for computer modeling because the monitoring consists of collecting grab samples due to necessarily short holding times. Grab samples are not representative of average bacteria levels over an entire storm. To assure accurate predictions, modeling conducted as part of the Draft EIR relied on annual average storm-event concentrations rather than grab samples. Attempting to model bacteria based on the available monitoring data for bacteria would require speculation. Moreover, there are numerous sources of pathogens, including birds and other wildlife, as well as domesticated animals and pets that could impact testing results and preclude accurate correlation of land use type and monitoring data. Therefore, adequate, defensible, quantitative analysis of coliform bacteria and pathogens is not possible at this time.

With respect to legacy pesticides, concentrations in urban runoff are often below detection limits for most commercial laboratories and, therefore, statistically reliable data on pesticide concentrations is not available to develop meaningful quantitative estimates for this pollutant of concern. Please see Draft EIR p. 4.8.1-47 and 4.8.1-82–84. Therefore, adequate, defensible, quantitative analysis of historic pesticides is not possible at this time.

Due to the lack of statistically reliable monitoring data, pathogens and legacy pesticides were analyzed qualitatively using literature information and best professional judgment (see Draft EIR Section 4.8.1, Water Quality, at p. 4.8.1-52, WQTR). CEQA does not require quantitative analysis of impacts, particularly when such analysis would not present accurate results.

The following summarizes the information qualitatively analyzed in the Draft EIR Section 4.8.1, Water Quality, and the WQTR with respect coliform bacteria and historic pesticides.

Coliform Bacteria: As previously mentioned, quantitative analyses require both adequate EMC and pollutant removal data, which is currently unavailable. However, water quality impacts of the project with respect to coliform bacteria and pathogens were evaluated qualitatively in accordance with CEQA. As discussed in the Draft EIR Section 4.8.1, Water Quality, while the conversion of open spaces or agriculture to urban development may result in some increase in pathogen levels, source and treatment control BMPs would help control coliform levels.

Additional BMPs that contribute to control of pathogens to be employed in the project include:

(1) Availability of pet waste collection bags ("mutt mitts");

(2) Distribution of pet waste educational material;

(3) Adequate connection and maintenance of sanitary sewer lines; and

(4) Maintenance of BMPs for removal of bacteria and all pollutants associated with sediment in the water quality basins, which occurs through periodic removal and proper disposal of accumulated sediments in the water quality basins. With implementation of the BMPs required pursuant to the Draft EIR, water quality impacts with respect to coliform bacteria and pathogens are determined to be less than significant.

Pesticides. As previously discussed, meaningful and accurate quantitative modeling of pesticides is not currently possible. However, water quality impacts of the project with respect to pesticides were evaluated qualitatively in accordance with CEQA. As discussed in the Draft EIR, the open space areas proposed for residential development are in a natural condition and are not known to have been maintained with pesticides. As discussed in Section 4.15, Human Made Hazards, and Appendix 4.15 of the Draft EIR, historic photos were reviewed to determine the extent of past agricultural activities. The review of photos found that only a portion within the western part of the site has been farmed, and the remainder of the proposed project site has been generally undeveloped since 1900. Pesticides applied prior to this date are likely degraded or mobilized off site. Pesticides used on the portion of the site historically devoted to agricultural and the off-site agricultural areas that drain onto the site may contain legacy pesticides. However, the potential health risk of these potential legacy pesticides was assessed in Section 4.15, Human Made Hazards, of the Draft EIR by evaluating a health risk assessment prepared in 1990 for the nearby Valencia Town Center. This property was previously owned by the same agricultural company as the project site, so it was assumed the same agricultural practices were performed at each site. The health risk assessment found that the total lifetime cancer risk to residents, visitors, and workers were below one in a million due to low-level pesticide residue in the soil. This information indicates that transport of legacy pesticides off site into receiving waters is relatively unlikely, even during the construction phase.

In addition, as discussed in Section 4.8.1, Water Quality, of the Draft EIR, pesticides, which tend to cling to sediment, will be controlled with recommended source-control and structural BMPs during both the construction and post-construction phases. During construction, compliance with the General Construction Activity Storm Water Permit and preparation of a SWPPP to control construction related water quality impacts would control discharges of pesticides. The key elements of the SWPPP will address erosion control sediment control, and proper application, control storage and use of pesticides in landscaping activities. Compliance with the MS4 Permit, and preparation of a standard urban

stormwater mitigation plan in compliance with the Draft EIR requiring implementation of post-construction BMPs, including efficient irrigation, implementation of an integrated fertilizer and pesticide application and management plan, and structural BMPs that capture sediment, will control post-development discharges of pesticides. Given the history of limited legacy pesticide use on the property, and the BMPs that must be implemented as project design features, water quality impacts with respect to pesticides will be less than significant.

Response 2

The estimated increase in stormwater runoff volume is provided in the Draft EIR Section 4.8.1, Water Quality, at p. 4.8.1-71 in Table 11 of the WQTR (see Draft EIR Appendix 4.8). An assessment of dry weather flows is presented on p. 83 of the WQTR, as well as in the *Additional Hydrology and Water Quality Analyses for the Riverpark Project Technical Report*, prepared by GeoSyntec, dated October 13, 2004, attached as **Appendix G** of the Final EIR. Dry weather flows will be eliminated through infiltration and evapotranspiration in the water quality treatment basins and swales within the project boundary. No dry weather flows will be discharged to the Santa Clara River.

Response 3

As shown in the WQTR, under existing conditions, 98 percent of the tributary watershed is open space. Under project conditions, 65.2 percent of the tributary watershed remains open space. Per the percent impervious tables provided in Table 5, and acreages in Table 10, there are an additional 88 acres of impervious areas—an increase of approximately 10 percent. Based on the estimated change in runoff volumes presented in Table 11 of the WQTR, the decrease in infiltration is expected to be about 100 acre-feet per year. However, this assumes no losses due to evapotranspiration or infiltration in the proposed structural BMPs. As stated in the Draft EIR and the WQTR, these BMPs would be designed to capture approximately 80 percent of the average annual runoff volume from the site, or 253 acre-feet. We can conservatively assume that 20 percent of this treated runoff is infiltrated based on the following factors: The International Stormwater BMP Database is a peer-reviewed database that contains a wide range of BMP effectiveness studies that are reflective of diverse land uses (ASCE/EPA, 2000). An analysis of the monitored inflow and outflow data contained in the International Stormwater BMP Database showed a stormwater volume reduction on the order of 30 percent for dry extended detention basins and 38 percent for biofilters (i.e., vegetated swales, filter strips, and bioretention facilities). Based on this analysis, a conservative estimate is that approximately 10 percent to 20 percent of the project's stormwater inflow to the water quality basins, bioretention areas, and vegetated swales will infiltrate and/or evapotranspire. Assuming 20 percent of this treated runoff is infiltrated, the actual reduction in infiltration would be

closer to 50 acre-feet per year (see *Additional Hydrology and Water Quality Analyses for the Riverpark Project Technical Report*, prepared by GeoSyntec, dated October 13, 2004, attached the Final EIR as **Appendix G**).

As stated in Appendix 4.8 of the Draft EIR in a Technical Memorandum prepared by CH2MHill entitled, *Effect of Urbanization on Aquifer Recharge in the Santa Clarita Valley*, urbanization in the SC Valley, including the Riverpark project and associated increase in impervious surface and decreases in infiltration, will not significantly reduce recharge to groundwater, nor deplete the amount of groundwater that is stored in the SC Valley. In the SC Valley, stormwater runoff flows to the Santa Clara River and its tributaries, whose channels are predominately natural and consist of vegetation and coarse-grained sediments. The stormwater runoff from developed areas is routed through detention basins or other treatment BMPs to the river channel, where the porous nature of the sands and gravels forming the streambed allow for significant infiltration to occur to the underlying groundwater.

Increased irrigation in the SC Valley associated with urban development has resulted in the irrigation of previously undeveloped lands. The effect of irrigation is to maintain higher soil moisture levels during the summer than would exist if no irrigation were occurring. Consequently, a greater percentage of the fall/winter precipitation recharges groundwater beneath irrigated land parcels than beneath undeveloped land parcels. Because reductions in stormwater infiltration in the developed condition are not substantial, and based on the technical analysis of the effects of urbanization on groundwater recharge developed by CH2MHill, reductions in percolation are less than significant.

Response 4

With respect to a net change in cubic feet per second of surface water contributions, in drought conditions there is no rain to contribute to surface water runoff. Further, due to implementation of efficient irrigation, swales and extended detention basins as project design features, dry weather runoff is expected to be infiltrated and evapotranspirated, and would not be discharged to the Santa Clara River. See *Additional Hydrology and Water Quality Analysis for the Riverpark Project*, prepared by GeoSyntec, dated October 13, 2004. Therefore, in drought conditions, there will be no surface water runoff pre or post development. The Draft EIR estimates the post-development discharge rate from surface water contributions in cubic feet per second in Section 4.20, Floodplain Modifications, at p. 4.20-38. The Draft EIR concludes that the proposed project would not result in a significant adverse increase the average flows in the river downstream of the project. In addition, the implementation of the Drainage Concept for the project would meet the flood control requirements of the City and the Flood Control and Watershed Management Divisions of the Los Angeles County Department of Public Works and would reduce any drainage impacts to less than significant (see Draft EIR Section 4.2 Flood).

With respect to a net change in groundwater contribution, it should be noted that flow rates (cubic feet per second) are typically not used as a groundwater hydrology measure. In drought conditions there will be no post-development change in the groundwater contribution because dry weather discharges will be fully mitigated prior to reaching the alluvial soils of the Santa Clara Riverbed by evapotranspiration or shallow infiltration (that does not reach groundwater aquifers) (see **Response 3**, above). Further, efficient irrigation systems and use of drought-tolerant materials in landscaping plans required as project design features are designed prevent over-watering, assuring that irrigation does not significantly or adversely surcharge groundwater volumes. In the 10-year, 50-year and 100-year flood conditions soils are saturated, resulting in runoff of stormwater and precluding infiltration and deep percolation. As a result, no significant additional groundwater recharge is expected to be associated with the 10-year, 50-year, and 100-year events as a result of the project. On an average annual basis, as discussed in **Response 3**, above, total infiltration is expected to decrease by about 50 acre-feet per year, but deep percolation and groundwater recharge within the regional aquifer is not expected to be significantly affected as a result of the project.

Response 5

The results of the modeling effort to quantitatively estimate the impacts for all potential development in the area within the next decade would not be valid or meaningful because the data inputs to the model for future projects would be, at best, speculative guesses. For example, as described in the Draft EIR and the WQTR, quantitative modeling of the projects requires determining the acreages of the various land uses within a proposed project, calculation of the likely percentage of impervious surface associated with each proposed land use based on proposed development plans, estimation of changes in runoff volume associated with the proposed land uses and added impervious surface, assessment of pollutant changes associated with post-development increases in runoff volumes and changes in land use, and assessment of treatment efficiency of specified, proposed BMPs. It is not possible to accurately estimate acreages of varied land uses within proposed projects, the likely percentage of impervious surfaces associated with those land uses, or the array of BMPs that will be incorporated into projects that might be developed over the next decade, when detailed master plans have not yet been proposed for those projects. In order to accurately predict impacts from future development, accurate data would be required for the proposed project land uses, areas of impervious surface, and proposed treatment BMPS. These data are not available.

CEQA does not require quantitative analysis of cumulative impacts. Further, CEQA does not require evaluation of cumulative impacts for all projects that might be proposed in the vicinity of the project within the decade. Instead, CEQA requires the analysis of cumulative impacts of the project together

with foreseeable probable future projects producing related impacts. See *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 77. The extent of the CEQA analysis required for cumulative impacts also includes an analysis of the project as it relates to the "most probable development patterns" in the area. *City of Antioch v. City Council of the City of Pittsburg* (1986) 187 Cal.App.3d 1325, 1337.

CEQA Guidelines Section 15130(b)(1) sets forth elements necessary for an adequate discussion of cumulative impacts. CEQA does not require quantitative analysis of cumulative impacts. Instead, *CEQA Guidelines* Section 15130(b)(1)(B) provides that cumulative impact discussions are sufficient if they are based upon a summary of projects contained in an adopted general plan or related planning document. Further, the *CEQA Guidelines* provide that the combined cumulative impact associated with a project's incremental effect and the effects of other projects may be less than significant if the project is required to implement or comply with mitigation standards or measures designed to avoid or substantially lessen the cumulative impact, provided that the lead agency shall identify the facts and analysis supporting the conclusion that the contribution of the project to the cumulative impact will be rendered less than cumulatively considerable by such implementation and compliance. See *CEQA Guidelines* Section 15064 (h)(3) and 15130(a)(2) and (3).

With respect to cumulative impacts to water quality in the Santa Clara River, the Draft EIR assesses potential cumulative impacts of the project in light of development projections for the Santa Clara River Watershed, and in light of projections of the SC Valley Cumulative Build-Out Scenario, which looks at a summary of development projections for the buildout of all lands under the current land use designations indicated in the City of Santa Clarita General Plan and the Los Angeles County Santa Clarita Valley Area Plan. Draft EIR Section 3.0, Cumulative Impact Analysis Methodology, at p. 3.0-6, and 4.8.1, Water Quality, at pp. 4.8.1-96–98. As described in Draft EIR Section 4.8.1, Water Quality (10)(a), the project's incremental water quality effect combined with the water quality effects of other projects, which are anticipated based upon watershed development projections and SC Valley Cumulative Build-Out Scenario, are determined to be less than significant because the project is required to implement or comply with water quality standards and water quality measures designed to avoid or substantially lessen the cumulative water quality impacts of urban development. Specifically, as analyzed in the Draft EIR, for those pollutants of concern that increase as a result of the project, runoff from the project will comply with receiving water quality standards designed to protect the beneficial uses of the Santa Clara River from the particular pollutant of concern. The water quality standards designed to address potential water quality impacts and to protect receiving water quality from development include the narrative and numeric water quality objectives of the Basin Plan, the California Toxics Rule, the requirements of the General MS4 Permit, and the requirements of the General Construction Activity Permit. With respect the

project, runoff is predicted to comply with these protective water quality standards applicable to receiving waters, resulting in no significant adverse cumulative water quality impacts (see Table 4.8.1-6, Table 4.8.1-16, Table 4.8.1-7, and pp. 4.8.1-65–91).

With respect to cumulative impacts to aquatic habitat in the Santa Clara River, the project will have no incremental direct affect on the aquatic resources of the river because it is designed to avoid impacts to those resources. The only potential incremental impacts to aquatic resources in the river are indirect impacts resulting from changes in runoff volumes and velocities, and river elevations that could potentially occur as a result of project and river-related improvements. The Draft EIR assesses potential cumulative impacts of the project in light of development projections for the Santa Clara River Watershed, and a list of projects set forth in Section 4.6 of the Draft EIR. As described in Draft EIR Section 4.20(8), the project's incremental effect on aquatic resources combined with effects of other projects, which are anticipated based upon watershed development projections and list of projects in the Section 4.6 of the Draft EIR, are determined to be less than significant because the project is required to implement or comply with avoidance, minimization and mitigation measures of the Natural River Management Plan (NRMP). Specifically, as analyzed in the Draft EIR, the NRMP standards designed to minimize and mitigation impacts of proposed development on the aquatic resources of the Santa Clara River are sufficient to mitigate cumulative impacts on those resources to a level of insignificance (see Draft EIR at p. 4-10-68).

3. LETTER RECEIVED FROM E. CONLEY, STATE OF CALIFORNIA, DEPARTMENT OF CALIFORNIA HIGHWAY PATROL, APRIL 6, 2004

Response 1

As described in the Draft EIR in Section 4.14, Sheriff Services, the proposed project site is located within the jurisdictional boundaries of the City of Santa Clarita. The City has an agreement with the County of Los Angeles by which the County of Los Angeles Sheriff's Department provides general law enforcement services to the City through the Sheriff's SC Valley Station. Therefore, general law enforcement responsibilities are within the jurisdiction of the County of Los Angeles Sheriff's Department, not the Department of California Highway Patrol, as the comment asserts.

Response 2

As described in the Draft EIR in Section 4.14, Sheriff Services, the proposed project site is located within the jurisdictional boundaries of the City of Santa Clarita. The City has an agreement with the County of Los Angeles by which the County of Los Angeles Sheriff's Department provides general law enforcement services to the City through the Sheriff's SC Valley Station. Therefore, the County Sheriff's Department would be responsible for traffic enforcement, emergency incident management, public service, assistance, and accident investigation for the project site.

Response 3

Traffic impacts are discussed in the Draft EIR in Section 4.3, Traffic/Access.

The Draft EIR concludes that the project will have significant impacts to the below listed intersections that cannot be mitigated to below significance:

Pre-Interim Year (Occupancy of up to 500 units, without Newhall Ranch Road/Golden Valley Road Bridge)

- Valencia Boulevard/Magic Mountain Parkway Interim Year.

Full Buildout of Project

- Valencia Boulevard/Magic Mountain Parkway;
- Bouquet Canyon Road/Soledad Canyon Road;

- Seco Canyon Road/Bouquet Canyon Road; and
- Whites Canyon Road/Soledad Canyon Road.

The Draft EIR indicates that the City has determined that the above-identified intersections are presently built-out, with the exception of the Bouquet Canyon Road/Soledad Canyon Road intersection. Improvements to this intersection have commenced, and upon completion will result in this intersection being presently built out. The City of Santa Clarita General Plan Circulation Element states that "[e]xisting street improvements are, in some cases, not able to be modified due to right-of-way limitations and existing development." The General Plan acknowledges that benefits of improvements at such intersections are not outweighed by a combination of the potential time and cost of actions necessary to acquire the property, the physical and economic costs to businesses at the affected intersections, and the social costs that could occur if the affected businesses were forced to relocate.

Finally, the Riverpark project results in the acceleration of the construction of the last, unfunded, unbuilt portion of the Cross Valley Connector. This improvement is required to be constructed and operation before the project's 501st occupancy. Section 4.3, Traffic/Access, of the Draft EIR, illustrates the benefits to the SC Valley's roadway network. One of the significant benefits associated with the Cross Valley Connector includes a substantial reduction in vehicle trips on Soledad Canyon Road. The Draft EIR indicates that Soledad Canyon Road, directly east of Bouquet Canyon Road, presently carries 57,000 vehicles per day. In the Interim Year with Project Scenario, which includes the completion of the Cross Valley Connector and the buildout of Riverpark, the number of vehicle trips on this portion of Soledad Canyon Road is significantly reduced to 36,000 vehicle trips. Therefore, acceleration of the Cross Valley Connector by the Riverpark project, through its right-of-way dedication and Bridge and Thoroughfare Fee District (B&T) contribution, will result in the improvement of traffic conditions in the SC Valley, including emergency vehicle movement.

Section 4.14, Sheriff Services, of the Draft EIR analyzes emergency response times and the potential need for additional resources and officers to provide traffic enforcement, emergency incident management, public service, assistance, and accident investigation. Implementation of the project would increase the demand for police protection and traffic-related services on the project site and the local vicinity in terms of personnel and equipment needed to adequately serve the project site at buildout. The project would require the services of four additional sworn officers. The project would generate revenue for the City of Santa Clarita through property taxes, sales taxes, users taxes, fees, and assessments. Although the project would increase demands for Sheriff's services, these service demands can be met through the allocation of funding by the City to the sheriff's department generated by the project as it builds out, which occurs

through the normal contractual procedures followed by the two parties; therefore, no significant impacts to the sheriff's department would be created by the project.

The sheriff's department has established an optimal response time for services of 10 minutes or less for emergency response incidents (a crime that is presently occurring and is a life or death situation), 20 minutes or less for priority (immediate) incidents (a crime or incident that is currently occurring but which is not a life or death situation) and 60 minutes or less for routine (non-emergency) responses (a crime that has already occurred and is not a life or death situation).[1] These response times represent the range of time required to handle a service call, which is measured from the time a call is received until the time a patrol car arrives at the incident scene. Response time is variable particularly because the nearest responding patrol car may be located anywhere within the station's patrol area, and not necessarily responding from the station itself. The sheriff's department currently has a response time to the project site for emergency calls of approximately 5–8 minutes, immediate (now called priority) response time of approximately 8–10 minutes, and routine (non-emergency) calls take approximately 40–50 minutes.[2] These response times are approximations only, and would be dependent on both the deployment of area radio cars and traffic conditions.[3] Therefore, response times to the project site are within the optimal response times as defined by the Sheriff's Department. Further, with regard to emergency service on project area roadways, the County of Los Angeles Sheriff's Department has determined that, with mitigation, impacts to emergency services would be less than significant.

With regard to emergency service on I-5 and SR-14, the Draft EIR Section 4.3, Traffic/Access, p. 4.3-50, concludes that the project would not cause a significant impact on the freeway on and off ramps because those locations would remain at an acceptable level of service (LOS) with project traffic.

Finally, since the Draft EIR was prepared and released for public review, the project has been revised to reduce the total number of residential units from 1,183–1,123, including, without limitation, converting Planning Area C from apartments to condominiums. This reduction in residential units will concomitantly reduce traffic trips generated by the project and reduced impacts.

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1 Telephone interview with Terri Beatty, Regional Allocation Police Services (RAPS) Coordinator, County of Los Angeles Sheriff's Department, Santa Clarita Valley Station, August 5, 2003.

2 Correspondence from Captain Patti A. Minutello, County of Los Angeles Sheriff's Department, Santa Clarita Valley Station, November 21, 2002 (Appendix 4.14 of the Draft EIR).

3 Ibid.

4. LETTER RECEIVED FROM CHERYL POWELL, STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, DATED APRIL 21, 2004

Response 1

The commenter suggests applying the equitable share responsibility formula and setting aside a portion of Transportation Impact Fees generated for the future state highway improvement projects. The City may need to recalculate or establish an additional fee for this purpose.

As requested by Caltrans, the following information shows a traffic share formula, which calculates the project share of traffic growth on the freeway mainline pursuant to the Caltrans guidelines. Using data for the project contained in the traffic study, **Table 1** shows the project's share as calculated with this formula:

P = The equitable share for the proposed project's traffic impact.

T = The vehicle trips generated by the project during the peak hour of adjacent state highway facility in vehicles per hour, vph.

T_B = The forecasted traffic volume on an impacted state highway facility at the time of general plan buildout (e.g., 20-year model or the furthest future model date feasible), vph.

T_E = The traffic volume existing on the impacted state highway facility plus other approved projects that will generate traffic that has yet to be constructed/opened, vph.

Table 1
Freeway Traffic Shares Riverpark Project

	AM Peak Hour					PM Peak Hour				
Location	**(T) Project**	**Existing**	**(T_E) Existing + Approved**	**(T_B) Long-Range General Plan Buildout**	**(P) Project Share**	**(T) Project**	**Existing**	**(T_E) Existing + Approved**	**(T_B) Long-Range General Plan Buildout**	**(P) Project Share**
Northbound										
SR-14 north of Golden Valley	7	2,360	2,600	3,720	0.6%	3	7,420	8,160	12,310	0.1%
SR-14 south of Golden Valley	5	2,420	2,660	3,270	0.8%	13	7,570	8,330	11,110	0.5%
SR-14 south of Placerita Cyn	8	2,510	2,760	4,220	0.5%	38	7,830	8,610	11,560	1.3%
Southbound										
SR-14 north of Golden Valley	1	7,300	8,030	11,790	0.0%	5	2,980	3,280	4,790	0.3%
SR-14 south of Golden Valley	15	7,460	8,210	10,390	0.7%	8	3,030	3,330	4,070	1.1%
SR-14 south of Placerita Cyn	44	8,170	8,990	11,890	1.5%	17	3,290	3,620	5,110	1.1%

Share formula: $P = T/(T_B-T_E)$
P = The equitable share for the proposed project's traffic impact.
T = The vehicle trips generated by the project during the peak hour of adjacent state highway facility in vehicles per hour (veh/hr).
T_B = The forecast traffic volume on an impacted state highway facility at the time of General Plan buildout (e.g., 20-year model or the furthest future date feasible) (veh/hr).
T_E = The traffic volume existing on the impacted state highway facility plus other approved projects that will generate traffic that has yet to be constructed/opened (veh/hr).

The Caltrans guidelines for traffic impact studies includes a section on project traffic shares. An introductory statement in the guidelines notes that "[t]he methodology in the guidelines is neither intended as, nor does it establish, a legal standard for determining equitable responsibility and cost of a project's traffic impact…." In addition, the Caltrans guidelines do not provide a threshold of significance for evaluating the results of these computations.

In light of this language within the Caltrans guidelines and lack of significance criteria, the Riverpark Draft EIR utilized the Congestion Management Program (CMP) for Los Angeles County to quantify the project's impacts on the CMP highway system, which includes State Route 14 and Interstate 5, and the local and regional transit systems.

According to CMP guidelines, the geographical area examined in a CMP traffic analysis consists of CMP monitoring locations that meet the following criteria, which have been used as thresholds of significance for the determination of impacts. The thresholds established for the identification of a significant impact on the highway system are identified in the Riverpark Draft EIR p. 4.3-50. Based upon these thresholds, the Draft EIR concludes, on pp. 4.3-50 and 4.3-51, that the Riverpark project would be below the applicable thresholds of significance and would, therefore, not cause a significant impact on the state highway system (mainline and on- and off-ramps). Finally, the Riverpark Draft EIR contains a CMP Debit and Credit Summary (p. 4.3-53), which concludes that the project would result in a net credit surplus of 95,430 points.

The comment further indicates that the City may need to recalculate or establish an additional fee for this purpose. As illustrated above and within the Draft EIR, the Riverpark project does not result in a significant impact to the state highway system pursuant to the thresholds established by the CMP and, therefore, no mitigation is required.

It should be noted that the project residents will also generate incremental state and federal gas tax revenue, which would contribute to the funding of future state highway projects.

Finally, since the Draft EIR was prepared and released for public review, the project has been revised to reduce the total number of residential units from 1,183 to 1,123, including, without limitation, converting Planning Area C from apartments to condominiums. This reduction in residential units will concomitantly reduce traffic trips generated by the project and reduced impacts.

Response 2

Buildout of the project necessitates the extension of Newhall Ranch Road from Bouquet Canyon Road to the Soledad flyover as part of the Cross Valley Connector, which is part of the project and has been analyzed in the project Draft EIR. The Cross Valley Connector is also undergoing separate environmental review, as the City is preparing an EIS/EIR for that project. Construction of the project will be coordinated with the Cross Valley Connector.

Response 3

The project-level and cumulative impacts of the project are analyzed in Section 4.3, Traffic/Access, of the project Draft EIR. Each of the scenarios analyzed in the traffic study (pre-interim year, interim year, alternative interim year, and fully SC Valley cumulative buildout) includes the cumulative effect of other future developments. The magnitude of the project's impacts has been quantified in the form of changes in intersection capacity utilization that occurs due to the project and the project's share of future increases in traffic volumes (see Draft EIR Volume II, Appendix 4.3 Traffic/Access, Appendix E of the traffic study for share calculations). The Draft EIR concludes that the project is located within the full-mitigation Bouquet Canyon Bridge and Thoroughfare District (Bouquet Canyon B&T). Payment of fees or construction of eligible improvements equal to the project's obligation will result in the project meeting its fair-share obligation and will reduce the traffic related impacts of cumulative projects to below a level of significance**.**

Response 4

As explained in Revised Riverpark Draft EIR Section 4.6**,** pp. 4.6-44–47, there is no viable existing north-south corridor on the project site. Habitat used by wildlife as movement corridors links together large areas of open space that are otherwise separated by rugged terrain, changes in vegetation, human disturbance, or by the encroachment of urban development. As the Draft EIR explains, however, the Riverpark project is located within the center of the City of Santa Clarita, with existing and/or approved development generally occurring to the north, south, east, and west. Upland portions of the site no longer function as a north/south wildlife corridor between the Santa Clara River and upland undeveloped areas largely due to this surrounding development.

By contrast, the Santa Clara River corridor is a perfect example of a wildlife corridor that links together large open space areas (San Gabriel Mountains, Santa Susana Mountains, and the Angeles National Forest). This corridor is known to be an important east-west migration and genetic dispersion corridor

for many wildlife species occurring in the region. As explained in Revised Riverpark Draft EIR Section 4.6, p. 4.6-81, the design of the project would preserve the integrity of the river as a wildlife corridor and would minimize impacts on local and regional wildlife movement by maintaining nearly all of the Santa Clara River as open space.

Though it clearly is not a wildlife corridor, an area on the site that may be conducive to the limited movement of on-site wildlife may be the Los Angeles Department of Water and Power Pipeline Corridor. Newhall Ranch Road and the Santa Clara River Regional Trail would both bridge over this corridor, allowing for wildlife movement underneath. This pipeline corridor could provide a route, without crossing Newhall Ranch Road, from the river to the undeveloped portions of the Castaic Lake Water Agency (CLWA) property. The areas directly outside of this pipeline corridor could be enhanced (via landscaping) to encourage its potential use for north/south movement of on-site wildlife. Enhancement of this corridor will be required by the City of Santa Clarita in conjunction with the approval of the project.

5. LETTER RECEIVED FROM JEFFREY SMITH, SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS, DATED APRIL 26, 2004

Response 1

The City disagrees with the commenter that the Draft EIR does not address Southern California Association of Governments (SCAG) goals and policies. Please see Draft EIR Section 2.0, Environmental and Regulatory Setting, pp. 2.0-20–40, which addresses all of the goals and policies outlined in the SCAG November 17, 2003 letter to the Notice of Preparation for the Riverpark project. This analysis provides a discussion of each goal and or policy and how it is consistent with the achievement of RCPG and RTP policies as suggested by SCAG. SCAG goal/policy numbers are used when discussing each policy. The proposed project is consistent with SCAG goals and policies.

Response 2

Please see **Response 1**, above.

6. LETTER RECEIVED FROM JEROME DANIEL, SANTA MONICA CONSERVANCY, DATED APRIL 26, 2004

Response 1

As the comment letter indicates, Revised Riverpark Draft EIR Section 4.6 was revised when western spadefoot toads were observed on the site in early March of 2004. As Revised Riverpark Draft EIR Section 4.6 explains (p. 4.6-35), western spadefoot toads have no federal or state protected status, but are classified only as a California Species of Special Concern and as a Federal Species of Concern, which indicates that the species warrants monitoring due to population decline.[4] Therefore, the species is not entitled to legal protection and a project redesign to preserve habitat is not required.

Even so, as indicated by Mitigation Measures 4.6-9–12 in Revised Riverpark Draft EIR Section 4.6, p. 4.6-105–106, suitable replacement toad habitat has been designated on site. In fact, in March of 2004, under the supervision and with the assistance of California Department of Fish and Game (CDFG), surviving spadefoot tadpoles from last remaining on-site rainpool were collected and maintained in captivity under the supervision of CDFG. (Please see Compliance Biology, *Status of Work Associated with Western Spadefoot Toad on the River Park Project Site*, September 13, 2004 and *Western Spadefoot Toad Habitat Enhancement and Monitoring Plan, River Park Project Site, Los Angeles County, California*, November 2004; Final EIR **Appendix C**.)

After completing metamorphosis, the collected toads were released on site in areas surrounding two CDFG approved locations where rain-pools will be constructed in the future. (Please see Compliance Biology, *Status of Work Associated with Western Spadefoot Toad on the River Park Project Site*, September 13, 2004 and *Western Spadefoot Toad Habitat Enhancement and Monitoring Plan, River Park Project Site, Los Angeles County, California*, November 2004; Final EIR **Appendix C**.)

Although there have been few attempts at relocation of western spadefoot toad to date, the project biologist believes that if the habitat areas are properly constructed there should be a very good possibility of success. (Compliance Biology letter report, March 15, 2004 attached to Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 8 and Compliance Biology, *Status of Work Associated with Western Spadefoot Toad on the River Park Project Site*, September 13, 2004 and *Western Spadefoot Toad Habitat*

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4 Hayes, M.P., and M.R. Jennings, "Decline of Ranid Frogs in Western North America: Are Bullfrogs (Rana catesbeiana) Responsible?" *Journal of Herpetology*, 20: 490-509.

Enhancement and Monitoring Plan, River Park Project Site, Los Angeles County, California, November 2004; Final EIR **Appendix C**.)

Response 2

Please see **Response 1**, above. Mitigation Measures 4.6-9–12 in the Revised Riverpark Draft EIR provide specific performance standards and criteria to be adequate under CEQA. (e.g., *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308 [a "condition requiring compliance with environmental regulations is a common and reasonable mitigating measure"]; see *Perley v. Board of Supervisors* (1982) 137 Cal.App.3d 424, 430.) In addition, all habitat creation, design, relocation, and monitoring must be approved by CDFG prior to implementation, and the monitoring biologist is required to submit periodic reports to CDFG.

Response 3

Please see **Response 1**, above. The design and creation of the western spadefoot toad habitat will be accomplished by an expert. Per Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measure 4.6-9, the biologist responsible for the design and creation of the toad habitat must be qualified to conduct such a program and has been approved by CDFG. In addition, per Mitigation Measures 4.6-10 and 12, CDFG must approve all aspects of the habitat creation including location, size, and number of ponds to be created. The commenter does not provide any evidence supporting any requirement for replacement of habitat at a 2:1 ratio, and CDFG has not required this mitigation. In any event, Mitigation Measure 4.6-10 requires that the size and number of the replacement ponds be determined by CDFG.

Response 4

Please see **Response 1**, above. As provided in Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measures 4.6-9 and 4.6-10, all aspects of the design and creation of the toad habitat, including water quality, must be approved by the CDFG.

Response 5

Please see **Response 1**, above. As indicated in Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measure 4.6-11, surveys to collect adult toads, tadpoles, and egg masses will occur during the breeding season of this species. In addition, as indicated in **Response 1** above, surviving tadpoles were collected in spring 2004 during the breeding season under the supervision of CDFG, were

maintained in captivity under the supervision of CDFG until mature, and have since been released in areas surrounding two CDFG approved mitigation areas.

The commenter does not provide any evidence supporting any requirement for the restrictions advocated (transplantation only during breeding season, collection in two consecutive years prior to initiation of construction activities in the existing habitat). However, as explained in **Response 1**, above, toads were collected in March of 2004, and Mitigation Measure 4.6-11 requires that toads again be collected, generally between February and April, before construction begins. Therefore, if toads are again present in 2005, toads will have been collected in two consecutive years prior to initiation of construction activities in existing occupied habitat.

Response 6

Please see **Response 1**, above. Spadefoot tadpoles cannot be expected to occur within any location during any given year due to the species' dependence on rainfall amount and temperature to instigate breeding. The design of the ponds, which will be under CDFG's control, will be such as to maximize spadefoot reproduction potential during any given year. Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measure 4.6-12 states that success criteria shall include verifiable evidence of toad reproduction at the relocation site.

Response 7

The comment is acknowledged. Please see **Response 1** and **Response 6**, above, regarding evidence of toad reproduction and presence of tadpoles.

Response 8

The comment is acknowledged. Please see **Response 1** and **Response 6**, above. The March 2004 detection of seasonal pools on the project site containing western spadefoot toad was reported, and the implications were analyzed, in Revised Riverpark Draft EIR Section 4.6, Biological Resources, and its attachments. Additional reports are contained in **Appendix C** to the Final EIR.

Response 9

Although spadefoot toads and fairy shrimp can co-exist in the same pools, fairy shrimp were not seen in any of the seasonal rainpools on the project site, including both those that contained western spadefoot

toads in March of 2004, and those that did not. As noted in the Compliance Biology letter report of September 13, 2004 (Final EIR **Appendix C**),

> "[u]nder the direct supervision, and with participation from CDFG, western spadefoot tadpoles were recovered from the Riverpark site. Mr. Crawford and each of the three CDFG biologists that assisted with the spadefoot toad collection are familiar with fairy shrimp and are capable of observing them if present. If any species of fairy shrimp were present in any of the seasonal pools, the applicant (Newhall Land and Farming Company) would have been directed to perform focused surveys following US Fish and Wildlife Service (FWS) [protocol]. They were not present; therefore, no focused surveys were conducted."[5]

The fact that fairy shrimp were not present in these seasonal rainpools was not unexpected. There are only two occurrences, noted in the April 27, 2004 Federal Register[6] for proposed critical habitat for the Riverside fairy shrimp, reported in the project region. The nearest is Cruzan Mesa, several miles from the project site, and the next nearest is from the Moorpark area, about 16 miles away. Both of these populations are defined by the U.S. Fish and Wildlife Service (USFWS) as isolated. The four core populations include two in San Diego, one in Riverside County, and one in Orange County.

Response 10

As discussed in **Response 9** (above), Riverside and San Diego fairy shrimp were not seen during the spadefoot toad surveys and are not expected to occur on the site because the site is outside of the known range of these species in the region. Furthermore, as noted in the Compliance Biology letter report of September 13, 2004 (Final EIR **Appendix C**),

> "[t]he Riverpark project site does not occur within or immediately adjacent to any finalized or proposed critical habitat for any listed fairy shrimp species. There are two occurrences noted in the project region in the April 27, 2004 Federal Register for proposed critical habitat for Riverside fairy shrimp reported. The nearest site is at Cruzan Mesa, approximately 5 miles from the Riverpark site and the next nearest is from the Moorpark area, at least 16 miles away. The U.S. Fish and Wildlife Service define both of these populations as isolated. The four core populations include two in San Diego County, one in Riverside County and one in Orange County. The nearest occurrence of the San Diego fairy shrimp in the CNDDB is in Orange County. Because none was observed on site and because the nearest recorded occurrence of San Diego fairy shrimps are not in the near vicinity, and because the Riverpark site is not near a core population, this species has at best a low potential for occurrence on the project site."

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5 Letter report prepared by Compliance Biology, "Potential Occurrence of Endangered Fairy Shrimp on the Riverpark Project Site" September 13, 2004. (Final EIR **Appendix C**)

6 Federal Register, part IV, Department of the Interior, Fish and Wildlife Service, 50 CFR part 17, Tuesday, April 27, 2004. (Final EIR **Appendix C**)

Response 11

The commenter suggests that all undeveloped open space on the project site be dedicated to a park agency for management and maintenance, and that funds be raised through the establishment of a Community Facilities District as adequate mitigation for permanent loss of river adjacent habitat. However, the commenter does not provide any evidence supporting the claim that the only adequate mitigation consists of dedication of the undeveloped open space on the project site to a park agency for management and maintenance, or even that such an action would constitute mitigation for "permanent loss of river adjacent habitat." In any event, the management and maintenance of open space areas on this site (not under the jurisdiction of homeowners associations) will be the responsibility of the City of Santa Clarita, and the commenter has offered no evidence that the City cannot provide the same level of management and maintenance that a park agency would.

7. LETTER RECEIVED FROM MICHAEL YANG, CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION, DATED APRIL 29, 2003

Response 1

As discussed in the Draft EIR Section 4.8.1, pp. 55–65, the project must comply with the MS4 Permit, which requires Site Design or Planning BMPs. The Site Design BMPs that have been incorporated into the project are discussed in detail in Draft EIR Section 4.8.1, pp. 55–57. The major site design BMPs to be incorporated into the project pursuant to the Draft EIR are further analyzed in the GeoSyntec report entitled, *Additional Hydrology and Water Quality Analysis for the Riverpark Project Technical Report*, dated October 13, 2004. (Final EIR **Appendix G**)

The following excerpt from the GeoSyntec report entitled, *Additional Hydrology and Water Quality Analyses for the Riverpark Project Technical Report*, dated October 13, 2004 provides further detail regarding the incorporation of site planning BMPs into the project as design features. (Please see Final EIR **Appendix G**.)

Site planning BMPs are practices designed to minimize runoff and the introduction of pollutants in urban runoff. Certain site planning BMPs, such as the use of vegetated swales and bioretention areas, are also considered treatment BMPs. The proposed site planning BMPs included in the Water Quality Technical Report are listed below.

Minimize Impervious Area and Directly Connected Impervious Areas

- Impervious areas will be minimized by incorporating pervious areas (natural open space or landscaped areas) over substantial portions of the project area. Of the 695.4-acre project area, 137.7 acres will be used for pervious recreation and open space land uses. Approximately 330 acres includes the Santa Clara River and its riparian corridor, which will be retained in its natural condition. The remaining 226.9 acres will be developed into residential, commercial, and roadway land uses. Therefore, without taking into account landscaped areas, common areas, and landscaped setbacks, approximately 74 percent of the total project area will be pervious in the developed condition.

- Impervious area will be minimized by use of natural bank stabilization techniques, as required by the NRMP, for the approximately 9,000 linear feet of the Santa Clara River bank adjacent to the project that will be stabilized for bank erosion and flood protection. About 3,000 linear feet of bank stabilization are proposed to protect Newhall Ranch Road, including Newhall Ranch Road/Golden Valley Road Bridge, and approximately 6,000 linear feet would be necessary to protect the residential and commercial development. The proposed bank stabilization technique is primarily buried soil cement, which would allow for the establishment of natural vegetation on the river bank. The use of natural bank stabilization techniques will reduce the amount of additional impervious surface required to provide bank erosion and flood protection.

- Single-family and multi-family residential landscape areas will be determined by City zoning requirements, City setback/parkway standards, and City design objectives. Assuming a typical 58 percent perviousness for single-family residential areas, 32 percent perviousness for multi-family residential areas, and 8 percent perviousness for commercial areas, approximately 70 acres of the 153 acres proposed for residential and commercial development will be landscaped.

- Directly connected impervious area will be minimized by draining commercial and multi-family parking lots to bioretention facilities located in islands to promote filtration and infiltration of runoff. Bioretention functions as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes. These facilities normally consist of a grass buffer strip, sand bed, ponding area, organic layer or mulch layer, planting soil, and plants. The flow velocity of the runoff is reduced by passing over or through the buffer strip and is subsequently distributed evenly along a ponding area. Percolation of the stored water in the bioretention area planting soil into the underlying soils occurs over a period of days. An underdrain may be provided to prevent standing water in excess of 48 hours.

- A majority of the residential units are multi-family consisting of two- and three-story structures, increasing density while minimizing the development footprint—building up rather than out.

Selection of Construction Materials and Design Practices

- Building materials for roofs, roof gutters, and downspouts will not include exposed copper or zinc.

- Streets, sidewalks, and parking lot aisles will be constructed to the minimum widths as determined by the City and in compliance with regulations for the Americans with Disabilities Act and safety requirements for fire and emergency vehicle access. Landscaped parkways will be incorporated between sidewalks and streets in compliance with the City's Unified Development Code, reducing impervious area and increasing opportunity for infiltration.

- Treatment BMP selection will incorporate natural systems that promote infiltration, such as vegetated swales, bioretention, and water quality basins.

- Septic tanks will be prohibited.

Conserve Natural Areas

- Development will be clustered on the least environmentally sensitive portions of the project site, while leaving the remaining land in a natural, undisturbed condition. For example, 330 acres of the Santa Clara River and surrounding riparian area will be preserved. Additional open space will be provided in the project including the active/passive park and the large open space proposed in Area D.

- Vegetated swales that mimic natural conveyances and allow for storm water infiltration as well as pollutant removal will be incorporated into the project within three sub-areas. These vegetated swales are considered treatment control BMPs. Within the park area, a natural drainage is also proposed for restoration. Flows from impervious surfaces developed as part of the project will be treated prior to entering this natural conveyance, but further pollutant removal and infiltration can be expected to occur in this natural drainage prior to outlet to the Santa Clara River.

- Canopy interception and water conservation will be maximized by preserving existing native trees and shrubs (e.g., the riparian area) and planting additional native or drought tolerant trees and large shrubs. The open space areas will help protect sensitive areas such as a wildlife corridor (the Santa Clara River) and plant and animal habitat. The landscaping plan for the project will conform to the City of Santa Clarita requirements for use of drought resistant plants. As indicated previously a

substantial portion of the site will be preserved as open space, and the native vegetation in these areas will remain.

Protect Slopes and Channels

- Slopes: Erosion potential will be minimized by preserving existing vegetation where feasible, by limiting disturbance, and by stabilizing and revegetating disturbed areas as soon as possible after grading or construction. Disturbed slopes will be stabilized during construction with measures such as covering with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. After grading operations are complete, slopes will be stabilized in a time frame consistent with code requirements. All slopes within the project will be designed and constructed to minimize erosion.

- Protect channels: To reduce storm flow velocities and to prevent erosion at storm water discharge points into the Santa Clara River, energy dissipaters consisting of either rip-rap or larger standard impact type energy dissipaters will be constructed at storm system outlets into the river. These energy dissipaters would slow the rate of flow of runoff into the river in order to prevent erosion of the stream channel. Approximately 9,000 linear feet of buried bank stabilization will be constructed along the Santa Clara River. An additional 1,500 linear feet of toe protection would be constructed adjacent to Area B. All of the improvements proposed along the Santa Clara River would be in conformance with the requirements of the NRMP.

Response 2

The project has been modified such that the City will maintain the basins. The project, and the City, as a co-permittee, will comply with the MS4 Permit, which requires the City to verify inspection and maintenance for structural and treatment control BMPs (please see MS4 Permit, Part 4.D.8). In the case of the proposed project, the City's verification will consist of assuring that required inspection and maintenance of the facilities occurs by City staff, and that funding provided for ongoing maintenance and inspection is provided. In addition, pursuant to the MS4 Permit, the City will track, inspect, and ensure proper operation and maintenance of BMPs in compliance with the standards of the MS4 Permit for commercial facilities constituting Critical Sources. This includes restaurants, retail gas, and automotive service facilities. (See MS4 Permit, Part 4.C.) With these provisions, ongoing inspection, maintenance, and operation of water quality facilities are sufficiently assured.

Response 3

Please see **Response 2**, above. Tabular formatting of the inspection schedule does not specifically address the content of the Draft EIR. This comments is acknowledged and will be forwarded to the decision makers for their consideration.

Response 4

The commenter is correct. As analyzed in the GeoSyntec report entitled, *Additional Hydrology Water Quality Analysis for the Riverpark Project Technical Report*, dated October 13, 2004 (Final EIR **Appendix G**), there will be some reduction in average runoff volumes with implementation of BMPs. In turn, the reductions in average runoff volume will reduce pollutant loads and concentrations below the levels disclosed in the Draft EIR. The reductions will also further minimize dry weather flows. The model analysis in the Draft EIR is conservative in its estimate of runoff volumes because the analysis excludes and does not consider several sources of water quality benefit, including (1) the treatment effectiveness of many mandated BMPs, (2) the treatment benefit of combining BMPs in series as mandated by the Draft EIR, (3) the treatment benefit of sizing structural BMPs to capture and treat 80 percent of average annual stormwater runoff volume (rather than .75 of runoff), and (4) the volume reductions associated with all BMPs. The GeoSyntec *Additional Hydrology and Water Quality Analyses for the Riverpark Project Technical Report*, dated October 13, 2004, evaluates volume reductions associated with some of the BMPs to be implemented as project design features. These volume reductions have not been incorporated into predictions of post-development water quality. By way of example, available data shows a 30 percent to 38 percent volume reduction in the types of detention basins and swales planned for the proposed project. These volume reduction figures have not been incorporated into the analysis of post-development water quality analysis or the GeoSyntec analysis. The GeoSyntec *Additional Hydrology and Water Quality Analyses for the Riverpark Project Technical Report*, dated October 13, 2004, assumes only 10 percent to 20 percent volume reductions by these BMPs. As a result, the current analysis overstates water quality impacts.

Response 5

The Draft EIR Section 4.8.1, Water Quality, p. 4.8.1-59 discusses that the majority of the roads in the project are proposed to be dedicated to the public, and would thus be maintained by the City. The City has street sweeping programs that will help control trash and vegetation debris and sediment that may accumulate on roadways. As a co-permittee, the City must comply with the terms of the MS4 Permit applicable to street and road maintenance. Under Part 4.F.6 of the MS4 Permit, the City must sweep streets or street segments that are designated as Priority A areas at least two times per month. This is because these areas consistently generate the highest volumes of transportation and/or debris. Compliance with the requirements of the MS4 Permit will assure adequate street sweeping frequency for public streets within the proposed project. Traffic and access in commercial areas will be relatively high. Covenants, Conditions and Restrictions (CC&Rs) for these areas will mandate sweeping at least twice per

month in furtherance of MS4 Permit standards. Sweeping will occur as otherwise required by the MS4 (Part 4.C. and Part 4.F.6) Permit for Critical Sources that may be located within those commercial areas.

The project has been modified such that all internal residential streets in Planning Areas A-1, B, and C will be private roads maintained by a private service. The level of access and traffic in planning areas serving residential uses is expected to be limited to homeowners, residents, and guests. Therefore, these areas are expected to generate lower volumes of transportation and/or debris. As a result, CC&Rs for these private, internal streets, would mandate sweeping as necessary, but in no case less than once per year prior to October 15. This is consistent with the purpose and intent of the MS4 Permit.

Response 6

The requested changes have been made to reflect the Regional Water Quality Control Board's (RWQCB) comments on the Draft EIR, in addition to the general statements of the Draft EIR obligating compliance with the MS4 Permit. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 7

The requested changes have been made to reflect the RWQCB's comments on the Draft EIR, in addition to the general statements obligating compliance with the MS4 Permit in the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 8

As stated in the Draft EIR, the proposed water quality control detention basins were preliminarily sized to meet the minimum Los Angeles County SUSMP criteria, based on a 0.75 inch runoff event. However, the final capacity of the basins will be designed to capture 80 percent of annual runoff. For volume-based BMPs in the Newhall Ranch or Santa Clarita area is a design storm depth of 1.15 inches over the impervious area of the project. The impervious area of the project refers to the area within development envelopes proposed by the project that will be impervious after construction. This is as opposed to landscaped or natural area within these envelopes. This design storm depth was determined using United States Environmental Protection Agency's (USEPA) Storm Water Management Model (SWMM) and is equivalent to treatment BMP volumetric sizing criteria 2 set forth in the LARWQCB MS4 Permit. The size of the facilities will be finalized during the design stage by the project engineer with the final storm drain improvement plans and project-level SUSMP, which will be prepared and approved to

ensure consistency with the EIR analysis. This will occur prior to issuance of a final grading permit. See the GeoSyntec *Additional Hydrology and Water Quality Analyses for the Riverpark Project Technical Report*, dated October 13, 2004 (Final EIR **Appendix G**).

Response 9

The MS4 Permit allows sizing of structural treatment control BMPs, including swales and hydrodynamic separators, in accordance with the following flow-based criteria:

1. Flow of runoff produced from a rain event equal to at least 0.2 inches/hour intensity; or
2. Flow of runoff produced from a rain event equal to at least 2X the 85th percentile hourly rainfall intensity for LA County; or
3. Flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using volumetric standards above.

The flow-based BMPs proposed for incorporation into the project, including the vegetated swales and hydrodynamic separators, will be sized for a design storm intensity of 0.3 inches per hour over the impervious area, which will provide 80 percent capture. The sizing of flow-based BMPs will be finalized during the design stage by the project engineer with the preparation of storm drain improvement plans and project-level SUSMP. During the design stage, the swales will be sized pursuant to flow-based criteria 3 set forth in the LARWQCB MS4 Permit. Specifically, the swales will be designed to capture and treat the same portion of runoff as the detention basins are designed to treat, as described in **Response 8** above.

8. LETTER RECEIVED FROM C. F. RAYSBROOK, STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME, DATED MAY 6, 2004

Response 1

As the comment letter indicates, Section 4.6 of the Draft EIR was revised when western spadefoot toads were observed on the site in early March of 2004 in three separate rainpools created by disturbances on the project site. As Revised Riverpark Draft EIR Section 4.6 explains (p. 4.6-35), western spadefoot toads have no federal or State protected status, but are classified only as a California Species of Special Concern and as a federal Species of Concern, which indicates that the species warrants monitoring due to population decline.[7] Therefore, the species is not entitled to legal protection and a project redesign to preserve existing habitat is not required.

As discussed in the Revised Riverpark Draft EIR Section 4.6, Biological Resources, Appendix 4.6, Compliance Biology report, March 2004, pp. 1–6, the seasonal pools found on the project site during the 2004 surveys were created as a result of alterations from human disturbance.

The project applicant has been actively working with the CDFG since western spadefoot toads were observed on the project site. (Please see *Compliance Biology, Status of Work Associated with Western Spadefoot Toad on the River Park Project Site*, September 13, 2004 and *Western Spadefoot Toad Habitat Enhancement and Monitoring Plan, River Park Project Site, Los Angeles County, California*, November 2004; Final EIR **Appendix C**.) As Mitigation Measures 4.6-9–12 require, all mitigation activities will be approved by CDFG and the designated qualified biologist is required to report to CDFG during the monitoring period. The mitigation pools created as part of the relocation and habitat enhancement plan will provide habitat that is suitable and able to retain water for longer periods than the current pools on the site. Similar mitigation has been approved by USFWS/CDFG in Orange County, California.

Moreover, 2004 appears to have been an optimal year for western spadefoot toad reproduction, as there were several other sightings in the SC Valley area in 2004. As noted in the Final Additional Analysis to the Environmental Impact Report, County Project No. 98-008, Vesting Tentative Tract Map 52455, SCH No. 98021052, West Creek Project, Volume VI of VI, p. 4.1-4,

> "[r]egarding spadefoot toad habitat characteristics, in the spring of 2003, Mr. Bloom observed large numbers of breeding spadefoots within a large discarded tarp on property owned by Los Angeles International Airport. The tarp apparently trapped enough water to create a suitable breeding "pool" for the toads. As evidenced by this

[7] Hayes, M.P., and M.R. Jennings, "Decline of Ranid Frogs in Western North America: Are Bullfrogs (Rana catesbeiana) Responsible?" *Journal of Herpetology*, 20: 490-509.

observation and the location of spadefoots within man-made retention basins on the West Creek site, this particular species is apparently capable of adapting to a variety of artificial habitats in which to breed." (See also Final EIR **Appendix C**, *Results of Focused Western Spadefoot Toad Surveys on the West Creek Project Site, Compliance Biology*, June 11, 2004 and *Western Spadefoot Toad Habitat Enhancement and Monitoring Plan, West Creek Project Site*, Compliance Biology, August 2004.)

All of the above-cited locations were in areas disturbed by past use of the property or development activities. This evidence illustrates that the species adapts well to disturbed environments and there is no evidence submitted with the comment to support a decline in local spadefoot populations.

Response 2

Please see **Response** 1, above. As discussed in Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measures 4.6-9–12, a relocation and habitat creation program will be developed in coordination with CDFG. All aspects of the habitat pool creation, including location, number of pools, size, and monitoring shall be approved by CDFG. Under the supervision and with the assistance of CDFG, several hundred spadefoot tadpoles from on-site rainpools have already been collected for future release into the created pools. Upon completion of metamorphosis, the collected toads will be translocated onto the Riverpark site to man-made seasonal pools designed and constructed under the supervision of CDFG. (Please see Compliance Biology, *Status of Work Associated with Western Spadefoot Toad on the River Park Project Site*, September 13, 2004 and *Western Spadefoot Toad Habitat Enhancement and Monitoring Plan, River Park Project Site, Los Angeles County, California*, November 2004; Final EIR **Appendix C**.)

Response 3

The commenter's request to relocate the proposed equestrian trail is noted. The trail has since been relocated further away from those areas currently being proposed for spadefoot toad mitigation and now joins the bike/pedestrian trail, as the commenter suggests. The new trail location will be reflected on the Final Tentative Tract Map.

Response 4

Page 4.6-37 of the Riverpark Draft EIR indicates that several San Diego black-tailed jackrabbits were observed during surveys on the site. The Draft EIR further indicates that the jackrabbit occupies areas on-site that are disturbed and, therefore, this habitat is considered to moderate in quality. Based upon

this, the Riverpark site is not considered to be occupied by a significant population of San Diego black-tailed jackrabbits.

Furthermore, the Revised Riverpark Draft EIR Section 4.6, Biological Resources, pp. 4.6-2–5 contains a detailed discussion of the NRMP for the Santa Clara River approved by the ACOE, the CDFG, and the RWQCB in 1998. The NRMP is a long-term, master plan that provides for the construction of various infrastructure improvements on lands adjacent to the Santa Clara River and two of its tributaries. More specifically, the NRMP governs a portion of the main-stem of the Santa Clara River from Castaic Creek to one-half mile east of the Los Angeles Department of Water and Power Aqueduct and portions of San Francisquito Creek and the Santa Clara River South Fork. The NRMP, and its certified EIR/EIS, analyzed impacts associated with the implementation of various infrastructure improvements (bank stabilization, bridges, utility crossings, storm drain outlets, etc.) along and within portions of the Santa Clara River adjacent to Newhall Land properties, including the Riverpark project site. The NRMP EIR/EIS reviewed and evaluated the biological context and impacts of these river-related improvements and imposed conditions to mitigate their impacts. Impacts on special status species, including the San Diego black-tailed jackrabbit were analyzed in detail in the NRMP EIR/EIS. The NRMP EIR/EIS indicated that the implementation of the NRMP would result in the loss of 23 acres of upland habitat along the river that could be suitable for the San Diego black-tailed jackrabbit (see p. 3.4-45 of the NRMP EIR/EIS). The NRMP EIR/EIS considered impacts to this species to be adverse and significant due to the loss of habitat. Mitigation Measures BIO-23, requiring capture and relocation of sensitive species including the San Diego black-tailed jackrabbit, and BIO-24, requiring replacement of habitat, contained within the NRMP EIR/EIS reduced the impacts to less than significant.

The Revised Riverpark Draft EIR Section 4.6, Biological Resources, (pp. 4.6-52–59) explains that impacts associated with the NRMP, including those on the Riverpark site, were addressed, mitigated, and permitted through the EIR/EIS prepared by ACOE and CDFG for the NRMP. To minimize impacts of the Riverpark project on biological resources, the applicant has incorporated the NRMP Mitigation Measures into the project design. Finally, the Revised Riverpark Draft EIR Section 4.6 notes on p. 4.6-59 that some of the activities permitted through the NRMP on the Riverpark site have been scaled back as a part of the Riverpark project, and those improvements would now have less of an impact than would have occurred if constructed in the NRMP. (Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, Figure 1, prepared by GeoSyntec, dated October 13, 2004 (see Final EIR **Appendix G**), which depicts the previous project bank stabilization location compared to the revised plan showing an increased setback.)

Additionally, the Riverpark project does not include bank stabilization from the eastern terminus of the toe protection to the western bridge abutment for the Newhall Ranch Road/Golden Valley Road Bridge.

Under the NRMP, bank stabilization was permitted in this area. The project has since been redesigned in the western portion of the project site to move back the bank stabilization even further back from the location analyzed in the Draft EIR. In summary, the Riverpark project design results in the preservation of additional habitat for the San Diego black-tailed jackrabbit and other sensitive status species as compared to the design approved and analyzed in the NRMP. Mitigation measures from the NRMP have been incorporated into the Riverpark project design, further mitigating impacts.

Response 5

As discussed in **Response 4** above, impacts to the San Diego black-tailed jack rabbit were discussed in detail in the NRMP EIS/EIR (which is incorporated into the Draft EIR by reference), which concluded that, with mitigation, impacts would be less than significant. As discussed in the Revised Riverpark Draft EIR Section 4.6, Biological Resources, all of the mitigation measures of the NRMP are incorporated into the Riverpark EIR. As discussed in **Response 4** above, Mitigation Measures BIO-23, requiring capture and relocation of sensitive species including the San Diego black-tailed jackrabbit, and BIO-24, requiring replacement of habitat, contained within the NRMP EIR/EIS reduced the impacts to less than significant. Both mitigation measures result in a tangible preservation element designed to provide and protect the San Diego black-tailed jackrabbit.

Additionally, the Riverpark project has been redesigned as a result of the public input and more upland habitat is being preserved on the site, which is greater than that allowed by CDFG and ACOE. Mitigation requiring relocation and the replacement of habitat as is required in the Riverpark Draft EIR is far more definitive than the commenter's assertion that the EIR contends that "the assumption that displaced jackrabbits will somehow survive by dispersing into remaining degraded open areas of uncertain protected status…." As discussed in the EIR, not only is there mitigation that will relocate and provide for the replacement of habitat but also the project has provided for additional upland preserve area for species such as the San Diego black-tailed jackrabbit. Because all projects located adjacent to the Santa Clara River, within the parameters of the NRMP boundaries (eastern property line of the Riverpark project to Castaic Creek to the west) would also be required to adhere to the same mitigation measures of the NRMP. While these mitigation measures would be required, the Draft EIR also concludes that cumulative significant unavoidable impacts could occur due to the net loss of wildlife habitat/natural open space.

Response 6

Project impacts on nesting native birds are addressed in Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-69, which states that a number of bird species could be adversely affected as a result of implementation of the proposed project and that construction-related activities that could result in the direct loss of active nests or the abandonment of active nests by adult birds during that year's nesting season would be a potentially significant impact.

Response 7

The comment is acknowledged. Please note that the prohibitions against take of active nests included in both the Federal Migratory Bird Treaty Act and the Fish and Game Code are referenced in Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-70.

Response 8

Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measures 4.6-1 (r)–(u), 4.6-2, and 4.6-20 require that preconstruction surveys be conducted from March through September and identify avoidance measures to be implemented should active bird nests be discovered.

Response 9

Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measures 4.6-1 (r)–(u), 4.6-2, and 4.6-20 address all of the commenter's concerns and points regarding avoidance of active bird nests. Mitigation Measure 4.6-1 will be modified as follows: The third sentence in 4.6-1(s) will be revised to state "…no more than 3 days prior to…"; the second sentence in Mitigation Measure 4.6-1(t) will be revised to state "… clearing and construction within 300 feet (500 feet for raptors) shall be postponed until…." The requested changes have been made to reflect the CDFG's comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 10

The loss of (Riversidian) sage scrub habitat as a result of project implementation is not considered a significant impact; therefore, pursuant to CEQA, no mitigation is required.

Response 11

As reported in Revised Riverpark Draft EIR Section 4.6, USFWS focused protocol surveys were conducted on the site and on property directly off site and no coastal California gnatcatcher were found. Compliance Biology, the firm that conducted the protocol surveys, has characterized the project site as containing only approximately 80 acres of suitable to marginally suitable coastal sage scrub habitat (Results of Focused Surveys for Coastal California gnatcatcher, January 24, 2003 – Riverpark Project, Appendix 4.6 of the Draft EIR). Compliance Biology also conducted protocol surveys on approximately 2 acres directly north of the project site in an area proposed by the Riverpark project as potential water tank sites (Results of Focused Surveys for California Coastal gnatcatcher – Proposed Water Tank Locations, April 23, 2003, Appendix 4.6 of the Draft EIR). The habitat on this approximately 2-acre site was considered generally unsuitable for Coastal California Gnatcatcher.

The Riverpark Draft EIR further notes on p. 4.6-13 that the eastern most 80 acres (approximately) is included in a much larger area that is currently being proposed by the USFWS as critical habitat for the Coastal California Gnatcatcher.

Finally, conversion of approximately 280 acres of wildlife habitat/natural open space, including but not limited to the conversion of this approximately 80 acres of proposed Coastal California gnatcatcher habitat to urban uses, was considered by the Draft EIR as a significant unavoidable impact of the project. Please see Riverpark Draft EIR Appendix 4.6, for the two gnatcatcher studies that were conducted for the project site. The Draft EIR also concludes that cumulative significant unavoidable impacts could occur due to the net loss of wildlife habitat/natural open space.

Response 12

The sage scrub areas planted along the Newhall Ranch Road corridor were not planted as mitigation for loss of this plant community in connection with a prior project. They were planted as a part of native seed mix to stabilize non-irrigated slopes previously cut and graded for the installation of water lines and slope drains. See Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-10. As further noted there, these planted areas are of poor quality because they support relatively few plant species and have not established a vegetative understory.

Response 13

The comment is acknowledged with respect to holly-leafed cherry scrub. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed

project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

Response 14

The holly-leaf cherry habitat on-site is considered scrub habitat because the canopy cover of this habitat did not amount to a woodland canopy. According to the CDFG's List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Data Base (September 2003 Edition), holly-leaf cherry scrub is not considered a special-status plant community. As stated in Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-65, because of the relatively small amount of habitat (3.6 acres) to be lost and because this stand of trees was not considered a sensitive plant community as identified be CDFG, the loss of the 3.6 acres was not considered a significant impact under CEQA.

Response 15

Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measure 4.6-2 on p. 4.6-98 establishes the requirement for a Resource Management and Monitoring Plan (RMMP). While the City agrees that transplanting for some species is experimental, similar transplantation plans drafted in part by Rancho Santa Ana Botanical Gardens that include the transplantation of bulbs of *Chalocortus* sp. have been recently approved by Los Angeles County. As identified on p. 4.6-99, adaptive management and contingency actions will be incorporated into the RMMP that specify what actions will be taken in the event the transplantation is not successful. Additionally, a Streambed Alteration Agreement was recently approved (2004) by the CDFG for the Deerlake Ranch project in Los Angeles County, that specifically allows for the relocation of and mitigation monitoring for the Plummer's mariposa lily (Final EIR **Appendix C**). This executed agreement providing for mitigation of the Plummer's mariposa lily indicates that CDFG believes the relocation of rare, threatened or endangered species can be sufficiently successful to warrant its use.

Further, Mitigation Measure 4.6-2 will be revised as is indicated in **Response 20** below.

Response 16

Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-5 of the Draft EIR, states that focused plant surveys were conducted on the project site during appropriate blooming season for two consecutive years (2002 and 2003). Additional surveys will be conducted during the blooming season prior to grading of the site as indicated in Mitigation Measure 4.6-5.

Response 17

CDFG's recommendation to acquire off-site habitat supporting special-status plant species is acknowledged. However, relocation has been accepted as mitigation by the County of Los Angeles and the City of Santa Clarita. Please see **Response 15**, above, regarding the feasibility of transplanting the target species on the Riverpark site. Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measure 4.6-2 contains performance standards and criteria adequate for CEQA to ensure the feasibility of preparing an RMMP. This measure will be revised to include CDFG review of the RMMP prior to project grading. The City of Santa Clarita will have final approval of any relocation plans for the project. Please see **Response 15**, above

Response 18

Further, please see **Responses 15** and **17**, above. As identified in Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measure 4.6-2, adaptive management and contingency provisions will be included in the RMMP that specify what actions will be taken in the event the transplantation is not successful. Contingency measures identified in the plan will be reviewed by CDFG and have to be approved by the City prior to grading of the project. There is no need for the acquisition of other land and bonding and is, therefore, no required as mitigation as the commenter offers no evidentiary support for the need for such additional contingent mitigation.

Response 19

The comment is acknowledged. As described in depth in both Revised Riverpark Draft EIR Section 4.6, Biological Resources, and in the Glenn Lukos & Associates *Hybrid Functional Assessment for Riverpark*, dated September 2004 (Final EIR **Appendix C**), the area of the drainages to be impacted by the project are largely unvegetated, or support degraded and non-native habitats. Further, the drainages exhibit minimal function. Higher function areas of the drainages, such as the upper portions of Drainages 1 and 6, are avoided by project design. Finally, implementation of the project, including proposed mitigation, has been demonstrated to increase on-site aquatic, riparian and wetland function, which will benefit

species using the river. As a result, impacts to the on-site drainages can be mitigated to a level of insignificance.

Response 20

The comment is acknowledged. The impacts to these jurisdictional drainages have been analyzed in the Revised Riverpark Draft EIR Section 4.6. Additionally, an analysis entitled, *Hybrid Functional Assessment for Riverpark*, dated September 2004, (included in Final EIR **Appendix C**) prepared by Glenn Lukos and Associates has evaluated the habitat quality of these impacted drainages. See **Response 19**, above. That assessment concluded that the area of the drainages to be impacted by the project are largely unvegetated, or support degraded and non-native habitats. Further, the drainages exhibit minimal function. Higher function areas of the drainages, such as Drainages 1 and 6, are avoided by project design. Finally, implementation of the project, including proposed mitigation, has been demonstrated to increase on-site aquatic, riparian and wetland function, which will benefit species using the river. As a result, impacts to the on-site drainages can be mitigated to a level of insignificance**.**

Mitigation Measure 4.6-2 in the Draft EIR regarding these drainages shall be revised to require the applicant to obtain a 1600 Permit from CDFG for the impacts to these drainages. Revised Mitigation Measure 4.6-2 will assure that the measure clearly requires the applicant to obtain CDFG and other applicable resource agency permits. The following is the text will be incorporated into the Final EIR setting forth the revised Mitigation Measure 4.6-2:

> "Resource Management and Monitoring Plan
>
> Prior to issuance of a Grading Permit for the project, the applicant shall obtain the services of a qualified biologist who must, at a minimum, have an appropriate degree in botany, biology, wildlife biology, wetlands biology, or ornithology and experience in developing management plans for the flora and fauna, jurisdictional resources, plant community and wildlife habitats found in the Southern California area, to develop a RMMP to serve as a guideline for managing and monitoring mitigation areas for specific species, plant communities, jurisdictional resource areas, and habitats. The RMMP shall serve as the basis for issuance of permits by the resource agencies. Those permits (Section 404, 1600, 401 Permits) shall be obtained prior to grading. The RMMP shall be submitted to the City of Santa Clarita Planning and Building Services at least 30 days prior to issuance of a Grading Permit for the project, and shall include the following:
>
> a. **A Site Selection** for mitigation within the project area will be determined in coordination among the project applicant, CDFG, and ACOE. Potential sites include the low value reaches of Drainage 1 and the low value areas of the river banks.
>
> b. **A Planting Plan** that at a minimum, lists all appropriate native plants to be included in all revegetation mitigation areas. The planting plan shall be developed by a qualified biologist as approved by the City.

c. **Procedures** regarding the removal of non-native vegetation, planting of native vegetation, translocation of trees, planting of container stock, irrigation, and equipment use.

d. **Maps** that illustrate the specific location of mitigation areas.

e. **Procedures outlining site preparation, monitoring and maintenance activities** including frequency and timing of monitoring visits, plant maintenance, temporary irrigation maintenance and replacement planting. The site preparation will include (1) weed control, (2) herbivory control, (3) trash removal, (4) irrigation systems maintenance, (5) maintenance training, and (6) replacement planting.

f. **Specific criteria** that will specify what goals must be accomplished at each mitigation area before the mitigation is deemed a success.

g. **Restoration and Creation of Habitat:** The plan shall require the creation of riparian habitat in the amount and of the type required by CDFG and ACOE, provided, however, that in order to assure no net loss of jurisdictional resources on an acre for acre basis, all impacted ACOE and CDFG jurisdictional habitat shall be compensated be restoration, enhancement or creation at a minimum of 1:1 ration.

h. **Adaptive Management and Contingency Actions** that will specify what actions will be taken in the event success criteria are not met.

i. **A Monitoring Plan** will include (1) qualitative monitoring (i.e., photographs and general observation, (2) quantitative monitoring (i.e. randomly placed transects), (3) performance criteria as approved by the resource agencies, (4) monitoring reports for three to five years, (5) site monitoring as required by the resource agencies to ensure successful establishment of riparian habitat within the restored and created area. Successful establishment is defined per the performance criteria set forth in this measure and as agreed to by the resource agencies, i.e., ACOE, CDFG, and RWQCB, and the landowner or subsequent project applicant.

j. **The source of funding** that will be required to successfully carry out all procedures outlined in the RRMP.

k. **A Schedule** will be developed which includes planting to occur in late fall and early winter, between October and January 31.

l. **Long Term Preservation** of the site will also be outlined in the mitigation plan to ensure the mitigation site is not impacted by future development. The plan shall be submitted to the City of Santa Clarita Planning and Building Services Department for review and approval.

Response 21

The CDFG's recommendation to further pull back bank stabilization to avoid mature cottonwood trees along the Santa Clara River is acknowledged. The City Planning Commission directed that the project be redesigned to preserve the area recommended for avoidance by CDFG.

This change will be reflected on the final map prepared for this project. Please see the Final Vesting Tentative Tract Maps (Final EIR **Appendix D**).

9. LETTER RECEIVED FROM JOHN KILGORE, COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY, DATED MARCH 16, 2004

Response 1

The requested changes have been made to reflect the County Sanitation Districts of Los Angeles County's comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 2

The requested changes have been made to reflect the County Sanitation Districts of Los Angeles County's comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

10. LETTER RECEIVED FROM RUTH FRAZEN, COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY, DATED MARCH 29, 2004

Response 1

The requested changes have been made to reflect the County Sanitation Districts of Los Angeles County's comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 2

The requested changes have been made to reflect the County Sanitation Districts of Los Angeles County's comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

11. LETTER RECEIVED FROM DAVID LEININGER, LOS ANGELES COUNTY FIRE DEPARTMENT, DATED APRIL 23, 2004

Response 1

The requested changes have been made to reflect the County fire department's comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 2

The requested changes have been made to reflect the County fire department's comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 3

This comment is acknowledged. The identification of Fire Station 111 as jurisdictional station was based on correspondence from Chief Leininger, dated November 12 and December 2, 2002. The requested changes have been made to reflect the County fire department's comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 4

Riverpark Draft EIR Section 4.13, Fire Services, p. 4.13-9, footnote 19 correctly attributes the statement that "no fire station is required for development mitigation for the project" to County of Los Angeles Fire Department correspondence prepared by Inspector Wally Collins on September 3, 2003. The Draft EIR Section 4.13, Fire Services, pp. 4.13-4 and 4.13-9 acknowledges the fire department's existing need for a fire station east of the project site, or possibly on the project site to serve the community, as expressed in Chief Leininger earlier correspondence dated December 4, 2002 and referenced in footnotes 9, 10 and 20. The Draft EIR Section 4.13, Fire Services, pp. 4.13-4 and 4.13-21, attributes the fire department's final determination that, upon a close review of the need for potential fire station sites, including a station site on the project site, the fire department has decided to wait for a fire station site more easterly of the project site on Soledad Canyon Road to e-mail communication provided on June 13, 2003 by Debbie Aguirre, as referenced in footnotes 11 and 21. Copies of the correspondence referenced in this response are provided in Appendix 4.13 of the Draft EIR.

Response 5

The requested mitigation has been added to reflect the County fire department's comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 6

The requested mitigation has been added to reflect the County fire department's comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 7

As identified in Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measure 4.6-6–8, appropriate approvals subject to the City of Santa Clarita Oak Tree Preservation and Maintenance Guidelines will be obtained prior to oak trees being removed. It should be noted that, as a result of changes to the project made by the City's Planning Commission, two additional oak trees will be removed from the active park area in the site's central park and relocated to locations further into the passive park area to the north. That change is reflected in Final EIR section entitled, "**Revised Draft EIR Pages**."

Response 8

The use of appropriate low-fuel plants will be used in fuel modification zones as necessary and incorporated into the RMMP as described in Mitigation Measure 4.6-2 on p. 4.6-98. However, to accomplish a high quality riparian and upland resource zone, low fuel volume plants may not be used in all areas.

Response 9

The comment is acknowledged. As described in Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-81, the project has been designed to preserve approximately 370 acres within the SEA, representing about 90 percent of the SEA. Moreover, the project has been revised to relocate the bank stabilization from the park in the central portion of the project site in the east to the easterly commercial parcel in the west to preserve the mature riparian resources along this edge of the river.

Response 10

This comment is acknowledged. The designation of the project site as a Very High Fire Hazard Severity Zone is discussed in the Riverpark Draft EIR Section 4.13, Fire Services, pp. 4.13-5, 4.13-8, and 4.13-10 through 4.13-12. Mitigation Measure 4.13-3 on p. 4.13-13 requires that the project prepare a Fuel Modification Plan, landscape plan and irrigation plan as required for projects located with a Very High Fire Hazard Severity Zone, submit the Fuel Modification Plan for approval by the County fire department prior to final map clearance, and depict a fuel modification zone in conformance with the Fuel Modification Ordinance in effect at the time of subdivision.

Response 11

This comment is acknowledged. The Draft EIR Section 4.13, Fire Services, p. 4.13-9 outlines the requirement for preparation of a fuel modification plan, a landscape plan and an irrigation plan, and Mitigation Measure 4.13-3 on p. 4.13-13 requires that the project prepare a Fuel Modification Plan, landscape plan and irrigation plan as required for projects located with a Very High Fire Hazard Severity Zone.

The requested changes to the mitigations measures identified above have been made to reflect the County fire department's comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 12

Please see **Response 11,** above. The requested changes have been made to Mitigation Measure 4.13-3 reflect the County fire department's comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 13

Cumulative analysis methodology is discussed in detail in Draft EIR Section 3.0, Cumulative Impact Analysis Methodology. Additionally, each environmental topic analyzed in the Draft EIR (Sections 4.1 through 4.21) contains a cumulative impact analysis. Consequently, the long-term cumulative impacts of the proposed project have been considered as it affects the City of Santa Clarita and its environs.

12. LETTER RECEIVED FROM COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS, DATED APRIL 29, 2004

Response 1

Please see Draft EIR Section 4.8.1, Water Quality pp. 4.8.1-25 and 26 which state that "[t]he EIR sets out the project's conceptual SUSMP, which complies with those County Standard Urban Storm Water Management Plan (SUSMP) Guidelines, the General MS4 Permit, and the existing component of applicable SQMPs. For the Riverpark project, these plans must be submitted to and approved by the City of Santa Clarita prior to issuance of a grading permit."

The Draft EIR recognizes the need for the project to comply with all requirements of the MS4 Permit, including all SUSMP requirements. The Draft EIR Section 4.8.1, Water Quality, pp. 55–65, summarizes all measures to be incorporated into the SUSMP at a planning level. As such, the Draft EIR creates a conceptual, planning level SUSMP that must be implemented at the project and design levels, to be consistent with the criteria, standards, and requirements of the Draft EIR prior to issuance of grading permits.

Response 2

The requested updates to Table 4.9-1 have been made to reflect the County Department of Public Works' comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions. Please note that to enhance readability of Table 4.9-1, the entire table has been reproduced in the Final EIR. To review the original table, please refer to the Draft EIR Section 4.9, Solid Waste Disposal, p. 4.9-12.

Response 3

This comment is acknowledged. The project will comply with Title 20, Chapter 20.87, of the Los Angeles County Code, Construction, and Demolition Debris Recycling. The requested mitigation has been added as Mitigation Measure 4.9-15 to reflect the County Department of Public Works' comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 4

As discussed in the Draft EIR Section 4.9, Solid Waste Disposal, p. 4.9-7, the City of Santa Clarita has established a comprehensive Integrated Waste Management Program, which incorporates solid waste management practices as established by the California Waste Management Act, Assembly Bill 939. These are, in order of priority, (1) Source Reduction; (2) Recycling; (3) Composting; (4) Transformation; and (5) Landfilling. City-sponsored programs intended to address solid waste management practices are identified on p. 4.9-7, and include curbside residential and commercial recycling. Consequently, no additional mitigation is required.

Response 5

As discussed in the Draft EIR Section 4.9, Solid Waste Disposal, on p. 4.9-7, the City of Santa Clarita has established a comprehensive Integrated Waste Management Program, which incorporates solid waste management, practices as established by the California Waste Management Act, Assembly Bill 939. These are, in order of priority, (1) Source Reduction; (2) Recycling; (3) Composting; (4) Transformation; and (5) Landfilling. City-sponsored programs intended to address these solid waste management practices are identified on p. 4.9-7, and include yard trimming recycling. Consequently, no additional mitigation is required.

Response 6

The requested changes have been made to reflect the County Department of Public Works' comments on the Draft EIR, including the addition of Mitigation Measure 4.9-15. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions. Given that landfills within Kern and Kings Counties have capacity for the acceptance of hazardous materials, no additional mitigation is required.

Response 7

As noted in the Draft EIR Section 4.15, Human Made Hazards, on pp. 4.15-15 and 4.15-16, no underground storage tanks are currently present on the project site. Based on records search and on-site field investigations, two underground storage tanks were formerly on the project site and were removed in accordance with applicable regulations. Nonetheless, the requested mitigation measure has been added as Mitigation Measures 4.15-1 and 4.15-2 to reflect the County Public Works Department's

comments on the Draft EIR. Please refer to the Final EIR section entitled, "**Revised Draft EIR Pages**" for the requested revisions.

Response 8

This comment is acknowledged. As this comment does not address the adequacy or contents of the Riverpark Draft EIR, no further response can be provided. However, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

It should be noted, however, that the water detention basins are designed to empty within 24–40 hours (Draft EIR Section 4.8.1, Water Quality, p. 4.8.1-61), and removal of standing water and animal and vector control are specific maintenance and monitoring responsibilities for grassy swales (pp. 62, 93-94 [Mitigation Measure 4.8.1-12]). The two water quality basins within the project will be maintained by the City of Santa Clarita. The grassy swales will be maintained by a homeowners or property owners association.

Response 9

This comment is acknowledged. The engineering plans and reports for the proposed project must and will conform to all of the City of Santa Clarita requirements prior to issuance of various permits. As this comment does not address the adequacy or contents of the Riverpark Draft EIR, no further response can be provided. However, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 10

See **Response 1**. A Drainage Concept/SUSMP report has been included and described in detail in Section 4.8.1, Water Quality, pp. 55–65 of the Draft EIR. Any future SUSMP will be prepared in accordance with the guidelines and Drainage Concept Map set forth in the Draft EIR. As a result, LADPW has been provided the opportunity to review the Drainage Concept/SUSMP and it has been incorporated into the Draft EIR.

Response 11

Draft EIR Section 4.21, Wastewater Disposal, concludes that the SC Valley Joint Sewerage System would have capacity for both the project and cumulative projects with proposed wastewater treatment facility expansions. Based on calculations provided by the County Sanitation District, the Draft EIR concludes that the available treatment capacity of the SC Valley Joint Sewerage System is more than adequate to handle project-related increases and that the existing wastewater conveyance lines would have adequate capacity to convey project-generated wastewater flows to the treatment facilities, and that, therefore, project-level impacts would not be significant (p. 4.21-6). The Draft EIR further analyzed potential cumulative impacts under both the DMS Build-Out Scenario and the Santa Clarita Cumulative Build-Out Scenario (both defined at p. 4.21-7), as well as a third County Sanitation Districts of Los Angeles County Facilities Plan for the SC Valley Joint Sewerage System Scenario (p. 4.21-12), concludes that, with the County's safeguards in place that ensure that no connection permits are issued if capacity is not available, there would be no significant unavoidable cumulative wastewater impacts (p. 4.21-13). Consequently, there is neither need for nor is there a nexus that would require the project applicant to prepare, a sewer area study for the tributary area, and no sewer study or further analysis is required.

Response 12

The City directs the commenter to Draft EIR Section 4.8, Water Services, pp. 4.8-1 through 118, which discusses local and regional water supplies in depth and in detail. The Draft EIR concludes that there are adequate water supplies to meet the demands of the proposed project. Additionally, the Draft EIR Section 4.8, Water Services, at pp. 4.18-117, concludes that "because cumulative water supplies exceed demand, cumulative development (including the proposed Riverpark project) would not result in unavoidable significant cumulative impacts on Santa Clarita Valley water resources." No further analysis is required.

Response 13

The City directs the commenter to Draft EIR Appendix Volume II, Section 4.8, Water Services, to review the water supply assessment and water supply verification prepared for the proposed project. Water supplies for the project have been verified by the Santa Clarita Water Division of the Castaic Lake Water Agency. Please also see **Response 12**, above. Please see **Appendix A**, CLWA letters, dated October 20, 2004 and November 1, 2004 verifying the water supply conclusions of the Draft Riverpark EIR.

Response 14

The comment confirms that the proposed project will not have any significant impact on County of Los Angeles highways. Because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

However, the information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 15

The referenced paragraph is intended to describe that portion of the Santa Clara River Trail, which crosses through the City of Santa Clarita. Included as a component of the Santa Clara River Trail is a Class I bike facility. The City of Santa Clarita's Master Plan of Bikeways provides links to the County's adopted plan for trails along the Santa Clara River. Completion of the Santa Clara River Trail through the project site and throughout the City of Santa Clarita would enable bicyclists to connect to County trails outside of the project site and outside of the City of Santa Clarita such as the proposed San Francisquito Creek Trail and County maintained portions of the Santa Clara River Trail outside the City.

Response 16

The referenced paragraph states that new residents of the project would use the City of Santa Clarita's and the County's existing and proposed trail systems in the SC Valley area as they are proposed and constructed. The commenter is directed to Table 4.12-3, Existing and Proposed City Trails, and Table 4.12-4, Existing and Proposed County Trails, for a listing of trails that residents of the Riverpark project would use.

Response 17

As stated in Riverpark Draft EIR Section 4.12, Parks and Recreation, p. 28 Mitigation Measure 4.12-3, the project developer shall construct all trails.

Response 18

As stated in Section 4.12, Parks and Recreation, p. 28 Mitigation Measure 4.12-3, "[t]he City of Santa Clarita shall receive ownership and/or easements of existing maintenance roads/trails and open space prior to easements provided to the Los Angeles County Flood Control District or others."

Response 19

The comment states that the project's bike paths and lanes must comply with State Department of Transportation standards, which they will. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 20

The comment refers to approval of bike path design. Because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided. However, the information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 21

Each of the intersections analyzed in the traffic analysis is located entirely within the City and, therefore, City methodology has been used for evaluation purposes. As the Draft EIR explains in Section 4.3, Traffic/Access (p. 4.3-3), traffic forecast data for the traffic impact analysis were derived from the SC Valley Consolidated Traffic Model, which is a traffic planning computer model developed jointly by the City of Santa Clarita and the County of Los Angeles. The study includes a section with a level of service analysis for cumulative impacts and the project's percent share has been calculated for each of the study intersections. (See Draft EIR Volume II, Appendix 4.3, Traffic/Access, Appendix E of the traffic study for share calculations.)

Response 22

The Draft EIR's traffic analysis includes a scenario in which the Newhall Ranch Road/Golden Valley Road extension is not completed. (Please see Draft EIR Volume II, Appendix 4.3, Section 4.3.3 of the traffic study.) The Golden State (I-5) Freeway southbound ramps at Valencia Boulevard have not been included in the traffic study since the project has less than a one percent contribution to the total traffic volumes at the intersection.

Response 23

The applicable information from the traffic count data sheets is provided in the intersection capacity utilization worksheets (see Draft EIR Volume II, Appendix 4.3, Appendix A of the traffic study). There are no County or joint City/County intersections included in the traffic study.

Response 24

The Tentative Tract Map is included as Figure 4.6-3 of the Riverpark Draft EIR and is also available for review at the City of Santa Clarita. Modifications to the project have been made through the Planning Commission hearing process with the City of Santa Clarita. A copy of the tentative map reflecting the revisions made by the City is included in the Final EIR. The project is located wholly within the City of Santa Clarita and does not abut unincorporated County areas, and is, therefore, not subject to County of Los Angeles subdivision review.

Response 25

The comment confirms that the project is not located in the any of the County of Los Angeles Waterworks Districts. Because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

However, the information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 26

The commenter is referred to Riverpark Draft EIR Section 1.0, Project Description, p. 1.0-2 which states that "[t]he project applicant, The Newhall Land and Farming Company, proposes to develop the Riverpark (Panhandle) project on a 695.4-acre site in the City of Santa Clarita in Los Angeles County."

Because the project is located wholly within the City, and not in unincorporated Los Angeles County, there is no need to annex to the Consolidated Sewer Maintenance District.

Response 27

The project has been designed consistently with this comment. No existing drainage improvements exist on the project site; however, once developed consistently with the proposed Drainage Concept, the Riverpark project would reduce post-development off-site storm water flows from the approximately 835-acre tributary watershed compared to existing conditions during a 50-year capital storm event. Specifically, the amount of burned and bulked runoff from the watershed would decrease from 2,217 cubic feet per second (cfs) to 2,151 cfs. The Drainage Concept also includes a variety of BMPs to filter storm flows from the site and to capture contaminants before the storm flows infiltrate into the ground or discharge downstream. Implementation of the proposed Drainage Concept would meet the flood control requirements of the Flood Control and Watershed Management Division of the Los Angeles County Department of Public Works.

The conceptual SUSMP proposed in the Draft EIR at Section 4.8.1, Water Quality at pp. 4.8.1-55–65 addresses all of the parameters suggested. Therefore, the proposed on-site system provides all the water quality benefits of a more regional solution.

Response 28

The approximately 835-acre tributary watershed comprises approximately 0.08 percent of the acreage of the entire 1,634 square mile Santa Clara River watershed. The proposed debris basins are necessary to also capture organic debris (e.g., twigs, leaves, and other organics), which do not contribute to beach sand replenishment. Total inorganic sediment production for the entire 1,634 square mile Santa Clara River watershed is unknown; however, it is reasonable to assume that the reduction in the amount of inorganic sediment that would have otherwise discharged from the site under undeveloped conditions would not contribute to a substantial reduction in beach sand replenishment.

Response 29

This is an accurate statement and the Riverpark Draft EIR is consistent with this comment. Section 4.2, Flood, of the Draft EIR states that clear flows would increase by 16.6 percent over existing conditions.

Response 30

Overcovering of much of the proposed development areas with impervious surfaces would result in an incremental increase in clear storm flows; however, there would be an overall decrease in runoff from the site because the debris basins would capture the debris and sediment from the runoff before it is discharged downstream. The runoff would also be detained in the detention basins for up to 40 hours, thereby promoting infiltration rather than direct runoff into the riverbed.

Response 31

The comment is acknowledged.

Response 32

Much of the Riverpark site would remain pervious, including the open space areas, parkland, residential yards, and the river. Furthermore, approximately 2,500 feet of ungrouted rip-rap and toe protection would occur along the river bank from Bouquet Canyon Road to the Newhall Ranch Road/Golden Valley Road Bridge. The remainder would be buried bank protection of soil cement from Bouquet Canyon Road to the Newhall Ranch Road/Golden Valley Road Bridge. Buried soil cement has been accepted by the City of Santa Clarita and the County of Los Angeles as acceptable flood protection.

Water recharge would continue to occur within the sandy bottom of the riverbed. It should be noted that the bank stabilization improvements are permitted under the already approved NRMP (ACOE Individual Permit No. 94-00-504-BAH).[8]

Response 33

The Drainage Concept proposes structural BMPs to mitigate potential storm water quality impacts of the project that would also permit water filtration, such as the proposed water quality detention basins, which would detain water for up to 40 hours. Furthermore, the proposed biofiltration swales would minimize and slow overland flow, thereby increasing the opportunity of storm water infiltration, as well as removing debris and particulates from the storm water. These two BMPs would, therefore, allow

8 The permit to construct improvements under the NRMP comes from an Army Corps Section 404 Permit, Fish and Game Incidental Take and 1603 Permit. The Santa Clara NRMP consists of new bank protection, new or widened bridges, inlet structures, storm drain outlets and utility line crossings associated with the infrastructure and land developments near the Santa Clara River and its tributaries in the Santa Clarita Valley.

stormwater percolation within the tributary watershed, and would assist in protecting groundwater quality.

The comment not to disturb or destroy land designated as a SEA or land within a river corridor is noted. The project has been designed to minimize disturbance of land within the SEA and river corridor, including a recent revision that pulls project development further away from the river between the central park area to the ease and the commercial area to the west.

Response 34

The comment directs the City to review applicable National Pollutant Discharge Elimination System (NPDES) Permit manuals. All of the references have been reviewed and summarized in the Draft EIR Section 4.8.1, Water Quality. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

Response 35

The comment directs the City to review applicable NPDES Permit manuals. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

13. LETTER RECEIVED FROM STEVE SMITH, SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, DATED APRIL 30, 2004

Response 1

The commenter suggests that credit not be taken for Mitigation Measures 4.4-8 and 4.4-9 because of the perception that these mitigation measures may be unproven at this time.

At this point, the use of aqueous fuel and cooled exhaust gas recirculation technology during project construction has not been "deemed technologically infeasible by the lead agency" and the City of Santa Clarita has not claimed an "emission reduction credit" for these measures. Table 4.4-22 of the Draft EIR simply states what the project's construction emissions could be should the construction mitigation measures listed in Section 4.4, Air Quality, including Mitigation Measures 4.4-8 and 4.4-9, be implemented.

The Draft EIR does state that aqueous fuel and cooled exhaust gas recirculation technology is presently unproven on a large scale and may be presently infeasible. To state that this technology would not be feasible at the time construction on the Riverpark site commences, or anytime during the buildout of the proposed project would be speculative at this point in time. Through adoption of these measures within a Mitigation Monitoring Plan, including Mitigation Measures 4.4-8 and 4.4-9, the City of Santa Clarita will require the project developer to use aqueous fuel and cooled exhaust gas recirculation technology if its use is deemed feasible at the time grading and construction permits are issued.

As stated in the Riverpark Draft EIR Section 4.4, Air Quality, p. 4.4-75, a statement of overriding considerations for the project's construction VOC, NOx, and PM_{10} emissions would be required because the construction emissions are significant. This statement of overriding considerations would be required regardless of whether the use of aqueous fuel and cooled exhaust gas recirculation technology during project construction is found infeasible at the time grading and construction permits are issued.

Response 2

The commenter suggests that Mitigation Measures 4.4-1 (i) and (j) be expanded to include the possible use of clean technologies such as CNG, oxidation catalysts, particulate filters, and/or low sulfur diesel.

According to Mike Bogdanoff, Project Supervisor with South Coast Air Quality Management District's Technology Advancement Office, CNG off-road equipment is not presently available because of the

difficulty of refueling this equipment, and moreover, there is limited space available to mount the large CNG tanks needed for this equipment.[9] Additionally, CNG does not have the same range as their diesel counterparts making construction schedules difficult to meet because of the constant refueling and the duration of refueling time.

Mr. Bogdanoff further stated that current manufacturers do not make CNG conversion kits for diesel fueled off-road equipment. Moreover, even if such conversion kits were available, the conversion kit would have to be certified by the California Air Resources Board or USEPA, depending upon the horsepower rating. Additional research did not disclose that CNG conversion kits were certified and/or readily available for off-road diesel fueled construction equipment.

Regarding particulate filters, as indicated in **Responses 6** and **7** to **Comment Letter 22**, Sierra Club, dated May 3, 2004), the use of emission control devices on post-1996 off-road construction equipment is prohibited by California Vehicle Code Sections 27156 and 38391, and Section 2472, Title 13, California Code of Regulations, unless it is approved by CARB. Furthermore, the use of non-approved devices on pre-1996 off-road construction equipment is not advisable because its effectiveness, feasibility, and safety have not been verified. Accordingly, particulate filters should only be used to the extent they are available and approved for the specific equipment that will be involved in construction of the proposed project. Oxidation catalysts on diesel engines would be of limited value because the emissions of volatile organic compounds and carbon monoxide from diesel engines are inherently low. Low sulfur diesel fuel (less than 15 ppm sulfur content) is not yet widely available throughout the South Coast Air Basin; however, SCAQMD Rule 431.2 requires the use of low sulfur diesel in mobile sources as of January 1, 2005. Thus, it will be used in construction equipment operated after that date. The Draft EIR acknowledges that diesel particulate filters may be feasible mitigation.

Response 3

The commenter recommends that additional mitigation measures such as covered trucks, paving roads, and truck routes that avoid residential and school areas be included in the Final EIR to further reduce construction-related air quality impacts.

Compliance with Vehicle Code Section 23114 is required by law. This section governs vehicles transporting "aggregate materials" and other materials on highways. Thus, it applies to the project regardless of whether it is specified as a mitigation measure. Furthermore, the requirements of Section

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9 Personal communication between Mike Bogdanoff, SCAQMD, and Rose Mamaghani, Impact Sciences, June 10, 2004.

23114 are included in SCAQMD Rule 403, compliance with which is required as Mitigation Measures 4.4-1 and 4.4-2 for the proposed project. (See also **Comment Letter 22, Response 8**, Sierra Club, dated May 3, 2004.)

Paving of access roads from construction areas to main roads will become a requirement of Rule 403 within the project lifetime. Rule 403 includes several requirements that become effective after January 1, 2005, including specific measures intended to reduce to track-out of material from construction areas onto paved roads. These measures will be applied to phases of the project construction after this date as part of Mitigation Measures 4.4-1 and 4.4-2 for the proposed project.

The SCAQMD's recommendation to route trucks to avoid residential areas and schools will be added to the list of mitigation measures, specifically Mitigation Measure 4.4-7a as follows: All on- and off-road construction equipment and vehicles, excluding the contractors' employee vehicles, shall be routed to avoid residential areas and schools. No construction equipment or vehicle shall travel closer than 300 meters from a residential area or school unless the applicant demonstrates than no alternative routing is available.

Response 4

The commenter suggests that rather than using the Bay Area Air Quality Management District's simplified CALINE4 screening method, a full analysis using the CALINE4 or CAL3QHC model for determining "CO hotspots" should be performed.

A supplemental CO hotspots analysis has been conducted using the SCAQMD recommended CALINE4 model for the seven intersections identified in the Draft EIR. The analysis is included in Final EIR **Appendix B**. The full CALINE4 analysis confirms, similar to the original CO hotspots screening analysis, that the project together with projected background traffic will not cause or contribute to violations of the ambient air quality standards for carbon monoxide.

Response 5

The commenter suggests the methodology in the *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol) should be followed for the CO hotspots analysis.

It should be noted that the CO Protocol recommends that a project be assessed through a series of increasingly more refined analyses. If a project fails to demonstrate compliance with the ambient air quality standards for CO after initial screening, then the CO Protocol recommends a full CO hotspots

analysis using CALINE4. However, as noted in **Response 13**, above, a full supplemental CO hotspots analysis has been conducted using the SCAQMD recommended CALINE4 model (see Final EIR **Appendix B**).

Response 6

The commenter suggests that in conducting the supplemental CO hotspots analysis using the CALINE4 model, EMFAC2002 emission factors should also be used.

The full supplemental CO hotspots analysis based on the CALINE4 model uses emission factors generated using EMFAC2002 (see Final EIR **Appendix B**).

14. LETTER RECEIVED FROM LOUISE HARTWELL, DATED APRIL 11, 2004

Response 1

Draft EIR Section 4.14, Sheriff Services, p. 4.14-10, explains that project development will result in the generation of tax revenues from property and sales taxes, which would be deposited into the City's General Fund. As demand increases with the development of the project, staffing will also corresponding increase to serve the project. These services would be funded by a portion of those revenues that would be allocated, in accordance with the City's contractual service agreement with the County, to maintain staffing and equipment levels for the Santa Clarita Sheriff's Substation in response to related demands, and concludes that "[a]lthough the project would increase demands for sheriff's services, these service demands can be met through the allocation of revenues collected from the project using existing sources; therefore, no significant impacts are anticipated."

Response 2

The project applicant is only responsible for that portion of Newhall Ranch Road (Cross Valley Connector) that will directly serve the Riverpark project. Please see Draft EIR Section 4.3, Traffic/Access, p. 4.3-61, Mitigation Measure 4.3-20). The Cross Valley Connector will be built regardless of whether or not the project is approved, though the timing of this needed improvement would likely be significantly delayed if the project were not approved. The Riverpark project, in staff's opinion, accelerates the City's ability to complete the Cross Valley Connector through the project's dedication of needed right-of-way and its substantial B&T contribution. Please see Draft Riverpark EIR Section 4.3, Traffic/Access, pp. 4.3-39, 45, and 46. As shown in the following cost breakdown, approval of the Riverpark project results in a nearly 50 percent reduction in the City's remaining obligation to construct this segment of the roadway (six-lane road, four-lane bridge). Additional B&T funds, state, and federal grant funds, and other funding sources would be utilized to make up the difference.

Cost Breakdown Based on 2003 Estimates
Cross Valley Connector (Bouquet to Soledad Flyover) Six-Lane Road/Four-Lane Bridge

	No Riverpark	With Riverpark
Design	$ 3,000,000	$ 3,000,000
* **ROW Acquisition**	$ 10,000,000	$ 0
Construction	$ 26,500,000	$ 26,500,000
Contingency/Overhead	$ 10,000,000	$ 10,000,000
Subtotal		$ 39,500,000
** **B&T Contribution**	N/A	- $ 13,842,160
Total	**$ 49,500,000**	**$ 25,657,840**

* ROW acquisition cost expected to be higher—based upon 2000 estimate and based upon past ROW acquisition on similar projects being higher than estimated
**B&T obligation cited above is based upon 1,183 residential units and a 3-acre commercial site.

Response 3

Although this comment does not specifically address the Draft EIR, a response is provided. Without the Cross Valley Connector, currently congested intersections such as Bouquet Canyon Road and Soledad Canyon Road will be forced to accommodate significantly more traffic in the future.

As explained in the Draft EIR's Section 4.3, Traffic/Access, at pp. 4.3-18 and 18, a method in which to model the improvement of surrounding intersections due to the implementation of the Cross Valley Connector involves the comparison of two scenarios: Scenario 1 – Interim Year/No Riverpark project and No Cross Valley Connector (Riverpark portion); and Scenario 2 – Interim Year/Riverpark project and Cross Valley Connector (portion through Riverpark). The Interim Year is generally 10 years into the future and would include additional traffic generated by projected ambient growth during that time frame.

The respective intersections and the comparison are as follows:

- Bouquet Canyon Road/Soledad Canyon Road – In Scenario 1, the intersection of Bouquet/Soledad would operate at LOS D in the AM peak hour and LOS F in the PM peak hour. In Scenario 2, this intersection would operate at an LOS C in the AM peak hour and LOS E in the PM peak hour, a marked improvement over operating conditions in Scenario 1. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- McBean Parkway/Newhall Ranch Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS D in the PM peak hour. In Scenario 2, the respective LOS in the AM and PM peak hour remain at the same grade (LOS D), with minor improvement. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- Bouquet Canyon Road/Newhall Ranch Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS E in the PM peak hour. In Scenario 2, the LOS would improve, though remain at LOS D in the AM peak and improve in the PM peak hour to LOS D. Overall, intersection operations would improve in Scenario 2 as compared to Scenario 1. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- Valley Center Drive/Soledad Canyon Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS D in the PM peak hour. In Scenario 2, this intersection would operate at LOS B in the AM peak hour and LOS B in the PM peak hour, again a significant improvement as compared to Scenario 1. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

Response 4

In response to concerns voiced by neighbors in the Emblem Tract, the project applicant has revised the project and will not be reducing the height of that portion of the ridge adjacent to Gavilan Drive in the Emblem neighborhood.

Regarding concerns associated with fugitive dust impacts (PM_{10}) during construction, although PM_{10} would be significant, as discussed in Draft EIR Section 4.4, Air Quality, these impacts would be short-term, during approximately the first year of project construction (i.e., 50 weeks). (See Final EIR Tables 4.4-19, 4-22a, and 4-22b.) During this brief period of time, compliance with SCAQMD Rules 403 and 1186, as well as the implementation of Mitigation Measures 4.4-1 and 4.42, will reduce these impacts to the maximum extent feasible. However, because of these short-term significant impacts, a Statement of Overriding Considerations would be required to approve the proposed project.

The commenter has not provided any information that the project will result in an increase in crime in the area. The sheriff's department has reviewed the proposed project and has not indicated that the proposed apartment uses would bring an element of crime to the area. Even so, the Planning Commission has modified the project to replace the 420 apartments in Planning Area C with 380 condominiums.

The comment claims that small and large animals that "will be coming our way once this gets started," but does not provide any evidence that this will in fact occur, or that it might occur to an extent that would cause even a less than significant impact on the environment. Additionally, this comment does not identify any defect in or objection to the analysis and conclusions in the Draft EIR. However, the information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 5

The comment addresses the adequacy of roadways in the Emblem Tract. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Additionally, the City of Santa Clarita has received letters from the Saugus Union School District and the William S. Hart Union High School District, each of which affirms that the School Facilities Agreement entered into between each District, respectively, and the Newhall Land and Farming Company would mitigate all impacts to school facilities, and that no further mitigation is required (see Final EIR **Appendix F**).

Response 6

The comment complains that the SC Valley area has developed since the commenter was a child and that the commenter has a long commute, and requests that the project eliminate all apartments and not grade the ridgeline. Please see **Responses 1** through **5**, above. This comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

15. LETTER RECEIVED FROM MARY STETLOW, DATED APRIL 28, 2004

Response 1

Riverpark Draft EIR Section 4.3, Traffic/Access, analyzes potential impacts to area roadways as a result of project implementation (including Bouquet Canyon Road, Newhall Ranch Road, and the intersection of Bouquet Canyon Road/Soledad Canyon Road), and concludes that impacts to most affected roadway intersections can be mitigated to a level of less than significant. However, as the Draft EIR further concludes (p. 4.3-32and 38), some intersections will have significant unmitigable impacts as follows:

Pre-Interim Year (Occupancy of up to 500 units, without Newhall Ranch Road/Golden Valley Road Bridge)

- Valencia Boulevard/Magic Mountain Parkway.

Full Buildout of Project

- Valencia Boulevard/Magic Mountain Parkway;
- Bouquet Canyon Road/Soledad Canyon Road;
- Seco Canyon Road/Bouquet Canyon Road; and
- Whites Canyon Road/Soledad Canyon Road.

However, the Draft EIR explains that the City has determined that the above identified intersections are presently built-out, with the exception of the Bouquet Canyon Road/Soledad Canyon Road intersection. Improvements to this intersection have commenced, and upon completion will result in this intersection being presently built out. The City of Santa Clarita General Plan Circulation Element states that "[e]xisting street improvements are, in some cases, not able to be modified due to right-of-way limitations and existing development." The General Plan acknowledges that benefits of improvements at such intersections are not outweighed by a combination of the potential time and cost of actions necessary to acquire the property, the physical and economic costs to businesses at the affected intersections, and the social costs that could occur if the affected businesses were forced to relocate. Please see Draft EIR Appendix 4.3, which includes pictures of roadway intersections that cannot be improved because of existing business and uses.

The commenter provides no evidence supporting her conclusion that Emblem School, Bridgeport School and unidentified middle and high schools will experience overcrowding as a result of the project. In fact, evidence submitted by the affected school districts proves the contrary. The City of Santa Clarita has

received letters from the Saugus Union School District and the William S. Hart Union High School District, each of which affirms that the School Facilities Agreement entered into between each district, respectively, and the Newhall Land and Farming Company would mitigate all impacts to school facilities, and that no further mitigation would be needed or required. (These letters can be found in Final EIR **Appendix F**)

During construction, dust impacts (PM_{10}) would be significant, as discussed in Draft EIR Section 4.4, Air Quality. Noise impacts would be significant during both construction and operational periods and is discussed in detail in Draft EIR Section 4.5, Noise. Noise impacts would be significant to those persons in the Emblem Tract during construction activities and is discussed in detail in Draft EIR Section 4.5, Noise, pp. 4.5-20 and 22.

The Riverpark Draft EIR Section 4.2, Flood, extensively analyzed the project's potential flood impacts, but concluded that with mitigation, the proposed project would not create any significant and unavoidable impacts.

The Riverpark Draft EIR Section 4.8, Water Services, analyzed the water supplies available to meet both project and cumulative demand, and concluded that the proposed project would not create any significant and unavoidable project-level or cumulative impacts. Please see also **Topical Responses 1** through **4**.

The Revised Riverpark Draft EIR Section 4.6, Biological Resources, analyzes impacts to wildlife habitat, among other issues. It concludes impacts to biological resources would be less than significant with the exception of certain impacts that would remain significant after mitigation, including the total net loss of 280 acres of wildlife habitat/natural open space as a result of conversion of undeveloped property to developed, impacts to the SEA and associated riverine habitat (as identified by the resource line) and riverbed, and impacts to adjacent upland habitat within 100 feet of the riparian resource line. However, since the Draft EIR was released for public review, the project has been modified by the Planning Commission to relocate the bank stabilization adjacent to the commercial areas and the A1 residential neighborhood further away from the Santa Clara River to preserve the mature riparian resources in this area. This modification resulted in the loss of 15 single-family residential lots and 2 out of the 3 commercial acres.

Response 2

The comment questions the need for apartments on the project site. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided. Further, since the Draft EIR was released for public review, the project has been revised to replace the 420 apartments planned for Planning Area C with 380 condominiums.

Response 3

The comment questions the time of day when the Planning Commissioners toured the project site. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided. In any event, Section 4.3, Traffic/Access of the Draft EIR contains a full traffic analysis, including, without limitation, PM peak hour traffic impacts.

Response 4

Please see **Response 1** above, with respect to traffic impacts generated by the proposed project. Based on the traffic analysis contained in the Draft EIR, the City does not concur with the commenter's supposition that the extension of Newhall Ranch Road will increase congestion on this roadway and would not alleviate traffic using Bouquet Canyon Road. As discussed above in **Response 1**, without the Cross Valley Connector, congested intersections such as Bouquet Canyon Road and Soledad Canyon Road will be forced to accommodate significantly more traffic in the future.

As described in the Draft EIR Section 4.3, Traffic/Access (pp. 4.3-18 and 19), a method in which to model the improvement of surrounding intersections due to the implementation of the Cross Valley Connector involves the comparison of two scenarios: Scenario 1 – Interim Year/No Riverpark Project and No Cross Valley Connector (Riverpark portion); and Scenario 2 – Interim Year/Riverpark Project and Cross Valley Connector (portion through Riverpark). The Interim Year is generally 10 years into the future and would include additional traffic generated by projected ambient growth during that time frame. The respective intersections and the comparison are as follows:

- Bouquet Canyon Road/Soledad Canyon Road – In Scenario 1, the intersection of Bouquet/Soledad would operate at Level of Service (LOS) D in the AM peak hour and LOS F in the PM peak hour. In Scenario 2, this intersection would operate at an LOS C in the AM peak hour and LOS E in the PM

peak hour, a marked improvement over operating conditions in Scenario 1. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- McBean Parkway/Newhall Ranch Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS D in the PM peak hour. In Scenario 2, the respective LOS in the AM and PM peak hour remain at the same grade (LOS D), with minor improvement. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- Bouquet Canyon Road/Newhall Ranch Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS E in the PM peak hour. In Scenario 2, the LOS would improve, though remain at LOS D in the AM peak and improve in the PM peak hour to LOS D. Overall, intersection operations would improve in Scenario 2 as compared to Scenario 1. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- Seco Canyon Road/Bouquet Canyon Road – In Scenario 1, this intersection would operate at LOS E in the AM peak hour and LOS F in the PM peak hour. In Scenario 2, this intersection would remain at LOS E in the AM peak hour but would improve significantly to LOS D in the PM peak hour. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- Valley Center Drive/Soledad Canyon Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS D in the PM peak hour. In Scenario 2, this intersection would operate at LOS B in the AM peak hour and LOS B in the PM peak hour, again a significant improvement as compared to Scenario 1. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

Response 5

The comment is concerned with the safety issues relating to in/out traffic in the Emblem Tract. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

Response 6

This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Additionally, the City of Santa Clarita has received letters from the Saugus Union School District and the William S. Hart Union High School District, each of which affirms that the School Facilities Agreements entered into between each District, respectively, and the Newhall Land and Farming Company would mitigate all impacts to school facilities, and that no further mitigation is required. (Please see Final EIR **Appendix F.**)

Response 7

This comment appears to address a need perceived by the commenter for an additional middle and/or high school to serve the project, but the commenter has not submitted any evidence in support of this claim. In fact, the evidence from the school districts proves that the project will not create a need for mitigation beyond that agreed to in the existing the School Facilities Agreements entered into between each district, respectively, and the Newhall Land and Farming Company. Please see Riverpark Draft EIR Appendix Volume VI for copies of agreement between the school districts and Newhall Land and Farming and Final EIR **Appendix F** for school district communication regarding adequacy of agreements with Newhall Land and Farming. Please see **Response 6** above.

Response 8

This comment primarily addresses existing noise conditions due to road noise from Bouquet Canyon Road, which conditions clearly have not been created by the proposed project. Draft EIR Section 4.5, Noise, analyzes projected noise impacts from the project, including areas along Bouquet Canyon Road, and concludes that significant noise impacts will be realized by the commenter during construction activities within proximity to the commenter's residence. The commenter will not be affected by significant operational noise impacts. Since the Draft EIR was released for public comment, the project has been revised, and the western terminus of the ridgeline separating the Emblem Tract from Planning Area D will no longer be graded; that revision will reduce the project-generated noise in the Emblem Tract.

Response 9

In response to concerns voiced by neighbors in the Emblem Tract, the project applicant has revised the project and will not be reducing the height of that portion of the ridge adjacent to the homes along Gavilan Drive in the Emblem neighborhood.

Please see **Response 8** above, regarding noise impacts of the proposed project.

Response 10

A comprehensive air quality impact analysis that analyzed and addressed in depth the proposed project's impacts on air quality is included in the Draft EIR Section 4.4, Air Quality. The Draft EIR Section 4.4, Air Quality, p. 4.4-1 concluded:

> "Feasible mitigation measures would be implemented that would reduce construction-related and operational-related emissions to the maximum extent feasible. However, no feasible mitigation exists which would reduce the project's construction-related emissions of VOC, NO_x, or PM_{10} to below the SCAQMD's recommended thresholds of significance. No feasible mitigation exists to reduce the project's operational emissions of CO, VOC, or NO_x to less than significant. Therefore, the project's construction-related and operation-related emissions would be considered unavoidably significant."

However, these conclusions are "worst-case" and conservative. The significant construction-related impacts, including traffic (i.e., mobile sources), would likely occur only intermittently over a 51-month period. (See Final EIR Tables 4.4-19, 4-22a, and 4-22b.) The significant operational-related impacts are associated with wood-stoves, which are likely to be prohibited in the project area, and mobile sources, which are regulated by the state (see Final EIR Tables 4.4-20 and 4-23).

Additionally, to determine the proposed project's potential impacts on a regional air quality basis, a supplemental air quality analysis has been undertaken. The regional air quality analysis prepared by Environ International Corporation is presented in **Appendix B** to the Final EIR. The regional air quality analysis addressed specifically the issue of whether significant ambient concentrations of ozone and particulate matter (PM) in the SC Valley result from local emissions, as opposed to emissions that have been transported into the SC Valley from the San Fernando Valley and other Los Angeles Basin areas. The regional air quality analysis concluded that "[t]he great majority of ozone and PM pollution in the SC Valley is created by sources of emissions outside the SC Valley." The SCAQMD has apparently prepared a similar study showing similar results, but has not yet released its full text.

However, because the Draft EIR concludes that, overall, the proposed project's construction-related and operation-related emissions would be considered unavoidably significant (Section 4.4, Air Quality, p. 4.4-75), a Statement of Overriding Considerations would be necessary to approve the proposed project.

Response 11

The Draft EIR Section 4.2, Flood, p. 4.2-41 states "[t]he project encroaches upon the existing FEMA flood hazard area, and residential lots 338 through 352 along the southern site boundary would be located within the 100-year flood hazard area." The Draft EIR concludes that "[t]his would result in a significant impact under this criterion unless mitigated. The project proposes buried bank stabilization that would protect the above noted residential units from flood waters and subsequent impacts and consequently

remove these units from the potential for flooding." Consequently, with mitigation no residential units would be subject to flooding impacts. Moreover, since the Draft EIR was released for public comment, the project has been revised by moving the bank stabilization in the area from the park in the central portion of the project site in the east to the easterly commercial parcel in the west further back from the river.

Response 12

Please see **Topical Response 1: Groundwater Supplies and Overdraft Claims** and **Topical Response 2: Groundwater Supplies and Perchlorate**. Revised Riverpark Draft EIR Section 4.8, Water Services, concludes that there is an adequate water supply for the proposed project and that there would be no significant project-level or cumulative impacts.

Response 13

The comment claims the cost of water is currently too high and that there is not enough [water] for existing residences. However, the commenter has not supported these statements with any evidence. In fact, the Draft EIR Section 4.8, Water Services, analyzed the available water supplies and found them to be sufficient to meet both project-level and cumulative demand. Please see **Appendix A**, CLWA letters, dated October 20, 2004 and November 1, 2004, verifying the water supply conclusions of the Draft Riverpark EIR. This conclusion is further supported by evidence from the Department of Water Resources and the Castaic Lake Water Agency, provided during their presentation on June 29, 2004 to the Planning Commission (see Final EIR **Transcript from June 29, 2004 Water Supply Presentation**).

Response 14

In response to concerns voiced by neighbors in the Emblem Tract, the project applicant has revised the site plan and will not be reducing the height of the ridge adjacent to the homes along Gavilan Drive in the Emblem Tract.

As discussed in **Response 1** above, the Draft EIR Section 4.6, Biological Resources, analyzed potential impacts to biological resources, and concluded that there would be no significant and unavoidable impacts to any endangered species, including, without limitation, those that inhabit the flood plain of the Santa Clara River. The Draft EIR does conclude that there would be a few impacts that would remain significant after mitigation, including the total net loss of 280 acres of wildlife habitat/natural open space as a result of conversion of undeveloped property to developed, impacts to the SEA and associated riverine habitat (as identified by the resource line) and riverbed, and impacts to adjacent upland habitat within 100 feet of the riparian resource line. Consequently the Draft EIR acknowledges that, to this

extent, the impacts to wildlife species (including coyotes and rattlesnakes) would be significantly impacted by the proposed project. The Draft EIR addresses impacts to the entire project site, including the ridgeline adjacent to the Emblem Tract.

Response 15

Please see **Response 14**, above. Impacts to endangered species which inhabit the flood plain are addressed in the Draft EIR. Please see Draft EIR Section 4.6, Biological Resources, pp. 4.6-26 through 39, which discuss the special status wildlife species known to occur in the project area, and pp. 4.6-70 through 75 which discuss potential impacts on such species and where it is concluded that potential impacts on those species. Please see also Draft EIR Section 4.20, Floodplain Modifications, pp. 4.20-64 and 4.20-67 and Draft Riverpark EIR, Appendix 4.20, Sensitive Aquatic Species Assessment Upper Santa Clara River, Riverpark Project, February 25, 2004. The Draft EIR concludes that, with the exception of western spadefoot toad, impacts on special-status species, including, without limitation, endangered species, would be less than significant after mitigation. Please see Revised Draft Riverpark EIR, Section 4.6, Biological Resources, p. 4.6-109.

Response 16

The comment expresses the commenter's opinions with respect to the City's responsiveness to its residents, the project applicant's status and the merits of the project as a whole, not with respect to the contents of the Draft EIR and, therefore, fails to raise any environmental issue regarding the proposed project requiring a response under Public Resources Code Section 21091(d) or *CEQA Guidelines* Section 15088. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

The commenter has attached photographs with handwritten notations that generally depict traffic conditions at various locations on Bouquet Canyon Drive. It appears that these photographs supplement the commenter's comments with respect to traffic conditions. Therefore, please see **Responses 1**, **3**, **4**, **5**, **6,** and **10**, above.

16. LETTER RECEIVED FROM SHERYOL NEILL, DATED APRIL 29, 2004

Response 1

The comment expresses the opinions of the commenter that the Newhall Ranch corridor is currently "extremely busy and noisy at commuter times of day" and that it is projected to become even busier once the Cross Valley Connector is built, and that approval of the project would increase traffic congestion, air pollution and noise levels., This comment is acknowledged and will be forwarded to the decision makers for their consideration., This issue is addressed in **Comment Letter 15, Response 1**.

However, it should be noted that traffic, noise and air quality impacts of the proposed project have been thoroughly analyzed in the Draft EIR Sections 4.3, 4.5, and 4.4, respectively.

Response 2

The comment expresses the only opinions of the commenter that she feels "hemmed in" by existing development, to which the proposed project may be added. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 3

The comment expresses only the opinions of the commenter that further development should be "slowed or curbed" and that I-5 and SR-14 should be expanded to enable existing City residents to travel outside the City to higher paying jobs. The comment expresses the opinions of the commenter only. As such, this comment does not raise any issue with respect to the contents of the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration.

17. LETTER RECEIVED FROM RON BOTTOROFF, FRIENDS OF THE SANTA CLARA RIVER, DATED APRIL 29, 2004

Response 1

The comment expresses only the opinions of the commenter with respect to the merits of the project and does not raise any issue with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project. However, this comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. Nevertheless, it should be noted that the potential cumulative impacts of the project have been thoroughly analyzed in the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources. Please see **Response 2**, below.

Response 2

The comment expresses the opinions of the commenter with respect to the effects of growth in the Santa Clara watershed over the last few decades. As such, the comment does not raise any issue with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project. However, this comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

It should be noted that the potential cumulative impacts of the project have been thoroughly analyzed in the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources, pp. 4.6-123 and 124:

> "The above analysis indicates that potentially significant cumulative impacts could occur to various environmental biological resources due to the combined impacts of the proposed project and following nearby projects: Santa Clarita Parkway extension, Tesoro del Valle, Newhall Ranch Specific Plan, West Creek, North Valencia II Specific Plan, Valencia Commerce Center, and Curtis Sand and Gravel Mine Expansion. These resources include upland habitats such as coastal sage scrub, oak trees, riparian habitat associated with Santa Clara River, wildlife movement corridors, special-status species (including unarmored three-spine stickleback, western spadefoot toad, and arroyo toad), resources within SEA 23, and increased use of sensitive riparian resources by human and domestic animals. Potentially significant cumulative impacts include loss of riparian habitat, disturbance of riparian wildlife habitat due to nearby urban development, and effects on habitat for the unarmored three-spine stickleback, least Bell's vireo, western spadefoot toad, and the arroyo toad, when present. While most of these projects include the implementation of measures that will mitigate specific biological impacts, most will still result in a net loss of biological resources, particularly natural habitat areas.
>
> Because of the high biological value of riparian and wetland habitats and because of the continued loss of these habitats throughout the region, the proposed Riverpark project's contribution to this loss, although relatively small, is considered a significant cumulative

impact, both to the vegetation community itself, as well as to its value to the riparian ecosystem. Because of the time it takes for oak trees to reach maturity and contribute biological values equal to that currently occurring on the site, and due to continued loss of these trees in the region, the project's contribution to this loss is considered a significant cumulative impact without mitigation. Continued development in the area also cumulatively contributes to the increase of humans and domestic animals. Because of the substantial amount of disturbance to sensitive resource areas posed by this increase, the project's contribution to this increase is also considered cumulatively significant. Although the proposed project minimizes impacts to the biological resources within the SEA, the net loss of habitat within the SEA, combined with net losses of SEA habitats from other projects, effectively reduces the overall size of the SEA and is considered a significant cumulative impact.

When the potential cumulative effects of the above mentioned projects are viewed from a regional wildlife movement perspective, the major movement corridors between the Santa Clara River Valley and the Santa Susana Mountains and Los Padres/Angeles National Forest lands would still be preserved. Therefore, no significant cumulative impacts would occur with respect to regional wildlife movement.

The project would result in unavoidable significant impact to the net loss of wildlife habitat/natural open space; loss of SEA and associated riparian habitat and riverbed and impacts to adjacent upland habitat within 100 feet of the riparian source line. All other impacts (e.g., oak trees) will be mitigated to less than significant."

Furthermore, Section 4.2, Floodplain Modifications, pp. 4.20-68 and 69 states that

"…the proposed project in combination with the construction of Santa Clarita Parkway across the Santa Clara River and project site and other development in the Santa Clarita Valley, would further modify the floodplain by installing an additional bridge across the river (see Figure 4.20-7, Bank Stabilization and Bridge Locations). This action would further alter flows in the river; however, as with the proposed project, the effects would only be observed during infrequent flood events that reach the buried banks (e.g., 50-year and 100-year flood events). As indicated above, the proposed project would cause an increase in flows, water velocities, water depth, and changes in the flooded areas. However, these hydraulic effects would be very minor in magnitude and extent… velocity changes in the river near the Santa Clarita Parkway Bridge would result in a very localized increase in velocity of five percent during the 2-year event that would dissipate approximately 200 feet downstream and 100 feet upstream of the bridge. Figures 4.20-12a–g, Santa Clara River Cumulative Conditions, show that the land area inundated by various flood events in the cumulative would also not vary significantly from existing and post-project conditions. When the construction of Santa Clarita Parkway across the river and project site is considered, the effects would still be insufficient to significantly alter the amount, location, and nature of aquatic and riparian habitats in the project area and downstream. Under the project with Santa Clarita Parkway Bridge, the river would still retain sufficient width to allow natural fluvial processes to continue. Hence, the mosaic of habitats in the river that support various Sensitive species would be maintained, and the populations of the species within and adjacent to the river corridor would not be significantly affected."

Section 4.4, Air Quality, pp. 4.4-73 and 74 explicitly state the cumulative impacts of the proposed project to air quality as follows:

"…implementation of the recommended mitigation measures would reduce summertime CO emissions by 4.6 percent, VOC emissions by 17.7 percent, NO_x emissions by 9.3 percent, and PM_{10} emissions by 4.2 percent. The measures would reduce wintertime CO emissions by 75.3 percent, VOC emissions by 91.6 percent, NO_x emissions by 29.5

percent, and PM_{10} emissions by 85.3 percent. Since these represent emission reductions on a daily basis, they would be reduced by at least the summertime percentages on an annual basis, thereby exceeding the SCAQMD's performance standard for annual emissions reductions. The CEQA Air Quality Handbook does not identify any reduction efficiencies for emissions of SO_x. It should be assumed, however, that these measures would reduce emissions of SO_x by a minimum of one percent given that the minimum reduction for other mobile emissions is 4.2 percent. Therefore, the project would meet the annual emission reduction target of one percent and would not be considered cumulatively significant pursuant to the SCAQMD's recommended approach.

Although this method is not included in the CEQA Air Quality Handbook as a way to assess cumulative air quality impacts, it is determined the project is within growth forecasts contained in the Growth Management Chapter of SCAG's RCPG, which forms the basis for the land use and transportation control portions of the 2003 AQMP. Therefore, it would be consistent with the 2003 AQMP, indicating that it would not jeopardize attainment of state and federal ambient air quality standards in the Basin.
Even though the project shows at least a one percent per year reduction in project emissions of CO, VOC, NO_x, and PM_{10}, and likely a similar reduction in SO_x emissions, and even though the project is consistent with 2003 AQMP, as a conservative and "worst-case" approach, the project is considered to result in a significant adverse cumulative air quality impact and feasible mitigation is required.

Additionally, Section 4.16, Visual Resources, pp. 34 and 35 concludes that cumulative impacts to visual resources will be significant as follows:

"Cumulative impacts would include the conversion of vacant land to urban or suburban uses. Additionally, there would be a cumulative visual impact relative to the loss of vacant undeveloped land as viewed from the public roadways. The amount of visible natural vegetation would also decrease overall. Nighttime illumination and daytime glare would increase in the project site and the surrounding area as a result of cumulative project development.

Development of the proposed project is currently planned to build out over a period of five years. As noted above, this development would occur within a generally urban and urbanizing area. The project's visible development areas, in combination with other development expected to occur within the project area before or during project buildout, would largely be compatible with the aesthetic character that currently exists, a visual character that is becoming more urbanized over time.

In summary, the project and other proposed or on-going projects occur within infill development area within the Santa Clarita Valley. Development will result in changes to the appearance of the landscape as viewed from public roads. Proposed cumulative development will also contribute to cumulative night lighting and daytime glare and reflective impacts. Thus, cumulative impacts are considered significant."

Section 4.3, Traffic/Access, p. 4.3-61 concludes that the proposed project would not create cumulative impacts subject to the implementation of mitigation measures as follows:

"Within the Santa Clarita Valley, the County and the City have established B&T Districts to manage the many significant infrastructure improvements planned to occur within the valley. The project site is located within the Bouquet Canyon District and the project will pay fees or construct eligible improvements.

The Bouquet Canyon B&T District has recently been updated and is considered a full improvement district. The implication of this is that the B&T fees collected within the

district have been calculated to cover all the anticipated improvements necessary to build out the arterial roadway network as outlined in the City's General Plan Circulation Element."

Section 4.2, Flood, and Section 4.8-1, Water Quality, concludes that the project would not create significant cumulative flood and water quality impacts with the following summation:

"It has been estimated that approximately 4 percent of that portion of the Santa Clara River watershed found in Los Angeles County would be developed and approximately 2.5 percent of the portion of the watershed found in Ventura County would be developed.[10] Each development project in the Santa Clara River watershed (1,634 sq. miles) will be of varying character and size, will have its own unique topographic and geologic characteristics, will have flood and water quality impacts that will be unique to the geologic/soil conditions of the site, to the tributary watershed in which it is located, and to the reach of the Santa Clara River to which it drains, either directly or indirectly, and will be subject to the development criteria of the jurisdiction in which it is located.

All development within the portion of the watershed of the Santa Clara River located in Los Angeles County, including that within the City of Santa Clarita, is required to comply with the LACDPW Q-cap requirements to ensure that upstream or downstream flooding does not occur and to ensure that downstream erosion and sedimentation do not occur. Compliance with these requirements ensures consistency with the County's Q-cap model. Pursuant to LACDPW requirements, all drainage systems in developments that carry runoff from developed areas must be designed for the 25-year Urban Design Storm, while storm drains under major and secondary highways, open channels (main channels), debris carrying systems, and sumps must be designed for the 50-year Capital Flood Storm. LACDPW also prohibits significant increases in off-site post-development storm flows and significant increases in storm flow velocities. Development in the Los Angeles County portion of the watershed must also comply with LACDPW design criteria. As a result of compliance, overall storm runoff discharge quantities from the watershed under post-development runoff conditions would be less than or equal to existing conditions largely because the runoff would be free of the debris that is typical of undeveloped watersheds and flow velocities would not increase significantly. Because on-site facilities would already have been built for burned and bulked flows from undeveloped areas, they would have more than adequate capacity to accommodate off-site flows as the off-site portions of the drainage areas develop.

Further, all development within the portion of the watershed of the Santa Clara River located within the jurisdiction of the RWQCB, including that within the City of Santa Clarita, is required to comply with the orders and regulations issued by the RWQCB, as well as those issued by the SWRCB, the NPDES, the County of Los Angeles, and the City of Santa Clarita and federal law during both construction and operation of the project. Further, each current and future development in the Santa Clarita Valley will also be required to meet all of those requirements to control storm water discharges of pollutants of concern for each such development.

As the analysis of project development demonstrates, development in minor drainage courses within Reach 7 of the Santa Clara River in compliance with these requirements would result in less than significant impacts. Additionally, as a policy, both the City of Santa Clarita and the LACDPW prohibit significant increases in flow velocity from a project site; therefore, adherence to this policy would result in no significant cumulative increases in velocity or erosion/sedimentation impacts along that portion of the Santa Clara River, which drains to this watershed.

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10 Alex Sheydayi, Deputy Director, Ventura County Public Works Agency, Flood Control Department, statement made at the Santa Clara River Enhancement and Management Plan Steering Committee Meeting, May 30, 1995.

Other projects within the City of Santa Clarita and Los Angeles County would be subject not only to the same general requirements as the proposed Riverpark project, but also to such other requirements as the City of Santa Clarita (as applicable), the LACDPW and the RWQCB may specifically identify for them based on their unique characteristics.

The analysis of project conditions, above, demonstrates that project development, which must comply with all of these City, County, state and federal requirements, would not create any significant impacts. Compliance with the Basin Plan, the General MS4 Permit and the General Construction Activity Storm Water Permit controls pollutants in runoff from the project, and thus runoff from the project causes no incremental increase in the cumulative impact of watershed-wide development.

Because the cumulative project storm water quality improvements in the City of Santa Clarita and Los Angeles County would be required to conform to all of the above-referenced requirements, no potentially significant cumulative project flooding impacts are expected to occur from the incremental impacts of the project. These water quality standards will ensure that no potentially significant cumulative impacts will occur.

a. Water Quality

If not properly controlled, the cumulative effects on water quality from future development within the Santa Clara River watershed could be adverse and potentially significant. The nature of the land uses involved, the manner in which runoff is controlled prior to discharge pursuant to the requirements of the controlling jurisdictions (i.e., LACDPW, City of Santa Clarita, Ventura County Flood Control District, SWRCB and RWQCB), and the manner in which urban wastes are managed and prevented from becoming part of the storm water runoff would all affect the significance of such cumulative water quality impacts by lessening them.

Overall, the project would be expected to improve surface water quality conditions in the watershed, as compared to existing conditions. The project would increase storm water runoff volumes in the watershed by increasing impervious surfaces at the site; however, as discussed in Section 4.2, Flood, overall storm water runoff will decrease. Moreover, as discussed above, in certain respects, water quality of the runoff from the site would be expected generally to improve over the existing conditions, particularly over the conditions in the agricultural areas. Those constituents whose concentrations and/or loading in runoff may increase with the proposed development are not expected to create significant adverse impacts and are anticipated to be controlled effectively through the use of project-specific BMPs (PDFs). Dry weather flows are expected to be adequately treated, and are unlikely to leave the site.

Regional plans and programs, including, without limitation, the Basin Plan and the General MS4 Permit are designed to preserve and enhance water quality and protect the beneficial uses of all regional waters within Region 4. The Basin Plan and the General MS4 Permit include narrative and numerical water quality objectives and parameters that must be attained or maintained to protect the designated beneficial uses of Reach 7 of the Santa Clara River. Through such means, the RWQCB regulates water quality in Los Angeles and Ventura Counties, including the Santa Clara River watershed, and it is the responsibility of the local jurisdictions (i.e., the City of Santa Clarita, LACDPW Watershed Management Division, the Ventura County Flood Control District and the RWQCB) to ensure that future development within the watershed would comply with the same or similar types of water quality requirements as the proposed project. Therefore, with these requirements in place, no cumulative water quality impacts are anticipated."

The Riverpark Draft EIR concludes with respect to noise that the proposed project would result in significant and unavoidable noise impacts to existing sensitive receptors and that because landfill resources are finite that the project would contribute to significant cumulative impacts to solid waste disposal Furthermore with respect to Section 4.1, Geological Resources; 4.7, Land Use; 4.8, Water Service; 4.10, Education; 4.11, Library Services; 4.12, Parks and Recreation; 4.13, Fire Services; 4.14, Sheriff Services; 4.15, Human Made Hazards; 4.17 Population/Housing/Employment would not result in significant cumulative impacts. Draft Riverpark EIR Section 4.19, Agricultural Resources concludes that the conversion of prime agricultural uses to prime farmland is a significant cumulative impact.

Response 3

The comment expresses only the opinions of the commenter with respect to the effects of encroachment of development into the Santa Clara River floodplain over the last few decades, and cites to articles that are not attached to the comment letter. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

It should be noted that the Revised Riverpark Draft EIR Section 4.6, Biological Resources, analyzes the proposed project's potential project-level and cumulative impacts to biological resources, including, without limitation, to the Santa Clara River and adjacent upland habitat throughout section (1) starting on p. 4.6-60, and section (5) starting on p. 4.6-75. Additionally, Section 4.20, Floodplain Modifications, concludes that the Riverpark project would not result in the decline of species for the following reasons:

> "The long term historical record for the river indicates it has always been relatively dry in the site area and restoration to previous conditions should not be aimed at developing permanent water flows in this area. However, continued development in the drainage could result in more wastewater discharge that could increase the extent of surface flow and potentially improve conditions for stickleback and other native aquatic forms. As indicated below, no significant impacts to the three sensitive aquatic species addressed would occur as a result of the project implementation. This is generally due to the fact that no substantial change to the aquatic habitats that support Sensitive species would occur (for conclusions related to the more general biological impacts of the proposed project, please see EIR Revised Section 4.6, Biological Resources). Specific reasons for the lack of significant impacts to these sensitive aquatic species are provided below.
>
> **Unarmored Threespine Stickleback**
>
> Occurrence of unarmored threespine stickleback on the project site is predicted to be very sporadic due to occasional strong storms or above average rainy seasons that may flush fish downstream from known established populations upstream. Site Nos. 1-3 (Areas of Standing Water) and proposed storm drain outlets provide possible areas that could maintain fish for temporary periods depending on the permanence of surface flow in the river and from these tributaries/storm drains. The implementation of project-related improvements are unlikely to affect stickleback from using the Santa Clara River on the project site.

The Flood Technical Report for Riverpark (PSOMAS, February 2004) prepared for the Riverpark project concludes that there would be no significant increase in water surface elevation, velocity, or sedimentation downstream of the project site as a result of project improvements. Based upon these facts, no impacts to downstream populations of UTS are expected.

Arroyo Toad

Occurrence of Arroyo Toad on the project site is unlikely, as the project site does not contain the habitat characteristics necessary for the permanent habitation of the species, primarily the lack of overflow pool habitat. Site No. 3 (Areas of Standing Water) contained associated damp substrata with willow and cattail patches, but not vegetated sandbars and overflow pool habitat parallel to the main channel. The other sites (Areas of Standing Water) and on-site drainages are not large enough to form overflow pools and therefore are not considered habitat.

The Flood Technical Report for Riverpark (PSOMAS, February 2004) prepared for the Riverpark project concludes that there would be no significant increase in water surface elevation, velocity, or sedimentation downstream of the project site as a result of project improvements. Based these facts, no impacts to downstream populations of Arroyo Toad are expected.

California Red-Legged Frog

California red-legged frogs occur rarely if at all in the Santa Clara River channel within or near the project site. The site lacks the appropriate spawning pools that are the ecologically central component of the California red-legged frog habitat.

The proposed project would modify the floodplain by placing bank stabilization along selected portions of the river, developing the floodplain areas behind the bank stabilization, and installing a bridge across the river. These actions would alter flows in the river; however, the effects would only be observed during infrequent flood events that reach the buried banks (e.g., 50-year and 100-year flood events). The proposed project would cause an increase in flows, water velocities, water depth; and changes in the flooded areas. However, these hydraulic effects would be minor in magnitude and extent. These effects would be insufficient to alter the amount, location, and nature of aquatic and riparian habitats in the project area and downstream. Under the project, the river would still retain sufficient width to allow natural fluvial processes to continue. Hence, the mosaic of habitats in the river that support various Sensitive species would be maintained, and the populations of the species within and adjacent to the river corridor would not be significantly affected."

Additionally, since the Draft EIR and its Revised Biological Resources section were released for public review, the project has been revised to push the proposed bank stabilization along the river from the park in the central portion of the project site in the east to the easterly commercial parcel in the west further back to preserve the mature riparian resources along this edge of the river. (Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project* Technical Report, Figure 1, prepared by GeoSyntec, dated October 13, 2004 (see Final EIR at **Appendix G**), which depicts the previous project bank stabilization location compared to the revised plan showing an increased setback.) The mature resource edge along this portion of the project site will now be preserved and the buffer increased beyond that provided by the NRMP. Finally, the potential cumulative impacts of the project as a whole have

been thoroughly analyzed in the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources.

Response 4

The comment expresses only the opinions of the commenter with respect to the effects of continued filling and channelization of the Santa Clara River over the last few decades; the commenter asserts unsubstantiated claims that continued filling and channelization of the river has altered and is altering the hydrology of the watershed, has increased storm runoff and decreased water quality, and that the river is now impaired for ammonia, chloride, coliform, nitrate/nitrite, and organic enrichment. This comment is acknowledged and will be forwarded to the decision makers for their consideration, but no further response is required since the comments are not addressed to the sufficiency of the Draft EIR or Revised Draft EIR or its analyses.

Even so, it should be noted that Revised Riverpark Draft EIR Sections 4.2, Flood; 4.8.1, Water Quality; and 4.20, Floodplain Modifications, fully analyze the proposed project's potential project-level and cumulative impacts referred to by the commenter. It should also be noted, that the project does not propose to fill or channelize the Santa Clara River, and that the reach of the river along which the proposed project site is located is impaired only for fecal coliform. As concluded in the Draft EIR Section 4.8.1, Water Quality, the proposed project will not create any project-level or cumulative impacts to the water quality in the river, either to the reach adjacent to the proposed project or in downstream reaches, as concluded in Sections 4.2, Flood, and 4.20, Floodplain Modifications.

As described in Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-1, and Draft EIR Section 4.20, Floodplain Modifications, the applicant has proposed to minimize impacts of project development, including river-related improvements, on the water quality and biological resources of the river by complying with and/or improving upon the development areas, mitigation measures, and other conditions of the Natural River Management Plan (NRMP). The NRMP is a long-term management plan, prepared at the request of the ACOE and approved by ACOE, the CDFG, and the LARWQCB as discussed in Revised Draft EIR Section 4.6, Biological Resources, at p. 4.6-2(a). The NRMP and the NRMP EIS/EIR reviewed proposed development envelopes, and evaluated the river-related facilities that would be associated with development in the envelopes, including bank protection, bridges, and floodplain changes. In those documents, the agencies and the public assessed the need for buffers between development and the river, to protect the biological and water quality resources provided by the river from indirect impacts. The documents also fully analyzed the impacts of river-related facilities associated with development, and imposed conditions, design restrictions, and mitigation measures related to

buffers and construction and operation of river-related improvements associated with development. Based on implementation of the NRMP, ACOE, CDFG, and LARWQCB have approved and permitted river-related improvements associated with development of the Riverpark project.

The project has been designed in accordance with the requirements and conditions of the NRMP, as described in Revised Draft EIR Section 4.6, Biological Resources, and Draft EIR Section 4.20, Floodplain Modifications, and in certain areas pulls back from the NRMP-permitted development. Pursuant to the NRMP, the project will not channelize the river. In fact, the vast majority of the river adjacent to the 695-acre development site, consisting of approximately 330 acres, will remain in its natural state, as noted in Draft EIR Section 4.20, Floodplain Modifications, p. 4.20-36. Pursuant to the NRMP, only the following natural river management techniques, which have already been approved by ACOE, CDFG, and RWQCB, will be implemented to control flow. These techniques are described in detail in the Revised Draft EIR Section 4.6, Biological Resources and Draft EIR Section 4.20, Floodplain Modifications:

(1) Naturalized bank stabilization consisting of buried layers of soil cement (a mixture of soil and Portland cement), which are buried under native soils and revegetated with native plants to create a natural, but protected bank;

(2) Naturalized toe protection – consisting of ungrouted rip-rap, A-jacks™, or unburied soil cement.

(3) Hardened gunite (the material used for channelization) is used only to reinforce the Newhall Ranch Road/Golden Valley Road Bridge abutments, and, for the entire project, affects less than 40,000 square feet of the river.

These innovative techniques minimize the adverse affects of flood control protection. As discussed in Revised Draft EIR Section 4.6 and Draft EIR Section 4.20, the alterations resulting from both development and naturalized stabilization and flood control techniques do not adversely affect the channel stability, sensitive habitats, or functions and value of the river. Further, as discussed in the URS analysis entitled, *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004 prepared by URS (Final EIR **Appendix C**), the prior implementation of NRMP-approved flood control and stabilization within Reach 7 and downstream reaches has not adversely affected, but rather has enhanced functions and values for the river. The NRMP predicts that compliance with its terms and requirements will actually result in an increase of approximately 69 aces of natural riverbed and enhancement of habitat within the riverbed. (NRMP Section 3.0 at p. 5) As a result of compliance with the NRMP, channelization of the river and associated adverse impacts are avoided. This prediction has in fact been confirmed. (Final EIR **Appendix C**)

Additionally, as acknowledged in Draft EIR Section 4.8.1, Water Quality, at pp. 17–18, the reach of the river adjacent to the project site and receiving runoff from the project site is impaired only for high

coliform count. This reach is not impaired for ammonia, chloride, coliform, nitrate/nitrite, and organic enrichment. As described in Draft EIR Section 4.20, Floodplain Modifications, at Section 3(a), during the majority of the year, the reach of the river receiving storm runoff from the proposed project site does not exhibit surface flows that are tributary to the impaired reaches of the river. This is so because the flow in the receiving reach of the river is largely and naturally ephemeral, with only intermittent areas being created by nuisance runoff. In addition, as indicated in Draft EIR Section 4.8.1-3(a), there are intervening sources of the pollutants impairing downstream reaches, which are discharging those pollutants downstream of the proposed project, including wastewater treatment plant discharges. As a result, runoff from the project area will only rarely be conveyed to the downstream, impaired reaches of the river, and the runoff will mix with wastewater treatment plant discharges and other discharges in those downstream reaches.

The reaches downstream from the project site are impaired for coliform, chloride, ammonia, nitrite, and organic enrichment. The RWQCBLAR has determined that historical rural and mining land uses and sewage treatment plants are actually the primary cause of these downstream water quality impairments to the river today, rather than the fill and channelization of the river as asserted by the commenter. As stated in the RWQCBLAR summary fact sheet for the Santa Clara River Watershed "[t]here are a number of 303(d)-listed impairments in the watershed which are primarily attributable to these existing rural and sewage treatment activities." See http://www.swrcb.ca.gov /rwqcb4/html/programs/ regional_program/ws_santaclara.html.

Finally, and most importantly, to the extent that the project might otherwise contribute to any existing water quality impairment in the receiving or downstream reaches of the river, the project has incorporated site planning, source control, and treatment BMPs. As explained in the Draft EIR Section 4.8.1, Water Quality, at pp. 4.8.1-37–45 and 4.8.1-70–96, runoff from the project with BMPs would adequately meet the receiving water quality standards (see Table 4.8.1-6, pp. 4.8.1-37–45), which include both water quality and hydrologic objectives. The in-depth quantitative and qualitative analyses in the Draft EIR conclude that the proposed development, including natural river management techniques, would not significantly impact the river with respect to Basin Plan water quality objectives, Section 303-d listed pollutants, CTR criteria, or other water quality regulations. With respect to each of the pollutants of concern listed by the commenter, the Draft EIR, at Table 4.8.1-6, shows that runoff discharged from the project site will not cause a violation of Basin Plan standards, TMDLs, or CTR criteria.

Response 5

Please see **Response 4,** above.

Response 6

The comment expresses the opinions of the commenter that cumulative impacts over the last few decades mentioned in earlier comments have not been addressed in the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Even so, it should be noted that the potential cumulative impacts of the project have been thoroughly analyzed in the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources. A summary of cumulative impacts associated with the proposed project appears in **Responses 2** and **4,** above.

Response 7

The comment expresses the opinions of the commenter that cumulative impacts over the last few decades mentioned in earlier comments have not been adequately addressed in the EIRs for projects other than the proposed project this comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. Nevertheless, please see **Responses 2, 4**, and **6**, above.

Response 8

The comment expresses the opinions of the commenter that continued failure to address and act on cumulative impacts due to development is turning a large section of the river in and around the City of Santa Clarita into a "dead zone." This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. Nevertheless, please see **Responses 2, 3, 4,** and **6**, above.

Response 9

The comment expresses the opinions of the commenter regarding the Santa Clara River, and, without substantiation, purports to report a general conclusion reached by the USFWS regarding the loss of riparian communities in general. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

It should be noted that, as discussed in Revised Riverpark Draft EIR Section 4.6, Biological Resources, the project would preserve the vast majority of the riparian resources associated with the Santa Clara River and would transfer those resources to the City of Santa Clarita for future management as natural open space. Additionally, since the Draft EIR and the Revised Biological Resources section were released for public review, the project has been revised to push the proposed bank stabilization along the river, from the park in the central portion of the project site in the east to the easterly commercial parcel in the west, further back to preserve the mature riparian resources along this edge of the river, and to dedicate additional portions of the South Fork of the Santa Clara River to the City. (Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project* Technical Report, Figure 1, prepared by GeoSyntec, dated October 13, 2004 (see Final EIR at **Appendix G**) which depicts the previous project bank stabilization location compared to the revised plan showing an increased setback.) These revisions would result in preservation of over 330 acres on site, and an increase in the buffer. Additionally, *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004 prepared by URS (Final EIR **Appendix C**) both characterizes and evaluates the quality of wetland and riparian habitats within selected areas of the Natural River Management Plan on the Santa Clara River. The report concludes that when bank stabilization is placed upland from the active channel (buried bank stabilization), floodplain, and terrace geomorphological units of the river, the bank stabilization had less of an impact on the hydrologic and ecological functions of the riparian system. The URS report also concluded that bank stabilization that includes native plant restoration allows for increased buffer (such as that proposed by the Riverpark project). The report states that the buffer also protects the river from sediment erosion. One example of how buried bank stabilization with (such as that proposed by the Riverpark project) affected the quality of the riparian habitats within the reach sited in the report is the Jefferson Apartment complex.

> The downstream-most site is located east of I-5, between the Jefferson Apartments on the south bank and a commercial complex to the north. The north bank of the site is partially lined with exposed gunite, and buried soil cement bank stabilization is in place along the southern bank. The vegetation communities within this reach are best described as cottonwood/willow riparian forest, with southern willow scrub interspersed. This was the highest-scoring site (HFA Total Score = .88), largely due to the presence of a wide

buffer between the river corridor and surrounding development. Even along the portion of the north bank where exposed gunite is in place, the channel width has not been excessively constrained and a riparian corridor is present between the active channel and developed uplands." *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004, p. 2 (Final EIR **Appendix C**).

Response 10

The comment expresses the opinions of the commenter regarding purported previously created impacts on the Santa Clara River due to bank stabilization, which the commenter erroneously refers to as "channelizing." This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue but no further response can be provided.

Again, the project does not propose to channelize the river, but only to install bank stabilization along a portion of the north side of the river within the project site. (See **Response 4**, above.) As Revised Riverpark Draft EIR Section 4.6 explains, the installation of bank stabilization in this part of the river was previously approved in the NRMP promulgated by the CDFG and the ACOE. As the Draft EIR further explains, the project as proposed and analyzed in the Draft EIR proposes modifications to the bank stabilization approved in the NRMP to move the bank stabilization further back from the river in certain locations. Additionally, as discussed in the Draft EIR and in Revised Section 4.6, Biological Resources, the project would preserve the vast majority of the riparian resources associated with the Santa Clara River and would transfer those resources to the City of Santa Clarita for future management as natural open space. Finally, as noted above, since the Draft EIR and the Revised Biological Resources section were released for public review, the project has been revised to push the proposed bank stabilization along the river from the park in the central portion of the project site in the east to the easterly commercial parcel in the west further back to preserve the mature riparian resources along this edge of the river, and to dedicate additional portions of the South Fork of the Santa Clara River (off the project site) to the City. (Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project* Technical Report, Figure 1, prepared by GeoSyntec, dated October 13, 2004 (see Final EIR at **Appendix G**) which depicts the previous project bank stabilization location compared to the revised plan showing an increased setback.)

Further, as discussed in **Response 9,** above, the report prepared by URS entitled, *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004, (Final EIR **Appendix C**) concludes that when bank stabilization is placed upland from the active channel (buried bank stabilization), floodplain, and terrace geomorphological units of the river, the bank stabilization had less of an impact on the hydrologic and ecological functions of the riparian system. The URS report also

concluded that buried bank stabilization that includes native plant restoration allows for increased buffer and beneficial effects (such as that proposed by the Riverpark project). The report states that the buffer also protects the river from sediment erosion.

Response 11

The comment expresses the opinions of the commenter regarding purported previously created impacts on the riparian and terrace habitats associated with the Santa Clara River. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

The project's potential project-level and cumulative impacts on biological resources and the Santa Clara River floodplain are fully analyzed in Sections 4.20, Floodplain Modifications, and in Revised Section 4.6, Biological Resources, in the Draft EIR. Potential impacts on biota throughout a much larger portion of the river, from the eastern Riverpark boundary to the west at Castaic Creek, including, without limitation, the reach of the river within the project site, were also analyzed previously in the EIR/EIS for the NRMP, incorporated into the Draft EIR by reference (CEQA Guidelines § 15150; see e.g., Section 4.6, Biological Resources, p. 4.6-3; Revised Section 4.6, Biological Resources, p. 4.6-3). Additionally, the report prepared by URS entitled, *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004, (Final EIR **Appendix C**) concludes that when bank stabilization is placed upland from the active channel (buried bank stabilization), floodplain, and terrace geomorphological units of the river, the bank stabilization had less of an impact on the hydrologic and ecological functions of the riparian system. The URS report also concluded that buried bank stabilization that includes native plant restoration allows for increased buffer and beneficial effects (such as that proposed by the Riverpark project). The report further concludes that the buffer also protects the river from sediment erosion.

Moreover, since the Draft EIR was released for public comment, the project has been revised by moving the bank stabilization in the area from the park in the central portion of the project site in the east to the easterly commercial parcel in the west further back from the river. As compared to the project design analyzed in the Draft EIR, this change would result preservation of mature riparian resources along the river in this location and in an increased buffer.

Response 12

The comment expresses the opinions of the commenter regarding purported previously created impacts on the Santa Clara River due to "urban edge effects, including illegal ORV use" which the commenter asserts "degrade riparian biological values." This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

The project's potential project-level and cumulative impacts on biological resources and the Santa Clara River floodplain are fully analyzed in Revised Draft EIR Section 4.6, Biological Resources, and Draft EIR Section 4.20, Floodplain Modifications. Urban edge effects are specifically discussed in Revised Draft EIR Section 4.6,Biological Resources at pp. 4.6-83–86 and are mitigated to a less than significant level by Mitigation Measures 4.6-13–19. In addition, as discussed in Revised Draft EIR Section 4.6, Biological Resources, potential impacts on biota throughout a much larger portion of the river, from the eastern boundary of the Riverpark site to the western boundary at Castaic Creek, including, without limitation, the reach of the river within the project site, as well as impacts from placing development within the floodplain and the SEA, were also analyzed previously in the EIR/EIS for the NRMP, incorporated into the Draft EIR by reference (*CEQA Guidelines* § 15150; see Revised Section 4.6, Biological Resources, p. 4.6-3). The NRMP permits development along the Santa Clara River, including, without limitation, the project site, along a development line it established, subject to certain mitigation measures. Subsequently, the beneficial effects of the NRMP provisions have been confirmed by a report prepared by URS entitled, *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004, (Final EIR **Appendix C**); that report concludes that when bank stabilization (buried bank stabilization) is placed upland from the active channel, floodplain, and terrace geomorphological units of the river, the bank stabilization had less of an impact on the hydrologic and ecological functions of the riparian system. The URS report also concludes that buried bank stabilization (such as that proposed by the Riverpark project) that includes native plant restoration allows for increased buffer and beneficial effects. The report further concludes that the buffer also protects the river from sediment erosion.

The proposed project was designed to comply with the NRMP and it incorporates all applicable mitigation measures. (See Revised Draft EIR Section 4.6, Biological Resources.) The project design also further improves upon the NRMP-permitted development. Revised Draft Riverpark EIR Section 4.6, Biological Resources, p. 4.6-80, states that

> "[a]s part of the Riverpark project, the applicant has elected to move certain components of the project further away from the river, and has eliminated bank stabilization in certain areas, than what was permitted by the NRMP, thereby, reducing the amount of riparian area impacted by development when compared with the riparian area that could

be developed under the NRMP. As shown in Figure 4.6-7, a total of 13.2 net acres of riparian area that could be developed under the NRMP-related permits would no longer be developed if the Riverpark project were developed as proposed."

Additionally, the Riverpark project eliminates NRMP-approved bank stabilization from the eastern terminus of the "toe protection" to the western bridge abutment for the Newhall Ranch Road/Golden Valley Road Bridge (roughly half of the Riverpark site that is adjacent to the river).

Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-51, discusses the need for setbacks, or buffer zones, between riparian ecosystems and adjacent development. Several studies are referenced in that Section that address the home range requirements of riparian-dependent wildlife and the need for adjacent upland habitats to be included in these home ranges. North Valencia Annexation Buffer Study April 1997, conducted along the Santa Clara River that found that a minimum of 100 feet of high quality upland habitat, as measured from the edge of the riparian canopy, was necessary to provide for the foraging and breeding habitat requirements of riparian wildlife and to maintain species diversity within the riparian ecosystem. This distance is consistent with that recommended by several resource agencies and professional biologists familiar with the biological resources along the Santa Clara River. As a result, one of the thresholds used for determining whether the project had potentially significant impacts was whether or not it maintains a 100-foot buffer from the riparian resource edge (p. 4.6-78). For the reasons discussed there, the project was found to have significant and unavoidable impacts based on this threshold (pp. 4.6-78, 109). As Revised Draft EIR Section 4.6, Biological Resources, explains, there are two small areas where the proposed project encroaches within the approved development line as established by the NRMP and do not adhere to the 100-foot buffer standard. One such area encroaches approximately 80 feet in order to preserve a Heritage oak tree. The other encroachment of approximately 200 feet is at the Newhall Ranch Road/Golden Valley Road Bridge, due to the realignment of Newhall Ranch Road. The remaining portions of the project that would not adhere to the 100-foot buffer standard (but do comply with the NRMP development line) consist of lower value habitat adjacent to areas that have historically been disturbed by agricultural operations (Area A2) and areas characterized by high bluffs (portions of Area B) which limit the use of this upland zone by riparian species. Finally, the remaining encroachments within the 100-foot upland preserve occur due to the Santa Clara River Regional Trail (primarily on the eastern portion of the project site where topography necessitates its location along the river).

However, after the Draft EIR and Revised Draft EIR Section 4.6, Biological Resources, were released for public comment (in March 2004), the project was revised in two respects. First, to preserve even more of the river and its mature riparian resources and create an increased buffer, the project has been revised by relocating the proposed bank stabilization along the river from the park in the central portion of the

project site in the east to the easterly commercial parcel in the west further back from the river. (Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project* Technical Report, Figure 1, prepared by GeoSyntec, dated October 13, 2004 (see Final EIR at **Appendix G**) which depicts the previous project bank stabilization location compared to the revised plan showing a deeper setback.) Second, the project applicant has agreed to dedicate approximately 130 acres of the South Fork of the Santa Clara River to the City to be preserved as open space.

Response 13

The comment expresses the opinions of the commenter regarding purported previously created impacts on the Santa Clara River due to purported failures to provide adequate buffer zones protecting the riparian corridor but does not specifically comment on the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration, but no further response can be provided. Nevertheless, adequate buffer zone to protect the riparian corridor are fully analyzed in Revised Draft EIR Section 4.6. Please see **Responses 12**, above and **Response 17**, below.

Response 14

The comment expresses the opinions of the commenter that the project will eliminate the function of the Santa Clara River terrace area as wildlife habitat or wildlife corridors, but does not specifically comment on the contents of the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration, but no further response can be provided. Even so, Revised Draft EIR Section 4.6 analyzes potential impacts on wildlife corridors. In addition, please see **Response 12**, above, and **Response 17**, below.

Please note further that NRMP measures a) through rr) have been incorporated into the project design, many of which will minimize the impacts to riparian vegetation and replace any vegetation temporarily or permanently removed. (Revised Riverpark Draft EIR Section 4.6, Biological Resources, pp. 4.6-87–98.) Therefore, the riparian vegetation that will be removed as a result of project implementation will not substantially affect the ability of resident and non-resident species to use the river as a movement corridor. The project will also preserve and restore various amounts of upland habitat adjacent to the river system that will allow some species, especially larger mammals, to use those adjacent upland areas as movement corridors.

As the Draft EIR also explains (Revised Section 4.6, p. 4.6-8.), the Newhall Ranch Road/Golden Valley Road Bridge will afford the opportunity for wildlife, particularly large mammals, to move down the river corridor, as there will be adequate vertical and horizontal spacing, a natural (dirt, sand, vegetation)

substrate on which to travel under the bridge structure, and an openness effect that will allow such wildlife to detect light, open space and habitat at the exiting end of the structure.

Response 15

The comment submits two scientific studies addressing edge effects and buffer zones in riparian systems which the commenter characterizes as supporting "the statement that urban development degrades adjacent biological resources," This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not raise any other CEQA issue, no further response can be provided.

Notwithstanding this, staff reviewed the two articles submitted by Friends of the Santa Clara River dealing with the design of buffers to determine if the articles apply to the project site. The first article, *Predicting the Impacts of Urbanization on Riparian Bird Communities*, was a study of three relatively narrow creeks in the San Francisco Bay area. The creeks were less than 45 feet wide, with a riparian corridor width of less than 240 feet. In contrast, the Santa Clara River riparian corridor and buffers are four to ten times wider. The study did not evaluate the direct effects of habitat alteration, but instead "focused on the ways in which intact remnants of riparian habitat have been affected by urbanization on adjacent lands [i.e., where no buffers currently exist]." The study also did not identify a minimum buffer width required for the maintenance of the integrity of riparian bird communities, but suggests that broader buffers better maintain riparian bird species richness. The study noted that species richness and density were negatively related to the abundance and proximity of bridges either because the bridges hindered free movement across gaps between sections of riparian habitat or because they were simply an indicator of the overall degree of adjacent urbanization. The study also stated that

> "[s]ome of the detrimental effects of urbanization on riparian bird communities can be minimized with proper planning. The single most important step that can be taken to conserve riparian bird communities in the face of urbanization is to minimize development in and along floodplains by maintaining broad buffers of undeveloped land between developed areas and riparian habitats. Habitat restoration efforts, particularly those that broaden riparian corridors and link fragments of riparian habitat, would augment habitat area and enhance the value of existing habitat by further buffering riparian birds from human influences outside the corridor. Where development has occurred in close proximity to riparian habitats, efforts to minimize direct human disturbance of riparian plant and bird communities (e.g., by restricting access to riparian habitats) and replace exotic plants with native species would also benefit riparian bird communities."

Based on the City's biological consultant's review, this article is not directly applicable to the conditions found on the project site. For example, unlike the areas in the article, the project design (a) includes a

bridge crossing, which was not found to cause significant impacts to riparian habitat; and (b) includes upland buffers between the river and proposed development. Furthermore, the Santa Clara River corridor through the project area is itself a very wide, long, and continuous wildlife corridor and habitat area that is larger than any addressed in the article.

The second article submitted by the commenter was also reviewed by City staff. The article is entitled, "Buffer Zones for Ecological Reserves in California: Replacing Guesswork with Science." This article is an informative review of buffer issues, which was generated from issues related to the design of reserves of the kangaroo rat habitat conservation plan in Riverside County. The article describes several approaches to quantifying edge effects in order to design buffer zones for nature reserves. The study suggests developing a buffering protocol that identifies the external forces likely to impact the sensitive species in question, determining the extent to which external forces are likely to penetrate the reserve boundary, and ranking those forces in terms of likely negative impact in order to produce a prioritized list of buffering requirements. As stated, the article studied the kangaroo rat reserve and did not specify a buffer distance for a riparian corridor, such as the Santa Clara River SEA 23. As a result, City staff believes that the only available and applicable evidence in directly assessing the "adequacy" of a buffer area for this riparian corridor is found in the site-specific studies and analyses that already have been performed along the river corridor within the project area. Please see Revised Draft EIR Section 4.6.

To the extent that the comment could be read to imply that the project contains inadequate buffers, please see **Response 12**, above, and **Response 17**, below.

Response 16

The comment asserts that "more studies are definitely needed on the impacts of development on riparian ecosystems" and that development along the Santa Clara River "is an experiment on a large scale with the fate of the river ecosystem in the balance," This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not raise any other CEQA issue, no further response can be provided. Nevertheless, the City has concluded that sufficient studies have been conducted and prepared to provide substantial evidence of the impacts of the project on riparian habitats, both project-specific and cumulative. Please see **Response 12**, above, and **Response 17**, below.

In addition to the *Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004, (Final EIR **Appendix C**), numerous studies and research have been conducted on the Santa Clara River riparian ecosystems (including the Riverpark project) as is acknowledged in Revised Draft Riverpark EIR Section 4.6, Biological Resources, pp. 4.6-2–4:

> "In order to use published information to preliminarily identify special-status plant and animal species (those species considered Rare, Threatened, Endangered, or otherwise sensitive by various state and federal resource agencies) that have been known to historically occur in the vicinity of the project site, the 2002 update of the California Natural Diversity Data Base (CNDDB) as well as the 2002 California Native Plant Society (CNPS) electronic data base, for the Newhall and Mint Canyon California USGS 7.5-minute quadrangle maps were reviewed. Other data sources reviewed included: (1) the Federal Register listing package for each federally listed Endangered or Threatened species potentially occurring on the project site or in the project vicinity; (2) literature from scientific sources pertaining to habitat requirements of special-status species potentially occurring on the project site; (3) other environmental or biological documentation of the project site (if available on the particular subject) or properties in the immediate vicinity; and (4) distributional information contained in Hall (1981) and Williams (1986) to determine the potential for common and special-status mammals to occur on the project site; Grinnel and Miller (1984) and Garrett and Dunn (1981) for common bird occurrences; Stebbins (1985) for reptiles and amphibians; California Department of Fish and Game (CDFG 2003), Sawyer, Keeler-Wolf (1995), Holland (1986) and Munz (1974) for plant community descriptions occurring within the project vicinity; and Pavlik (1992) and Skinner and Pavlik (1994) for oak tree information.
>
> Sources used to determine the sensitivity status of biological resources are: Plants – U.S. Fish and Wildlife Service (USFWS 1993 and 1996), California Department of Fish and Game (CDFG 2003), CNDDB 2002, and (CNPS) (Skinner and Pavlik 1994-1999); Wildlife – USFWS (1994 and 1996), CDFG (2003), CNDDB (2002), Williams (1986), and Remsen (1978); Habitats – California Department of Fish and Game (CDFG 2003) (pers. comm. Keeler-Wolf) and Sawyer, Keeler-Wolf (1995).
>
> (1) Background
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> On November 30, 1998, the ACOE, CDFG, and the California Regional Water Quality Control Board (RWQCB) approved the Natural River Management Plan (NRMP) for the Santa Clara River. The NRMP is a long-term, master plan that provides for the construction of various infrastructure improvements on lands adjacent to the Santa Clara River and portions of two of its tributaries. More specifically, the NRMP governs a portion of the main-stem of the Santa Clara River from Castaic Creek to one-half mile east of the Los Angeles Department of Water and Power Aqueduct and portions of San Francisquito Creek and the Santa Clara River South Fork, Los Angeles County, California. The project site is located within the portion of the river now governed by the NRMP.
>
> In connection with this approval, the following permits were issued by the following agencies:
>
> - Army Corps of Engineers (ACOE) – Permit No. 94-00504-BAH under Section 404 of the Federal Clean Water Act. Section 404 of the Federal Clean Water Act allows for certain activities that result in the discharge of fill or dredged materials into "Waters of the U.S." or in this case the Santa Clara River. Prior to issuing this permit, the ACOE had completed an endangered species consultation (pursuant to Section 7 of the Federal Endangered Species Act) with the United States Fish and Wildlife Service.

- California Department of Fish and Game (CDFG) – 1603 Streambed Alteration Agreement No. 5-502-97 and Incidental Take Permit No. 2081-1998-49-5. In summary, the Streambed Alteration Agreement allows for activities that alter the "…natural flow or change the bed, channel or bank of the river…" The Incidental Take Permit applies to all state listed species pursuant to Fish and Game Code Section 2081(b).

- California Regional Water Quality Control Board (Los Angeles Region) – Order No. 99-104 related to waste discharge associated with the improvements included in the NRMP.

The NRMP was prepared in response to an ACOE request to prepare a long-range management plan for projects and activities potentially affecting the Santa Clara River and San Francisquito Creek. More specifically, the NRMP, and its certified EIS/EIR (NRMP EIS/EIR), analyze impacts associated with the implementation of various infrastructure improvements (bank stabilization, bridges, utility crossings, storm drain outlets, etc.) along and within portions of the Santa Clara River adjacent to Newhall Land properties, including the Riverpark project site. The NRMP, and its EIR/EIS, are available at the City of Santa Clarita, Planning and Building Services Department, 23920 Valencia Boulevard, Suite 302, Santa Clarita, California, and are incorporated in this EIR by reference.

Due to the discovery in 2001 of a southwestern arroyo toad (*Bufo californicus*) within the NRMP boundaries (in a location west of the confluence of San Francisquito Creek and the Santa Clara River, approximately 1.5 miles west of the Riverpark project site), additional Section 7 (of the Endangered Species Act) consultation between the ACOE and the U.S. Fish and Wildlife Service was initiated. Prior to initiating this consultation, the ACOE and CDFG had removed certain stretches of the Santa Clara River and San Francisquito Creek from the consultation area as these areas lacked the necessary habitat requirements for the arroyo toad. The areas covered by the NRMP but designated as "no may effect" included the Santa Clara River 1,000 feet upstream of the Bouquet Canyon Road Bridge (including most of the Riverpark site), San Francisquito Creek north of the Newhall Ranch Road Bridge and the South Fork of the Santa Clara River south of the Valencia Boulevard Bridge. This consultation, along with the preparation of a Biological Opinion (dated November 15, 2002) (Appendix 4.6), resulted in the issuance of a modification to the 1998 ACOE Section 404 Permit (issued June 23, 2003) (Appendix 4.6) that includes provisions for the protection of the arroyo toad in the affected NRMP area. (The Biological Opinion and the Section 404 modification are incorporated in this EIR and are also available at the City of Santa Clarita, Planning and Building Services Department, 23920 Valencia Boulevard, Suite 302, Santa Clarita, California.)"

As demonstrated above, substantial and sufficient research has been conducted on the ecology and the effects of development on the Santa Clara River, particularly with the EIR/EIS prepared for the NRMP and with the Riverpark EIR requiring no further study with regard to the proposed project.

Response 17

The comment expresses the general opinions of the commenter that "creating larger buffer zones to conserve more of the riparian community is a must." This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. To the

extent this comment could be interpreted as suggesting that the project include a wider buffer zone, please see **Response 12**, above.

Response 18

The comment quotes from a paper relating to riparian bird communities submitted with the comment letter expressing the author's belief in the importance of "maintaining broad buffers of undeveloped land between developed areas and riparian habitats." This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. To the extent that the comment could be interpreted as suggesting that the project include a wider buffer zone, please see **Response 12**, above.

Response 19

This comment implies that the project does not create an "adequate buffer zone," that the project is, therefore, not consistent with Policy 5.3 under Goal 5 of the Land Use Element of the City's General Plan, and that only if the project created an "adequate buffer zone" could this policy of the City's General Plan be effectively implemented. The City disagrees with this comment. First, the City does not agree that there is only one method by which a development project within an SEA can be consistent with Policy 5.3 under Goal 5 of the Land Use Element of the City's General Plan. Had the City intended to limit the means and methods of implementing Policy 5.3 solely to provision of an "adequate buffer zone," it would have so provided in Policy 5.3. Instead, Policy 5.3 calls for consistency through "creative site planning techniques" (the comment omits the reference to site planning) to avoid and minimize, not simply avoid, disturbances in SEA areas. This policy can be achieved in many different ways, depending upon the circumstances of each development project and each development site.

Second, the City analyzed the project's consistency with the City's General Plan, and found it to be consistent. (Draft EIR Section 4.7, Land Use.) Based on the analyses contained in the Draft EIR, including, without limitation in the Revised Section 4.6, Biological Resources, the City specifically concluded that the project is consistent with Policy 5.3. (Draft EIR Section 4.7, Land Use, pp. 4.7-67–68.) In turn, the Draft EIR's Revised Section 4.6, Biological Resources, contains the City's analyses with respect to the project's potential impacts on the Santa Clara River SEA (Id. pp. 4.6-81 and 4.6-83). Although approximately 90 percent of the habitat within the SEA will be preserved, the Revised Riverpark Draft EIR (p. 4.6-125) concludes that the net loss of 29 acres of habitat within the SEA as a result of project implementation is a significant impact under CEQA that cannot be fully mitigated. However, after the Draft EIR and the Revised Section 4.6, Biological Resources, were released for public comment, the project

was revised in two respects. First, to preserve even more of the river and its mature riparian resources, the project has been revised by relocating the bank stabilization from the park in the central portion of the project site in the east to the easterly commercial parcel in the west. Second, the project applicant has agreed to dedicate approximately 130 acres of the South Fork of the Santa Clara River to the City to be preserved as open space.

Response 20

The comment suggests that the City develop an additional alternative to the project, which the commenter labels the "Floodplain/Terrace Avoidance Alternative," but it does not describe further.

The Draft EIR does in fact address the commenter's concerns that alternatives look at floodplain and terrace avoidance. As discussed in Draft EIR Section 6.0, Project Alternatives, the Draft EIR provides a reasonable range of alternatives, including Alternative 2, Santa Clara River Reduced bank Stabilization Alternative. This alternative addresses the option of setbacks not only from the 50-year Q-cap line, but also from the upland preserve and buffer, as suggested by the comment. This alternative would implement a setback of the Q-cap 50-year line or the upland preserve/buffer setback from the resource line—whichever is more restrictive—in order to preserve the entire river corridor.

As analyzed and discussed in Section 6.0, Alternatives, of the Draft EIR (pp. 6.0-3–13), however, this alternative, although environmentally superior to the proposed project on the basis of environmental impacts, alone, would provide fewer housing opportunities to meet the anticipated demand for housing expected in the Santa Clarita area. Implementation of Alternative 2 would result in a loss of approximately 54 single-family dwelling units from Planning Area A-1, 24 single-family units from Planning Area A-2, 1 acre of commercial property, 4 acres of active parkland, and 1 additional oak tree. (Id., p. 6.0-3.) Therefore, as the Draft EIR concludes (pp. 6.0-12–13), this alternative would too narrowly limit the housing opportunities on the site and thus would fail to meet the project objective of providing a substantial number of new housing units to accommodate projected regional growth in a location which is adjacent to existing and planned infrastructure, urban services, public transit, transportation corridors, and major employment areas. (See Section 1.0, Project Description, p. 1.0-13 of the Draft EIR.) In order to meet that project objective, the alternative would have to provide for greater or more dense development in other areas; such intensified development would, in turn, likely create the same impacts as those created by the proposed project (if not more, due to the increased density and intensity).

Moreover, after the Draft EIR and the Revised Section 4.6, Biological Resources, were released for public comment, the project was revised in three respects. First, to preserve even more of the river and its

mature riparian resources, the project has been revised by relocating the bank stabilization from the park in the central portion of the project site in the east to the easterly commercial parcel in the west. The mature resource edge along this portion of the project site will now be preserved and an adjacent upland buffer of 100 feet will also be provided. Second, the project applicant has agreed to dedicate approximately 130 acres of the South Fork of the Santa Clara River (off the project site) to the City to be preserved as open space. Third, the project has been revised to move the equestrian trail north, outside of the river bottom and away from the river. Rather than separating from the multi-purpose trail before the western bridge abutment for the pedestrian/bike bridge (see Draft EIR Section 4.12, Parks and Recreation, Figure 4.12-4, Recreation and Trails Plan), the equestrian trail will now remain within the multi-purpose trail and will cross over the Los Angeles Aqueduct on the pedestrian/bike bridge. (See **Revised Tentative Tract Maps, Appendix D.)** Concomitantly, the pedestrian/bike bridge will be widened from 20–25 feet, which will provide a minimum clearance of 20 feet on the bridge, large enough to accommodate all trail users. This project modification will reduce the potential impacts on riparian resources with which this commenter is concerned.

Finally, as compared to the proposed project as revised, Alternative 2 would not lessen any potential impacts on either the arroyo toad or western spadefoot toad. The Draft EIR concludes that it is unlikely that impacts would occur to individual arroyo toads, due to the lack of suitable habitat in and adjacent to the Santa Clara River within the project site. (Revised Section 4.6, Biological Resources, pp. 4.6-28, 74.) Because western spadefoot toads inhabit shallow, temporary seasonal rainpools and vernal pools in upland areas (Please see Revised Section 4.6, Biological Resources, Appendix Results of Focused Western Spadefoot Toad Surveys for discussion with regard to the toad's characteristics.) Alternative 2's configuration would not affect this species' habitat. (Id., pp. 4.6-28, 74)

Response 21

The commenter's request to redesign the eastern terminus of the proposed project trail system to end at Santa Clarita Parkway is noted. The design of the project trail system as proposed is consistent with the City of Santa Clarita General Plan. Moreover, proposed Santa Clarita Parkway will divide Planning Area A-2 to the west and Planning Area B to the east. As explained in the Draft EIR Revised Section 4.6, Biological Resources, at p. 4.6-79, when discussing potential impacts of the trail system, the majority of Planning Area B is located on a bluff overlooking the Santa Clara River. Because the bluff is immediately adjacent to the river, the 100-foot upland preserve zone is located on top of the bluff, and, therefore, any impacts to the 100-foot upland preserve zone within Planning Area B would occur on top of the bluff. The position of this upland zone at the top of the bluff's steep cliffs already limits the use of this upland

area by riparian species such as small animals and some birds, and, therefore, potential impacts to such species would also be limited.

Farther east, the trail's placement in proximity to the Santa Clara River would also allow humans and domestic animals greater access to sensitive areas, and such access could cause potentially significant impacts, which impacts are discussed in the Draft EIR. (Id. at pp. 4.6-79, 84–85) However, with the imposition of Mitigation Measures 4.6-13–18, such impacts would be reduced to a less than significant level.

In addition, since the Draft EIR and the Revised Section 4.6, Biological Resources, were released for public comment, the project has been revised to move the equestrian trail north, outside of the river bottom and away from the river. Rather than separating from the multi-purpose trail before the western bridge abutment for the pedestrian/bike bridge (see Draft EIR Section 4.12, Parks and Recreation, Figure 4.12-4, Recreation and Trails Plan), the equestrian trail will now remain within the multi-purpose trail and will cross over the Los Angeles Aqueduct on the pedestrian/bike bridge. (See **Revised Tentative Tract Map**, **Appendix D.**) Additionally, the pedestrian/bike bridge will be widened from 20 to 25 feet, which will provide a minimum clearance of 20 feet on the bridge, large enough to accommodate all trail users. This project modification will reduce the potential impacts on riparian resources with which this commenter is concerned.

Response 22

The commenter suggests that terminating the trail at Santa Clarita Parkway would avoid negative impacts to the eastern portion of the project area due to increased disturbance by humans, domestic animals, and ORVs. Please see **Response 21**, immediately above. As discussed above, Revised Section 4.6, Biological Resources, of the Riverpark Draft EIR identifies an increase of disturbances caused by human impacts, ORV, and domestic animals in section (1) on p. 4.6-84 as a significant impact. Mitigation Measures 4.6-13–18 starting on p. 4.6-106 mitigate these impacts to a less than significant level.

In addition, since the Draft EIR and the Revised Section 4.6, Biological Resources, were released for public comment, the project has been revised to move the equestrian trail north, outside of the river bottom and away from the river. Rather than separating from the multi-purpose trail before the western bridge abutment for the pedestrian/bike bridge (see Draft EIR Section 4.12, Parks and Recreation, Figure 4.12-4, Recreation and Trails Plan), the equestrian trail will now remain within the multi-purpose trail and will cross over the Los Angeles Aqueduct on the pedestrian/bike bridge. (See **Revised Tentative Tract Map, Appendix D.**) Concomitantly, the pedestrian/bike bridge will be widened from 20 to 25 feet, which will provide a minimum clearance of 20 feet on the bridge, large enough to accommodate all trail users. This

project modification will reduce the potential impacts on riparian resources with which this commenter is concerned.

18. LETTER RECEIVED FROM LARRY KANNER, SANTA CLARITA ORGANIZATION FOR PLANNING AND THE ENVIRONMENT, DATED MAY 3, 2004

Response 1

The comment states that "the presence of the spadefoot was not disclosed even though many people were aware of its existence," questions the adequacy of surveys and requests that "*independent*" new surveys be conducted. As indicated in Revised Riverpark Draft EIR (beginning on p. 4.6-5), the biological surveys conducted on the Riverpark site were conducted by independent biologists. These include the following: oak trees: Tree Life Concern (2003 and addendums 2004); rare plants: Flx (2002, 2003); butterflies: Bruyea Biological Consulting (2003); California gnatcatcher: Compliance Biology (2003); general birds: Dan Guthrie (1993-2003); mammals: Compliance Biology (2003); California red-legged frog, and unarmored threespine stickleback: Entrix, Compliance Biology, (2003, 2004); arroyo toad: Ecological Sciences (2004); and western spadefoot toad: Compliance Biology (2003 and 2004). The NRMP EIS/EIR was prepared by URS Greiner. All surveys were conducted according to accepted survey methods and protocols for the target species, and by those published by CNPS, CDFG, and/or USFWS where they existed for a particular species. Individual reports were prepared by each independent biologist that documented the methods and findings of each survey. These reports were submitted to the EIR preparer; the results were summarized within Draft EIR Section 4.20, Floodplain Modifications and Revised Draft EIR Section 4.6, Biological Resources and the reports appear in Draft EIR Appendices 4.6 and 4.20. Furthermore, the City of Santa Clarita conducted its own third-party review, specifically of Revised Section 4.6, Biological Resources. The independent third-party reviewer found no irregularities or inconsistencies in the methodology or conclusions outlined in the EIR section.

As discussed in the Revised Riverpark Draft EIR (p. 4.6-18), surveys conducted in 2003 for the western spadefoot toad in response to claims made by passers-by that vocalizations of this species were heard on/near the site did not reveal the presence of this species. However, additional surveys conducted in March 2004 resulted in the detection of this species. (See also Revised Section 4.6, Biological Resources, Appendix 4.6, Compliance Biology report (March 2004), pp. 1–6.) The methods and results of these surveys were promptly disclosed to the City of Santa Clarita and are included in the Revised Draft EIR prepared and released to the public that same month.

The comment refers to the environmental consultant for this project and the West Creek project, Impact Sciences, Inc. (Impact Sciences), and the alleged "failure" of that consultant to "find species [on Newhall Ranch] which were later discovered by others, including the San Fernando Valley spineflower." The

letter provides no substantiation for these allegations. The City does not concur with this comment. Impact Sciences was not the consultant responsible for conducting rare plant surveys on the portion of Newhall Ranch in question; it was the responsibility of URS Corporation.

The discovery of spineflower on the Newhall Ranch Specific Plan site was thoroughly disclosed, analyzed and for which mitigation was provided in both the Newhall Ranch Revised Draft Additional Analysis (RDAA; November 2002) and the subsequent Final Additional Analysis (FAA; March 2003 and May 2003; Project No. 94-087(5); SCH No. 1995011015), both prepared by Impact Sciences as the environmental consultant.

The comment refers to Newhall Ranch, a separate proposed development within unincorporated County territory, and not the Riverpark project. The City considers this comment to be beyond the scope of the analysis presented in the Riverpark EIR, and does not question the adequacy or completeness of the Riverpark EIR. No further response is needed or required.

Response 2

The "previous project" alluded to by the commenter was not conducted within or even immediately adjacent to the Riverpark project. Therefore, the survey methodology and protocols for the arroyo toad are not relevant to the Riverpark project site. However, arroyo toad surveys that were conducted along the Santa Clara River that included the Riverpark project site were conducted using the appropriate survey protocols and methods required by the USFWS. These surveys, conducted in 2002, 2003, and 2004, are included in the appendix. (See **Appendix C** of this Final EIR.) In addition, as stated on p. 4.6-73 of the Revised Draft EIR, the "Biological Opinion" written by the USFWS for the NRMP concludes that it is unlikely for the arroyo toad to occur outside the "may affect" area, that is, east of a point approximately 1,000 feet east of the Bouquet Canyon Bridge due to the lack of suitable habitat. Most of the project is outside of this "may affect" area, as indicated by the Biological Opinion. Therefore, it is unlikely that the project would cause impacts to occur to individual arroyo toads.

Response 3

See **Comment Letter 8,** California Department of Fish and Game, **Response 4.** As discussed in the Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-73, impacts to black-tailed jackrabbit were considered to be less than significant pursuant to CEQA. Therefore, no mitigation measures are required. However, Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measure

4.6-1 (v), as incorporated into the Draft EIR from the NRMP, requires that pre-construction surveys be conducted for a variety of special-status wildlife species potentially occurring on the site, including black-tailed jackrabbit. The measure further stipulates that individuals of any of these species that are located be captured and relocated to nearby undisturbed areas with suitable habitat. Implementation of this measure will substantially minimize direct impacts to this species. As a notation, the San Diego black-tailed jackrabbit does not have legal protected status and is on the state and federal "watch list" only. See also **Comment Letter 8**, **Response 5** for further discussion of impacts to black-tailed jackrabbit.

Response 4

Impact Sciences prepared the EIR for the Riverpark project and was hired by the City of Santa Clarita to perform this analysis. Impact Sciences has not signed any confidentiality agreements with the City of Santa Clarita. The applicant and its consultants have indicated that no confidentiality agreements have been entered into between the project applicant and its consultants for the Riverpark project. The City also has thoroughly and independently reviewed the Riverpark Draft EIR, including all comments and responses, and finds the document to be adequate under CEQA. The City of Santa Clarita has also reviewed all technical studies.

Response 5

The commenter suggests that status reports on the NRMP be included "by reference" in the EIR. All mitigation with regard to the success of mitigation measures relative to the NRMP is within the jurisdiction of ACOE and CDFG, and not the City of Santa Clarita. CDFG and ACOE sign off on all mitigation as to whether or not it meets their requirements after the planting and monitoring periods. However, the City is currently monitoring NRMP mitigation measures incorporated into other projects (North Valencia 1, North Valencia 2, Bouquet Canyon Road Bridge Widening, Soledad Canyon Road bank stabilization) within its boundaries.

The City's environmental consultant on the Riverpark project, Impact Sciences, has indicated that they are not conducting all of the environmental documentation and mitigation oversight for Newhall Land projects. The City has confirmed this with Newhall Land. Other environmental consultants such as Rincon, URS, Dudek, and PCL are presently conducting environmental documents for other Newhall Land projects. These firms, along with the applicable lead agency, will likely also be responsible for oversight of mitigation measures.

Response 6

The comment is acknowledged. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

Response 7

The comment states that cumulative impacts to the Santa Clara River watershed must be addressed. The Draft EIR, however, does address cumulative impacts on that watershed in the manner required by *CEQA Guidelines* Section15130 (b). The analysis of potential cumulative impact on biologic resources appears at Revised Draft EIR Section 4.6, pp. 4.6-109–125; the CEMEX project (approximately 7 miles from the Riverpark site) is specifically noted at p. 4.6-117 and 118. The potential cumulative impacts on water resources and water quality are analyzed at Draft EIR Section 4.8, pp. 4.8-109–118, and Section 4.8.2, pp. 4.8.1-98, respectively, and the potential air quality cumulative impacts are analyzed at Draft EIR Section 4.4, pp. 4.4-73–74. Furthermore, potential cumulative impacts resulting from alterations to hydrology by the project, by past NRMP facilities, and by proposed facilities that will affect the river, are assessed in Sections 4.2, Flood and 4.20, Floodplain Modifications of the Draft EIR. Further assessment of such impacts is included in the *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, prepared by GeoSyntec, dated October 13, 2004 (see Final EIR at **Appendix G**).

These cumulative impacts analyses show that cumulative impacts of all proposed projects within the tributary area for Reach 7 of the river, and immediately adjacent to the river reaches, will cause only localized hydrological and hydraulic affects within the river. The Draft EIR further determines that those localized, cumulative hydrological impacts are fully mitigated by compliance with (i) the naturalized flood control and stabilization techniques of the NRMP; (ii) the more than 34 minimization measures for biological, water quality, hydrology and hydraulic impacts applicable to flood control and stabilization measures implemented within the river, including requirements to implement and maintain upstream BMPs to control runoff water quality and to revegetate all areas of bank stabilization; and (iii) the more than 50 biology, hydrology and water quality mitigation measures prescribed by the Draft EIR.

Cumulative water quality impacts of the project, including impacts to the river, are fully analyzed in Section 4.8.1, Water Quality of the Draft EIR. The project, like all other cumulative projects, must comply with applicable water quality permits, regulations and regional plans and programs designed to address

cumulative water quality impacts and hydrology impacts. As a result, the cumulative water quality impacts of the project will be reduced to a level of insignificance.

As addressed more fully in the sections referenced above, compliance with the following regional hydrology and water quality regulations, permits, plans and programs mitigates the cumulative hydrology and water quality impacts to a level of insignificance as summarized below:

- *City of Santa Clarita ("City") Flood Control Requirements, including Q-cap flood control requirements (hydrological impacts of storms).* Pursuant to City requirements, which are based on LACDPW standards, project drainage systems must be designed to carry runoff from developed area for the 25-Year Urban Design Storm, and drainage systems for major and secondary highways, main drainage channels, debris carrying systems and sumps must be designed for the 50-year capital flood storm. The City also prohibits significant increases in off-site post-development storm flows and increases in storm flow velocities. Development throughout the watershed must also comply with City design criteria. As a result of compliance, overall storm runoff discharge quantities from the watershed under post-development runoff conditions would be less than or equal to existing conditions because development drainage facilities are required to have adequate capacity to capture and convey flows from developed areas, precluding significant increases in velocity, scouring, and water surface elevation in the river.

- *Construction General Permit (hydrological and water quality impacts*. The General Construction Permit requirements are established by the State Water Resources Control Board, and supplemented by LARWQCB requirements and local agency requirements. The standards for storm water quality control are set to protect receiving water quality by requiring implementation of a SWPPP that employs BMPs meeting BAT/BCT standards. Per the General Construction Permit BMPs must (1) be site-specific; (2) take into account site and watershed hydrology; and (3) be designed to protect the receiving water for the site. These requirements apply to all construction sites within the watershed, and, in fact, constitute a regional minimization and protection plan to protect the state's surface waters. As set forth in Section 4.8.1, Water Quality, p. 18 of the Draft EIR, the project will comply with all requirements of the General Construction Activity Storm Water Permit.

- *MS4 Permit*. The MS4 Permit requirements are established by the LARWQCB to protect the LA Regions' surface water quality and to prevent and preclude discharges from the municipal separate storm sewer systems from causing or contributing to exceedances of water quality standards in the region's surface waters. The MS4 Permit requires implementation of SUSMPs with specified categories of BMPs, including treatment BMPs sized per criteria set forth in the MS4 Permit, to control quality of storm water runoff from new development to the maximum extent practicable. As such, the MS4 Permit requirements, including SUSMP requirements adopted by local agencies and the LARWQCB, constitute a regional minimization and protection plan to protect the region's surface waters. As set forth in Section 4.8.1, Water Quality, of the Draft EIR, the project as proposed will meet, and in some cases exceed, these requirements.

- *NRMP and associated permits*. By complying with the NRMP, the project would protect water quality and ecosystem functions. The NRMP and its EIR/S assessed cumulative impacts of urbanization of the river and prescribed special management and construction minimization measures designed to assure that adverse impacts to riparian and aquatic habitat within the river associated with urban development within River Park and other proposed development areas would be fully mitigated to a level of insignificance. See also cumulative analysis of Draft EIR Section 4.20, Floodplain Modifications, and the URS, *Draft Hybrid Functional Assessment of Wetland and Riparian Habitats For Newhall Ranch*, dated July, 2004.

- *Basin Plan and CTR water quality objectives, general, and Santa Clara River specific hydrologic and water quality standards*. Based on extensive quantitative and qualitative analyses, Section 4.8.1(c) of the

Draft EIR concludes project runoff will comply with receiving water TMDLs, CTR criteria and basin plan objectives, which are established to protect regional receiving water quality.

The comment also seeks to submit and incorporate by reference "all documents submitted and research conducted by the City of Santa Clarita and known to exist in its files, of public documents, regarding impacts to the Santa Clara River." The commenter does not specify what those documents are; however, all documents submitted for the Riverpark project will be included in the administrative record. The only document provided with the comment letter is a comment letter for the issuance of a wetlands fill permit for the Spring Canyon project east of Canyon Country project, which is approximately 8 miles from the project site; this letter will be included in the Riverpark administrative record.

Response 8

The comment states that "[a]lthough an SB 610 Assessment is provided" for the Riverpark project, "it neglects to adequately disclose current water demand from previously approved, but not yet built projects as found in the County [sic] development monitoring system. The demand in the SB 610 Assessment is only for existing connections and does not adequately disclose approved, but unbuilt projects." For the reasons identified below, the City does not concur with the comment that the SB 610 analysis for the Riverpark project is "inadequate."

First, the water demand figures used in the SB 610 analysis for the Riverpark project are consistent with the projected future water demand figures found in the *2002 Santa Clarita Valley Water Report*. (Final EIR **Appendix A**)

Second, the law implementing SB 610 does not require the "water supply assessment" to be the same as, or similar to, the Development Monitoring System (DMS) required for projects located within unincorporated Los Angeles County. In terms of water supply and demand, SB 610 requires a water supply assessment to "[q]uantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and *projected water use*…." (*Emphasis added*; see Water Code §10631, subdivision (e)(1)). While the law requires a projection of future water use, it does not favor any one method of projection over another. As noted above, the projections used in the Draft EIR are consistent with both the water demand figures found in the *2002* and *2003 Santa Clarita Valley Water Reports*, and the demand figures used by CLWA and other purveyors in the Santa Clarita Valley.

Consistent with the legal requirements, the water demand presented in the SB 610 analysis for the Riverpark project includes existing water demand, plus the demand of other cumulative development expected in the Santa Clarita Valley in five-year increments, including the years 2005, 2010, 2015, and

2020. (See Appendix 4.8, SB 610, Water Supply Assessment for the Riverpark project, dated August 7, 2003, Tables 2.1 and 2.2.) In addition, the Draft EIR Section 4.8, Water Service, at pp. 4.8-105–106, includes a cumulative water demand assessment utilizing the County's Development Monitoring System database. Section 4.8, at pp. 4.8-106–108, also includes an even more extensive cumulative water demand assessment for buildout of the entire Santa Clarita Valley through calendar year 2025. This analysis adequately represents future water demand in the Santa Clarita Valley.

Response 9

The comment suggests that the SB 610 analysis includes a demand figure that is lower than shown in the *2003 Santa Clarita Valley Water Report*. The SB 610 analysis for the Riverpark project was based on, among other documents, the earlier *2002 Santa Clarita Valley Water Report*. At the time the Riverpark Draft EIR was circulated for public review (March 2004), the next annual water report was not yet issued (i.e., *2003 Santa Clarita Valley Water Report*). As a result, it was not possible to conduct the Riverpark SB 610 analysis based on a report that was not yet published or available.

In any case, the *2002 Santa Clarita Valley Water Report* showed an actual demand of 85,031 AF for the year 2002, which was a dry year as reported in the document (see Water Report, p. 12 found in **Appendix A** to the Final EIR). The *2002 Water Report* states that water demand for 2002 was elevated by approximately ten percent due to dry weather conditions. Subtracting the ten percent dry year increase would yield an average year demand in 2002 of approximately 76,528 AF. As reported in the SB 610 analysis for the Riverpark project (Draft EIR Appendix 4.8, p. 11), the estimated calendar year 2005 demand was reported as 81,700 AF, which is actually slightly *higher* than the 2003 average year demand of 76,528 AF reported in the *2002 Water Report*.

The comment also suggests that agricultural demand was not included in water demand figures. This is incorrect. As shown in Table 4.8-26 of the Draft EIR, existing water demand for the Santa Clarita Valley includes "agricultural demand at 15,278 in average years and 16,806 AF in dry years."

Lastly, this comment suggests that demand for 7,000 AF of agricultural water already exists because the Newhall Ranch Specific Plan would utilize this water as a source of supply. This is incorrect. The Newhall Ranch Specific Plan has not yet been built. Consequently, the Newhall Ranch project cannot create an *existing* demand for water. The Newhall Ranch Specific Plan, in fact, will create a *future* demand for 7,038 AF of water at buildout, the source of which will be The Newhall Land and Farming Company's agricultural water from the Alluvial aquifer. The Draft EIR indicates that, the under average conditions, water demand in the Santa Clarita Valley would be 81,700 acre-feet in year 2005, 90,100 acre-feet in year

2010, 100,700 acre-feet in year 2015 and 113,100 acre-feet in year 2020. The water demands generated by the Newhall Ranch Specific Plan in those years are included in these demand figures (see Draft EIR Table 4.8-31, Scenario 2: Santa Clarita Valley 2025 Build-Out Scenario Water Demand and Supply, and Table 4.8-27, Average/Normal Water Year Supply and Demand Assessment.)

Response 10

This comment suggests that the available groundwater supplies reported in the Draft EIR are too high, because the supplies do not account for the "reduction" in those supplies due to the presence of perchlorate contamination in five closed wells in the basin. The amount of groundwater available from local groundwater supplies is accurately reported, based on scientific information and expert analysis. Please see the Draft EIR Section 4.8, Water Service, pp. 4.8-–53, including Table 4.8-3, for a summary of the existing and projected groundwater supplies from the Alluvial and Saugus aquifers.

The groundwater supply figures used in the Draft EIR are supported by the updated groundwater analysis by Slade.[11] In addition, specific to the Alluvial aquifer and perchlorate, please see Draft EIR Section 4.8, pp. 4.8-37–38, and, specific to the Saugus Formation and perchlorate, please see the Draft EIR Section 4.8, pp. 4.8-42–52. Finally, further responsive information is presented in **Topical Response 2: Groundwater Supplies and Perchlorate** to the Final EIR.

The comment also suggests that Water Code §10910(d)(1),(2) addresses the issue of contaminated groundwater. However, a review of the Water Code provisions indicates that they do not address the issue of contaminated water or the treatment of such water. For that reason, no further response can be provided.

Finally, the comment states that groundwater supplies should be "reduced" to reflect the discovery of perchlorate in five municipal-supply wells. This same comment has been made to CLWA, but CLWA does not believe it is appropriate to reduce the Valley's groundwater supplies due to the detection of perchlorate contamination.

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11 The "updated analysis by Slade" is found in the report prepared by Richard C. Slade & Associates (Slade), entitled, *2001 Update Report on the Hydrogeologic Conditions in the Alluvial and Saugus Formation Aquifer Systems*, dated July 2002. This updated analysis is found in **Appendix A** to the Final EIR.

In recent correspondence from CLWA regarding the availability of the Valley's groundwater supplies, CLWA identified the treatment technologies available to remove perchlorate from the basin, and determined that those supplies should not be reduced due to perchlorate contamination:

> "1. While a portion of the Saugus Formation and Alluvial Aquifer is currently not available due to perchlorate contamination, technology exists to treat groundwater to remove the perchlorate and return it to drinking water quality. This technology is already in use in other parts of California, most notably in the nearby San Gabriel Valley (La Puente Valley County Water District). This treatment process has received all necessary state approvals.
>
> The La Puente treatment plant is a state-of-the-art facility approved by the California Department of Health Services for the removal of perchlorate from water supplies. The plant removes perchlorate and other contaminants from a nine square mile pollution plume (much larger than the plume area sourced by the Whittaker-Bermite site), disinfects the water to drinking water standards and then serves it to customers.
>
> CLWA and the purveyors, including NCWD, have developed a plan for beginning the treatment process necessary for removal of the perchlorate from the Saugus Formation as soon as possible, so that the affected wells can be restored to service. Thus, the supplies associated with the local aquifers, since they can be returned to use by treatment, constitute a finalized supply, or should be footnoted as being only temporarily unavailable."[12]

In addition, in a presentation made by Dan Masnada, General Manager, CLWA, to CLWA's Board of Directors at its January 28, 2004 regular meeting, Mr. Masnada responded to comments that were made to the Board of Directors claiming that, due to perchlorate contamination, certain groundwater supplies were "lost."

In response to such comments, as they apply to the Alluvial aquifer, Mr. Masnada stated in his presentation, at p. 3, that

> "Reducing groundwater supply projections for the one well [in the Alluvial aquifer] that has been shut-in due to perchlorate contamination is inappropriate and unnecessary because sufficient additional well capacity exists to fully utilize the whole supply. That said, remediation of the perchlorate over the long-term is necessary to ensure no additional wells are detrimentally impacted by the contamination."[13]

In response to such comments, as they apply to the Saugus Formation, Mr. Masnada stated in his presentation, at p. 5, that

> "…[a]lthough four wells are shut-in due to perchlorate contamination, the supply is not lost. All water in the [Santa Clarita Valley] is treated in some form or fashion. Restoring

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12 See **Appendix A** to Final EIR [Letter from CLWA to NCWD Board of Directors, dated January 8, 2004, and related attachments].

13 See **Appendix A** to Final EIR [Letter to NCWD Board of Directors from CLWA, dated January [28], 2004 and Mr. Masnada's slide presentation regarding proposed NCWD Resolution 2004-03, p. 3].

these wells to beneficial use necessitates treatment and attendant costs, which will be borne by those that caused the pollution (not [Santa Clarita Valley] residents).

…Reducing groundwater supply projections for the four wells that have been shut-in due to perchlorate contamination is inappropriate and unnecessary because sufficient additional well capacity exists to pump at least 15,000 acre-feet per year. That said, remediation of the perchlorate over the long term is necessary to ensure no additional wells are detrimentally impacted by the contamination.

…Only about 5,000 acre-feet per year is currently being pumped from the Saugus. In the near term, any significant increase in pumping from this supply would only occur in dry years. Possible use of this supply at higher levels on a more consistent basis would only occur in the long term, well after remediation and treatment of the perchlorate contamination has been implemented. That said, remediation of the perchlorate over the long term is necessary to ensure no additional wells are detrimentally impacted by the contamination."[14]

Finally, as to the timing of the clean-up of the five impacted production wells, please refer to **Topical Response 2: Groundwater Supplies and Perchlorate** to the Final EIR.

Response 11

The comment states that the Riverpark SB 610 analysis cannot rely on the 41,000 AF water transfer, because there is no certified EIR for the water transfer project, and because such reliance would be "contrary" to Section 10910(d)(2)(D) of the Water Code. The City does not concur with this comment.

Water Code Section 10910(d)(2)(D) states:

> An identification of existing **water** supply entitlements, **water** rights, or **water** service contracts held by the public **water** system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall be demonstrated by providing information related to all of the following…Any necessary regulatory approvals that are required in order to be able to convey or deliver the **water** supply.

The 41,000 AF water transfer is the subject of a valid contract between CLWA and the Kern County Water Agency (KCWA) and its member district (WRMWSD).

Additionally, the Draft EIR, Section 4.8, Water Service, at pp. 4.8-56–63 contain a detailed discussion of SWP water supplies and CLWA's SWP Table A Amount, including the additional 41,000 AF water transfer, the environmental review and litigation associated with that water transfer, and the status of CLWA's water transfer under the Monterey Agreement. **Topical Response 3: SWP Supplies – Reliance on the 41,000 AF Water Transfer** to the Final EIR and **Response 12**, below, also discuss these issues and

14 Id. at p. 5.

the EIR for the 41,000 AF transfer as a necessary regulatory approval in conformance with Water Code Section 10910(d)(2)(D).

Based on the Draft EIR and the entire record, and after considering comments challenging CLWA's reliance on the 41,000 AF water transfer, the City agrees with CLWA that it is appropriate for CLWA to have included, and to continue to include, the 41,000 AF water transfer as part of CLWA's available SWP water supplies. Accordingly, the City finds that it is appropriate for the Riverpark project to rely on those SWP supplies in both the water service section of the Draft EIR and the SB 610 analysis (Appendix 4.8). For further responsive information, please also refer to **Topical Response 3: SWP Supplies – Reliance on the 41,000 AF Water Transfer** to the Final EIR.

By way of background, as stated in the Draft EIR, at p. 4.8-57, at the inception of the SWP, DWR entered into individual water supply contracts with agricultural and urban water suppliers (SWP contractors) throughout California. The contracts were the method used to fund construction and operation of the SWP facilities for the delivery of water to the SWP contractors. Each such contract sets forth the annual amount of water to which an SWP contractor is contractually entitled, which is stated in "Table A" to the contract. However, the amount of SWP water actually available for delivery in any year may be an amount less than the contractor's maximum Table A Amount due to hydrology and a number of other factors. The Table A Amount was previously referred to as "SWP entitlement."

The transfer of 41,000 AF of SWP Table A Amount to CLWA from Kern County Water Agency (KCWA) and its member district (WRMWSD), was the subject of a completed contract between the parties in 1999, and imported water supply associated with that transfer became available for use by CLWA starting in January 2000. The 41,000 AF Transfer Agreement and the Point of Delivery Agreement between DWR, KCWA, and CLWA are included in **Appendix A** to the Final EIR.

The 41,000 AF water transfer between CLWA, KCWA, and WRMWSD was evaluated previously in a Final EIR prepared by CLWA in 1999. The Second Appellate Court, Fourth Division, ordered that the 1999 EIR be decertified in January 2002 in the decision entitled, *Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.3d 1373 (Friends decision) in **Appendix A** to the Final EIR. The appellate court decertified the 1999 EIR because it tiered from the Monterey Agreement Program EIR, which itself was decertified as a result of a separate appellate court decision issued while the *Friends* decision was on appeal. (See *Planning and Conservation League v. Department of Water Resources* [2000] 83 Cal.App.4th 892 [PCL decision], **Appendix A** to the Final EIR.)

In the Friends decision, the appellate court found that "all other contentions" concerning the legal adequacy of the 1999 EIR were "without merit." The appellate court specifically ordered the trial court to issue a writ of mandate vacating certification of the 1999 EIR, to retain jurisdiction until CLWA certifies an EIR complying with CEQA, and to consider such orders it deems appropriate under the remedy provisions set forth in CEQA (see Public Resources Code §21168.9). CLWA's Board of Directors decertified the 1999 EIR in the fall of 2002.

In September 2002, the trial court was requested to prohibit CLWA from using the 41,000 AF in any manner. The trial court refused to enjoin performance of the completed 41,000 AF Transfer Agreement, maintained its jurisdiction over the matter, and authorized CLWA to utilize "any of the 41,000 AFY," subject to the following order:

> "Respondent [CLWA] will not be prohibited from using the water to which it is entitled, but Petitioner may renew its application for such prohibition based upon evidence of the actual use of such additional water for purposes it considers improper."[15]

Petitioners in the Friends litigation appealed the trial court's judgment and, again, requested that the use of the 41,000 AF be prohibited. However, on December 1, 2003, in an unpublished opinion, the Court of Appeal affirmed the trial court's judgment that CLWA's use of the 41,000 AFY is not prohibited.

Because the 41,000 AF was a permanent water transfer, because DWR includes the 41,000 AF in calculating CLWA's share of SWP Table A Amount, and because the courts have not prohibited CLWA from using or relying on those additional SWP supplies, the City has determined that it remains appropriate for the Riverpark project to include those water supplies in its water supply and demand analysis, while acknowledging and disclosing the potential uncertainty created by litigation.

In the meantime, CLWA has recently circulated for public review the new Draft EIR for the 41,000 AF water transfer project. The new EIR evaluates the potential environmental impacts of the 41,000 AF water transfer project, along with the rights for storage and delivery of water associated with the transfer through SWP facilities.[16] For further responsive information, please refer to **Response 12**, below.

In light of the information presented in the Riverpark Draft EIR and the entire record, the City believes that CLWA was entitled to use, and may continue to use, the additional SWP water supplies from the

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15 For a copy of the trial court's decision, please refer to the Final EIR **Appendix A**, p. 2, ¶6.

16 The Draft EIR for CLWA's 41,000 AF water transfer project is incorporated by reference and is available for public review and inspection at CLWA's offices, located 27234 Bouquet Canyon Road, Santa Clarita, California 91350 (661) 297-1600

41,000 AF water transfer pending certification of the new EIR pursuant to CEQA, absent a subsequent order to the contrary from the Los Angeles Superior Court, which maintains jurisdiction over the 41,000 AF water transfer litigation.

Accordingly, the City has determined that the Riverpark project can appropriately rely on CLWA's SWP annual Table A Amount (including the 41,000 AF) as an existing entitlement, right or water service contract in determining water supply in the manner required to comply with SB 610 for the Riverpark project. The City also has determined, based on the entire record, that the projected SWP supplies, in conjunction with other supply sources, will be sufficient to satisfy the demands of the Riverpark project, in addition to existing and planned future uses in the Santa Clarita Valley.

Response 12

The Riverpark Draft EIR (pp. 4.8-56–80) provided in-depth information regarding SWP water supplies, including Castaic Lake Water Agency's (CLWA) acquisition of the 41,000 AF SWP supplies. In response, the comment suggests that the 41,000 AF water transfer was to be used only by "existing customers" within the CLWA service area. The commenter objects to the inclusion of the 41,000 AF of SWP water for planning purposes until the EIR for that transfer and that for the Monterey Agreement have been certified by the respective lead agencies. The City does not concur with this comment. The use of the 41,000 AF water transfer was not limited to "existing customers" of CLWA.

Please see **Response 11**, above. As stated above, in the Friends litigation, project opponents sought to prohibit CLWA from utilizing the 41,000 AF water transfer. The trial court refused to enjoin CLWA's use of the 41,000 AFY, maintained its jurisdiction over the proceedings, and held that CLWA "will not be prohibited from using the water to which it is entitled, but petitioner may renew its application for such prohibition based on evidence of the actual use of such additional water for purposes it considers improper. Project opponents in the Friends litigation then appealed the trial court's judgment and, again, requested that the use of the 41,000 AFY be prohibited. However, the appellate court affirmed the trial court's judgment that CLWA's use of the 41,000 AFY is not prohibited. For a copy of the trial court's judgment, writ, and transcript in connection with the Friends litigation, please refer to **Appendix A** to the Final EIR. In addition, further responsive information is presented in **Topical Response 3: SWP Supplies – Reliance on the 41,000 AF Water Transfer** to the Final EIR.

Aside from the status of the Friends litigation, there are also practical considerations that favor CLWA's use of the 41,000 AFY pending certification of the new EIR for that project. For example, the 41,000 AF water transfer was memorialized in an agreement between state water contractors (i.e., CLWA and

KCWA/WRMWSD) for the reallocation of SWP water supplies. Pursuant to the parties' agreement, KCWA/WRMWSD agreed to sell, and CLWA agreed to buy, 41,000 AFY of SWP Table A Amount. As a result, CLWA's annual SWP Table A Amount was increased by 41,000 AFY (to its current Table A Amount of 95,200 AFY), and KCWA/WRMWSD's annual entitlement was reduced by the same amount. CLWA executed the agreement in March 1999 and the agreement was effective upon execution. DWR approved the agreement pursuant to Amendment 18 to the "water supply contract" between CLWA and DWR, thereby permanently transferring 41,000 AFY of SWP Table A Amount to CLWA. CLWA paid approximately $48 million for the additional SWP supplies. Those monies have been received by KCWA/WRMWSD, and were financed by CLWA's sale of tax-exempt obligation bonds. In short, the agreement has been executed, performed, and implemented. If that agreement were set aside, CLWA's contractual rights and obligations would be significantly impaired. Importantly, the water transfer agreement has been in effect for more than five years. During that time, CLWA has not noted any significant adverse environmental impacts not previously identified in its EIR on the 41,000 AF water transfer project. Nor has CLWA ever been advised of any increase in the severity of any environmental impacts previously identified in the prior CLWA EIR. Project opponents also have not provided any documentation or other materials evidencing new or increased impacts resulting from the permanent reallocation of the 41,000 AFY to CLWA. In summary, no practical environmental issues preclude CLWA's continued use of the 41,000 AFY as part of its permanent SWP water supply allocation.

Finally, CLWA has also completed preparation of the new Draft EIR for the 41,000 AF water transfer project. The new EIR addresses the significant environmental effects of the 41,000 AF water transfer project, and has been subject to public review and comment. The new EIR is expected to be considered for certification by CLWA's Board of Directors in 2004-2005. Therefore, based on the Riverpark Draft EIR and the entire record, the City has not identified any legal or practical reason for prohibiting CLWA from using its SWP supplies, including the 41,000 AFY.

Response 13

This comment refers to "a public hearing" where a "project proponent" stated that "the water from contaminated wells closed due to excessive levels of ammonium perchlorate pollution should be counted because they will be back on line in a year." The comment does not identify the date or subject of the public hearing. The comment also does not identify the "project proponent" who made the statement. Finally, the comment does not provide documentation referencing the particular statement. Therefore, the City finds it difficult to provide a thorough response. Nonetheless, evidence in both the Draft EIR and the record show that reliable treatment methods exist that can be used to reduce perchlorate concentrations to low or non-detectable levels.

For example, the Riverpark Draft EIR discussed the fact that CLWA and the retail purveyors have advised both the County of Los Angeles and the City of Santa Clarita that portions of the Saugus Formation and the Alluvial aquifer where perchlorate has been detected are still capable of being used as a viable water supply, particularly in dry years, because the water is treatable. CLWA and other Santa Clarita Valley retail purveyors have further advised both the County and City that the technology to remove perchlorate exists and is already in use in California and elsewhere. CLWA and the retail purveyors have demonstrated that they intend to use this proven technology to clean up the water where perchlorate has been detected. In fact, as discussed below, CLWA and other retail purveyors continue to work with the Whittaker-Bermite site owners and the regulatory agencies (State Department of Toxic Substances Control [DTSC] and the ACOE) to characterize and remediate the perchlorate problem caused by the former Whittaker-Bermite site, so that water from the temporarily closed municipal-supply wells (Saugus, 4 wells; Alluvial, 1 well) is returned to service.

While the author of the comment letter attaches a one-page DTSC "Operable Unit Schedule for the Former Whittaker-Bermite Facility," indicating that date of Remedial Action Plan (RAP) certification may take longer than one year, neither a remedial action plan nor the characterization leading to a remedial action plan are required before treatment can begin. According to testimony on the subject before the California Public Utilities Commission addressing the issue of treatment of groundwater in the Saugus Formation in which perchlorate was detected:

> Full on-site and/or off-site characterization is not required before clean-up of contamination can begin. Containment and clean-up efforts should begin as soon as possible, both on and off site. In most cases, these efforts should be undertaken well ahead of completing on-site and off-site characterization work. Removal of existing contamination is beneficial to the overall clean-up goals. In my experience, where there is a will to do so, containment and clean-up has been started far in advance of completing on-site and off-site characterization work. Reply Testimony of Stephen B. Johnson, Application of Valencia Water Company (U-342) Seeking Approval of its Updated Water Management Plan, CPUC Case No. A.99-12-025, May 5, 2000. (For a copy of the Johnson Reply Testimony, please see **Appendix A** to the Final EIR.)

In addition, CLWA has advised both the County and City that field studies and groundwater modeling activities are in progress to evaluate how best to hydraulically contain the portion of the aquifer system where production wells have been voluntarily shut down, while simultaneously preventing perchlorate movement to currently unimpacted areas. According to CLWA, the field studies have included installation of monitoring wells and sampling at multiple depths and locations on and around the Whittaker-Bermite site, the source of the perchlorate; water level monitoring in these wells; aquifer testing of two unimpacted water supply wells; and groundwater velocity testing in Alluvial monitoring wells located between the Whittaker-Bermite site and the Santa Clara River.

According to CLWA, these studies have helped Santa Clarita Valley water purveyors and the Whittaker Corporation further refine the current understanding of groundwater flow patterns in specific areas on and near the Whittaker-Bermite site. In addition, CLWA has advised both the County and City that this information has been incorporated into the Santa Clarita Valley water purveyors' regional groundwater flow model, which is being used to identify a containment and treatment plan for impacted wells that would meet the objectives of restoring the lost water supply from the impacted wells (with wellhead treatment), while simultaneously containing perchlorate and hydraulically limiting its movement down-gradient to unimpacted wells and other portions of the aquifer system where new water supply wells are planned to be constructed.

The groundwater modeling effort is conducted by CH2MHill. According to CLWA, the modeling simulations will be used to guide selection of a final pumping plan for the impacted wells in the Saugus Formation. Selection of a final pumping plan will be made jointly by the Santa Clarita Valley water purveyors and the Whittaker Corporation, with regulatory oversight and permitting performed by the California Department of Health Services (DHS), with technical support from DTSC. CLWA also has confirmed with both the City and County that several treatment technologies for the removal of perchlorate from water are currently available, as reported in the Riverpark Draft EIR at pp. 4.8-43–51. Please see **Topical Response 2: Groundwater Supplies and Perchlorate**, for further responsive information.

The comment states that treatment will require a brine line. However, the Riverpark Draft EIR presents evidence that treatment can occur without the need for a brine line. As stated in the Draft EIR at pp. 4.8-50–51:

> "In addition to the proven treatment methods, a U.S. patent was recently granted for a new treatment device that reportedly renders perchlorate harmless. The device is a hollow-fiber membrane biofilm reactor, which, through a natural biochemical process of electron transfer, turns perchlorate into innocuous chloride. Perchlorate contaminated water is run through the biofilm reactor, which contains a bundle of thousands of hollow fiber membranes into which hydrogen gas is fed. The hydrogen gas diffuses through the membrane walls into the water as it flows past the fibers. Bacteria attach to the surface of the membrane because they gain energy from the process of transferring electrons and act as catalysts for the transfer of electrons from hydrogen gas to the oxidized contaminant, such as perchlorate. The contaminants are reduced to harmless end products while the hydrogen gas is oxidized to water.
>
> The advantage of the biofilm reactor method over existing methods is that it destroys the contaminant *without creating brine or other waste products, which must then be disposed of.* [*Emphasis added*]
>
> In addition, ion exchange systems for perchlorate removal and destruction can allow the recycling of brine solution, although result in a greater cost for treatment, starting at approximately $500 per acre-foot of treated water." (Source: Memorandum, Update On

Perchlorate Groundwater Pollution Within The Los Angeles Region, Dennis Dickerson to LARWQCB Members, April 28, 2003).[17]

The Department of Toxic Substances Control, Office of Pollution Prevention and Technology Development, has also reported on several means of brine reduction. For example:

Calgon ISEP+™ System. The perchlorate and nitrate destruction module (PNDM) of this system is a catalytic chemical reduction process for treating perchlorate and nitrate ions in the waste regeneration brine. In this process, ammonium (a hydrogen source) is added as a reductant, and perchlorate is reduced to chloride ($ClO4 + 8e + 8H^{+} => Cl + 4H_2O$). The system operates at 250 degrees C and is relatively energy intensive. Pilot study results indicate that the PNDM can effectively reduce both perchlorate and nitrate present in regeneration brine waste, and that the treated regenerant stream can be reused (i.e., recycled) to effectively regenerate the resin. The overall process waste from the pilot test system was about 0.16 percent of the feed volume. O&M costs are estimated at about two times the cost of a comparable biological treatment unit.

Oak Ridge National Laboratory. ORNL has developed a method to degrade perchlorate in $FeCl_3$-HCl regenerant solutions using ferrous iron and/or non-toxic organic reducing agents (US patent pending). Results indicate that complete destruction of perchlorate to chloride and water can be achieved in less than one hour residence time. While perchlorate is reduced, ferrous (Fe^{++}) ions are oxidized to ferric (Fe^{+++}) ions, which replenish or "regenerate" the $FeCl_3$-HCl solution.

Applied Research Associates - Integrated Thermal Treatment Process. Laboratory research demonstrated that perchlorate in regenerant brine could be thermally decomposed at elevated temperature and pressure with the addition of reducing agents and promoters. Concentration of the brine with reverse osmosis would be necessary to make the process cost-effective. A patent application is pending. (Source: Perchlorate Contamination Treatment Alternatives, Department of Toxic Substances Control, Office of Pollution Prevention and Technology Development (Draft, January 2004).[18]

In addition, the groundwater presently impacted by perchlorate can be treated by the time the need arises. For example, as to the Alluvial aquifer, the Draft EIR disclosed, at p. 4.8-38, that perchlorate was detected in one Alluvial aquifer municipal-supply well, located near the former Whittaker-Bermite site; that all other Alluvial wells operated by the purveyors in Santa Clarita Valley continue to be used for municipal water-supply service; and that, as part of regular operations, the other municipal-supply wells are sampled routinely and perchlorate has not been detected in any other wells.

CLWA and other retail purveyors in Santa Clarita Valley have advised both the City and County that the closure of the one Alluvial well does not adversely affect the amount of groundwater that can be produced from the Alluvial Aquifer. In addition, as discussed below, CLWA and other retail purveyors have confirmed that technology exists to treat groundwater to remove the perchlorate and to return it to drinking water quality. CLWA also has reported to the City and County that the purveyors have placed a high priority on remediation of perchlorate over the long term, to restore the affected well to service,

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17 This source memorandum is incorporated by this reference and available for public inspection at CLWA, 27234 Bouquet Canyon Road Santa Clarita, CA 91350-2173.

18 This source memorandum is incorporated by this reference and available for public inspection at CLWA, 27234 Bouquet Canyon Road Santa Clarita, CA 91350-2173.

and to ensure that treatment methods are available to reduce perchlorate concentrations to low or non-detectable levels if any other wells in the Alluvial aquifer are later impacted.

Response 14

As described in the Riverpark Draft EIR Section 4.8, Water Services, pp. 4.8-49–50, biological treatment methods are considered viable for treating perchlorate. As described in the Riverpark Draft EIR Section 4.8, Water Services, at pp. 4.8-49–50, biological treatment methods are considered viable for treating perchlorate. In addition, the Department of Toxic Substances Control, Office of Pollution Prevention and Technology Development, has reported on several currently feasible or viable in the near term means of biological treatment. For example:

> **"Bioreactors: Fluidized Bed, Packed Bed, Fixed Film, etc.**
>
> Perchlorate can be anaerobically biodegraded under reducing conditions. In these reactions, perchlorate serves as an electron acceptor and is readily reduced to water, carbon dioxide, and chloride in the presence of an appropriate food source (electron donor) and redox conditions. A number of microorganisms have been identified that have the capability to reduce both perchlorate and chlorate. Most identified bacterial strains that reduce perchlorate are denitrifying facultative anaerobes. Not all denitrifying bacteria can reduce perchlorate however, and in some cases the presence of nitrate can inhibit perchlorate reduction. Many reactor types have been investigated for perchlorate removal. Most of these systems are attached growth reactors using either granular activated carbon (GAC) or sand, and are able to remove perchlorate to very low levels. A variety of electron donors including ethanol, methanol, acetate, hydrogen, and cheese whey have been utilized in these reactors. A total dissolved solids concentration above 20,000 to 30,000 mg/L generally inhibits perchlorate reduction. Microorganisms from saline environments may be able to degrade perchlorate at up to 5 percent salt concentrations. Fluidized bed reactors (FBR) as well as packed bed reactors (PBR) have been developed for treating perchlorate contamination and are commercially available. Fixed-bed systems use stationary sand or plastic media to support the biofilm while fluidized bed systems support biofilm growth on sand or GAC media suspended in the fluid by mixing and upward flow velocities maintained in the reactor. The disadvantage is the pumping cost to maintain the required flows. Fixed-bed systems require periodic backflushing to remove biosolids buildup and to prevent plugging. Fluidized bed systems have higher pumping/energy costs, but have high surface area for biomass attachment and growth, and low pressure drop across the bed. Other innovative systems to biologically reduce perchlorate are also being developed including a patented a hollow-fiber membrane biofilm reactor that utilizes hydrogen as the electron donor to biologically degrade perchlorate.
>
> In April 2002 the DHS Water Treatment Committee recommended a conditional acceptance of biological treatment (fluidized bed reactor) for the removal of perchlorate in a drinking water supply. The recommendation is based on a treatability study of the full-scale FBR system treating perchlorate-contaminated groundwater at the Aerojet facility in Rancho Cordova. Biological treatment systems are being considered by the Castaic Lake Water District as well as in the San Gabriel Groundwater Basin, but to date DHS has not issued a permit to any facility that allows biological treatment for domestic water supply.

Biologically Active Carbon (BAC)

AWWARF-funded bench and pilot scale tests indicate that biologically active carbon filtration can effectively remove low levels of nitrate and perchlorate under anaerobic conditions with the addition of an electron donor. Nitrate reduction can also enhance perchlorate reduction kinetics, making BAC filtration particularly attractive for combined nitrate-perchlorate remediation.

In Situ Biological Reduction

In situ biological treatment of perchlorate contaminated groundwater involves essentially the same processes that above-ground bioreactors use to reduce perchlorate. Perchlorate-degrading microorganisms have been found to be widespread in the subsurface environment (indigenous, native bacteria) and present at many, if not most, perchlorate contamination sites. In the presence of an appropriate food source (electron donor) and redox condition these bacteria have the capability to reduce perchlorate into chloride, carbon dioxide, and water. Injection or placement of a food/carbon source (electron donor) into the contaminated aquifer is necessary to promote growth of the desired bacteria and effect perchlorate degradation. Different remediation strategies have been used to supply the proper mixing and amount of food source into the contaminated aquifer. A system of injection wells or injection/extraction wells is typically used to inject and mix the carbon source into contaminated zone at the proper concentration. Selection of appropriate electron donor appears to be site specific. Injected carbon sources that have been used or considered include acetate, corn syrup, and edible oils. Another approach is to use biologically active trenches or permeable reactive barriers (PRBs) to treat the contaminated groundwater plume as it flow through biologically active zone. Materials used to construct PRBs or "barrier" trenches have included composting materials, cotton seed meal and cotton seed. To effectively implement an in-situ biological treatment technology requires a comprehensive understanding of the subsurface contamination distribution and subsurface hydrogeology, in addition to an understanding of the microbiological processes. A system of monitoring wells to routinely monitor key biological and water quality treatment parameters is essential to a successful implementation. Key biological treatment parameters would include redox, dissolved oxygen, perchlorate, and parent/by-product concentrations, carbon source concentration, microbiological growth, etc. Perchlorate can be biodegraded in situ under a mildly reducing environment. A highly anaerobic reducing environment is generally not desirable due to potential dissolution and/or release of compounds or metal ions that may adversely impact water quality (e.g., metal ions, sulfides, methane).

Contaminated Soil - Composting

Naturally occurring bacteria can effectively reduce perchlorate under anaerobic conditions when perchlorate-contaminated soil is composted with an organic carbon source (electron donor) such as steer manure, sawdust, alfalfa, corn syrup, alcohol, sodium acetate, etc." (Source: Perchlorate Contamination Treatment Alternatives, Department of Toxic Substances Control, Office of Pollution Prevention and Technology Development (Draft, January 2004).[19]

In addition, the groundwater presently impacted by perchlorate is not needed today and can be treated by the time the need arises. Meanwhile, as the Draft EIR disclosed, all unaffected wells operated by the purveyors in Santa Clarita Valley continue to be used for municipal water-supply service, and all are

19 This source memorandum is incorporated by this reference and available for public inspection at CLWA, 27234 Bouquet Canyon Road Santa Clarita, CA 91350-2173.

providing, and are reasonably expected to continue to provide, sufficient supplies. Please see also **Topical Response 2: Groundwater Supplies and Perchlorate.**

As discussed above in **Responses 12** and **13**, CLWA and other retail purveyors in Santa Clarita Valley have advised both the City and County that the closure of the one Alluvial well does not adversely affect the amount of groundwater that can be produced from the Alluvial Aquifer. In addition, as discussed below, CLWA and other retail purveyors have confirmed that technology exists to treat groundwater to remove the perchlorate and to return it to drinking water quality. CLWA also has reported to the City and County that the purveyors have placed a high priority on remediation of perchlorate over the long term, to restore the affected well to service, and to ensure that treatment methods are available to reduce perchlorate concentrations to low or non-detectable levels if any other wells in the Alluvial aquifer are later impacted.

Response 15

As stated in the Riverpark Draft EIR Section 4.8, Water Services, at p. 4.8-48, effective technologies presently exist to treat perchlorate in water in order to meet drinking water standards. This includes standards for nitrate. As noted in **Response 13**, above, certain brine treatments also treat nitrates. The comment does not provide any information to the contrary.

Response 16

This comment suggests that water demand has "rapidly increased" in the Santa Clarita Valley, since the last water report was prepared and complains that the latest water report had not been issued as of May 2004. However, the comment relating to a "rapid increase" is not substantiated. In fact, the water demand has slightly increased from 2002 to 2003. However, the increase was anticipated by CLWA and other retail water purveyors in the Santa Clarita Valley. There have been no "rapid" increases in water demand.

The Draft EIR Section 4.8, Water Service, relied on the most current water reports available.

The City did conduct a review of the 2002 Santa Clarita Valley Water Report, as part of its environmental review of the Riverpark project. The Draft EIR Section 4.8, Water Services, also relied on the *2002 Water Repor*t.

The next annual water report was not yet available when the Riverpark Draft EIR was circulated for public review and comment. Therefore, the next annual report could not have been considered by the

City in the context of the Draft EIR for the Riverpark project. However, since public circulation of the Riverpark Draft EIR, CLWA and other retail water purveyors in the Santa Clarita Valley have distributed to the City the *2003 Santa Clarita Valley Water Report*. The 2003 report has been reviewed during preparation of the Final EIR and is included in **Appendix A** to the Final EIR.

Response 17

The comment suggests that the groundwater basin in the Santa Clarita Valley is in a state of overdraft, and, therefore, the City cannot rely on the amount of groundwater shown in the Draft EIR as a reliable source of supply. In addition, comments state that water levels are dropping in wells in the eastern reaches of the groundwater basin, indicating an "overdraft" condition. Comments also state that "overdrafting" the groundwater basin is "contrary" to the Los Angeles County General Plan, the Santa Clarita Valley Areawide Plan, and the City's General Plan. Finally, comments suggest that withdrawing water from the basin "in excess of the safe yield" affects "endangered species" and may be contrary to SB 610. Each of these issues is addressed in detail in **Topical Response 1: Groundwater Supplies and "Overdraft" Claims** to the Final EIR.

Annual groundwater production is reported in the Draft EIR from a low of 20,000 AFY in 1983 to a high of 43,000 AFY in 1999. See, Draft EIR at 4.8-35 to 36. From 1980 through 2003, total production of the Saugus Formation as reported in the Draft EIR, at 4.8-31, ranged from a low of 3,850 AFY in 1983 to a high of nearly 15,000 in 1991.

It should be noted that the CPUC found these estimated water supplies, based on evidence presented to it, to be "consistent with current management practices…well within the aquifer's perennial yield," and "supported by recent experience." (See Valencia Water Company, Decision No. 01-11-048, November 29, 2001) at p. 39. See also, Reply Testimony of both Robert J. DiPrimio and Joseph C. Scalmanini, Application 99-12-025, May 5, 2000 ["DiPrimio and Scalmanini Reply Testimony"]. In doing so, the CPUC rejected the same contentions made by the commenter here, which organization was also a party to the CPUC litigation. The complete decision in included in **Appendix A** to the Final EIR. The California Supreme Court declined to hear an appeal from the CPUC decision.

Response 18

This comment states that the increased use of imported SWP water and its affects on water quality were not addressed in the Riverpark Draft EIR. The City does not concur with this comment for several reasons. First, the Riverpark project does not result in an unanticipated "increase" in the use of SWP water in the CLWA/Santa Clarita Water Company Division service area. The Riverpark project is simply

one of several planned developments within that service area. Second, with regard to water quality, the primary regulatory mechanism, which is in place to monitor imported SWP water supplies from CLWA, is the Safe Drinking Water Act.[20] As the wholesale water agency in Santa Clarita Valley, CLWA must deliver water that meets the applicable drinking water standards.

Existing water quality conditions for urban water uses in the CLWA service area are documented in the *2002 Santa Clarita Valley Water Report*.[21] This report provides the cumulative results of water quality tests performed in the Santa Clarita Valley area on CLWA's and the local purveyors' water supplies. The report shows that CLWA produces SWP water that meets drinking water standards set by the EPA and the California Department of Health Services (DHS).

For additional pertinent water quality data, please see the most recent annual *2003 Santa Clarita Valley Water Report*, which is found in **Appendix A** to the Final EIR. The *2003 Water Report* confirms, at p. 29, that CLWA operates two water treatment plants, the Earl Schmidt Filtration Plant located near Castaic Lake, and the Rio Vista Water Treatment Plant, located in Saugus, and that CLWA receives imported SWP water supplies, treats those supplies and produces water that meets drinking water standards set by EPA and DHS.

In addition, the state Department of Water Resources (DWR) prepared a technical memorandum that provides information generally responsive to this comment. Please see the DWR Memorandum, dated September 25, 2002, entitled "Quality of Non-Project Groundwater Pump-Ins to the California Aqueduct and Effect on SWP Water Quality, 2001," which is found in **Appendix A** to the Final EIR.

Finally, the comment does not present any evidence that is contrary to, or conflicts with, the above statements, which are supported by the referenced studies. Therefore, no further response is necessary or possible at this time.

Response 19

The City does not concur that the water-related issues raised in the comment must be addressed further in a "subsequent or supplemental EIR." First, the Draft EIR Section 4.8, Water Services, contains a thorough analysis of the water service and water quality issues arising from implementation of the Riverpark project. Second, the City has considered whether significant new information has been presented since completion of the Riverpark Draft EIR with respect to water resources, water service, and water supply and demand issues in Santa Clarita Valley. The City has determined, based on the entire

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20 The Safe Drinking Water Act is intended to protect public health by regulating public drinking water supplies, and requires a variety of actions to protect drinking water and its sources. The act authorizes the EPA to set national health-based standards for drinking water to protect against both naturally occurring and man-made contaminants that may be found in drinking water.

21 For a copy of the 2002 Water Report, please refer to **Appendix A** to the Final EIR.

record, that no new significant information has been presented, which would require preparation of a supplemental or subsequent EIR, in addition to the Riverpark Draft EIR.

Under CEQA, new information is not considered "significant" unless the EIR is changed in a way that, absent recirculation "deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement." (See *CEQA Guidelines* §15088.5) The City has reviewed the Riverpark Draft EIR, and the Final EIR, including the comments and responses, and has concluded that recirculation is not necessary because the CEQA threshold for recirculation has not been triggered. The criteria used by the City in determining that recirculation is not required are set forth below:

(a) There are no new significant environmental impacts resulting from the Riverpark project or from any proposed mitigation measures presented in the Draft EIR;

(b) There are no substantial increases in the severity of any environmental impact noted in the Draft EIR; and

(c) There are no feasible project alternatives or mitigation measures identified in the Draft EIR that would clearly lessen any significant environmental impact of the project, but that the applicant has declined to adopt. See *CEQA Guidelines* §§15088.5(a), 15162(a)(3).

Accordingly, the City has concluded that neither a subsequent nor supplemental EIR is required.

Response 20

The comment asserts the project would remove a significant ridgeline buffering an existing residential neighborhood. The comment is incorrect. First, the only existing residential neighborhood so buffered is the Emblem neighborhood; the adjacent ridgeline there is not classified by the City as a significant ridgeline (either primary or secondary). Second, the project has been revised to eliminate grading on the nose of that ridgeline.

Although beyond the scope of this comment, it should be noted that the Riverpark project proposes encroachment on relatively limited portions of two ridgelines classified by the City as secondary ridgelines. Both of these ridgelines are located both on and off the project site.

As discussed in Section 4.16, Visual Resources, of the Draft EIR, the first City-classified secondary ridgeline enters the project site from the north and east of the future intersection of Santa Clarita Parkway and Newhall Ranch Road. The upper, and most visible, portion of this ridgeline is already degraded by previous development and no longer meets the City's criteria for classification as a secondary ridgeline. Approximately 1,690 linear feet or 45 percent of the northern portion of the ridgeline was previously

impacted and graded down by the construction of the CLWA Rio Vista Water Treatment Plant and Administrative Offices. The project would impact the remaining southern portion of the ridgeline (approximately 55 percent or 2,062 linear feet). However, approximately 700 linear feet or 19 percent of the ridgeline would be impacted as a result of the extension of Newhall Ranch Road and the Santa Clarita Parkway; both roads are part of the City's General Plan, and would likely be built even if the project were not approved. The remaining 1,362 linear feet or 36 percent of the ridgeline would be impacted by a portion of the residential development in Area B.

The second City classified secondary ridgeline also enters from the north into the project site where Area C is located on the eastern portion of the site. A majority of this ridgeline is located off-site, however, approximately 29 percent or approximately 597 linear feet of the ridgeline is located on the project site. However, after further research and comparison, the actual ridgeline and what is shown on the City's Ridgeline Map is incorrect. The secondary ridgeline actually extends approximately 372 linear feet into the project site not 597 linear feet as shown on the City's Ridgeline Map. The project would impact (as a result of Area C) approximately 225 of the 372 linear feet of the secondary ridgeline.

According to the applicant's Riverpark Innovative Application Compliance Report (Final EIR **Appendix E**) the Riverpark project employs a creative and imaginative site design that tailors the development to the site and minimizes impacts to the significant natural topographic prominent features (Santa Clara River, central canyon, etc.) within the project site; and the project leaves a substantial portion of the project site as open space, concentrates development on the flatter, disturbed portions of the site and significantly exceeds the minimum standards identified in the City of Santa Clarita Ridgeline Preservation and Hillside Development Guidelines.

In summary, the Planning Commission has reviewed the project applicant's innovative application and has found that support to the proposed ridgeline modification can be made with the following project benefits:

- Preservation and dedication of approximately 440 acres of open space, including approximately 338 acres of the Santa Clara River;
- Dedication and improvement to the City of Santa Clarita of a 29-acre active/passive park;
- Extension of over 2 miles of the Santa Clara River Regional Trail; including bridging over the LA DWP Aqueduct;
- Extension of approximately 2 miles of Class I (roadway separated trail) along Newhall Ranch Road;
- Dedication of approximately 130 acres of the South Fork of the Santa Clara River, including adjacent upland area—the property is located between Valencia Boulevard and Magic Mountain Parkway;

- The project applicant shall contribute 25 percent pf the costs associated with the construction of a pedestrian bridge over Newhall Ranch Road providing regional trail access from Central Park to the Santa Clara River Regional Trail; and
- Contribution, through right-of-way dedication and bridge and thoroughfare fees, of over $25,000,000 to this segment of the Cross Valley Connector.

Response 21

Riverpark Draft EIR Sections 1.0, Project Description p. 1.0-8, and Section 4.7, Land Use, p. 4.7-12 did acknowledge that a hillside review was required and that an Innovative Application was required to develop on identified secondary ridgelines. Additionally, the environmental analysis of ridgeline modification was addressed in Riverpark Draft EIR Section 4.16, Visual Resources. Although the Innovative Application itself was not analyzed the Riverpark Draft EIR, all of the information contained in the application—the environmental consequences of development of secondary ridgelines—was analyzed. Therefore, all potential impacts were analyzed.

Moreover, contrary to the commenter's implication, the Draft EIR in fact analyzed the suggested alternative as Alternative No. 3, the "Ridgeline Preservation Alternative," in Section 6.0, pp. 6.0-13–20. The Draft EIR concluded that, although many (not all) of the environmental impacts would less than or equal to those of the proposed project, this alternative would remove 76 dwelling units in Planning Area B, 55 units in Area C and 27 units in Area D, and would too narrowly limit the housing opportunities and would not provide as many housing opportunities on the site, and would fail to meet or would impede to some extent the project objectives listed there. Consequently, the City rejected this alternative.

Finally, the City does not concur that the Innovative Application must be circulated for public review. Even so, the Innovative Application is available, and has been available since April 16, 2004, for review at the City of Santa Clarita, 23920 Valencia Boulevard, Suite 300, Santa Clarita, California 91355, and it is located in **Appendix E** of this Final EIR.

Response 22

Please see **Responses 19** and **20** to the April 29, 2004 **Comment Letter 17** from Friends of the Santa Clara River. The Riverpark Draft EIR addressed five alternative scenarios to the proposed project. In accordance with Section 15126.6(a) of the *CEQA Guidelines*:

> "[a]n EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of

potentially feasible alternatives that will foster informed decision making, and public participation."

The City believes that the five alternatives considered: No Project, Santa Clara River Reduced Bank Stabilization, Ridgeline Preservation, Noise/Development Standards and Deletion of Santa Clarita Parkway directly reflect *CEQA Guidelines* Section 15126.6(b) "…the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project." Therefore, no further analysis of additional alternatives is required.

Response 23

The commenter suggests that the proposed project, together with a project on the south side of the Santa Clara River will create a "severe constriction of river flow." The City disagrees and the analysis in the Draft EIR concludes that there is no purported constriction at that point or any other point within the project site. The project's potential flood impacts are discussed and analyzed in Section 4.2, Flood, and Section 4.20, Floodplain Modifications, of the Draft EIR, based on detailed technical information contained in the technical report entitled, Flood Technical Report for Riverpark, Psomas, February 2004, contained in Appendix 4.2 to the Draft EIR.

These potential impacts were analyzed in the Riverpark Draft EIR in the Flood and Floodplain Modifications sections. Based on the Flood section's analyses, the Floodplain Modifications section analyzed the potential biological impacts of the predicted hydraulic conditions, and found those impacts to be less than significant.

As to the predicted changes in flows in the Santa Clara River, based on the Flood Technical Report for Riverpark, February 2004, the Draft EIR concluded that the average flows in the Santa Clara River would generally not increase downstream of the project, and, therefore, the project would cause no significant impacts to sensitive aquatic species located downstream based on flows (pp. 4.20–38). Based on an analysis conducted to estimate the impacts of the floodplain boundary changes caused by the project (which analysis provided a direct assessment of the potential change in total acreage and configuration of habitats along the Santa Clara River within the project site), it further concluded that there would be only negligible differences in the total aquatic, wetland, and riparian habitat area inundated in the developed condition as compared to the existing condition, and, therefore, that these changes caused by the project would not be significant (pp. 4.20–42). The Draft EIR also concluded that the reduction in floodplain area caused by bank protection would not create a significant increase in overall velocities and that the velocities for all return events would not be significantly different between the existing and proposed

conditions, and that, in many instances, velocities would be unchanged or would decrease. (Section 4.2, Floodplain Modifications, pp. 4.20–42, 59) The final design of the flood protection improvements associated with Riverpark will be consistent with the conclusions reached in the Draft EIR. Similarly, the Draft EIR concluded that there would be no significant increase in water depths for all return intervals at all locations, including at the Newhall Ranch Road/Golden Valley Road Bridge (pp. 4.20-59, 60).

Based on these findings, the Draft EIR Section 4.2, Floodplain Modifications, concluded that the hydraulic changes created by the project would cause no significant downstream impacts (pp. 4.20-60, 63–64), and no significant impacts on sensitive species, including, without limitation, to unarmored three-spine stickleback, arroyo toad, or California red-legged frogs (pp. 4.20–64, 67–68), either within or downstream from the project site.

Further with regard to impacts of increased velocities, see Riverpark Draft EIR Section 4.20, Floodplain Modifications, pp. 4.20–59, states:

> "A comparison of Figures 4.20-4a–f, Santa Clara River Existing Velocities with Figures 4.20-10a–f, Santa Clara River Proposed Velocities, demonstrates that variations in velocities are localized and limited in scope, especially when viewed in the entirety of the river corridor within the project site. The key locations shown represent a wide range of conditions along the river, including narrower areas and wider areas with larger terraces adjacent to the river.
>
> These data indicate that there would be no significant increase in water velocity for all return intervals at all locations, including the bridge location. The predicted increased velocities at the Newhall Ranch Road Bridge (e.g., an increase in velocity from just 3.4 to 3.7 feet per second during the 2-year storm event) would be very localized and represent a very small segment of river located within the project. Water velocities return to existing rates beyond this point. In the five other instances where velocities increase with the project (i.e., Newhall Ranch Road Bridge location during the 50-year storm; future Santa Clarita Parkway Bridge location during the 50-year storm; and existing Bouquet Canyon Road Bridge during the 5-year storm, 50-year storm and the 100-year storm), such increases range from one to three percent. In four instances (i.e., at the future Santa Clarita Parkway Bridge location during the 2-year, 5-year, 10-year and 20-year storm events) velocity would be unchanged with the project and in eight instances (i.e., at the Newhall Ranch Road Bridge location during the 5-, 10-, 20-, and 100-year storm events; the future Santa Clarita Parkway Bridge location during the 100-year storm event; and at the Bouquet Canyon Road Bridge location during the 2-, 10-, and 20-year storm events) velocities would actually decrease. In both existing and post-development cases, water velocities at and downstream of the bridge abutments are generally greater than 4 feet per second, and would continue to be, erosive in all storm events except the 2-year event.
>
> The velocities for all return events are not significantly different between existing and proposed conditions (velocity increases are all less than 10 percent and mostly well less than five percent. In many instances, velocities would be unchanged or would decrease)."

Response 24

Please see **Response 23,** above. The commenter improperly seeks to incorporate on a wholesale basis all information contained in City files regarding flooding previously submitted on Bouquet Bridge, without identifying that information, identifying the substance of the information contained in that information, providing copies of the information sought to be incorporated, or providing the location at which the information is maintained. Even so, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 25

Please see **Responses 23** and **24,** above. Moreover, the property referenced across the street under the ownership of Newhall Land was developed legally and in accordance with approvals issued by the City of Santa Clarita. As indicated in **Response 23**, a comprehensive floodway analysis was conducted for the Riverpark project. This analysis included modeling of the proposed Riverpark flood protection improvements along with existing flood protection improvements adjacent to or within the boundaries of the Riverpark project. As indicated in **Response 23**, the Draft EIR concluded that the reduction in floodplain area caused by bank protection would not create a significant increase in overall velocities and that the velocities for all return events would not be significantly different between the existing and proposed conditions, and that, in many instances, velocities would be unchanged or would decrease. (Section 4.2, Floodplain Modifications, pp. 4.20–42, 59).

Response 26

The commenter states that they are opposed to the project. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

Response 27

The commenter suggests that an additional alternative "adher[ing] to the City's Hillside Ordinance and preserv[ing] a greater portion of the floodplain" added. The Draft EIR Section 6.0, Project Alternatives, however, provides a reasonable range of alternatives as required by CEQA, including Alternative 2, Santa Clara River Reduced Bank Stabilization Alternative, which would preserve a greater amount of floodplain by requiring a setback of the greater of either the Q-cap 50 year line or the upland preserve

buffer setback from the resource line, and Alternative 3, Ridgeline Preservation Alternative, which preserves ridgelines designated by the City as secondary. Please see **Response 20,** above.

Response 28

The City does not concur that the Santa Clarita Valley is experiencing water supply problems. The City has determined that the Riverpark project can appropriately rely on CLWA's SWP annual Table A Amount (including the 41,000 AF) identified in both the Draft EIR and the SB 610 analysis. The City also has determined, based on the entire record, that the projected SWP supplies, in conjunction with other supply sources, will be sufficient to satisfy the demands of the Riverpark project, in addition to existing and planned future uses in the Santa Clarita Valley.

Response 29

The commenter suggests that public and alternative modes of transportation should be incorporated into the project design to reduce air pollution. The Riverpark project description includes bicycle lanes and trails into its site design, which encourages non-auto modes of transportation.

Response 30

CEQA Guidelines Section 15088.5, recirculation of an EIR prior to certification, requires that

> "(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement."

Section 15088.5(b) further states that "(b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR."

No new information has been provided in the course of comments to the Riverpark Draft EIR that is significant and that would require recirculation. Consequently, recirculation of the Riverpark Draft EIR is not required.

19. LETTER RECEIVED FROM MARIA GUTZEIT, LOS ANGELES COUNTY BIKE COALITION DATED MAY 3, 2004

Response 1

The commenter expresses an opinion with regard to trails and bike paths. The comment does not comment on or criticize the Draft EIR's analyses or conclusions, and consequently requires no response. Even so, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Moreover, it should be noted that the City Planning Commission requested that staff review the bike trail documents that Ms. Gutzeit provided to the Commission at the June 29, 2004 hearing to ensure that there are adequate bike trails within the proposed project. As staff concluded

> "[t]he Riverpark project includes Class I bike trails, Santa Clara River multipurpose trails (that includes separated bike paths), and paseos. The south side of Newhall Ranch Road and the Newhall Ranch Road/Golden Valley Road Bridge will be providing a Class I bike trail that will be paved and striped separately from the pedestrian sidewalk. The Class I will provide adequate width for bicyclists going east and west. The west side of Santa Clarita Parkway will also include a Class I bike trail that will be identical to the one on Newhall Ranch Road. The documents submitted by Ms. Gutzeit requested traffic signal sensors in the roadway for bicyclists, however, these are only functional with Class II bike trails which are located on the street. The documents also mentioned that the "Walk Your Bike" signs in the crosswalk should not be part of the crosswalk signage, however, the City's policy is to continue to place them in the crosswalks for liability reasons. The bicyclists have the option of riding outside of the crosswalks.
>
> In addition, the Riverpark site plan will be providing a multipurpose trail along the Santa Clara River that will connect the Bouquet Canyon Bridge to the Newhall Ranch Road/Golden Valley Road Bridge. The trail will be paved and striped for pedestrians and bicyclists. There are two primary connections to the Class I trail to the multipurpose. One is on the west side of the project where the commercial element is located and the other is located on the eastern side of the project by the Newhall Ranch Road/Golden Valley Road Bridge. The connection by the bridge includes a 20-foot paved pedestrian and bike trail that switchbacks along the bridge abutment. The switchback is required because of the significant slope on the bridge abutment. In addition, there is a third connection that includes a 10-foot paseo that runs from the river trail through the active park and canyon to Newhall Ranch Road.
>
> Staff has reviewed the documents and the Riverpark site plan and believes that the site is properly planned for bicyclists and are consistent with the Parks and Recreation and Traffic Division's policies regarding City of Santa Clarita bike trails. As a staff suggestion, the Planning Commission may want to include in their study session schedule an additional topic related to the City's bike trails and the policies related to bicycle planning."

Response 2

Please see **Response 1**, above. The commenter expresses a general opinion with regard to the City's policies on cycling. The comment expresses the opinions of the commenter only, and does not address the content of the Draft EIR or any of its conclusions. Even so, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 3

The City does not concur with the commenter that the project is not consistent with promoting bicycles as an alternative mode of transportation. As discussed in Riverpark Draft EIR Section 1.0, Project Description, at p. 1.0-29, in addition to trails, a 12-foot Class I bicycle trail is designed into the project. The Riverpark project uses both Class I bicycle trails as well as multi-use trails. Although the commenter prefers that bicycles be afforded on-street bike lanes, there are many residents in the community who desire to go bicycle riding with their families on paseos (multi-use trails) as opposed to Class I bicycle trails. Therefore, the City is providing an option for bicycle users within the community and believes that this project is consistent with alternative transportation policies. Further, please see **Response 1**, above.

This is a comment on the project description, not on the content of the Draft EIR or any of its conclusions. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

Response 4

The commenter again suggests that on-street bike lanes are preferable to multi-purpose trails. Please see **Response 1** and **3**, above.

The Riverpark project is consistent with City policy regarding the construction of Class I Bicycle trails, and is not inconsistent with the City's General Plan. A Class I bicycle trail has been included along the entire length of Newhall Ranch Road and Santa Clarita Parkway. The City's General Plan calls for a Class I bikeway at these locations. Therefore, the Riverpark project is consistent with the City of Santa Clarita General Plan.

The comment refers to design standards for bicycle trails. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

Response 5

The commenter offers her opinion with respect to the internal consistency of the City's General Plan, but does not address the content of or the conclusions reached in the Draft EIR, and no response can be provided. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Although no response can be provided, the City does wish to note that Policy 5.4 is a policy within the City's General Plan, and is consistent with the Circulation Element of the General Plan. The City's policies promote not only bike lanes and trails, but also safe transportation for all modes of vehicle travel. Providing on-street bike lanes increases the capacity of the streets in terms of the types of transportation modes they can accommodate. The City promotes both bike lanes and bike trails to accommodate not only adult riders using bikes as an alternative transportation mode, but also family riders who use bikes as a form of recreation for their children and who do not wish to subject their children to the dangers of on-street riding. Resolution 92-102 simply affirms the City's commitments to vigorously support bike use in the City on both on-road and off-road highways, but does not commit to requiring on-street bike paths on every street or as a part of every residential development. In the City's opinion, the proposed project is properly designed. Further, see **Response 1** and **3**, above.

Response 6

Again, the commenter uses a statement in the Draft EIR as a basis for suggesting that, for safety and access reasons, on-street bike lanes are preferable to bike trails. The comment does not address the analyses included in the Draft EIR, or any of its conclusions, and, therefore, a response is not required. Even so, the information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

It is acknowledged that the commenter prefers that bicycles be afforded on-street bike lanes however this is a comment to the project description and does not address the Riverpark Draft EIR, consequently no further response can be provided.

Response 7

The comment seeks to reserve the right to comment on trail alignments in the future. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 8

This comment essentially summarizes previous statements made in the comment letter, primarily referring to design standards for bicycle trails. Please see **Responses 1** through **7**, above. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

20. LETTER RECEIVED FROM DAMON WING, VENTURA COASTKEEPER, MAY 3, 2004

Response 1

The comment expresses only the opinions of the commenter with respect to the effects of growth in the Santa Clara River floodplain and watershed over the last few decades, but does not raise any issue with respect to the contents of the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR, no further response can be provided

It should be noted that the potential project-specific and cumulative impacts of the project, including, without limitation on the western spadefoot toad and unarmored threespine stickleback, have been thoroughly analyzed in Draft EIR Section 4.20, Floodplain Modifications, and in Revised Draft EIR Section 4.6, Biological Resources.

Response 2

The comment expresses only the opinions of the commenter with respect to the effects of growth in the Santa Clara River floodplain over the last few decades, but does not raise any issue with respect to the contents of the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Even so, please see **Response 1**, above. Additionally, as discussed in the Revised Riverpark Draft EIR (pp. 4.6-2–5), a portion of the project development was previously permitted by the NRMP, which is a long-term management plan, approved by the ACOE and CDFG, that addresses proposed projects and activities in the Santa Clarita area that would potentially affect the Santa Clara River. The NRMP EIS/EIR analyzed the cumulative impacts of these various projects and activities and suggested a number of measures (which were incorporated into the project) to mitigate these impacts. The Revised Riverpark Draft EIR Section 4.6, Biological Resources, (beginning on p. 4.6-109) includes a thorough analysis of the cumulative impacts of the Riverpark project when considered with other existing and proposed projects along the Santa Clara River and in the region. A total of 21 other projects were included in this analysis.

Response 3

The comment expresses only the opinions of the commenter with respect to the effects of growth in the Santa Clara watershed over the last few decades, but does not raise any issue with respect to the contents of the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

It should be noted that the potential cumulative impacts of the project have been thoroughly analyzed in the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources. The cumulative impacts analysis in the Revised Riverpark Draft EIR (beginning on p. 4.6-109) addresses the potential cumulative impacts of the Riverpark project in conjunction with both the City's construction of Santa Clarita Parkway through the project site and with 21 other proposed or existing projects in the region. Biological resources that were addressed in this analysis include special-status plant and animal species, ACOE/CDFG jurisdictional resources (drainages and the Santa Clara River), wildlife movement, and resources associated with the Santa Clara River SEA. Indirect impacts resulting from increased human and domestic animal presence, increased non-native plant and wildlife species, increased light and glare, stormwater runoff, and construction activities were also included in this analysis.

Response 4

The commenter claims, without substantiation, that mitigation measures from the NRMP are failing. The City disagrees with this opinion.

The potential project-specific and cumulative impacts of the project have been thoroughly analyzed in the Draft EIR and further in Revised Draft EIR Section 4.6, Biological Resources. Additionally, impacts of multiple projects with a large area along the Santa Clara River were previously analyzed in the NRMP EIS/EIR, as discussed above. Moreover, since the release of the Draft EIR and Revised Draft EIR Section 4.6, Biological Resources, an assessment of the NRMP entitled, *Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan Area*, has been conducted by URS, and is included in **Appendix C** to the Final EIR. This assessment concludes that when bank stabilization is placed upland from the active channel (buried bank stabilization), that floodplain, and terrace geomorphological units of the river, the bank stabilization had less of an impact on the hydrologic and ecological functions of the riparian system. This report also concluded that bank stabilization (such as that proposed by the Riverpark project) that includes native plant restoration allows for increased buffer. The report states that the buffer also protects the river from sediment erosion. Consequently, based on

these analyses, the City does not agree with the commenter's opinions as to the "failings" of the NRMP and its mitigation measures.

Response 5

The comment expresses the opinions of the commenter with respect to the effects of growth in the Santa Clara watershed over the last few decades. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

It should be noted that the potential cumulative impacts of the project have been thoroughly analyzed in the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources. Further, analysis undertaken since the Draft EIR and Revised Draft EIR Section 4.6, were released, three additional analyses have been prepared, including *Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan Area*" prepared by URS, *Hybrid Functional Assessment for Riverpark*, prepared by Glenn Lukos Associates, and *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, prepared by GeoSyntec (Final EIR **Appendices C** and **G**), and provide further support for the Draft EIR's and Revised Draft EIR's analyses and conclusions.

Response 6

The City does not agree that the project will cause the severe degradation the commenter suggests. Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-86, and Draft EIR Section 4.20, Floodplain Modifications, address the potential impacts of increased stormwater and urban runoff on biological resources. Increases in amount of impervious surfaces due to the project will create significant volumes of contaminated stormwater runoff from construction to post-construction stages and, without the project design features (PDFs) and mitigation measures proposed by the Draft EIR and Revised Draft EIR, could have threatened to degrade water quality and habitat for the river. Impacts as a result of this increase were considered potentially significant. Impacts on overall water quality are also addressed in Section 4.8.1, Water Quality, of the Draft EIR**.** While construction of the project will increase impervious surface, which in turn increases the volume of urban storm water runoff, the project has been designed to incorporate appropriate construction stage and post-construction stage BMPs (PDFs) so as to avoid creating significant impacts. Mitigation has been recommended to avoid adverse significant impacts from construction and post-development increases of urban storm water runoff volumes as discussed in

Draft EIR Section 4.8.1, Water Quality. Therefore, with the PDFs and recommended mitigation in place, the project would not create either project-level or cumulative significant impacts.

With respect to the post-development stage, Draft EIR Section 4.8.1 and Table 4.8.1-11, at pp 4.8.1-70–71, evaluate and quantitatively predict the increases in runoff volumes that can be expected to result from development of the project.

Additionally, the Draft EIR Section 4.8.1, Water Quality, at pp. 4.8.1-55–65 describes the post-development BMPs incorporated into the project as design features (PDFs) in detail. Post-construction BMPs incorporated into the project as PDFs include site planning BMPs, source control BMPs, and treatment BMPs, including hydrodynamic separators, extended detention basins, and biofilters. These BMPs are designed into the project in accordance with the MS4 Permit, and will remove contaminants from post-development runoff. The site planning and treatment BMPs have been further described in greater detail in the GeoSyntec *Additional Hydrology and Water Quality Analysis for the Riverpark Project*, dated October 13, 2004 attached to the Final EIR at **Appendix G**, as well as in Draft EIR Figure 4.8.1-2, Drainage Concept Map. Draft EIR heading 4.8.1.6 sets forth the standards for later project implementation of these BMPs in accordance with the MS4 Permit, and these facilities and structures constitute the conceptual SUSMP for the project.

Finally, the Draft EIR Section 4.8.1, at pp. 70–90, 92–96, evaluates the increase in urban runoff volume, then predicts post-development urban storm water quality and evaluates, quantitatively and qualitatively, the effectiveness of the BMPs in treating the urban runoff prior to discharge to the river. This detailed analysis concludes that, overall, the project would not be expected to adversely affect surface water quality conditions in the watershed, as compared to existing conditions and receiving water quality standards. Taking into account the maximum potential increase in mean annual storm water runoff volume that can be expected to result from development of the project, the detailed quantitative and qualitative analysis in the Draft EIR shows that the quality of the runoff will not cause or contribute to any water quality standard exceedances and will not significantly degrade water quality in the river. In some cases, post-development water quality runoff is predicted to improve over existing conditions. For example, over runoff conditions in agricultural areas, because water quality impacts are reduced to a level of insignificance by implementation of the PDFs in compliance with applicable federal, state and local regulatory and local permit requirements.

It should be clarified that the Draft EIR's analysis of water quality impacts resulting from increases in urban storm water volume is conservative in that it overstates water quality impacts. The analysis is conservative for a number of reasons (see **Response 11**, below), including the fact that the water quality

analysis is based on assumptions that overstate increases in storm water runoff volume, assuming the increases are greater than they are actually likely to be.

Pursuant to the LARWQCB comment letter, a new GeoSyntec *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, dated October 13, 2004 (please see Final EIR **Appendix G**), has been prepared. At the request of the LARWQCB, the GeoSyntec Analysis addresses the expected reductions in runoff volume anticipated to occur as a result of certain BMPs. The analysis concludes that substantial reductions in runoff volume can be expected to result from BMPs identified for incorporation into the project. For example, the Draft EIR, water quality analysis conservatively did not account for volume losses that are likely to occur in the planned detention basins and vegetated swales. Recent analyses of the ASCE/BMP database has shown that dry detention ponds and biofilters will, on average, achieve volume reductions of about 30 percent and 38 percent, respectively, due to infiltration and evapotranspiration. Based on this analysis, GeoSyntec conservatively estimates in their report that approximately 10 percent to 20 percent of the project's inflow to water quality basins, swales and bioretention areas will evapotranspirate and infiltrate in the planned BMPs. The identified volume reductions, which were not taken into account in the Draft EIR, mean that post-development water quality impacts are reduced to a lower level than discussed in the Draft EIR because as storm water volume decreases, pollutants decrease.

Even taking into account its conclusions with respect to volume reductions, the GeoSyntec Additional Analyses remains conservative because additional volume and pollutant load reductions are expected to result from PDFs and/or BMPs other than the extended detention basins and the swales. These reductions are not addressed or calculated by the GeoSyntec Additional Analyses or by the Draft EIR**.** Some of the BMPs that will reduce runoff volume and pollutant loads include minimizing total impervious and directly connected impervious areas, as well as maximizing canopy interception by preserving existing native trees and shrubs (e.g., riparian area), landscaping with additional native or drought tolerant trees and large shrubs, and implementing efficient irrigation. None of these BMPs has been modeled for purposes of runoff volume or pollutant reductions.

In light of the information in the GeoSyntec Additional Analyses, the conclusion of the Draft EIR that increases in impervious surface and resulting increases in urban storm water runoff will not cause significant, adverse water quality impacts in receiving waters is not only fully supported by analysis, but is conservative.

The construction stage of the project also poses risks of discharge of pollutants to receiving waters, but not generally due to increases in impervious surface, which do not occur until the project is actually

constructed and surfaces are covered with improvements or hardscape. Draft EIR Section 4.8.1, Water Quality, at pp. 4.8.1-66–70, and 4.8.1-91–92, analyzes in detail potential water quality impacts during the construction stage of the project. The Draft EIR also analyzes in detail the BMPs that will be implemented during the construction phase to control these pollutants and mitigate potential water quality impacts on the river.

The Draft EIR Section 4.8.1, Water Quality, at pp 4.8.1-67–68 describes the potential for significant increases in pollutant export from the site due to soil disturbance and construction operations, including the potential for increased levels in runoff of sediment, TSS, pesticides, trace metals, nutrients, pathogens and other wastes. Additionally, this Section, at pp. 4.8.1-66–67, discusses the regulatory requirement mandating preparation and approval of a Storm Water Pollution Prevention Plan (SWPPP) prior to issuance of grading permits pursuant to the General Construction Activity Storm Water Permit, the MS4 Permit, and City of Santa Clarita ordinances. As discussed in the Draft EIR, the SWPPP will be prepared in accordance with the performance standards set forth in the Draft EIR, General Permits, and the City's water quality ordinances, and will provide a more detailed description of the specific BMPs that would be employed to control discharge of pollutants associated with construction activities and the locations of those BMPs. BMPs will be selected to control runoff discharged during the construction process from available BMP handbooks, including the California Stormwater Quality Association *Stormwater Best Management Practice (BMP) Construction Handbook*, 2003 http://www.cabmphandbooks.com/. These BMPs must be implemented and designed in accordance with the requirements and performance criteria set forth in the General Permit. This includes the requirement that construction BMPs shall be designed to treat storm water runoff in accordance with Best Available Technology/Best Conventional Technology standards, and must control the quality of runoff from the construction site and prevent erosion. Finally, the Draft EIR evaluates the effectiveness of BMPs incorporated into SWPPPs in compliance with these standards. The Draft EIR determines that available BMPs will effectively control construction related pollutants in stormwater, and non-stormwater related discharges, preventing significant adverse impacts on the Santa Clara River.

The extensive incorporation of BMPs into the project for both the construction and post-construction phases, and the conservative, and in-depth analysis of project water quality impacts, all assure that water quality impacts are mitigated to a level of insignificance and that neither the construction phase, nor the post-construction phase will result in degradation of water quality within the River.

As discussed in Sections 4.2, Flood, and 4.20, Floodplain Modifications, of the Draft EIR, the post-development increases in volume of runoff will be controlled sufficiently by onsite drainage

improvements sized consistently with the City of Santa Clarita requirements, both prior to, and at the point of discharge to prevent adverse affects on River and its habitat.

Draft EIR Section 4.2, Flood, at pp. 4.2-38–40 first quantitatively evaluates changes in post-development runoff volumes. Section 4.2, p. 40 further evaluates the post development condition, including project storm water drainage facilities, and determines that clear flow runoff volumes would increase by 20.8 percent over existing conditions. However, post-development burned and bulked flow volumes decrease, as do capital flood flows, due to increased cover provided by development. The Draft EIR then compares the changes in peak flow runoff volumes with existing peak flows in the River and with the capacity of the River. The Draft EIR determines, based on expert, quantitative analysis, that changes in runoff volumes will not adversely affect the River or the habitat within the River.

Draft EIR Section 4.2, Flood, pp. 4.2-37-38 and 4.2-43-44 also models expected changes in velocities within the river resulting from increased peak flows from the developed site. Based on quantitative analysis, the Draft EIR Section 4.2, Flood, p. 38 determines that for all storm events, except the 2-year event, there are no post-development net increases in river velocity, and no additional erosion or scour will result from project development in the 5-, 10-, 20-, 50-, or 100-year event. As outlined on p. 4.2-44 of the Draft EIR, in the 2-year event, localized velocity increases on the order of about 6 percent are expected in the immediate vicinity of bridge abutments and piers. Draft EIR Section 4.2 at pp 4.2-38 and 4.2-44 states that these velocity increases are expected only in the smallest events and can be mitigated to a level of insignificance by use of erosion protection measures at discharge points to the River, and energy dissipater, all of which shall be implemented consistently with NRMP requirements. As a result, increases in velocities resulting from increased peak flows in the post-development condition will not adversely affect the resources within the river.

Draft EIR Section 4.2, Flood, at pp. 37 and 39, also calculates the potential for post development increases in peak flows to result in detrimental increases in water surface elevations within the river. Based on quantitative analysis, the Draft EIR concludes that the project will not result in any significant increases in water surface elevation that could adversely affect river resources.

Finally, Section 4.20, Floodplain Modifications, at pp. 4.20-3–6 of the Draft EIR, evaluates the combined effects on the habitat, sensitive species and other resources of the river resulting from modifications to the floodplain associated with the proposed project (including the placement of bank, toe, and bridge abutment stabilization within the river). This evaluation includes upstream and downstream areas of the river. Hydraulic calculations and sediment transport assessments were prepared using ACOE HEC-RAS and HEC-GEO-RAS programs. These programs were also used to determine floodplain limits, flow

velocities and scour/deposition potential for a range of storms, and flow frequencies (2-, 5-, 10-, 20-, 50-, and 100-year storms were all evaluated). The Draft EIR concludes, based on these quantitative analyses, that river hydraulics would essentially be unchanged by the project. Based upon this comprehensive Draft EIR analysis, the Draft EIR concludes that

- Post-development increases in flows will not adversely affect the river or its aquatic, wetland and riparian habitat areas or sensitive species (Draft EIR Section 4.20 at pp. 4.20-38–40 and 4.20-60–63);
- Post-development decreases in flood inundation area result in only negligible change to the river and do not adversely affect its aquatic, wetland or riparian habitat areas or sensitive species (Draft EIR Section 4.20 at pp. 4.20-41–50 and 4.20-60–63);
- Post-development changes in velocities are generally negligible, but where increases occur, the increases are generally less than 5 percent, and always less than 10 percent. So impacts are localized and limited in scope and do not significantly affect the river, or its wetland, aquatic or riparian habitat areas or its sensitive species (Draft EIR Section 4.20 at pp. 4.20-38–51 and 4.28-63–667); and
- Post-development increase in flow due to the project do not result in significant increases in depths for any storm event, and the minimal, localized increase in depth that result from the project do not adversely affect the River or its habitat areas or species. (Draft EIR Section 4.20 at pp. 4.20-59–64)

In addition to achieving protection of the river from the effects of peak post-development storm water flows, post-development increases to the duration of runoff and in average annual runoff volumes (which is a measure that focuses on the expected increases in runoff resulting form more frequent, and smaller storm events, rather than peak flows) will not adversely affect the river. The GeoSyntec *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, dated October 13, 2004 (Final EIR **Appendix G**), supports the Draft EIR's conclusions that the increases in mean annual stormwater runoff will not adversely affect River habitat or create scour or erosion within the River. Storm drainage facilities, including detention ponds, and water quality facilities, including extended detention basins and biofiltration swales, all combine to infiltrate, evapotranspirate and retard erosive flows from smaller, but more frequent storm events. Further, energy dissipation measures at discharge points reduce local scour and erosion consistently with the NRMP.

Finally, volume reductions achieved in biofiltration swales and detention basins avoid discharge of dry weather flows. As a result, increases in duration of flow, and mean annual runoff will not significantly adversely affect river channel stability or habitat.

Response 7

The City does not agree with this comment regarding storm water pollution. The Draft EIR addresses the potential impacts of increased stormwater and urban runoff on biological resources on p. 4.6-86. Impacts as a result of this increase were considered potentially significant. The prospect of the need to channelize

the Santa Clara River to control stormwater runoff is speculative, represents the opinion of the commenter, and does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR; therefore, no further response can be provided. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Please see Friends of the Santa Clara River (**Comment Letter 17**) **Responses 4** and **5**, above, SCOPE (**Comment Letter 18**) **Response 7**, above, and **Response 6**, above. As discussed in Draft EIR Section 4.8.1, Water Quality, at pp. 4.8.1-70–80, although pollutant loads are predicted to increase for certain pollutants in comparison to open space (as opposed to agricultural) conditions, the overall pollutant concentrations will not increase. All pollutant concentrations are below the Basin Plan, TMDL, and CTR benchmark criteria. Therefore, the increased pollutant loads would not affect beneficial uses, riparian species, and wetland habitat. Please Draft EIR Section 4.8.1 for more detailed summary of the Draft EIR analysis and conclusions.

The project does not propose channelization. Channelization of the river is not required due to the project or increases in storm water runoff volume. See **Response 6**, above, and Draft EIR Sections 4.2, Flood, and 4.20, Floodplain Modifications, for more detailed discussion.

Further, the project must comply with the NRMP, which prohibits channelization. The NRMP requires the use of stream restoration techniques for bank stabilization, which employ native soils and natural revegetation of banks. Compliance with the NRMP assures that storm drainage and peak flows will not adversely affect the river, but, at the same time, assures preservation of the natural river system. The project proposes to implement the natural stream restoration techniques authorized by the NRMP to stabilize limited stretches of riverbank in the vicinity of the Riverpark development. Except where bridge abutments are installed, no concrete sidewalls or other channelization techniques will be implemented as part of the project. See Friends of the Santa Clara River (**Comment Letter 17**) **Response 4**, Draft EIR Sections 4.2, Flood, and 4.20, Floodplain Modifications, and Revised Draft EIR Section 4.6, Biological Resources, for a more detailed discussion.

With regard to the comment that a more adequate analysis of water quality impacts of the entire project must be considered than is currently presented in the EIR, the comment fails to identify any specific areas where analysis could be improved. In the City's opinion, there is an extensive quantitative and qualitative study of potential water quality impacts in Section 4.8.1, Water Quality, of the Draft EIR.

The conclusions of the in-depth water quality analysis set forth in Section 4.8.1, Water Quality, of the Draft EIR are summarized in Friends of the Santa Clara River (**Comment Letter 17**) **Response 4**, above,

SCOPE (**Comment Letter 18**) **Response 7**, above, and in **Response 6**, above. With respect to adequacy of this analysis, depending on available data for pollutants of concern and other relevant factors, in depth quantitative or qualitative and pollutant specific analysis of potential water quality impacts was conducted in the Draft EIR. Results of this analysis were then compared with applicable storm water permit requirements and benchmark receiving water standards to determine, based on the weight of the evidence, the likelihood for significant adverse water quality impacts.

With respect to the quantitatively analyzed pollutants of concern, the model methodology used was adapted from an empirical method that has been referred to by others as the Simple Method (Schueler 1987). The Simple Method is an empirical approach using available representative water quality data to estimate pollutant export from urban development sites. Rather than attempting to mimic the complex nature of rainfall-runoff events and resulting water quality, the Simple Method is a data-driven method that utilizes actual water quality data. With the current lack of complete understanding of the fundamental unit processes involved in pollutant transport and removal, this "black box" approach to modeling is considered more appropriate than alternative physically based pollutant transport modeling methodologies that utilize a multitude of empirically-derived constants (some of which are extremely difficult and costly to accurately estimate) and simplifying assumptions. The only empirical constants used in the pollutant-loading model are in the estimation of runoff volume from rainfall depth, which is based on the widely accepted rational formula.

With respect to qualitatively analyzed pollutants of concern, based on the fact that the quality and extent of available data for both land use-based runoff concentrations and BMP performance limits, and the number of parameters available for numerical assessment through modeling, some potential constituents of concern could only be reasonably addressed qualitatively. For qualitatively analyzed pollutants of concern, a rigorous literature and data review was conducted to assess the likelihood of a pollutant increase as a result of the project, the current water quality condition of receiving waters, and the efficacy of BMPs in controlling each pollutant. Therefore, the analysis of potential water quality impacts of the proposed project with respect to all potential constituents of concern, whether addressed numerically through modeling, or addressed qualitatively through narrative discussion, is considered more than adequate.

In evaluating the adequacy of the water quality analysis, it is also important to take into account that the analysis of post-development water quality impacts set forth in the Draft EIR is conservative. The analysis overstates potential water quality impacts of the project. This is true for three reasons. First, the analysis does not take into account the treatment expected to occur in all water quality features that are incorporated into the project as PDFs. Instead, the analysis only considers the treatment provided by

only one of the structural BMPs identified as a PDF, the extended detention basins. Second, the analysis does not take into account the benefits of combining various BMPs in series, even though, as a project design feature, these BMPs would be constructed in series in certain locations. For example, as demonstrated in GeoSyntec *Additional Hydrology and Water Quality Analyses For the Riverpark Project*, October 13, 2004, Figure 1 (Final EIR **Appendix G**), the commercial area and multi-family residential areas, hydrodynamic separators will be constructed upstream of swales, providing synergistic treatment benefits that are not quantified in the Draft EIR. Finally, the Draft EIR evaluation overstates impacts because it does not take into account volume reductions that are expected to occur within the structural BMPs identified as project design features. Therefore, pollutant loads are overstated because a greater increase in mean annual runoff volume is assumed in the water quality analysis than will actually occur.

Response 8

The commenter states that he "finds many of the proposed mitigations unacceptable in protecting riparian and wetland habitat," but does not state which mitigation he finds unacceptable or why. The comment fails to identify any specific defect in the mitigation measures or to raise any specific objection to the analyses and conclusions in the Draft EIR. As such, the comment does not raise any issue with sufficient particularity to enable the City to respond by providing additional evidence, explanation, or analysis to supplement the Draft EIR's cumulative impacts analyses. Even so, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 9

The comment expresses the opinions of the commenter that buried bank stabilization is not acceptable, and fails to explain why it is not, rendering it impossible for the City to respond to any specific concern. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

It should be noted that the potential project-specific and cumulative impacts of the project, including buried bank stabilization, have been thoroughly analyzed in the Draft EIR (see Section 4.2, Flood, and Section 4.20, Floodplain Modifications) and further in the Revised Draft EIR Section 4.6, Biological Resources. In addition, the potential impacts of bank stabilization along larger portions of the Santa Clara River were analyzed in the NRMP EIS/EIR prepared by the ACOE and the CDFG, incorporated by reference into the Draft EIR [this document can be reviewed at the City of Santa Clarita, Department of

Planning and Building Services, 23920 Valencia Boulevard, Suite 300, Santa Clarita, CA 91355], and specific mitigation was included in the NRMP. As a result, the majority of the project bank stabilization has been permitted under the NRMP, and the NRMP mitigation has been included in the project and analyzed in Draft EIR.

Additionally, since the release of the Draft EIR and Revised Draft EIR Section 4.6, Biological Resources, URS has prepared a report on the effectiveness of the NRMP, entitled *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004 (Final EIR **Appendix C**). This report both characterizes and evaluates the quality of wetland and riparian habitats within selected areas of the Natural River Management Plan on the Santa Clara River. The report concludes that when bank stabilization (buried bank stabilization) is placed upland from the active channel, floodplain, and terrace geomorphological units of the river, the bank stabilization had less of an impact on the hydrologic and ecological functions of the riparian system. The URS report also concluded that bank stabilization that includes native plant restoration allows for increased buffer (such as that proposed by the Riverpark project). The report states that the buffer also protects the river from sediment erosion. One example of how buried bank stabilization with (such as that proposed by the Riverpark project) affected the quality of the riparian habitats within the reach sited in the report is the Jefferson Apartment complex.

> "The downstream-most site is located east of I-5, between the Jefferson Apartments on the south bank and a commercial complex to the north. The north bank of the site is partially lined with exposed gunite, and buried soil cement bank stabilization is in place along the southern bank. The vegetation communities within this reach are best described as cottonwood/willow riparian forest, with southern willow scrub interspersed. This was the highest-scoring site (HFA Total Score = .88), largely due to the presence of a wide buffer between the river corridor and surrounding development. Even along the portion of the north bank where exposed gunite is in place, the channel width has not been excessively constrained and a riparian corridor is present between the active channel and developed uplands." *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004, p. 2 (Final EIR **Appendix C**).

Finally, since the Draft EIR and Revised Draft EIR Section 4.6, Biological Resources, were released for public review, the project has been revised to relocate the proposed bank stabilization along the river from the park in the central portion of the project site in the east to the easterly commercial parcel in the west further back to preserve the mature riparian resources along this edge of the river. Additionally, the project has been revised to dedicate additional portions of the South Fork of the Santa Clara River to the City. These revisions would result in preservation of over 330 acres on-site and nearly 130 acres off site.

Response 10

The commenter incorrectly asserts that removal of non-native plant species is suggested by the Draft EIR as the only mitigation for bank stabilization. To the contrary, however, the removal of exotic, non-native plant species represents one of over 50 mitigation measures included in the Draft EIR to address impacts on riparian habitat and associated plant and animal species and would not, by itself, adequately mitigate impacts on these resources. Removal of non-native vegetation is part of a comprehensive plan (including the NRMP as well as the RMMP addressed in the mitigation section (Revised Section 4.6, Biological Resources, p. 4.6-52–59) to restore, enhance, and create riparian habitat to offset impacts associated with the Riverpark project.

Response 11

The comment expresses the opinions of the commenter that the Draft EIR fails to adequately balance the need for housing and the need for biological resource and floodplain protection, but the commenter does not state specifically in what manner the Draft EIR fails, or identify any specific defect in or objection to the analyses and conclusions in the Draft EIR. The City disagrees, and believes that the Draft EIR (see Section 4.17, Population/Housing/Employment, and Section 4.20, Floodplain Modifications), together with Revised Draft EIR Section 4.6, Biological Resources, adequately balances those needs. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR, no further response can be provided.

21. LETTER RECEIVED FROM CYNTHIA HARRIS, SANTA CLARITA OAK CONSERVANCY DATED, MAY 3, 2004

Response 1

The comment endorsing the project's design to save 72 of the oak trees on site is acknowledged. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Revised Riverpark Draft EIR, no further response can be provided.

Response 2

The commenter is concerned about the removal of 15 of the 87 oak trees on site. As the Draft EIR, and particularly Revised Draft EIR Section 4.6, Biological Resources, make clear, the project has been designed to avoid potential impacts to oak trees to the greatest extent possible. With the subsequent changes in the design of the active park suggested by the City's Parks Commission, two additional oak trees in that area will be removed and relocated to areas further into the canyon area of the passive park. Potential impacts on oak trees are analyzed in Revised Section 4.6, Biological Resources, based among other things on the analysis in the Oak Tree Report included in Appendix 4.6 to the Draft EIR, and appropriate mitigation measures for those impacts are identified, starting on p. 4.6-100 (Final EIR **Appendix C)**. As stated in Mitigation Measure 4.6-6, appropriate approvals subject to the Oak Tree Preservation Ordinance (Ordinance 89-1) and the City of Santa Clarita Oak Tree Preservation and Maintenance Guidelines shall be obtained prior to oak trees being removed.

Response 3

The comment suggests, erroneously, that the removal of the 17 oak trees is required due to "5.5 million cubic yards of grading in a flood plain" and that the remaining oak trees will be prevented from absorbing water from the river by the bank stabilization, and then argues that the project should be designed so that not one oak tree is removed, especially because of what the commenter believes is the rapid approach of Sudden Oak Death.

Fifteen of the oak trees proposed for removal will be relocated on-site primarily within the passive park area located in the central canyon proposed for dedication to the City of Santa Clarita. An extensive monitoring program will be implemented on all of the transplanted trees. This canyon area presently contains a majority of the oak trees located on site. Other oak trees located on site and not proposed for

removal and/or relocation are in areas either set back a substantial distance from the river or in areas where bank stabilization is not proposed. For example, the passive park area, containing most of the trees on site as well as being the primary area for transplantation, is located over 600 feet from the river corridor and its vegetation is influenced by localized drainage patterns within the canyon rather than the river. Therefore, the implementation of buried bank stabilization on the Riverpark site is not expected to indirectly impact existing or transplanted oak trees.

Finally, the commenter states that the oak trees are being removed due to the grading within the floodplain. This statement is inaccurate. Most of the oak trees proposed for relocation are due to proposed grading associated with the project, not grading within the floodplain as defined by the FEMA.

Response 4

The commenter quotes from a City publication entitled, *Understanding Our Oak Trees* then suggests that the City consider alternatives that will retain all of the oak trees, preferably by extending the City's Central Park (north of the project site) through the project site to the river.

22. LETTER RECEIVED FROM HENRY SCHULTZ, SIERRA CLUB, DATED MAY 3, 2004

Response 1

The commenter states that the most recent Air Quality Management Plan (AQMP) adopted by the South Coast Air Quality Management District (SCAQMD) should be discussed in the EIR.

The section referenced in the comment (Draft EIR Section 4.4, Air Quality) only mentions that the SCAQMD's 1997 AQMP predicted attainment of the air quality standards in the air basin by 2010. Further discussions of the SCAQMD's AQMP in that section refer to the most recent plan, which was adopted by the SCAQMD's Governing Board on August 1, 2003. A detailed discussion of this plan is found in Section 4.4, Air Quality, of the Draft EIR (see pp. 4.4-10–11). The Draft EIR reflects the most recently approved AQMP by the SCAQMD, the 2003 AQMP.

Response 2

The commenter notes that portions of the SCAQMD's *CEQA Air Quality Handbook* are being revised and may be obsolete.

The City is aware that the SCAQMD's 1993 *CEQA Air Quality Handbook* is being revised, and the Draft EIR states this fact (see Section 4.4, Air Quality, pp. 4.4-12 and 4.4-13). The City's consultant has consulted with the SCAQMD concerning its updating process. As of its public release, the air quality analysis contained in the Draft EIR Section 4.4, Air Quality, conforms to current recommendations by the SCAQMD regarding air quality analyses of residential, commercial, and retail projects, such as this project, including the use of URBEMIS2002 to estimate emissions from construction- and operational-related activities associated with these type of development projects. As the SCAQMD's April 30, 2004**,** letter confirms, the SCAQMD has no comment on the Draft EIR's use of its *CEQA Air Quality Handbook*.

Response 3

The commenter suggests that the air quality analysis in the EIR include the most recent air quality data for the Santa Clarita Valley.

The Riverpark Draft EIR Section 4.4, Air Quality (see pp. 4.4-42–47), provides the historical and most recent ambient air quality data reported by monitoring stations nearest to the project site. Additionally,

this section discusses the regional air quality in the air basins regulated by the SCAQMD (i.e., South Coast Air Basin and portions of the Salton Sea Air Basin) as well as the project-specific area in the Santa Clarita Valley (see pp. 4.4-20–37). While the project's emissions would have impacts in the local area, it could also affect regional air pollutants, such as ozone and PM_{10}. Accordingly, the localized and broader scope of the air quality environmental setting gives the decision makers in the City of Santa Clarita a better understanding of the potential impacts of their decision on regional air quality.

Response 4

The commenter suggests that details from 2003 daily smog (i.e., ozone) maps from the SCAQMD's Website be included in the EIR.

As noted in **Response 3**, above, the Riverpark Draft EIR Section 4.4, Air Quality (see pp. 4.4-42–47), provides the historical and most recent ambient air quality data reported by monitoring stations nearest to the project site, which include ozone and the ozone precursor NO_x. Additionally, this section discusses the regional air quality in the air basins regulated by the SCAQMD (i.e., South Coast Air Basin and portions of the Salton Sea Air Basin) as well as the project-specific area in the Santa Clarita Valley, and it includes a discussion of ozone and ozone precursors NO_x and ROG (see pp. 4.4-21–23, 4.4-28–29, and 4.4-36–37). This depiction provides sufficient information to notify the public and the decision makers of the existing regional and localized ozone problems and an adequate depiction of the status of ambient air quality for the region and the project area.

The commenter has not explained why the 2003 daily smog maps should be included in the Draft EIR or why the data presented in the Draft EIR is not adequate. The daily smog maps, which may be obtained from the U.S. Environmental Protection Agency's website,[22] are generated each day and are available to the public. The commenter does not suggest any criteria for choosing maps for any particular days.

Response 5

The commenter indicates that the air quality, wind, temperatures, rainfall, and inversion patterns of the Santa Clarita Valley be included in the EIR air quality analysis.

22 www.epa.gov/airnow/mapselect.html.

This information has been included in the Riverpark Draft EIR Section 4.4, Air Quality, (see pp. 4.4-20–37); localized air quality (see pp. 4.4-42–47); regional climate (see pp. 4.4-14–17); and local climate (see p. 4.4-41). Please see also **Responses 3** and **4**, above.

Response 6

The commenter indicates that the air quality section of the Draft EIR is unclear as to whether additional diesel controls are available as construction mitigation.

California Vehicle Code Sections 27156 and 38391, and Section 2472, Title 13, California Code of Regulations, prohibit the sale or offer for sale, advertisement, or installation of any device which alters or modifies the original design or performance of any required motor vehicle, off-highway motor vehicle, or off-road vehicle, engine, or equipment pollution control device or system unless the device has been exempted by the California Air Resources Board (CARB). With respect to off-road construction equipment, this prohibition applies to engines with a model year of 1996 or later. A device or apparatus may be used if it has been formally exempted by the California Air Resources Board as not reducing the effectiveness of any required control device or resulting in emissions that comply with existing state or federal standards for the model year of vehicle being modified. CARB's "aftermarket parts" program evaluates aftermarket products to verify that they meet these criteria. If so, the CARB issues an Executive Order allowing the use of these products. Accordingly, emission control technology that has not been approved by CARB cannot be used on post-1996 construction equipment. Similarly, it would not be prudent to use control devices that are not CARB-approved on pre-1996 equipment due to uncertainty about their effectiveness, feasibility, or safety.

To date, only one selective catalytic reduction system, which is conceptually similar to the one suggested by the commenter, has been approved for off-road construction equipment, such as graders, scrapers, and loaders. It can only be used on 1996 to 2002 4-stroke diesel and diesel/natural gas bi-fuel engines rated at less than 600 horsepower. The SCR system suggested by the commenter for diesel transit buses has not been approved by CARB for use on on-road or off-road diesel-fueled engines. As the exact equipment to be used to construct the proposed project is not known at this time, it cannot be determined, and it is speculative, whether such control equipment would be available and approved by CARB to control emissions from the diesel-fueled construction equipment by the time such equipment would be used for the proposed project. Nonetheless, any construction equipment used for the project will have to comply with the appropriate emission standards for its model year. As newer equipment is introduced in the marketplace, it will be likely to have lower emissions than those presented in the Draft EIR.

Please also see **Comment Letter 13, Response 2**.

Response 7

The commenter suggests that the air quality section of the EIR comment on all diesel controls and why they may or may not be used.

The diesel controls described in the Riverpark Draft EIR Section 4.4, Air Quality (see pp. 4.4-65–68), represent the current commercially available diesel control devices for off-road diesel-fueled construction equipment. As stated in **Comment Letter 22, Response 6**, any emission control device installed on off-road construction equipment with a model year of 1996 or later must be approved by CARB through its aftermarket parts program. Thus, they would only be feasible if approved by CARB. Most of the equipment approved by CARB for off-road engines are various kinds of particulate control devices, which the Draft EIR indicates may be feasible mitigation. Please note that the feasibility is dependent on a current CARB approval for particular engines of specified model years under specified conditions (e.g., the use of ultra-low-sulfur diesel fuel). Because they have not been verified as being effective, use of non-CARB-approved emission control devices on construction equipment would be of uncertain feasibility.

Please also see **Comment Letter 13, Response 2**.

Response 8

The commenter states that SCAQMD Rule 403 dust control measures are not covered in the air quality section of the EIR.

While the specific SCAQMD Rules 403 and 1186 dust control measures were not set out verbatim in the Riverpark Draft EIR Air Quality, heading 4.4.7, (Mitigation Measures Proposed by this EIR), those dust control measures are incorporated by reference in heading 4.4.6 (Mitigation Measures Already Incorporated into the Project and/or the Air Quality Impact Analysis), specifically in Mitigation Measures 4.4-1 and 4.4-2. They do not appear in heading 4.4.7 (Mitigation Measures Proposed by this EIR), because the proposed project already incorporates those measures. In addition, implementation of these control measures was assumed for the purpose of estimating the project's construction-related emissions in the Draft EIR. Accordingly, the Air Quality section of the Draft EIR recognizes that compliance with SCAQMD Rules 403 and 1186 will be required for this project.

Response 9

The commenter asserts that the project is not consistent with efforts to minimize air quality impacts and that it would significantly worsen air quality in the Santa Clarita area. The City disagrees with both comments.

The analysis in Section 4.7, Land Use, of the Riverpark Draft EIR, on p. 4.7-18, in part, discusses the project's consistency with City of Santa Clarita General Plan Element Goals and Policies, specifically, the Air Quality Element. The listed goals and policies require coordination between various elements of the General Plan and the Air Quality Element and between local, regional, state, and national agencies to "plan and implement clean air objectives for the South Coast Air Basin." Consistency with these goals and policies does not require that a project have less than significant air quality impacts. As stated in the Draft EIR, the preparation of the EIR and implementation of the proposed mitigation measures is intended to carry out such coordination. Accordingly, the project is consistent with these goals and policies.

Further, since the Draft EIR was released to the public, a supplemental regional air quality analysis has been undertaken. The regional air quality analysis was prepared by Environ International Corporation and is presented in **Appendix B** to the Final EIR. The regional air quality analysis addressed specifically the issue of whether significant ambient concentrations of ozone and particulate matter (PM) in the Santa Clarita Valley (SC Valley) result from local emissions, and thus, significantly worsen air quality. The regional air quality analysis concluded that significant ambient levels of ozone and PM in the SC Valley do not result from local emissions, and that "[t]he great majority of ozone and PM pollution in the SC Valley is created by sources of emissions outside the SC Valley."

However, because the Draft EIR concludes overall that the proposed project's construction-related and operation-related emissions would be considered unavoidably significant, a Statement of Overriding Considerations would be necessary to approve the proposed project.

Response 10

The commenter asserts that the project is not consistent with City policy to protect residents from air quality concerns.

The City of Santa Clarita does not concur that the project is inconsistent with this General Plan Air Quality Element Policy 13.5. As was stated in the Draft EIR,

> "[b]y calculating project air quality impacts and by recommending mitigation measures to reduce these impacts to the extent required by SCAQMD and as feasible, mitigation is proposed in this section to reduce project-related air quality impacts to less than significant levels. However, no feasible mitigation exists which would reduce these emissions to below the SCAQMD's recommended thresholds of significance. To the extent that the project evaluates and mitigates project air quality impacts, it is consistent with Policy 13.5; however, no mitigation exists to reduce project impacts to less than significant levels." (See Section 4.7, Land Use, p. 4.7-29.)

Furthermore, the direct emissions from the proposed project are not expected to produce levels of criteria pollutants or precursors that are unsafe to local receptors, as Policy 13.5 requires. For example, the revised "CO hotspots" analysis requested by the SCAQMD in its comments on the Draft EIR (see **Comment Letter 13** of this Final EIR), concludes that local CO levels will be well below the health-based National and California ambient air quality standards. (See Final EIR **Appendix B.)**

Moreover, since the Draft EIR was released to the public, a supplemental regional air quality analysis has been undertaken. The regional air quality analysis was prepared by Environ International Corporation and is presented in **Appendix B** to the Final EIR. The regional air quality analysis addressed specifically the issue of whether significant ambient concentrations of ozone and particulate matter (PM) in the Santa Clarita Valley (SC Valley) result from local emissions, and thus, significantly worsen air quality. The regional air quality analysis concluded that significant ambient levels of ozone and PM in the SC Valley do not result from local emissions, and that "[t]he great majority of ozone and PM pollution in the SC Valley is created by sources of emissions outside the SC Valley."

However, because the Draft EIR concludes overall that the proposed project's construction-related and operation-related emissions would be considered unavoidably significant, a Statement of Overriding Considerations would be necessary to approve the proposed project.

Response 11

The commenter urges the City of Santa Clarita decision makers to downsize the proposed project because of its purported negative air quality impacts. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Because the Draft EIR concludes that, overall, the proposed project's construction-related and operation-related emissions would be considered unavoidably significant (Section 4.4, Air Quality, p. 4.4-75), a Statement of Overriding Considerations would be necessary to approve the proposed project. However, after the Draft EIR was released to the public, a regional air quality analysis was prepared by Environ International Corporation, and is presented in **Appendix B** to the Final EIR. The regional air quality analysis addressed specifically the issue of whether significant amounts of ozone and PM in the SC Valley result from local emissions, as opposed to emissions that have been transported into the SC Valley from the San Fernando Valley and other Los Angeles Basin areas. The regional air quality analysis concluded that "[t]he great majority of ozone and PM pollution in the SC Valley is created by sources of emissions outside the SC Valley." The SCAQMD has apparently prepared a similar study showing similar results, but has not yet released its full text. Therefore, it cannot be said that the majority of the air pollution in the Santa Clarita Valley area is generated by development in the Valley, as opposed to development outside the Valley.

Response 12

The commenter suggests that the EIR should mention that many houses near the project site were built in the 1960s and 1970s with single-paned windows, and implies that these houses are therefore are more susceptible to noise impacts than the Draft EIR acknowledges. The City disagrees. The extent to which any one individual structure would attenuate noise depends on a number of variables, including the type of construction, types of windows (single versus double pane), presence of insulation in the roof and walls, presence of seals around door and window frames, baffles at air exchange vents, etc. Table 4.5-1, Outside to Inside Noise Attenuation, in Section 4.5, Noise, of the Draft EIR provides the average known noise attenuation for typical structures. A light frame structure with an ordinary window sash in a closed position, which may be typical for older homes in the project area, would have a noise reduction of approximately 20 dB(A). A masonry frame structure with single pane windows, which is typical for many commercial buildings, would have a noise reduction of approximately 25 dB(A).[23] Therefore, the older homes in the project vicinity may have a noise reduction of approximately 20 dB(A), depending on the presence or absence of the aforementioned variables, compared to the 25 dB(A) indicated in Table 4.5-1, Outside to Inside Noise Attenuation, of Section 4.5, Noise, of the Draft EIR.

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23 U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch, Highway Traffic Noise Analysis and Abatement Policy and Guidance, (Washington D.C.: U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch, June 1995), p. 13.

The potential project-specific and cumulative impacts of the project on offsite locations are extensively and sufficiently analyzed in Section 4.5, Noise, of the Draft EIR. Moreover, the Draft EIR concludes that temporary and intermittent construction noise impacts, and operational mobile source noise impacts, would occur both on and off the project site. As a result, a Statement of Overriding Considerations would be necessary to approve the project.

Response 13

The commenter requests information indicating the success of habitat restoration.

By way of background, Revised Riverpark Draft EIR Section 4.6, Biological Resources, Mitigation Measure 4.6-2 on p. 4.6-98 establishes the requirement for a Resource Management and Monitoring Plan (RMMP). Revised Riverpark Draft EIR Section 4.6, Biological Resources, pp. 4.6-98 and 4.6-99, discusses the contents of the Resource Management and Monitoring Plan (RMMP) that will be prepared to address habitat restoration and plant and animal species protection. As indicated, this plan will include specific criteria that will specify what goals must be accomplished at each restoration/creation area before the mitigation is deemed a success. The RMMP will be reviewed by CDFG and approved by the City of Santa Clarita prior to the issuance of a grading permit for the site. Moreover, as provided in **Responses 15** and **20** to **Comment Letter 8**, above, the mitigation measure providing for the preparation of the RMMP has been modified.

Transplantation plans similar to those for the project drafted in part by Rancho Santa Ana Botanical Gardens and that include the transplantation of bulbs of *Chalocortus* sp. have been recently approved by Los Angeles County. As identified on p. 4.6-99 of Revised Draft EIR Section 4.6, adaptive management and contingency actions will also be incorporated into the RMMP that specify what actions will be taken in the event that the transplantation is not successful. Additionally, a Streambed Alteration Agreement was recently approved (2004) by the CDFG that specifically allows for the relocation and mitigation monitoring for the Plummer's mariposa lily (**Appendix C**). This executed agreement providing for mitigation of the Plummer's mariposa lily indicates that CDFG believes that the relocation of rare, threatened, or endangered species can be sufficiently successful to warrant its use as a mitigation measure.

Additionally, the project applicant has been actively working with the CDFG since western spadefoot toads were observed on the project site. As Mitigation Measures 4.6-9–12 demonstrate, all mitigation activities will be approved by CDFG and the designated qualified biologist is required to report to CDFG during the monitoring period. The mitigation pools created as part of the relocation and habitat

enhancement plan will provide habitat that is suitable and able to retain water for longer periods than the current pools on the site and that could equally support western spadefoot toads.

Response 14

The first sentence on p. 4.6-83 of the Revised Riverpark Draft EIR Section 4.6, Biological Resources will be revised as follows: a comma will be inserted between "habitat" and "representing" and the words "implementation of the" will be inserted between "the" and "project" at the end of the sentence. The sentence identifies the amount and type of habitat within the Santa Clara River SEA that will be removed as a result of project construction and grading.

Response 15

Scientific studies on the effects of a specific lighting standard on particular species or habitat are, at best, fragmentary with a few notable exceptions, such as the effect of tall, lighted structures on bird kills, not relevant to the project. Voltage and candlepower may also not be the correct standards by which to measure impact. In the absence of accepted quantitative standards, qualitative standards requiring lighting to be downcast luminaries and directed away from natural areas are performance standards accepted by CDFG and other resource agencies to effectively minimize light and glare impacts on wildlife in adjacent open space areas.

Response 16

Please refer to **Response 15** above regarding studies on light effects to wildlife. Glare impacts are created by vehicular and other forms of lighting, and light impacts are created by traffic lights, parking lot lights, street lights, and some safety lighting if lighting is provided on trails. Cumulative light and glare impacts are discussed in Revised Section 4.6, Biological Services p. 4.6-124, which states that "[c]ontinued development in the area also cumulatively contributes to the increase of humans and domestic animals. Because of the substantial amount of disturbance to sensitive resource areas posed by this increase, the project's contribution to this increase is also considered cumulatively significant." The Pony fields, while not specifically discussed, are a part of the existing development in the City that has been taken into consideration as a part of the whole of existing and proposed projects, which contribute to the cumulative impacts of the project.

Response 17

Mitigation Measure 4.6-18 in Revised Riverpark Draft EIR Section 4.6.7.g, Biological Resources, will be revised to be consistent with the specified air quality mitigation measures. Heading 4.4.6 (Mitigation Measures Already Incorporated into the Project and/or the Air Quality Impact Analysis) states that the applicant must "develop and implement a dust control plan, as approved by the City prior to issuance of a grading permit, which includes the measures recommended by the SCAQMD, or equivalently effective measures approved by the SCAQMD, as provided in Rules 403 and 1186 regarding fugitive dust from construction activities." Accordingly, dust control measures in compliance with SCAQMD rules have been incorporated into the project, and they will serve to mitigate potential biological impacts. Control measures in Rule 403 that become effective after January 1, 2005, will be applied to the phases of project construction after the effective date.

Response 18

The comment expresses the opinions of the commenter only. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Revised Riverpark Draft EIR, no further response can be provided.

Response 19

The Las Lomas project is located approximately 7 miles south and not in the same direct watershed as the project, and thus does not create a cumulative impact to biologic resources. It is unclear as to which project at the Placerita/Sierra Highway location to which the commenter is referring. However, the City has no formal development applications pending or received at the Placerita/Sierra Highway location.

Response 20

The City does not concur with the comment that its analysis of the consistency of the Riverpark project with General Plan Policy 3.5 is misleading. Please see Draft EIR Section 4.7, Land Use, at pp. 4.7-38–40.

Response 21

Please see **Response 13**, above.

Response 22

The Riverpark Draft EIR and Revised Draft EIR Section 4.6, Biological Resources discuss in detail the impacts to the Santa Clara River as a result of the construction of bank stabilization. The City directs the commenter to Revised Draft EIR Section 4.6, Biological Resources, and Draft EIR Section 4.20, Floodplain Modifications, for further discussion with regard to impacts to the Santa Clara River as a result of bank stabilization. In addition, it should be noted that the majority of the bank stabilization proposed by the project has already been approved by the NRMP, and that the potential impacts of that bank stabilization in a large area adjacent to the Santa Clara River were analyzed in detail in the NRMP EIS/EIR. Finally, after the Draft EIR and Revised Draft EIR Section 4.6, Biological Resources, were released to the public, URS prepared a report, entitled *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004 (Final EIR **Appendix C**). That report concludes that when bank stabilization (buried bank stabilization) is placed upland from the active channel, floodplain, and terrace geomorphological units of the river, the bank stabilization has less of an impact on the hydrologic and ecological functions of the riparian system. The URS report also concluded that buried bank stabilization (such as that proposed by the Riverpark project) that includes native plant restoration allows for increased buffer and beneficial effects. The report states that the buffer also protects the river from sediment erosion.

Response 23

See **Response 22**, above. Riverpark Draft EIR Section 1.0, Project Description, provides a thorough discussion of the type and extent of bank stabilization to be installed along the river corridor. Revised Riverpark Draft EIR Section 4.6, Biological Resources adequately addresses the loss of, or disturbance to, riparian and upland habitat and associated plant and animal species as a result of bank stabilization. Several of these impacts (e.g., loss of riparian habitat) were determined to be unmitigable significant impacts of the project. As discussed in the Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-80, most areas subject to bank stabilization will be immediately revegetated with native plant species similar to that being removed. All graded areas for the buried bank stabilization will be returned to naturalized contours and will be vegetated with native plant species. Mitigation Measure 4.6-1 (NRMP mitigation) provides a number of measures that will mitigate the impacts of bank stabilization on natural resources.

Response 24

The comment suggests that the amount of earth disturbance related to bank stabilization should be quantified in terms of cubic yards and depth of excavation. Riverpark Draft EIR Section 1.0, Project Description, p. 1.0-31 states that "[p]roject site grading would require the movement of approximately 5.5 million cubic yards of earth, which would be balanced onsite in terms of cut and fill. Additional remedial grading of 3.6 million cubic yards is also proposed." At this time exact depths of excavation are not known, however the overall impacts of grading the 5.5 million cubic yards of earth (and 3.6 million cubic yard of remedial grading) is analyzed in the Draft EIR.

Response 25

The comment expresses the opinions of the commenter that more permeable materials should be used in the project. The project will limit impermeable surfaces to the maximum extent feasible. Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, prepared by GeoSyntec, in Final EIR **Appendix G**. pp. 3–5.

Response 26

The comment expresses the opinions of the commenter as to bank stabilization and suggests using a 300-foot setback purportedly used in the State of New Jersey. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Revised Riverpark Draft EIR, no further response can be provided.

Even so, it should be noted, in addition, that the project as proposed eliminated NRMP-approved bank stabilization in the western portion of the site, and that the bank stabilization in the eastern part of the site has been pushed back (Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, Figure 1, prepared by GeoSyntec, dated October 13, 2004. (See Final EIR at **Appendix G**), which depicts the previous project bank stabilization location compared to the revised plan showing an increased setback.)

Response 27

The comment expresses the opinions of the commenter that the project should be downsized and moved further back from the river to reduce the amount of bank stabilization. Please see **Response 26**, above.

Response 28

The percentage of residential traffic noted in the traffic study refers to the total amount of trips generated per day and was obtained from the City's traffic forecasting model. As noted in the traffic study, work trips typically account for only two to four of the approximately ten trips generated each day by a single-family residence. The remainder represent trips such as to schools, shopping and recreation. When local trips such as these are taken into account, the percentage of trips utilizing the I-5 and SR-14 freeways is substantially lower than the percent of commuter traffic utilizing these facilities. The incremental change in traffic volume on freeway facilities due to the project is documented in Appendix B of the traffic study (Appendix 4.3, Draft Riverpark EIR).

Response 29

As shown in Section 4.2.2 of the traffic study (Appendix 4.3, Draft Riverpark EIR), the increase in traffic due to the proposed project is substantially less than the increase in traffic that would be generated by the land uses allowed by the current General Plan designations for the site. For locations where a significant impact has been identified, mitigation measures have been identified which effectively mitigate the impacts of the project. Even so, however, traffic impacts at four intersections cannot be mitigated to below significance and, as a result, a Statement of Overriding Considerations would be necessary if the City approved the project.

Response 30

The General Plan consistency analysis addresses the consistency of the proposed project with the City of Santa Clarita General Plan, and finds that it is consistent. The project may or may not include the use of solar panels; the City's policies, which use the words "promote" and "encourage," does not require that it do so.

Response 31

The commenter states his opinion that the project is inconsistent with the City's General Plan, but provides no specifics as to why it is not. The comment fails to identify any specific defect in or objection to the analyses and conclusions in the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR, no further response can be provided.

It should be noted that the project's consistency with the City's General Plan is extensively analyzed in Section 4.7, Land Use, of the Draft EIR, and the Draft EIR concludes that the project is in fact consistent.

Response 32

The comment suggests that the Draft EIR fails to mention the possibility and feasibility of either Material Recovery Facilities or Waste to Energy facilities as aspects of solid waste management, and further suggests that educational materials should include specific content. Riverpark Draft EIR Section 4.9, Solid Waste Disposal, analyzes the potential project-specific and cumulative impacts on the generation of solid waste. However, this section is not required to address material recovery facilities or waste to energy facilities, as those facilities are not a part of the City of Santa Clarita's solid waste management program. The comment's suggestions with respect to the content of the educational materials do not address any defect in or objection to the analyses or conclusions in the Draft EIR, but will be included as part of the record and made available to the decision makers prior to final approval of the project.

Response 33

The comment contains unsupported claims with respect to the applicant's activities, none of which addresses the content of the Draft EIR or objects to its analyses or conclusions; therefore, no response to these claims is required. The comment then suggests additional mitigation be included. However, the City of Santa Clarita will conduct a Mitigation Monitoring Program for the site and that document will contain reference to applicable permits necessary to satisfy conditions. A specific additional mitigation measure to this effect is not necessary.

Response 34

The City of Santa Clarita will conduct a Mitigation Monitoring Program for the site. The City does not believe that advance notice of biological work is either necessary, or required. All required biological reports will be submitted to the proper agencies as required and would be available at City of Santa Clarita, Department of Planning and Building Services.

Response 35

The City of Santa Clarita will conduct a Mitigation Monitoring Program for the site that will monitor all activities. The submittal frequency of the Mitigation Monitoring Program has not been determined.

Response 36

Policy 7.12 "encourages" the use of native and drought-tolerant materials. As stated in the policy analysis in Riverpark Draft EIR Section 4.7, Land Use, p. 4.7-46: "the proposed project will utilize, as much as possible, native and drought tolerant plant species for revegetation and landscaping and is consequently consistent with Policy 7.12."

Response 37

This comment claims that the water supplies currently available in the Santa Clarita Valley are not adequate to accommodate the proposed project. The comment also states that the 2000 UWMP does not adequately disclose "reliability" problems with the SWP, or the "loss of water due to perchlorate pollution." According to the comment, the 2000 UWMP also provides for "unfinalized supplies from water transfers," presumably referring to CLWA's SWP supplies, including the 41,000 AF water transfer. The comment attaches Resolution 2004-3 issued by the Newhall County Water District (NCWD). Resolution 2004-3 is provided to support statements in the comment regarding actual versus potential water supplies. Finally, SB 610 and 221 are cited as limitations on the water supplies for Santa Clarita Valley.

The City does not concur with the above comments for several reasons. Based on the analysis presented in the Draft EIR Section 4.8, Water Services, the SB 610 Water Supply Assessment (see Appendix 4.8) and the entire record, the City finds that an adequate supply of water is available to meet the demands of the Riverpark project, in conjunction with future cumulative water demand in the Santa Clarita Valley, without creating significant environmental impacts.

In response to comments regarding the adequacy of the 2000 UWMP, it should be noted that the UWMP was prepared for CLWA and three local retail water purveyors, including the NCWD, about four years ago. The update to that plan is required to be adopted in 2005. Since that time, considerable additional information has been developed regarding CLWA's SWP supplies and the reliability of those supplies, as well as the local groundwater supplies and the impact of perchlorate on such supplies. For information responsive to these and other related topics, please see **Topical Response 2: Groundwater Supplies and Perchlorate**; **Topical Response 3: SWP Supplies – Reliance on the 41,000 AFY Water Transfer**; and **Topical Response 4: Newhall County Water District Resolution.**

In response to the comment relying upon NCWD Resolution 2004-3, please specifically refer to **Topical Response 4: Newhall County Water District Resolution**.

Response 38

The comment is critical of the 2000 UWMP's "Water Storage Contingency Plan." The comment also points out that the plan, by itself, should not be construed as "adequate protection in times of drought."

In response, the 2000 UWMP, including the Water Storage Contingency Plan, was prepared by expert water consultants and the staff of each of the water agencies in Santa Clarita Valley (CLWA, Santa Clarita Water Division, NCWD and Valencia Water Company).

Aside from the 2000 UWMP, however, the City also relies on the Draft EIR's separate environmental analysis of water supply and demand in the Santa Clarita Valley, including the SB 610 Water Supply Assessment (see Appendix 4.8). In addition, the City relies on the annual water reports issued by water purveyors in the Valley. This information, together, constitutes an adequate basis for assessing water supply and demand in the Santa Clarita Valley, including plans in place to address reduced water supplies in times of drought. For further responsive information, please refer to the Draft EIR Section 4.8, at pp. 4.8-1–15 and pp. 4.8-85–98.

Response 39

The comment refers to the Draft EIR Section 4.8, Water Services, p. 4.8-4, and requests the source of data for Figure 4.8-2, "Rainfall in the Santa Clarita Valley." The Draft EIR, at p. 4.8-2, made it clear that the region, including the Santa Clarita Valley, is subject to "wide variations in annual precipitation." Over a several-year period, the average rainfall has been approximately 18 inches per year in the lower elevations and approximately 27 inches per year in the mountains. This data is supported by both the Draft EIR itself, at p. 4.8-2, and the *Newhall Ranch ASR Impact Evaluation*, prepared by CH2MHill, dated February 2001, Section 4, p. 4-1, including Figure 4-1, which illustrates the annual rainfall in the valley, and graphically depicts the time periods with low rainfall from 1950 through 2000.[24]

To clarify the text of the Draft EIR, at p. 4.8-2, the following change will be made: "Average rainfall is approximately 18 inches per year in the lower elevations and approximately 27 inches per year in the mountains."

The above change will be reflected in the **Revised Draft EIR Pages** portion of the Riverpark Final EIR.

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24 The Newhall Ranch ASR Impact Evaluation is incorporated by reference and available for public review and inspection at City of Santa Clarita, Department of Planning & Building Services, 23920 Valencia Blvd., Suite 302, Santa Clarita, California 91355.

Response 40

The comment states that Figures 4.8-5, 4.8-11, and 4.8-19 are not legible. Each figure has been reviewed and is sufficiently legible. However, if the commenter's review of the Draft EIR is impaired, please contact the City of Santa Clarita, Department of Planning & Building Services, 23920 Valencia Boulevard, Suite 300, Santa Clarita, California 91355, Jeff Hogan (661) 255-4330, for additional copies of the three figures.

Response 41

The comment is critical of the information presented in the Draft EIR regarding the reliability of SWP supplies, indicating that the analysis overstates supply reliability.

As shown below, the Draft EIR was prepared with the view toward providing accurate availability, reliability and supply estimates for SWP water in wet, average and dry years, and those estimates were based on data obtained from DWR.

The Draft EIR Section 4.8, Water Services, provides SWP water supply and reliability estimates for wet, average, and dry years. The water analysis was based on DWR modeling and reporting, all of which was fully disclosed in the Draft EIR. Applying DWR's reliability projections to CLWA's current maximum annual SWP Table A Amount (95,200 acre-feet per year (AFY)), the Draft EIR reported the varying yields in the amount of SWP water that would be available to CLWA in average, dry, and critical dry years. DWR's modeling effort is considered the best available information for assessing the delivery reliability of SWP supplies.

For information regarding imported SWP water supplies and delivery of such supplies, please refer to the Draft EIR heading 4.8.2(d), pp. 4.8-56–80.

For information regarding CLWA's SWP Table A Amount and deliveries, please refer to the Draft EIR heading 4.8.2(d)(4), pp. 4.8-61–65.

For information regarding the reliability of CLWA's SWP supplies, please refer to the Draft EIR heading 4.8.2(d)(8), pp. 4.8-71–80.

In addition to the information presented in the Draft EIR Section 4.8, Water Services, the City acknowledges recent appellate court decisions, among others, *Planning & Conservation League v.*

Department of Water Resources (2000) 83 Cal.App.4th 892 (and, particularly, p. 908, footnote 5, where the court noted the difference between SWP contractual water entitlements and the amount of water actually delivered by the SWP); and *Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.4th 1373 (and, particularly, p. 1376, where the court notes that DWR, which manages the SWP, has historically delivered *less* water than the contractual entitlements to the 29 SWP contractors). (Please see **Appendix A** of this Final EIR for copies of these two decisions.)

The City also has reviewed the comment letter submitted by CLWA, dated January 17, 2003, which is part of the "comments and responses" portion of the Newhall Ranch Final Additional Analysis, Vol. III (March 2003).[25] In that letter, CLWA acknowledged, as did the Riverpark Draft EIR that CLWA's current SWP Table A Amount of 95,200 AFY is an annual *contractual* entitlement, based on a water supply contract entered into between DWR and CLWA. All water supply contracts between DWR and its SWP contractors, including CLWA's, provide that in a year when DWR is unable to *actually deliver* the full amount of SWP contractor requests, deliveries to contractors will be *reduced*, so that total deliveries equal total available supply for that year.

CLWA's letter further acknowledged, as did the Riverpark Draft EIR, that the reliability of CLWA's current SWP Table A Amount (95,200 AFY) is affected by a number of factors, including hydrologic conditions, the status of SWP facilities' construction, environmental requirements and evolving policies for the Sacramento-San Joaquin Delta (Delta), where the water supplied by the SWP originates. Because of these factors, *actual* SWP supplies and deliveries are subject to *reduction*. These reductions can occur in average and dry years, and, particularly, during drought periods. In summary, the CLWA letter disclosed that

> "The State Water Project (SWP) supply referred to in the Draft Additional Analysis is a contract right of CLWA.…
>
> DWR makes its annual SWP entitlement water allocation based on each year's hydrology and SWP system storage. In any given year, the water allocation is based on a *percentage* of each contractor's total SWP Table A entitlement. Thus, CLWA's current total SWP Table A entitlement of 95,200 acre-feet (af) is *not necessarily wholly available each and every year, but a varying percentage of that amount is available each year*." (*Emphasis added*.) (CLWA letter, dated January 17, 2003, p. 1)

In summary, the City notes that neither CLWA nor the Draft EIR rely on CLWA's total contractual Table A Amount of 95,200 AFY for planning purposes (i.e., 100 percent of the contractual entitlement). Instead, projected supplies/deliveries of CLWA's Table A Amount are based on a varying percentage of that amount each year. CLWA's current total SWP Table A Amount (95,200 AFY) is not necessarily available

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25 For a copy of this letter, which is available for public review and inspection and incorporated by reference, please contact City of Santa Clarita, Department of Planning & Building Services, 23920 Valencia Blvd., Suite 302, Santa Clarita, California 91355.

each year because, as stated, several factors affect and reduce actual deliveries (i.e., hydrologic conditions, SWP system storage, SWP facilities' construction, environmental constraints, water availability and evolving policies for the Delta).

For a specific analysis of the variability in SWP supplies available to CLWA, the City has considered the Draft EIR Section 4.8-2(d), Water Services, pp. 4.8-70–79, and, particularly, Tables 4.8-14–15, and Tables 4.8-24 through 4.8-31. This discussion includes an analysis of the availability of imported SWP water supplies to the Santa Clarita Valley. The imported SWP supplies are broken down by wet year, average/normal year, and dry year. The source for this information is DWR's reporting and modeling of SWP delivery reliability.

The City also notes that the Draft EIR includes important source documents relating to SWP supplies. For example, please refer to the Final EIR **Appendix A**, for copies of the *2002* and *2003 Santa Clarita Valley Water Reports*, which include an analysis of CLWA's SWP supplies and water supply reliability. In addition, the City notes that the Riverpark Final EIR includes a copy of the final DWR *State Water Project Delivery Reliability Report*, dated 2002 (see **Appendix A**), which was prepared to assist SWP contractors and others in the assessment of the adequacy of the SWP component of their overall water supplies. Information in this report is useful in assessing SWP supply reliability, which is of key importance to local agencies, like the City, because the City has the responsibility to plan for future growth in the context of providing an available, adequate, and affordable water supply for existing and projected needs.

As to comments regarding CLWA's SWP supplies, including the 41,000 AF water transfer, please refer to the Draft EIR at pp. 4.8-19–20, and 4.8-61–75; **Topical Response 3: SWP Supplies – Reliance on the 41,000 AFY Water Transfer**; **Response 1** to **Comment Letter 23** from California Water Impact Network (Carolee K. Krieger), dated May 4, 2004; and **Response 11** to **Comment Letter 18** from Santa Clarita Organization for Planning and the Environment (Larry Kanner), dated May 3, 2004.

The comment makes reference to the NCWD Resolution 2004-3. As to that Resolution, please refer to **Topical Response 4: Newhall County Water District Resolution**.

Response 42

The comment states that the Draft EIR, at p. 4.8-16, "incorrectly" states that if SWP water supplies are curtailed "groundwater will be easily used to make up the difference." The City does not concur with this comment.

In fact, the Draft EIR, at p. 4.8-16, describes CLWA's role as the wholesale water purveyors in the Santa Clarita Valley. The discussion also refers to CLWA's Draft *Water Supply Reliability Plan*, dated September 2003, which is found in **Appendix A** to the Final EIR. The Draft EIR states that "[a]s indicated in the

[*Water Supply Reliability Plan*] water supply is variable due to its dependence on hydrology (i.e., precipitation and snowpak of the present and past years) and, therefore, deliveries can be curtailed." The Draft EIR goes on to state that "[w]hen sufficient SWP water is not available, the balance of the Valley's demand is met with local groundwater" provided by the Santa Clarita Valley water purveyors. The Draft EIR also states that, "[b]ecause available groundwater is limited, it is anticipated that water demands will increasingly rely on SWP supplies," and that "[a]s CLWA's water requirements utilize increased proportions of its SWP Table A Amount," water banking opportunities, together with water transfers, water conservation, recycled water, and other supply sources become important elements of CLWA's long-term water supply strategy and are included in its Capital Improvement Program.

Based on the above text, CLWA and other retail water purveyors rely on several water sources to meet existing and projected water demand of the Santa Clarita Valley.

Response 43

This comment does not question the sufficiency of the analysis in the Draft EIR for the Riverpark project. Instead, the comment states that CLWA and the purveyors have not documented progress toward the 14 conservation "Best Management Practices listed in the EIR." The source for the information regarding the conservation BMPs is Castaic Lake Water Agency, its Santa Clarita Water Division and Valencia Water Company. According to the water agencies, in March 2004, the California Urban Water Conservation Council and various water suppliers and others entered into an amended Memorandum of Understanding (MOU) regarding urban water conservation in California. The MOU contains BMPs that signatory water suppliers commit to implementing in accordance with a schedule set forth in Section B of that memorandum. As a result, it appears that significant progress has been made regarding water conservation BMPs for Santa Clarita Valley. For further information, please refer to the MOU, as amended March 10, 2004, which is incorporated by this reference and available for public inspection at Castaic Lake Water Agency, 27234 Bouquet Canyon Road, Santa Clarita, California 91350-2173

Response 44

This comment states that CLWA's SWP supplies, including the 41,000 AF water transfer, should not be used for planning purposes. The comment is incorrect. For information responsive to this comment, please refer to the Draft EIR, at pp. 4.8-19–20, and 4.8-61–75; **Topical Response 3: SWP Supplies – Reliance on the 41,000 AFY Water Transfer**; and **Response 1** to **Comment Letter 23** from California Water Impact Network (Carolee K. Krieger), dated May 4, 2004; and **Response 11** to **Comment Letter 18** from Santa Clarita Organization for Planning and the Environment (Larry Kanner), dated May 3, 2004.

Response 45

The comment refers to the Draft EIR Section 4.8, Water Services, p. 4.8-23, which discusses CLWA's allocation of imported SWP supplies. The comment states that "NCWD recently requested that CLWA provide details on the allocation due to them and to the other water service areas because it felt that the information is relevant to future planning." The comment states that CLWA "has not yet responded."

The comment addresses a general subject area, which received extensive analysis in the Draft EIR, beginning at p. 4.8-23. The comment does not raise any specific issue regarding that analysis and, therefore, no more specific response can be provided. However, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 46

The comment states that the Draft EIR, at p. 4.8-27, "incorrectly overstate[s] the support for the UWMP." The comment also points out that NCWD no longer supports the 2000 UWMP at this time.

In response, it is acknowledged that, due to a change in the composition of NCWD's Board of Directors, NCWD now no longer supports the 2000 UWMP. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

For further responsive information regarding the 2000 UWMP and NCWD's Resolution 2004-3, please refer to **Topical Response 2: Groundwater Supplies and Perchlorate**, and **Topical Response 4: Newhall County Water District Resolution**. The statement that the litigation will show that the UWMP overstates supplies is incorrect. The decision in that litigation holds only that there was not substantial evidence to support the UWMP findings with respect to perchlorate. It must be noted, though, that the Riverpark EIR relies on evidence with respect to perchlorate not available for or presented in the UWMP. Please see **Topical Response 2: Groundwater Supplies and Perchlorate**.

Response 47

The comment refers to the yield of the groundwater basins in the Santa Clarita Valley. The comment states that the yield of the basins should be reduced due to the detection of perchlorate. The comment also relies on NCWD Resolution 2004-3. The City does not concur with this comment.

For information responsive to the yields of both the Alluvial aquifer and the Saugus Formation, please refer to the Draft EIR pp. 4.8-33–37 (Alluvial aquifer), and pp. 4.8-38–42 (Saugus Formation). In addition, please refer to **Topical Response 1: Groundwater Supplies and "Overdraft" Claims**.

For information responsive to the Santa Clarita Valley's groundwater supplies and the impact of perchlorate on those supplies, please refer to **Topical Response 2: Groundwater Supplies and Perchlorate**.

In response to the comment's reliance on NCWD Resolution 2004-3, please refer to **Topical Response 4: Newhall County Water District Resolution**.

Response 48

The comment refers to municipal-supply wells in the eastern portion of the groundwater basin, which, according to the comment, are experiencing water level declines (i.e., overdraft). The City does not concur with this comment.

For information responsive to this comment, please refer to **Topical Response 1: Groundwater Supplies and "Overdraft" Claims**; and **Topical Response 4: Newhall County Water District Resolution**.

Response 49

The comment refers to the Draft EIR Section 4.8, Water Services, p. 4.8-43, which discusses ammonium perchlorate and the status of federal and state drinking water standards regulating perchlorate. The comment requests updated information regarding state drinking water standards for perchlorate.

In response, the law requires the state Department of Health Services (DHS) to establish a contaminant's maximum contaminant level (MCL) at a level as close as is technically and economically feasible to its public health goal (PHG). The PHG, established by the Office of Environmental Health Hazard Assessment (OEHHA), is the contaminant's concentration in drinking water that does not pose any significant risk to health, derived from a human health risk assessment. (See Health and Safety Code, Section 116365(a).) The law also requires OEHHA to establish a PHG for perchlorate by January 1, 2003, and DHS to establish an MCL by January 1, 2004. (See, Health and Safety Code, Section 116293.)

OEHHA established a 6 micrograms per liter ($\mu g/l$) for perchlorate in March 2004. OEHHA announced when it established the 6 $\mu g/l$ PHG:

> "[t]he National Academy of Sciences (NAS) is conducting an evaluation of U.S. EPA's 2002 Draft Toxicological and Risk Characterization for Perchlorate. This is an important undertaking that may help guide efforts to study the health effects of perchlorate. When that evaluation is completed, OEHHA will carefully review the NAS conclusions and will revise the PHG as necessary (Health and Safety Code Section 116365(e)(1))."

DHS reports that it is early in the regulatory process for an MCL for perchlorate. Until the perchlorate MCL is in place, DHS reports that it will use an "action level" to protect consumers. This level is currently 6 $\mu g/l$, the same as the PHG set by OEHHA.

Response 50

The comment states that the Riverpark Draft EIR does not contain relevant information regarding the amount of perchlorate contamination in the groundwater basin, the status of characterization of the perchlorate plume or the timeline for expected cleanup. The City does not concur with this comment.

Section 4.8, Water Services, pp. 4.8-37–38, and beginning on p. 4.8-42, the Riverpark Draft EIR provides extensive information regarding the perchlorate contamination detected in both the Alluvial aquifer and Saugus Formation. The analysis includes the locations of the municipal-supply wells where perchlorate was detected (Figure 4.8-17), the source of the perchlorate contamination, the actions taken by CLWA and other water purveyors to monitor the perchlorate contamination, the on-going testing of municipal-supply wells for perchlorate concentrations, the water purveyors' strategy regarding the groundwater production from the Saugus Formation, and the regulatory actions taken by numerous federal, state and local agencies with respect to the perchlorate contamination. The Draft EIR also discusses the remedial investigations undertaken by federal, state, and local agencies to address the perchlorate contamination in the basin. In addition, the Draft EIR, beginning at p. 4.8-48, discusses the technologies and methods available for the treatment of perchlorate contamination.

In addition, at pp. 4–6, the *2003 Santa Clarita Valley Water Report*, dated May 2004 (**Appendix A** to the Final EIR), provides updated information on the progress made for the ultimate remediation of the perchlorate contamination. In summary, the *2003 Water Report* states:

> "Work toward the ultimate remediation of perchlorate contamination, including the restoration of impacted groundwater supply progressed on several integrated tracks in 2003. In February 2003, the Purveyors entered into a voluntary cleanup agreement with the State Department of Toxic Substances Control (DTSC) whereby DTSC is providing review and oversight of the activities by the Purveyors in response to the detection of

perchlorate in the five impacted wells. In accordance with that agreement, the Purveyors have prepared a Work Plan for sampling of production wells, prepared a report on the results and findings of the production well sampling, prepared a draft Human Health Risk Assessment, prepared a draft Remedial Action Workplan, completed the evaluation of treatment technologies, and completed the development of the groundwater model described above. The Purveyors have also initiated a process for approval by the State Department of Health Service (DHS) in accordance with its Policy 97-005 for restoration of water supply from "severely impaired" water sources such as the perchlorate-impacted wells. The evaluation of treatment technologies and the groundwater model noted above were key activities completed in 2003 for inclusion in the application for approval by DHS for the restoration of perchlorate-impacted water supply.

Finally, in 2003, the Purveyors and Whittaker entered into an Interim Settlement Agreement (ISA) wherein the parties agreed to work cooperatively for a minimum of a one-year period to further define long-term costs and reach a long-term settlement. The ISA specifies that Whittaker and its insurers would reimburse certain past costs as well as ongoing costs incurred by the Purveyors in responding to perchlorate contamination. Activities since execution of the ISA have been focused on developing the elements of the potential remedial strategy in sufficient detail to allow estimation of costs and preparation of a long-term Settlement Agreement."

As to the timing or schedule for the expected clean-up, please refer to **Topical Response 2: Groundwater Supplies and Perchlorate**.

As to the comment's reference to NCWD Resolution 2004-3, please refer to **Topical Response 4: Newhall County Water District Resolution**.

Response 51

The comment refers to the Draft EIR Section 4.8, Water Services, pp. 4.8-53–55, regarding reclaimed water supplies. The Draft EIR's reclaimed water supply section is provided because that water source is part of the existing and projected water supplies for the Santa Clarita Valley. However, at p. 4.8-108, the Riverpark Draft EIR makes it clear that the water sources expected to be used by Santa Clarita Water Division (the purveyor for the Riverpark site) include a combination of SWP water delivered through CLWA and local groundwater resources in the Alluvial aquifer and the Saugus Formation. Although reclaimed water, water transfers, water banking and other conjunctive water use supplies are presented, such supplies are not anticipated to be used or needed to meet the water demand for the Riverpark project.

Response 52

The comment refers to Table 4.8-6 on p. 4.8-64 of Section 4.8, Water Services, of the Riverpark Draft EIR. The comment states that one of the columns (column 2) presents "misleading" information. The City does

not concur with this opinion. Table 4.8-6 contains detailed footnotes explaining most of the columns used in that table, including the second column referenced in the comment.

Response 53

The comment is critical of desalination as a future source of water supplies. In response, the Draft EIR, pp. 4.8-48 and 4.8-85, provides objective information about the advantages and disadvantages of desalination as a future water supply source. It is acknowledged that Carlsbad in San Diego County and Long Beach in Los Angeles County are pursuing desalination as a future water supply source and that the advantages and disadvantages of using such a source have been publicized. Nonetheless, neither Carlsbad nor Long Beach have announced that they are no longer interested in pursuing desalination. In fact, Carlsbad recently reinitiated negotiations with Poseidon regarding a desalination plant. In addition, the San Diego County Water Authority is showing renewed interest in the proposed Carlsbad plant. Also, Long Beach's desalination technology has a patent pending, and while a small prototype machine has been operating for two years, a facility that can process 300,000 gallons per day is under construction. As a result, the information presented in the Draft EIR adequately describes desalination as a future water supply option.

Response 54

The comment is critical of the amount of recycled water shown in Table 4.8-13 on p. 4.8-90 of Section 4.8, Water Services, of the Draft EIR. The City does not concur with this comment.

The purpose of Table 4.8-13 is to describe planned local future water supplies from groundwater and reclaimed water sources. Such water supplies are not used, or relied upon, to meet the water demands of the Riverpark project or other near-term projects in Santa Clarita Valley (see Draft EIR Tables 4.8-26, 4.8-27, 4.8-28 and 4.8-29).

As to the comment regarding reduced groundwater supplies due to perchlorate contamination, please refer to **Topical Response 2: Groundwater Supplies and Perchlorate**.

Response 55

The comment is critical of Table 4.8-15 on p. 4.8-91 of Section 4.8, Water Services, of the Draft EIR. The comment requests a specific time when the "planned future supplies" will be available.

As stated in the Draft EIR, at p. 4.8-91, planned local and imported water supplies are identified for long-term planning purposes. These supplies are consistent with the 2000 UWMP, but must be updated every five years. The next update will be adopted on or before December 2005. In the meantime, for the Riverpark project, water sources expected to be used include a combination of SWP water delivered through CLWA and local groundwater supplies from both the Alluvial aquifer and Saugus Formation. According to CLWA and the retail purveyor, Santa Clarita Water Division, such supplies are available to meet the water demand for the Riverpark project, in conjunction with other planned development in Santa Clarita Valley without creating significant environmental impacts (see Draft EIR Appendix 4.8 [SB 610 Water Supply Assessment]).

As to comments regarding perchlorate, please refer to **Topical Response 2: Groundwater Supplies and Perchlorate**.

Response 56

The comment is critical of the water demand factor assigned to single-family units of 0.55 acre-feet per unit (af/unit). This factor is shown in the Draft EIR at p. 4.8-100 and on Table 4.8-22. As stated in the Draft EIR Section 4.8, Water Services p. 4.8-99, the water demand factors were provided by Santa Clarita Water Division, the retail water purveyor in whose service area the Riverpark project is located (see also, **Appendix 4.8** [SB 610 Water Supply Assessment, pp. 4–6]). In response to this comment, the City's environmental consultant, Impact Sciences, Inc., contacted the Santa Clarita Water Division of CLWA to confirm the water demand factors used in the SB 610 analysis for the Riverpark project. On November 1, 2004, the Santa Clarita Water Division advised the City that the single-family residential water demand factor needed to be corrected. The corrected residential water demand factor for the Santa Clarita Water Division service area is 0.80 acre-feet per residential unit. Please see **Appendix A** to the Final EIR for the letter from Santa Clarita Water Division to Jeff Hogan, Senior Planner, City of Santa Clarita, dated November 1, 2004, along with the enclosed table estimating the Riverpark water demand, as revised.

In reviewing the adjusted residential water demand factor for the Riverpark project, the City finds that the adjustment does not have any significant impact on the water supply and demand findings contained in the SB 610 analysis for the Riverpark project. The Santa Clarita Water Division concurs with the City's findings. (See **Appendix A** to the Final EIR [letter from Santa Clarita Water Division, dated November 1, 2004, p. 1].)

In addition, please refer to the **Revised Draft EIR Pages** for corrections to the Riverpark Draft EIR Section 4.8, Water Service, with respect to the Riverpark water demand assessment.

Response 57

The comment provides a "general water comment," stating the Draft EIR "should go beyond just what the UWMP plan says and consider and present all available information on the water situation."

The City does not agree that the Riverpark Draft EIR Section 4.8, Water Services, relies solely on the 2000 UWMP. As reflected in the text, the Draft EIR relies on the SB 610 Water Supply Assessment (see Appendix 4.8), the annual water reports prepared for the Santa Clarita Valley, the Slade and Scalmanini technical reports, the Slade *2001 Update Report*, and several other water-related reports, studies, water supply contracts, agreements, and other technical data provided by DWR, CLWA, retail water purveyors in the Santa Clarita Valley and consultants with expertise on water supply and demand issues pertinent to the Santa Clarita Valley. Based on the Draft EIR, and the entire record, the City finds that there is a sufficient water supply available to meet the needs of the Riverpark project in addition to existing and other planned future uses in Santa Clarita Valley. This independent determination is not based on the 2000 UWMP, which is almost four years old, and which is required by law to be updated every five years, with the next update due on or before December 2005.

Response 58

The comment erroneously asserts that site visibility was analyzed only from the perspective of motorists. This assertion is untrue, as other viewing audiences (residents, trail users, office workers) were considered as well. (see e.g., Section 4.16, Visual Resources, pp. 4.16-6–16 [describing current conditions, without the extension of the trails], and pp. 19–20, 30–32 [analyzing potential visual impacts of the proposed project on surrounding uses].) Even so, the Riverpark EIR will be revised to state that some pedestrians and hikers, including those using trails and those who may use Soledad Canyon Road, may view the site for longer periods than that called out in the Draft EIR. The above change will be reflected in the **Revised Draft EIR Pages** portion of the Final EIR.

Response 59

Per the direction of the Planning Commission, staff researched the costs associated with incorporating visual enhancements on the bridge abutments for the Newhall Ranch Road/Golden Valley Road Bridge and concluded that it would increase the total bridge costs by approximately $50,000.00–$100,000.00. The visual improvements could include colored concrete, stamped concrete, manufactured stone veneers and decorative concrete indentions/impressions. Because this bridge is part of the Cross Valley Connector, the bridge itself is subject to the City's Cross Valley Connector Aesthetics' Guideline Book (currently in

draft form and will be finalized in the next month). The Guideline Book includes design standards that consist of the above visual improvements for the bridges and bridge abutments. Per the direction of the Planning Commission, staff can add a condition to the project that states, "The Newhall Ranch Road/Golden Valley Road Bridge and bridge abutments shall be subject to the City's Cross Valley Connector Aesthetics' Guideline Book."

Response 60

The City is unaware of scientifically reviewed studies that indicate the maximum voltage and/or candlepower that can exist before adverse impacts occur to the wide variety of wildlife species that might occur in the project area. The City is also unaware of any studies that would effectively guide the lighting footprint and pattern on a given site so as to avoid specific adverse impacts to wildlife. Because of the complexity and large number of variables (behavior, sensitivity to lighting, foraging/breeding range, habitat requirements, etc.) that would need to be addressed for each animal species potentially affected by artificial lighting, such studies would be very time consuming and difficult to conduct. The requirements for lighting to be downcast luminaries and directed away from natural areas has been an accepted performance standard by CDFG and other resource agencies to effectively minimize light and glare impacts on wildlife in adjacent open space areas. These requirements are included in Mitigation Measure 4.6-19 in Revised Section 4.6, Biological Resources, as well as in Mitigation Measure 4.16-2, referenced by the commenter. In the City's opinion, these mitigation measures are sufficient to reduce potential project-level and cumulative impacts to less than significant.

Response 61

The comment expresses the opinions of the commenter with respect to existing cumulative light impacts along the river and is unrelated to the project, and does not raise any issue with respect to the contents of the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

It should be noted that the potential project-specific and cumulative impacts of the project on biological resources, including, without limitation, lighting impacts, have been thoroughly analyzed in the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources, and mitigation measures have been proposed. The requirements for lighting to be downcast luminaries and directed away from natural areas have been an accepted performance standard by CDFG and other resource agencies to effectively minimize light and glare impacts on wildlife in adjacent open space areas. These requirements are

included in Mitigation Measure 4.6-19 in Revised Section 4.6, Biological Resources, as well as in Mitigation Measure 4.16-2, referenced by the commenter. In the City's opinion, these mitigation measures are sufficient to reduce potential project-level and cumulative impacts to less than significant.

Response 62

The City does not concur with the commenter that the project is inconsistent with Policy 2.1. As is stated in Riverpark Draft EIR Section 4.7, Land Use:

> "[t]he City of Santa Clarita is responsible for adopting a Ridgeline Preservation and Hillside Development Ordinance. The dominant topographic feature associated with the project site is the Santa Clara River and it is proposed for preservation in the land plan submitted for the proposed project. Therefore, the project is consistent with Policy 2.3. The City of Santa Clarita is responsible for the enforcement and update of the Ridgeline Preservation and Hillside Development Ordinance and standards and has required that the project applicant provide the necessary documentation to allow for consistency and analysis of the Ridgeline Preservation and Hillside Development Ordinance and, therefore, the project is not applicable to Policies 2.4 and 2.5. The project is consistent with Goal 2."

The Riverpark project will not destroy any secondary ridgeline, but proposes encroachment on relatively limited portions of two ridgelines classified by the City as secondary ridgelines. Both of these ridgelines are located both on and off the project site.

As discussed in Section 4.16, Visual Resources, of the Draft EIR, the first City-classified secondary ridgeline enters the project site from the north and east of the future intersection of Santa Clarita Parkway and Newhall Ranch Road. The upper, and most visible, portion of this ridgeline is already degraded by previous development and no longer meets the City's criteria for classification as a secondary ridgeline. Approximately 1,690 linear feet or 45 percent of the northern portion of the ridgeline was previously impacted and graded down by the construction of the CLWA Rio Vista Water Treatment Plant and Administrative Offices. The project would impact the remaining southern portion of the ridgeline (approximately 55 percent or 2,062 linear feet). However, approximately 700 or 19 percent of the ridgeline would be impacted as a result of the extension of Newhall Ranch Road and the Santa Clarita Parkway; both roads are part of the City's General Plan, and would likely be built even if the project were not approved. The remaining 1,362 linear feet or 36 percent of the ridgeline would be impacted by a portion of the residential development in Area B.

The second City classified secondary ridgeline also enters from the north into the project site where Area C is located on the eastern portion of the site. A majority of this ridgeline is located off-site, however, approximately 29 percent or approximately 597 linear feet of the ridgeline is located on the project site.

However, after further research and comparison, the actual ridgeline and what is shown on the City's Ridgeline Map is incorrect. The secondary ridgeline actually extends approximately 372 linear feet into the project site not 597 linear feet as shown on the City's Ridgeline Map. The project would impact (as a result of Area C) approximately 225 of the 372 linear feet of the secondary ridgeline.

According to the applicant's Riverpark Innovative Application Compliance Report (see Final EIR **Appendix E**), the Riverpark project employs a creative and imaginative site design that tailors the development to the site and minimizes impacts to the significant natural topographic prominent features (Santa Clara River, central canyon, etc.) within the project site; and. the project leaves a substantial portion of the project site as open space, concentrates development on the flatter, disturbed portions of the site and significantly exceeds the minimum standards identified in the City of Santa Clarita Ridgeline Preservation and Hillside Development Guidelines.

Response 63

Please see **Response 62**, above. The comment expresses the opinions of the commenter only. However, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

23. LETTER RECEIVED FROM CAROLEE KRIEGER, CALIFORNIA WATER IMPACT NETWORK, DATED MAY 4, 2004

Response 1

This comment objects to the proposed Riverpark project relying upon CLWA's 41,000 AF water transfer. The comment also states that the Riverpark Draft EIR's assessment of water services and water supply reliability is not "accurate" due to the EIR's reliance upon the 41,000 AF water transfer. For the reasons discussed below, the City has determined that the Riverpark project can appropriately rely on CLWA's SWP annual Table A Amount (including the 41,000 AF), which is identified in both the Riverpark Draft EIR and the SB 610 Water Supply Assessment. (See Draft EIR Appendix 4.8.)

Section 4.8, Water Services, pp. 4.8-19 and 4.8-20, and 4.8-56–63, contain a detailed discussion of SWP water supplies and CLWA's SWP Table A Amount, including the additional 41,000 AF water transfer, the environmental review and litigation associated with that water transfer, and the status of CLWA's water transfer under the Monterey Agreement. Based on the Draft EIR and the entire record, and after considering comments challenging CLWA's reliance on the 41,000 AF water transfer, the City agrees with CLWA that it is appropriate for CLWA to have included, and to continue to include, the 41,000 AF water transfer as part of CLWA's available SWP water supplies. Accordingly, the City finds that it is appropriate for the Riverpark project to rely on those SWP supplies in both the water services section of the Draft EIR and the SB 610 analysis (Appendix 4.8). For further responsive information, please refer to **Topical Response 3: SWP Supplies – Reliance on the 41,000 AF Water Transfer** to the Final EIR.

By way of background, as stated in the Draft EIR, at p. 4.8-57, at the inception of the SWP, DWR entered into individual water supply contracts with agricultural and urban water suppliers (SWP contractors) throughout California. The contracts were the method used to fund construction and operation of the SWP facilities for the delivery of water to the SWP contractors. Each such contract sets forth the annual amount of water to which an SWP contractor is contractually entitled, which is stated in "Table A" to the contract. However, the amount of SWP water actually available for delivery in any year may be an amount less than the contractor's maximum Table A Amount due to hydrology and a number of other factors. The Table A Amount was previously referred to as "SWP entitlement."

The transfer of 41,000 AF of SWP Table A Amount to CLWA from Kern County Water Agency (KCWA) and its member district (WRMWSD), was the subject of a completed contract between the parties in 1999, and imported water supply associated with that transfer became available for use by CLWA starting in

January 2000. The 41,000 AF Transfer Agreement and the Point of Delivery Agreement between DWR, KCWA and CLWA are included in **Appendix A** to the Final EIR.

The 41,000 AF water transfer between CLWA, KCWA, and WRMWSD was evaluated previously in a Final EIR prepared by CLWA in 1999. The Second Appellate Court, Fourth Division, ordered that the 1999 EIR be decertified in January 2002 in the decision entitled, *Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.3d 1373 (Friends decision) in **Appendix A** to the Final EIR. The appellate court decertified the 1999 EIR because it tiered from the Monterey Agreement Program EIR, which itself was decertified as a result of a separate appellate court decision issued while the *Friends* decision was on appeal. (See *Planning and Conservation League v. Department of Water Resources* [2000] 83 Cal.App.4th 892 [PCL decision], **Appendix A** to the Final EIR.)

In the Friends decision, the appellate court found that "all other contentions" concerning the legal adequacy of the 1999 EIR were "without merit." The appellate court specifically ordered the trial court to issue a writ of mandate vacating certification of the 1999 EIR, to retain jurisdiction until CLWA certifies an EIR complying with CEQA, and to consider such orders it deems appropriate under the remedy provisions set forth in CEQA (See Public Resources Code §21168.9). CLWA's Board of Directors decertified the 1999 EIR in the fall of 2002.

In September 2002, the trial court was requested to prohibit CLWA from using the 41,000 AF in any manner. The trial court refused to enjoin performance of the completed 41,000 AF Transfer Agreement, maintained its jurisdiction over the matter, and authorized CLWA to utilize "any of the 41,000 AFY," subject to the following order: "Respondent [CLWA] will not be prohibited from using the water to which it is entitled, but Petitioner may renew its application for such prohibition based upon evidence of the actual use of such additional water for purposes it considers improper."[26]

Petitioners in the Friends litigation appealed the trial court's judgment and, again, requested that the use of the 41,000 AF be prohibited. However, on December 1, 2003, in an unpublished opinion, the Court of Appeal affirmed the trial court's judgment that CLWA's use of the 41,000 AFY is not prohibited.[27]

Because the 41,000 AF was a permanent water transfer, because DWR includes the 41,000 AF in calculating CLWA's share of SWP Table A Amount, and because the courts have not prohibited CLWA from using or relying on those additional SWP supplies, the City has determined that it remains

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26 For a copy of the trial court's decision, please refer to the Final EIR **Appendix A**, p. 2, ¶6.

27 For a copy of the unpublished opinion, please refer to Appendix 4.8 to Draft EIR (*Friends of the Santa Clara River v. Castaic Lake Water Agency*, 2003 WL 22839353, p. 3).

appropriate for the Riverpark project to include those water supplies in its water supply and demand analysis, while acknowledging and disclosing the potential uncertainty created by litigation.

In the meantime, CLWA has recently circulated for public review the new Draft EIR for the 41,000 AF water transfer project. The new EIR evaluates the potential environmental impacts of the 41,000 AF water transfer project, along with the rights for storage and delivery of water associated with the transfer through SWP facilities.[28]

In light of the information presented in the Riverpark Draft EIR and the entire record, the City believes that CLWA was entitled to use, and may continue to use, the additional SWP water supplies from the 41,000 AF water transfer pending certification of the new EIR pursuant to CEQA, absent a subsequent order to the contrary from the Los Angeles Superior Court, which maintains jurisdiction over the 41,000 AF water transfer litigation.

Accordingly, the City has determined that the Riverpark project can appropriately rely on CLWA's SWP annual Table A Amount (including the 41,000 AF) identified in both the Draft EIR and the SB 610 analysis. The City also has determined, based on the entire record, that the projected SWP supplies, in conjunction with other supply sources, will be sufficient to satisfy the demands of the Riverpark project, in addition to existing and planned future uses in the Santa Clarita Valley.

Response 2

This comment points out that the California Water Impact Network is currently a plaintiff in several cases against CLWA. This comment provides background information only and does not raise an environmental issue regarding the Riverpark Draft EIR; therefore, no further response can be provided. However, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 3

Please see **Response 1**, above, for a response to the comment related to CLWA's 41,000 AF water transfer. In addition, please see **Topical Response 3: SWP Supplies – Reliance on the 41,000 AFY Water Transfer**.

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28 The Draft EIR for CLWA's 41,000 AF water transfer project is incorporated by reference and is available for public review and inspection at CLWA's offices, located 27234 Bouquet Canyon Road, Santa Clarita, California 91350 (661) 297-1600

In addition, it is acknowledged that the commenter has challenged CLWA's efforts to store water in the Semitropic Water Storage District's groundwater bank. Regarding the steps taken by CLWA to store water with the Semitropic Water Storage District, the City believes it is appropriate to consider the water already stored and water to be stored in this existing groundwater bank. For supporting information, please refer to the Riverpark Draft EIR Section 4.8, Water Services, at pp. 4.8-15 and 4.8-16.

As stated in the Draft EIR, at pp. 4.8-80–84, conjunctive uses include groundwater banking. CLWA has already taken affirmative steps to store a significant amount of water in Semitropic Water Storage District's existing groundwater bank. For example, in 2002-2003, CLWA placed into storage 24,000 AF of water, 21,600 AF of which can be recovered for future use, and in 2003-2004, CLWA stored an additional approximately 32,000 AF of water, approximately 28,800 AF of which can be recovered for future use. These actions by CLWA resulted in a total of approximately 50,400 AF of usable water already being placed in storage as part of a funded conjunctive use program implemented by CLWA.[29]

Finally, the City has been advised that the referenced litigation against CLWA concerning the water banking agreement between CLWA and Semitropic Water Storage District was resolved at the trial court level in favor of CLWA, Semitropic, and DWR (*California Water Network, et al. v. Castaic Lake Water Agency, et al.*, Ventura County Superior Court No. CIV 215327). The trial court's decision in that case is found in **Appendix A** to the Final EIR. The trial court decision is now the subject of an appeal.

Response 4

The comment states that the Riverpark project, and other proposed developments in California, are "dependent" on the analysis by DWR and its *State Water Project Delivery Reliability Report*, *Final 2002*"(*DWR Reliability Report*). The comment further states that the *DWR Reliability Report* has been criticized for "overstating" actual available water supplies, for containing "questionable modeling and simulations," and for lacking "proper peer review." In response, neither the Riverpark Draft EIR Section 4.8, Water Services, nor the SBC 610 Water Supply Assessment (see Appendix 4.8) is "dependent" on the *DWR Reliability Report*. For supporting information, please refer to the Riverpark Draft EIR Section 4.8, Water Services, pp. 4.8-74–75.

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[29] In response to this comment, the City incorporates by this reference CLWA's public record of proceedings relating to CLWA's water storage program with the Semitropic Water Storage District. This record includes CLWA's initial studies and negative declarations supporting its storage program. The record of these proceedings is available for public review at Castaic Lake Water Agency, Mary Lou Cotton, 27234 Bouquet Canyon Road Santa Clarita, California 91350-2173, (661) 297-1600.

In addition to the information presented in the Riverpark Draft EIR Section 4.8, Water Services, the City points out that, as the administrator of the SWP, DWR is considered the appropriate state agency to determine the reliability of the SWP system. In completing the Riverpark Draft EIR, the City reviewed the *DWR Reliability Report*, a copy of which is provided in **Appendix A** to the Final EIR. As shown below, the *DWR Reliability Report* contains useful information concerning the reliability of the SWP system. The information was considered, along with other information, in the context of the Riverpark Draft EIR.

According to the *DWR Reliability Report*, the "report presents DWR's current information regarding the annual water delivery reliability of the SWP." (See Final EIR **Appendix A** [*DWR Reliability Report*, p. 1]) In addition, DWR issued the report to assist the SWP contractors "in the assessment of the adequacy of the SWP component of their overall water supplies. SWP water reliability is of direct interest to them and those they serve because it is an important element of their overall water supply." (Id., p. iii)

In addition, the *DWR Reliability Report* is not intended to be a static document. In fact, DWR has acknowledged in the *DWR Reliability Report*, at p. 1, that it "will update [the] report every two years or more frequently should study factors change significantly or if improvement in the analytical tools warrants an earlier release."

The *DWR Reliability Report* is also useful to local planners and local land use jurisdictions (like the City), with responsibility to plan for future growth and, at the same time, to assure an adequate, affordable and available water supply for existing and projected uses. For example, at p. 2, the *DWR Reliability Report* states that

> "[t]he water delivery reliability of the SWP is of direct interest to those who use SWP supplies because it is an important element in the overall water supply in those areas. Local supply reliability is of key importance to local planners and local government officials who have the responsibility to plan for future growth while assuring that an adequate and affordable water supply is available for the existing population and businesses. This function is usually conducted in the course of preparing a water management plan such as the Urban Water Management Plans required by Water Code Section 10610. The information in this report may be used by local agencies in preparing or amending their water management plans and identifying the new facilities or programs that may be necessary to meet future water demands."

Furthermore, the *DWR Reliability Report* is useful in conducting the water analyses required by recent legislation (SB 610/SB 221). At p. 2, the *DWR Reliability Report* states that

> "[l]ocal agencies also will find in this report information that is useful in conducting analyses mandated by legislation authored by Senator Sheila Kuehl (SB 221) and Senator Jim Costa (SB 610). These laws require water retailers to demonstrate whether their

> water supplies are sufficient for certain proposed subdivisions and development projects subject to the California Environmental Quality Act."

In responses to comments on the draft *DWR Reliability Report*, DWR elaborated on the importance of the report in assisting local land use jurisdictions in complying with recent SB 610/SB 221 legislation:

> "The Department of Water Resources released the report to assist local water and planning agencies and the State Water Project contractors in meeting the requirements of Senate Bills 221 (Chapter 642, Statutes of 2001) and 610 (Chapter 643, Statutes of 2001). These laws link certain land-use decisions with the determination of local water supply sufficiency. For the 29 SWP water contractors and the many water agencies receiving water from them, information contained in the report is an important component of the analyses necessary to determine this sufficiency. *The SWP Delivery Reliability Report provides the SWP contractors and the general public with the best information available on the delivery ability of the SWP*." (*Emphasis added*)

The *DWR Reliability Report* is also intended to respond to recent criticisms of DWR in its administration of the SWP system. The primary criticism was based on comments pursued in the Monterey Amendment litigation against DWR, claiming that local planners and public officials were relying on "overstated" estimates of actual water supplies from the SWP system in approving new development. The *DWR Reliability Report* is intended to be "the most current data available" on SWP delivery reliability for use in the local land use planning and decision-making process. At p. 2, the *DWR Reliability Report* states that

> "[t]his delivery reliability report also responds to the recent criticisms of the Department in its administration of the SWP. Comments on the Monterey Amendment Environmental Impact Report stated that local planners and public officials were relying on inflated estimates of water supply from the SWP in approving new development. *This report provides local officials with a single source of the most current data available on SWP delivery reliability for use in local planning decisions*." (*Emphasis added*)

In addition, DWR has emphasized that the *DWR Reliability Report* does not analyze how specific local water agencies integrate SWP water into their overall water supplies. DWR has recognized that many local water agencies in California operate in areas with multiple sources of water and that, typically, local water agencies "mix and match" these sources to maximize water supply and quality and to minimize cost. At p. 21, the *DWR Reliability Report* states that

> "[t]he real significance of SWP water delivery reliability is not to the SWP itself but to the agency that ultimately provides the SWP water to its municipal, industrial, and agricultural customers and to the city or county that makes the land-use decisions in which water supply is a matter of key concern. SWP water delivery reliability is most important as it affects the local provider's overall water supply reliability.
>
> This report does not recommend a particular level of SWP water delivery reliability for any individual SWP water contractor. The degree of reliability of SWP water deliveries that a local water provider desires or needs depends on the particular facts and circumstances that pertain to that provider. For example, if periodic shortages can be tolerated, then a lesser degree of SWP reliability will be 'reliable enough.' If, on the other hand, water is needed every year, say for permanent crops like orchards and vineyards,

> and no replacement supply is available, higher SWP water delivery reliability will be desired.
>
> Local water delivery reliability depends not only on SWP supplies but upon all sources of supply to the local provider. For example, the local provider may have access to local surface water and groundwater supplies, to reclaimed water, or to other sources of imported water, which have different levels of reliability. If so, the local provider will manage all sources of supply together, each with its individual degree of reliability, to enhance overall reliability. It is also at the local level that demand itself may be managed to meet supply through conservation, water use efficiency, drought response planning, and land-use planning decisions made by local jurisdictions."

In this instance, CLWA and the local water purveyors in the Santa Clarita Valley utilize local groundwater resources, SWP water supplies, water conservation, recycled water and other supplies in order to meet the Valley's existing and projected water demand. The combination of these water sources provides a significant opportunity to ensure overall water supply and reliability for the CLWA service area.

Although the comments do not agree with the information presented in the *DWR Reliability Report*, the report contains useful information regarding the SWP system and its reliability. The City considers the *DWR Reliability Report*, and the modeling efforts conducted by DWR, to be the "best information available" on SWP delivery reliability, and it should be used in making local land use decisions.

Response 5

The comment incorporates by reference the following report: *Strategic Review of CALSIM II and its Use for Water Planning, Management and Operations in Central California*, dated December 4, 2003 (*Strategic Review of CALSIM II*). According to the comment, this report "raises significant questions as to the reliability of *DWR's Delivery Reliability Report*. The comment expresses the opinions of the commenter only. It does not raise issues regarding the Riverpark Draft EIR's analysis of water service for the Riverpark project. In addition, the comment raises issues beyond the scope of the Riverpark Draft EIR. Nonetheless, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

In response to the comment, the City has reviewed the *Strategic Review of CALSIM II* report. The report contains considerable information regarding both the strengths and weaknesses of the CALSIM II model. The report also contains its own "summary" of its findings. At p. 2, the report's "summary" states:

> "The central all-encompassing question put to the panel is whether the CALFED program has adopted an appropriate approach to modeling the CVP-SWP-Central Valley system. Is the general CALSIM modeling approach appropriate for predicting the performance of

> the general facilities and of use in allocation planning, assessing water supply reliabilities and for carrying out operation studies? We believe the use of an optimization engine for simulating the hydrology and for making allocation decisions is an appropriate approach and is in fact the approach many serious efforts of this kind are using. It is a substantial improvement of the previous modeling approaches and provides a basis for consensus among federal and state interests. The modeling approach addresses many of the complexities of the CVP-SWP system and its water management decisions.
>
> There exists a common tension between those who wish for greater detail and those who want less detail from the model. This argues for a more comprehensive, modular, and flexible approach than is now available. In this report we suggest some ways this might be accomplished in the future. We also propose some management procedures that could be considered to improve model and model application quality control and documentation. The openness and availability of the model is admirable and very important given the numerous stakeholders who have interests in the management and allocation of water in the state. To increase the public's confidence in the many components and features of CALSIM II, we suggest that these components of CALSIM be subjected to careful technical peer review by appropriate experts and stakeholders."

In addition, at p. 14, the *Strategic Review of CALSIM II* report provided the following caveat:

> "Just as all models are approximations of reality, so may all advice be an approximation of what it should be. We hope what we have written in this report is correct and useful, but encourage CALSIM model managers and California's water community to take our assessments and suggestions for what they are, arrived at based on our own experiences and some limited exposure to those who know much more about CALSIM and CALSIM II than we do.

A complete copy of the *Strategic Review of CALSIM II* report is provided in **Appendix A** to the Final EIR.

Response 6

The comment expresses the opinions of the commenter only. However, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. Because the comment does not raise a specific environmental issue regarding the adequacy of the water analysis contained in the Riverpark Draft EIR Section 4.8, Water Services, no further response can be provided.

Response 7

The Riverpark Final EIR, including comments and responses, will be made available for public review prior to a final decision on the proposed project.

Response 8

The comment seeks to incorporate all other comments opposing the Riverpark Draft EIR. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

24. LETTER RECEIVED FROM ROGER MOORE, ROSSMAN AND MOORE, DATED MAY 4, 2004

Response 1

The comment provides background information only and does not raise a specific environmental issue regarding the water analysis found in the Riverpark Draft EIR Section 4.8, Water Services. The comment will be included as part of the record and made available to the decision makers prior to making a final decision on the proposed project. However, because the comment does not raise a specific environmental issue, no further response can be provided.

In addition, in response to the comment, please see Appendix 4.8 to the Draft EIR for a copy of both (1) the Settlement Agreement, dated May 5, 2003, which settled the litigation in the following action, *Planning and Conservation League v. Department of Water Resources (*PCL*)* (2000) 83 Cal.App.4th 892 (PCL decision) and (2) the Amendment to the Water Supply Contract between DWR and Castaic Lake Water Agency (CLWA), dated May 28, 2003 (Amendment No. 19). Pursuant to the Settlement Agreement and Amendment No. 19, DWR amended the water supply contracts with the SWP contractors, including CLWA, to delete terms in each water supply contract, such as "annual entitlement" and "maximum annual entitlement," so that the public and particularly land use planning agencies (like the City) will better understand the contracts.

For example, the water supply contracts have been amended to define SWP "Annual Table A Amount" as follows:

> "'Annual Table A Amount' shall mean the amount of project water set forth in Table A of this contract that the State, pursuant to the obligations of this contract and applicable law, makes available for delivery to the Agency at the delivery structures provided for the Agency. The term Annual Table A Amount shall not be interpreted to mean that in each year the State will be able to make that quantity of project water available to the Agency. The Annual Table A Amounts and the terms of this contract reflect an expectation that under certain conditions the Agency will receive its full Annual Table A Amount; but that under other conditions only a lesser amount, allocated in accordance with this contract, may be made available to the Agency. This recognition that full Annual Table A Amounts will not be deliverable under all conditions does not change the obligations of the State under this contract, including but not limited to, the obligations to make all reasonable efforts to complete the project facilities, to perfect and protect water rights, and to allocate among contractors the supply available in any year, as set forth in Articles 6(b), 6(c), 16(b) and 18, in the manner and subject to the terms and conditions of those articles and this contract. Where the term "annual entitlement" appears elsewhere in this contract, it shall mean "Annual Table A Amount." The State agrees that in future amendments to this and other contractor's contracts, in lieu of the term "annual

entitlement," the term "Annual Table A Amount" will be used and will have the same meaning as "annual entitlement" wherever that term is used."[30]

In addition, the water supply contracts were amended to define SWP "Annual Table A Amounts," as follows:

> "Commencing with the year of initial water delivery to the Agency, the State each year shall make available for delivery to the Agency the amounts of project water designated in Table A of this contract, which amounts shall be subject to change as provided for in Article 7(a) and are referred to in this contract as the Agency's Annual Table A Amounts."[31]

The amended water supply contracts also provide the following language at the bottom of Table A to each contract:

> "In any year, the amounts designated in this Table A shall not be interpreted to mean that the State is able to deliver those amounts in all years. Article 58 describes the State's process for providing current information for project delivery capability."[32]

The water supply contracts were amended to require that DWR prepare and distribute a report to all SWP contractors, including CLWA, and all California city, county and regional planning departments and agencies within each SWP contractor's service areas. Under the amended water supply contracts DWR will determine the delivery capability of the dependable annual supply of SWP water to be made available to SWP contractors through existing SWP facilities. The amended water supply contracts provide

> "58. Determination of Dependable Annual Supply of Project Water to be Made Available by Existing Project Facilities.
>
> In order to provide current information regarding the delivery capability of existing project conservation facilities, commencing in 2003 and every two years thereafter the State shall prepare and mail a report to all contractors, and all California city, county, and regional planning departments and agencies within the contractors' project service areas. This report will set forth, under a range of hydrologic conditions, estimates of overall delivery capability of the existing project facilities and of supply available to each contractor in accordance with other provisions of the contractors' contracts. The range of hydrologic conditions shall include the delivery capability in the driest year of record, the average over the historic extended dry cycle and the average over the long-term. The biennial report will also include, for each of the ten years immediately preceding the report, the total amount of project water delivered to all contractors and the amount of project water delivered to each contractor."[33]

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30 See Appendix 4.8 to Riverpark Draft EIR (Amendment No. 19, dated May 28, 2003, pp. 4-5).

31 See Appendix 4.8 to Riverpark Draft EIR (Amendment No. 19, dated May 28, 2003, p. 6).

32 See Appendix 4.8 to Riverpark Draft EIR (Amendment No. 19, dated May 28, 2003, p. 7).

33 See Appendix 4.8 to Riverpark Draft EIR (Amendment No. 19, dated May 28, 2003, p. 7).

Consistent with this amended provision, in 2003, DWR issued and distributed *DWR Reliability Report*, a copy of which is found in **Appendix A** to the Final EIR. The report presents DWR's current information regarding the annual water delivery reliability of the SWP system. In the *DWR Reliability Report*, DWR's Director, Thomas M. Hannigan, identified the purposes of the report:

> "The Department of Water Resources is issuing this report to assist the contractors of the State Water Project in the assessment of the adequacy of the SWP component of their overall water supplies. SWP delivery reliability is of direct interest to them and those they serve because it is an important element of their overall water supply.
>
> Local supply reliability is of key importance to local planners and government officials who have the responsibility to plan for future growth while assuring an adequate and affordable water supply is available for the existing population and businesses. This function is usually conducted in the course of preparing a water management plan such as the Urban Water Management Plans required by Water Code Section 10610. Information in this report may be used by local agencies in preparing or amending their water management plans and identifying the new facilities or programs that may be necessary to meet future water needs.
>
> Local agencies will also find this report useful in conducting analyses mandated by legislation authored by Senator Sheila Kuehl (SB 221) and Senator Jim Costa (SB 610). These laws require water retailers to demonstrate the sufficiency of their water supplies for certain proposed subdivisions and development projects subject to the California Environmental Quality Act."[34]

The *DWR Reliability Report* also "responds to the recent criticism of the Department in its administration of the SWP." The "criticism" emanated from "[c]omments on the Monterey Amendment Environmental Impact Report [that] stated that local planners and public officials were relying on inflated estimates of water supply from the SWP in approving new development."[35] According to DWR, "*[t]his report provides local officials with a single source of the most current data available on SWP delivery reliability for use in local planning decisions*." (*Emphasis added*)

The City reviewed and considered the PCL decision, the related Settlement Agreement, Amendment No. 19, and the *DWR Reliability Report* in connection with the Riverpark project.

Response 2

The comment states that the Riverpark Draft EIR's assessment of water services and water supply reliability is "defective," and "fails to honor the PCL decision and its subsequent settlement agreement." The comment is also critical of the Draft EIR's assessment of SWP supplies, including CLWA's 41,000 AF water transfer project. Based on the information presented in the Draft EIR, pp. 4.8-19–20 and 4.8-56–80,

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34 See **Appendix A** to the Final EIR (DWR Reliability Report, p. iii).

35 See **Appendix A** to the Final EIR (DWR Reliability Report, p. 2).

the City does not concur with this comment. The City believes that it is appropriate to consider CLWA's SWP supplies, including the 41,000 AF water transfer, for planning purposes. For further responsive information, please refer to **Topical Response 3: SWP Supplies – Reliance on the 41,000 AFY Water Transfer**; and **Response 1** to **Comment Letter 23** from California Water Impact Network (Carolee K. Krieger), dated May 4, 2004.

Response 3

The comment is critical of the Riverpark Draft EIR's reference to CLWA's 41,000 AF water transfer as part of CLWA's SWP supplies. For information responsive to this comment, please refer to **Response 2**, above; **Topical Response 3: SWP Supplies – Reliance on the 41,000 AFY Water Transfer**; and **Response 1** to **Comment Letter 23** from California Water Impact Network (Carolee K. Krieger), dated May 4, 2004.

Response 4

The comment refers to the PCL decision and quotes from portions of that decision. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

Response 5

The comment refers to the litigation involving CLWA's EIR on the 41,000 AF water transfer project (*Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.4th 1373). For information responsive to this litigation, please refer to the Riverpark Draft EIR Section 4.8, pp. 4.8-19–20. In addition, please refer to **Response 2**, above; **Topical Response 3: SWP Supplies – Reliance on the 41,000 AFY Water Transfer**; and **Response 1** to **Comment Letter 23.**

Response 6

The comment expresses the opinion that it is "imprudent" for the Riverpark Draft EIR to rely on CLWA's SWP supplies, including the 41,000 AF water transfer. The City does not concur with this comment. However, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 7

The comment is critical of the Riverpark Draft EIR for relying upon CLWA's SWP supplies, including the 41,000 AF water transfer. The comment suggests that the 41,000 AF water transfer is not "final;" and, therefore, cannot be relied on as part of CLWA's SWP supplies, pursuant to terms found in the Settlement Agreement relating to the PCL decision. The City does not concur with this comment. For information responsive to this comment, please refer to the Riverpark Draft EIR Section 4.8, Water Services, pp. 4.8-19–20 and pp. 4.8-56–63. In addition, please refer to **Topical Response 3: SWP Supplies – Reliance on the 41,000 AFY Water Transfer**; and **Response 11** to **Comment Letter 18**.

Response 8

Please refer to **Response 7**, above.

Response 9

Please refer to **Response 7**, above. In addition, in response to this comment, p. 4.8-62 of the Riverpark Draft EIR has been clarified, as follows:

> "~~In effect, the~~ The Monterey Agreement ~~provided a blanket pre-approval~~ provides for those transfers by the participating SWP contractors, thus facilitating transfers of Table A Amounts from agricultural to urban SWP contractors. As stated above, the environmental documentation for the Monterey Agreement has been decertified. However, the ~~pending~~ legal proceedings (*Planning and Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892 [PCL litigation]) did not invalidate ~~have not invalidated~~ the Monterey Agreement or enjoin~~ed~~ either the Monterey Agreement or further implementation of the Monterey Agreement. In addition, the subsequent settlement agreement in the PCL litigation did not invalidate or otherwise enjoin the Monterey Agreement."

Please see the Final EIR section entitled, "**Revised Draft EIR Pages,**" to review the above revised text.

Response 10

The comment questions the Riverpark Draft EIR's statement, at p. 4.8-62, that nothing in the existing SWP water supply contracts or applicable law prohibits water transfers between SWP contractors with or without the Monterey Agreement. The text in the EIR explains the basis for the statement.

In addition, since preparation of the Riverpark Draft EIR, CLWA has prepared and circulated for public review its new EIR addressing the environmental effects associated with the previously approved 41,000 AF water transfer project. CLWA's new Draft EIR, at p. 1, clarified that the 41,000 AF water transfer "was

contractually completed in 1999, and imported water supply associated with the transfer became available for use by CLWA starting in January 2000." At pp. 2–4 of the Executive Summary portion of the new Draft EIR, CLWA provides important information regarding the 41,000 AF water transfer, the environmental review for that transfer, the Monterey Amendment Program EIR, the PCL litigation over the Monterey Amendment EIR and the Settlement Agreement arising from the PCL litigation. This new EIR has been incorporated by reference in the Final EIR for the Riverpark project.

Response 11

The comment expresses the opinions of the commenter only. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 12

The comment is critical of CLWA preparing its own separate new EIR to address the environmental effects associated with the previously approved 41,000 AF water transfer project. According to the comment, CLWA's new EIR "violates" the PCL decision and "lead agency" principles under CEQA. In response, the issues raised in this comment are beyond the scope of the environmental analysis presented in the Riverpark Draft EIR. In addition, comments addressing the legal adequacy of CLWA's new EIR for the 41,000 AF water transfer project are more appropriately addressed to CLWA.

Response 13

The comment is critical of a statement in the Riverpark Draft EIR Section 4.8, Water Services, p. 4.8-17, to the effect that CLWA had achieved certain tasks in calendar year 2002 to enhance, preserve and strengthen the quality and reliability of its existing and future water supplies. One of those tasks was CLWA working with other SWP contractors to establish a claim to 16,000 AFY of SWP Table A Amount, which is subject to conditions released by Kern County Water Agency and DWR, following appropriate environmental review. Appropriately, the Draft EIR pointed out that the 16,000 AFY water transfer is still subject to conditions to be worked out among CLWA, Kern County Water Agency and DWR, and that the transfer must still undergo appropriate environmental review. For those reasons, the 16,000 AFY water transfer was not relied upon as a water source for the Riverpark project. It was merely listed as one of CLWA's tasks in calendar year 2002. It was not listed in the Draft EIR as a "firm" water source for Riverpark or any other development project.

Response 14

The comment mentions CLWA's 24,000 AFY water banking agreement in Semitropic Water Storage District's (Semitropic's) existing groundwater bank. At pp. 4.8-17 and 4.8-80–84, the Draft EIR referenced the fact that CLWA entered into an agreement with DWR and the Kern County Water Agency for the interim banking of water in Semitropic's existing groundwater bank. CLWA generally refers to this transaction as its 2002 "Groundwater Banking Project."

This project calls for the storage by CLWA of the unused portion of its 2002 allocation of SWP Table A Amount at an existing groundwater storage bank managed and operated by Semitropic. Semitropic, a California water storage district authorized to store water for other public agencies, operates its existing groundwater bank pursuant to a valid EIR certified in July 1994. CLWA's 2002 Groundwater Banking Project calls for CLWA to engage in the same general storage activities at Semitropic's existing groundwater bank as other banking partners have engaged in since 1995.

Because the environmental impacts of these groundwater banking activities were addressed in Semitropic's EIR, and because CLWA's project operates within the parameters of that EIR, CLWA adopted an Initial Study/Negative Declaration for its project. In November 2002, the California Water Network and Friends of the Santa Clara River filed litigation arising primarily under CEQA, challenging the CLWA 2002 Groundwater Banking Project. Although the litigation is still pending in Ventura County Superior Court (*California Water Network, et al. v. Castaic Lake Water Agency, et al.*, Case No. BS058871), the trial court in that case recently issued a ruling in favor of CLWA, Semitropic and DWR. The trial court's ruling upheld the adequacy of CLWA's environmental analysis for this groundwater banking project. For a copy of the courts ruling, please see **Appendix A** to the Final EIR. The trial court decision is now the subject of an appeal.

Response 15

Please see **Response 4** to **Comment Letter 23** from California Water Impact Network (Carolee K. Krieger), dated May 4, 2004.

Response 16

Please see **Responses 4** and **5** to **Comment Letter 23** from California Water Impact Network (Carolee K. Krieger), dated May 4, 2004. In addition, the comment states that the *DWR Reliability Report* has been the subject of "vigorous and on-going statewide debate." The City has reviewed the comments submitted in

response to DWR's draft *Reliability Report*. There were a total of 17 comment letters, not all of which were critical of DWR's draft *Reliability Report*. In addition, the City has reviewed DWR's written responses to the 17 comment letters, and has included both the comments and responses in **Appendix A** to the Final EIR.

By way of background, according to DWR, the draft *Reliability Report* was released in late August 2002. There were six public meetings held throughout the state in October 2002 to explain the report and discuss related issues. Written comments were accepted by DWR through the end of October 2002. According to DWR, the final *Reliability Report* incorporates the comments and concerns of the public.[36]

Based on the City's review and understanding of DWR's process, and its analysis of the final *Reliability Report*, including the comments on that report and related responses, the City does not concur with the statement in the comment that there exists a "statewide debate" over DWR's final *Reliability Report*. In fact, the City concurs with DWR's statement in the final *Reliability Report* that its report represents a "single source" of the "most current data available on SWP delivery reliability for use in local planning decisions."[37]

Response 17

The comment expresses the opinions of the commenter only. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

36 See **Appendix A** to the Final EIR (DWR Reliability Report, p. 1).
37 See **Appendix A** to the Final EIR (DWR Reliability Report, p. 2).

25. LETTER RECEIVED FROM SHELLEY LUCE, HEAL THE BAY, DATED MAY 6, 2004

Response 1

The comment expresses only the general opinions of the commenter with respect to the benefits of the Santa Clara River, the need to protect its functions, and the need for the City to comply with CEQA, the Clean Water Act, the Porter-Cologne Act, the County of Los Angeles General Plan, and the City's own plans and policies. As such, this comment does not raise any issue with respect to the contents of the Draft EIR. However, this comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Even so, it should be noted that the project has been designed to protect the river to the greatest extent possible, that the project design reduces the amount of bank stabilization permitted by the NRMP, and that the western portion of the project has recently been revised to pull the bank stabilization back further away from the river than what was permitted by the NRMP, to preserve mature riparian resources. In addition, please see Friends of the Santa Clara River (**Comment Letter 17**) **Responses 1** and **2**. It should be noted that the potential project-specific and cumulative impacts of the project on water quality and biological resources have been thoroughly analyzed in Section 4.6, Biological Resources, Section 4.8.1, Water Quality, and Section 4.20, Floodplain Modifications, of the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources.

The project will meet or exceed the requirements of the biological and water quality protection regulations, standards, conditions, and design requirements. See Friends of the Santa Clara River (**Comment Letter 17**) **Responses 4** and **5**, and Ventura Coastkeeper (**Comment Letter 20**) **Response 6**, above.

By innovative stabilization and flood control techniques of the NRMP approved by the ACOE, CDFG, and LARWQCB, and by incorporation of appropriate BMPs into construction phase Storm Water Pollution Prevention Plans and post-construction Standard Urban Stormwater Mitigation Plan (SUSMP), the project can be constructed without significant adverse affects on the biological and water quality ecosystem functions of the river. In compliance with the NRMP, the project has been designed to assure that river alterations are approached with the utmost caution, so as to protect the river ecological system. The NRMP EIR/EIS developed cumulative impacts assessment of urbanization of the river. The

minimization measures of the NRMP combined with naturalized flood control and stabilization measures were determined to fully mitigate potential biological and hydrological impacts of river-related improvements associated with proposed development. See Revised Draft EIR Section 4.6, Biological Resources, and **Comment Letter 17**, Friends of the Santa Clara River **Responses 4** and **5** for a more detailed discussion.

All proposed alterations are consistent with the NRMP, and some improve upon the NRMP by impacting less of the river, including the flood plain area and riparian and aquatic habitat, than permitted under that plan. As discussed in Revised Draft EIR Section 4.6, Biological Resources, at p. 4.6-59, the project proposed in the Draft EIR was designed to scale back flood control, stabilization, and other river alterations permitted by the NRMP. As discussed in the Draft EIR, the following design improvements were proposed:

- Bank stabilization has been eliminated from the western terminus of the "toe stabilization" proposed adjacent to the bluff in Area B to the bridge abutment for Newhall Ranch Road/Golden Valley Road Bridge. The NRMP permitted bank stabilization in this area.

Top of bank stabilization has been set back a greater distance from the top of the bank, than that permitted by the NRMP. (Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, Figure 1, prepared by GeoSyntec, dated October 13, 2004 (see Final EIR at **Appendix G**) which depicts the previous project bank stabilization location compared to the revised plan showing an increased setback.)

- This pullback preserves resources previously permitted for impact and creates larger upland buffers than were found necessary for river protection by the NRMP.

In addition, to these design improvements, in recent City Planning Commission hearings on the Draft EIR, the proponent has agreed to set the project back even further from the approved NRMP boundary. The set back has been defined by a "resource line" designed to protect river-adjacent sensitive resources. Revised Draft EIR Section 4.6, p. 4.6-76 identified a "resource line," used to delineate riparian habitat directly associated with the Santa Clara River. The new project setback eliminates impacts to habitat within the "resource line" from proposed bank stabilization in the western portion of the project adjacent to a portion of Area E and Area A1. The modification results in the preservation of mature riparian resources. The increased setback, and protection of habitat adjacent to the river, Area E, and Area A1 is described in Figure A-1 of the GeoSyntec, *Additional Hydrology and Water Quality Analysis for the Riverpark Project*, dated October 13, 2004 (see **Appendix G** to the Final EIR). This additional set back, which

particularly protects a number of sensitive resources adjacent to Area A1 previously permitted for impact by the NRMP.

The project is designed to meet or exceed all requirements of the NRMP. Further, as discussed in **Response 7** to **Comment Letter 18** and **Comment Letter 20, Response 6**, the project incorporates all appropriate construction and post-construction BMPs to assure that runoff will not cause or contribute to any exceedance of receiving water quality standards. In addition, more than 50 water quality, biology, floodplain and hydrology mitigation measures and PDFs are imposed on the project as set forth in Sections 4.2, Flood; 4.8.1, Water Quality; and 4.20, Floodplain Modifications, of the Draft EIR and Section 4.6, Biological Resources of the Revised Draft EIR. As a result, the project is designed to proceed in a manner that protects and restores biological, water quality and ecosystem function within the watershed.

The Glenn Lukos Associates *Hybrid Functional Assessment for Riverpark*, dated September 2004, the URS *Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan Area – Summary*, dated July 2004, and Section 4.20 of the Draft EIR further support this conclusion. Both the July 2004 URS report as well as the September 2004 Glen Lukos assessment are attached to the Final EIR in **Appendix C**. Pursuant to these studies, the post-development riparian and aquatic function within the project site and the river will exceed existing function. No adverse impacts to sensitive resources of the river upstream or downstream of the project vicinity are anticipated as a result of direct or cumulative project impacts. See also GeoSyntec *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, dated October 13, 2004, attached to the Final EIR as **Appendix G**.

Response 2

The comment expresses the general opinions of the commenter that the project will cause "significant, immitigable damage to water quality and aquatic habitat." The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. The Revised Draft EIR Section 4.6, Biological Resources, adequately addresses impacts to the aquatic and terrestrial habitat associated with the Santa Clara River, including its function as a Significant Ecological Area. Please see **Responses 3–6**, immediately below.

Response 3

The comment asserts that there is "little or no buffer zone" included in the project. The comment is incorrect.

A description of the importance of an upland buffer zone to riparian habitats can be found In Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-78. Specifically, upland habitat within 100 feet of the riparian resource edge was considered to be necessary to buffer the riparian ecosystem from adjacent incompatible uses. As stated in the Revised Draft EIR, analyzing the project as originally proposed, approximately 20 percent of the bank along the Santa Clara River within the boundary of the project site meets or exceeds the 100-foot width buffer zone, 3 percent is between 50 and 100 feet, and 76 percent is between 0 and 50 feet in width. The fact that an overall minimum of 100 feet buffer from the riparian resource edge would not be preserved with the proposed project design was identified by the Revised Riverpark Section 4.6, Biological Resources, p. 4.6-125 as an unavoidable significant impact of the project. However, since the Draft EIR and Revised Draft EIR were released to the public, the project has been revised to push the bank stabilization further back from the site's Central Park in the east to the commercial area in the west to preserve mature riparian resources in that area. (See Final EIR **Appendix G**, *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, prepared by GeoSyntec). That revision will also increase the buffer in that area, and will in some areas create a buffer wider than 100 feet from the resource line.

Response 4

The comment asserts that bank stabilization, including buried bank stabilization, is known to cause erosion/sedimentation problems and decrease aquatic and riparian habitat. However, the Riverpark Draft EIR and Revised Draft EIR Section 4.6 adequately analyze and address these issues. Please see **Response 1**, above.

Riverpark Draft EIR Section 1.0, Project Description provides a thorough discussion of the type and extent of bank stabilization to be installed along the river corridor. Section 4.6, Biological Resources of the Revised Draft EIR adequately addresses the loss of, or disturbance to, riparian and upland habitat and associated plant and animal species as a result of bank stabilization. Please see also Draft EIR Sections 4.2, Flood, and 4.20, Floodplain Modifications. Several of these impacts (e.g., loss of riparian habitat) were determined to be unmitigable significant impacts of the project. As discussed in the Revised Draft EIR (p. 4.6-80), most areas subject to bank stabilization will be immediately revegetated with native plant species similar to that being removed. All graded areas associated with the buried bank stabilization will be returned to naturalized contours and will be vegetated with native plant species. Mitigation Measure 4.6-1 provides a number of measures that will minimize impacts of bank stabilization on natural resources. According to a more recent evaluation prepared by URS, entitled, *Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan Area – Summary* (Final EIR **Appendix C**), when bank stabilization (buried bank stabilization) is placed upland from the active

channel, floodplain, and terrace geomorphological units of the river, the bank stabilization had less of an impact on the hydrologic and ecological functions of the riparian system. This report also concluded that bank stabilization (such as that proposed by the Riverpark project) that includes native plant restoration allows for increased buffer, and that the buffer also protects the river from sediment erosion.

Further, Draft EIR Sections 4.2 and 4.8.1, which thoroughly address potential erosion and sedimentation impacts. These analyses have been supplemented by the *Additional Hydrology and Water Quality Analyses for the Riverpark Project* prepared by GeoSyntec (Final EIR **Appendix G**), and the URS evaluation, discussed above.

Response 5

The City does not concur that the water quality analyses are flawed. Nonetheless, the comment expresses the opinions of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. A more definitive response cannot be provided, as the commenter does not explain this general comment with specific contentions.

Response 6

The commenter is incorrect in the assertion that there is no mitigation for impacts to water quality or aquatic/riparian habitat. Please see Riverpark Draft EIR Section 4.8.1, Water Quality, pp. 4.8.1-91–96, which provides for 20 mitigation measures for water quality and Revised Riverpark Draft EIR Section 4.6, Biological Resources, pp. 4.6-87–109 which provides for 23 mitigation measures which address the entire biological conditions of the site, including aquatic species.

Response 7

The commenter is incorrect in the assertion with respect to Santa Clara River acreage. Please see Riverpark Draft EIR Section 1.0, Project Description, p. 1.0-4, Table 1.0-1, Riverpark Development Statistical Summary, which clearly calls out the Santa Clara River having an acreage of 330.8 acres.

Response 8

Please see **Response 7,** above. Please see Riverpark Draft EIR Section 1.0, Project Description, p. 1.0-29 which states that "[a]bout 300 acres of the Santa Clara River area would be maintained predominantly in its natural state and in accordance with the Natural River Management Plan (NRMP)." The comment

will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 9

This comment is acknowledged. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 10

The commenter states that the EIR contains no grading restrictions, and that there should be no grading within 100 feet of the river or any tributary, or on steep (>4:1) slopes during the rainy season. These are standard controls utilized in LCPs and should apply to any significant water resource such as the river. Grading activities will conform to the standards of the City of Santa Clarita Building Code requirements. Requirements of the LCP are not applicable to the Riverpark project as the City of Santa Clarita is not located in the Coastal Zone. The project is located 48 river miles from the western-most point of the project boundary out to the coast, 44 as the crow flies. Therefore, Local Coastal Plan requirements are not applicable or relevant to the construction issues to be addressed by the proposed project.

As discussed in the Draft EIR Section 4.1, Geotechnical Resources, there are extensive restrictions on grading to protect sensitive resources and the river, and the project avoids grading in sensitive areas as is described in Revised Section 4.6, Biological Resources, pp. 52–60. Additionally, since the Draft EIR was prepared, the project has been modified, and development in Planning Areas A-1 and E has been pulled back further upland from the river than originally proposed. This creates an even larger buffer to protect the river and its resources. As originally proposed in the Draft EIR, the project buffers were generally 50–230 feet wider than the buffers determined by ACOE, CDFG, and RWQCBLAR in the NRMP to be appropriate to protect water quality and biological resources of the river. While the original planning area boundaries were consistent with, or upland of, the development limits required by the NRMP, the new planning area boundaries further protect and preserve the river. (Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, Figure 1, prepared by GeoSyntec, dated October 13, 2004 (see Final EIR at **Appendix G**) which depicts the previous project bank stabilization location compared to the revised plan showing an increased setback.)

The substantial restrictions and mitigation measures applicable to work in the vicinity of the river and the modified project development boundaries combine to protect the river from adverse construction impacts.

Additionally, Draft EIR Section 4.8.1, Water Quality, contains an extensive discussion of controls to prevent erosion of the project site during construction. Please see **Comment Letter 20**, Ventura Coastkeeper, **Response 6**, above, for summary description and citations to the Draft EIR. The project will be designed to comply with the requirements of the General Construction Permit, the MS4 Permit and the incorporated SQMP, and the City of Santa Clarita water quality ordinances, which require adequate treatment and erosion protection during construction. In compliance with the conditions of the General Construction Permit, a SWPPP will be prepared prior to issuance of a grading permit in accordance with the performance standards in the Draft EIR and the applicable permit conditions. This will identify more specifically the controls and/or structural BMPs, meeting BAT/BCT standards that are necessary to retain sediments on the project site. As discussed in the Draft EIR, the project will be required to include in the SWPPP an effective combination of BMPs, such as bank stabilizing and covering erosion susceptible slopes, inspecting graded areas during rain events and planting and maintenance of vegetation on slopes. Draft EIR Section 4.8.1, Water Quality, pp. 66–70 outline that all construction site BMPs and discharge points are required to be inspected before, during and after all rain events during the wet season to assure sediment and erosion control BMPs are working properly and are properly maintained.

In designing the SWPPP and choosing the appropriate BMPs for effective sediment and erosion control, site-specific conditions, drainage patterns, and receiving waters must be identified, considered and addressed in the plan. As mandated by the General Construction Permit, SWPPP BMPs will be chosen from BMP handbooks, including the California Stormwater Quality Association Stormwater Best Management Practice (BMP) Construction Handbook, 2003 (http://www.cabmphandbooks.com/), which provide detailed recommendations for BMPs that effectively control erosion and sedimentation in light of varying site-specific conditions.

Preparation of the SWPPP in compliance with the standards and conditions of the Draft EIR, Construction General Permit, the MS4 Permit, and City of Santa Clarita Water Quality Ordinances is sufficient to protect the river from potential adverse impacts to water quality associated with rainy season grading. This protection supplements the protection provided by NRMP minimization measures and the recent Planning Commission directed project redesign.

Response 11

The comment asserts that the time period over which cut and fill activities would occur is not specified in the Draft EIR. However, Riverpark Draft EIR Section 1.0, Project Description, p. 1.0-38 states that "[all

planning areas within the project are intended to be developed at once." There are no limitations on when grading can or cannot occur.

Response 12

Grading activities will conform to the standards of the City of Santa Clarita Building Code requirements. Please see **Response 10**, above.

Response 13

The comment is acknowledged. However, the comment does not address the Riverpark Draft EIR. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. Nevertheless, please see **Response 10**, above.

Response 14

Grading activities will conform to the standards of the City of Santa Clarita Building Code requirements and all applicable water quality requirements as discussed in Draft EIR Section 4.8.1. Please see **Response 10**, above.

Response 15

The comment is acknowledged. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

Response 16

The ACOE uses acreage as a unit of measure when determining whether or not fill of jurisdictional "Waters of the U.S." will require a Nationwide or Individual Permit and the CDFG uses acreage as a unit of measure when issuing Streambed Alteration Agreements. Both agencies use acreages when determining mitigation ratios. For further analysis regarding the drainages on site, please see *Hybrid Functional Assessment for Riverpark* (October 2004) prepared by Glenn Lukos Associates (Final EIR **Appendix C**). The comment will be included as part of the record and made available to the decision

makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

Response 17

The comment expresses the opinions of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided. Nevertheless, **Response 16,** above, addresses the use of acreage versus linear feet. Draft EIR Section 4.20, Floodplain Modification, and Revised Draft EIR Section 4.6, Biological Resources, both analyze impacts on the sensitive riparian areas within the project site, and Draft EIR Sections 4.2, Flood, and 4.8.1, Water Quality, and Revised Draft EIR Section 4.6, Biological Resources, include mitigation measures to protect these areas.

Response 18

The comment is acknowledged. The impacts to these jurisdictional drainages have been analyzed in the Draft EIR and Revised Draft EIR Section 4.6. Additionally, a *Hybrid Functional Assessment for Riverpark* (included in Final EIR **Appendix C**) prepared by Glenn Lukos and Associates has been prepared to evaluate the habitat quality of these impacted drainages and concludes that the drainages to be impacted by the project exhibit minimal function. Furthermore, this assessment concludes that the Riverpark project will result in a substantial increase in functional units (FUs) on-site aquatic functions as compared to the existing condition. Mitigation Measure 4.6-2 in the Revised Draft EIR regarding these drainages shall be revised to require the applicant to obtain a 1600 et seq. from CDFG for the impacts to these drainages. Mitigation ratios for these drainages shall be established in accordance with CDFG requirements based upon the habitat quality for the impacted drainages.

Consequently, the mitigation of impacts to these drainages will be undertaken in accordance with mitigation measures provided in the NRMP as incorporated into this Revised Draft EIR Section 4.6, Biological Resources (beginning on p. 4.6-87). See also **Response 20** to **Comment Letter 8** from CDFG regarding modification to the language of Mitigation Measure 4.6-2.

Response 19

While responsible agencies may use a certified EIR to make mitigation determinations, it is a non sequitur to state that as a result, a Draft EIR must contain appropriate mitigation for potentially significant impacts

on streams, wetlands, and riparian areas. Although its analysis will normally rely on an existing EIR, a responsible agency must decide for itself how to respond to those significant effects that will directly or indirectly result from the responsible agency's own decision to approve the aspect of the project within its jurisdiction. With the modification to Mitigation Measure 4.6-2 (see **Response 18**, above), appropriate mitigation for these impacts has been provided.

Response 20

Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-77 discusses specific impacts to the seven upland drainages on the site as a result of project implementation. The assertion that the Draft EIR concludes there will no potentially significant impacts to these drainages is erroneous. What the Draft EIR does conclude is that these potentially significant impacts can be mitigated to a less than significant level. This conclusion is further supported by the evaluation entitled, *Hybrid Functional Assessment for Riverpark* prepared by Glenn Lukos Associates (Final EIR **Appendix C**). Also, please see **Responses 18** and **19**, above.

Response 21

See **Response 16** (above) regarding the use of acreage versus linear feet.

Response 22

As discussed in Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-47, and further in the Glenn Lukos Associates *Hybrid Functional Assessment for Riverpark* (Final EIR **Appendix C**), the level of significance of potential impacts on habitat areas, including streams and rivers, is determined by an evaluation of the overall biological value of a particular area or resource with respect to identified significance threshold criteria. The relative value of the habitat area is measured by such factors as disturbance history, biological diversity, importance to particular plant and wildlife species, uniqueness, and other factors. Therefore, while the direct impact on a particular habitat area is typically measured by areal extent, the significance of the impact takes into consideration the factors addressed above, which include biological functions such as nutrient and sediment cycling and wildlife movement areas. Wildlife movement is also addressed in more detail beginning on p. 4.6-44 and on p. 4.6-81 of the Draft EIR.

Response 23

The comment that the project should be redesigned to preserve natural drainages and buffer zones is noted. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Revised Riverpark Draft EIR Section 4.6, Biological Resources no further response can be provided. See **Responses 24–26** (below) regarding buffer zones. Nevertheless, see **Responses 18** and **19** (above) regarding mitigation and permits for impacts to the upland drainages on the Riverpark site, and **Response 20** to **Comment Letter 8** (CDFG). Please see also **Responses 12, 13,** and **17** to **Comment Letter 17** (Friends of the Santa Clara River), above, regarding buffer zones.

Response 24

A detailed discussion of the importance of upland buffer zones along riparian corridors begins in Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-50. This discussion concludes, similar to that of the commenter, that a minimum of 100 feet of upland habitat is necessary to adequately provide for the foraging and breeding habitat requirements of riparian-associated wildlife and to maintain species diversity within the riparian ecosystem.

See Friends of the Santa Clara River (**Comment Letter 17**) **Responses 4**, **12**, **13**, and **17**, above.

In approving the NRMP and its EIR/EIS and Section 401 Certification, the ACOE, CDFG and RWQCBLAR found buffers ranging from 75 to 225 feet in width, which include trails and access roads, located in certain strategic locations along the river, are sufficient to protect habitat and water quality of the Santa Clara River.

The project as proposed in Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-59 proposed a longer buffer than required by the NRMP. Still, the project as proposed in the Draft EIR, consistently with the NRMP, did not require a buffer width of 100 feet in all locations. The Revised Draft EIR Section 4.6, 4.6-80 specifically analyzes the lack of a 100 foot buffer width in certain locations, determines that the lack of a 100-foot buffer does not change the basic size or shape of the river channel. Further, Revised Section 4.6 at p. 4.6-79 determines only one significant adverse impact resulting from buffer widths of less than 100 feet in some locations: namely, the potential restriction of upland wildlife species movement due to inclusion of the trail within the buffer area. The Draft EIR Section 4.6, p. 4.6-79, concludes, as the NRMP p. 6 did, that the lack of a 100-foot buffer width in some locations does not result in significant adverse impacts to riverine species and resources. One of the thresholds used for determining whether

the project had potentially significant impacts was whether or not it maintains a 100-foot buffer from the riparian resource edge (p. 4.6-78). For the reasons discussed there, the project was found to have significant and unavoidable impacts based on this threshold (pp. 4.6-78, 109). As Revised Draft EIR Section 4.6, Biological Resources, explains, there are two small areas where the proposed project encroaches within the approved development line as established by the NRMP and do not adhere to the 100-foot buffer standard. One such area encroaches approximately 80 feet in order to preserve a Heritage oak tree. The other encroachment of approximately 200 feet is at the Newhall Ranch Road/Golden Valley Road Bridge, due to the realignment of Newhall Ranch Road. The remaining portions of the project that would not adhere to the 100-foot buffer standard (but do comply with the NRMP development line) consist of lower value habitat adjacent to areas that have historically been disturbed by agricultural operations (Area A2) and areas characterized by high bluffs (portions of Area B) which limit the use of this upland zone by riparian species. Finally, the remaining encroachments within the 100-foot upland preserve occur due to the Santa Clara River Regional Trail (primarily on the eastern portion of the project site where topography necessitates its location along the river).

Additionally, the project, as redesigned at the direction of the Planning Commission, is now set back further from the river to avoid more sensitive habitat located along the western portion of the river adjacent to Area A-1 and E, effectively providing a wider buffer for the river, particularly in these areas. (See Figure A-1 in the GeoSyntec report *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, dated October 13, 2004, in the Final EIR **Appendix C** for a depiction of the proposed buffer area).

Response 25

Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-78 addresses the impacts of the proposed project on the 100-foot buffer threshold. As stated in the Draft EIR, approximately 20 percent of the setback between the riparian edge and proposed development meets or exceeds the 100-foot width buffer threshold, 3 percent is between 50 and 100 feet, and 76 percent is between 0 and 50 feet in width.

See Friends of the Santa Clara River (**Comment Letter 17**) **Responses 4, 12, 13, 17,** and **24** above for additional discussion regarding buffers. See **Response 26,** below, for discussion of project encroachment into the floodplain.

The comment that no buffer zone is provided by the project between urban development and the river is inaccurate. As noted in the Draft EIR Section 4.6, p. 4.6-78, the project proposed (1) a buffer that exceeded 100 feet in width for 2910 linear feet adjacent to the river; (2) a buffer of 50 to 100 feet in width for 470 linear feet; and (3) a buffer of 0 to 50 feet for 10, 775 linear feet. This proposal exceeded NRMP

requirements, which have already been determined by Trustee Agencies as adequate for protection of river water quality, habitat, and resources.

Additionally, the project, as redesigned at the direction of the Planning Commission, is now set back further from the river to avoid more sensitive habitat located along the western portion of the river adjacent to Area A-1 and E, effectively providing a greater buffer for the river, particularly in these areas (see Figure A-1 in Appendix A of the GeoSyntec Additional Water Quality Assessment for a depiction of the proposed buffer area. This additional setback essentially expands the buffer width, providing greater protection to resources of the river. Given site-specific considerations and the established location of resources within the river, the expanded buffer adequately protects river resources. (See Final EIR at **Appendix G.**)

Response 26

The commenter's desire to keep homes out of the 100-year floodplain is noted. As discussed in Draft EIR Section 4.2, Flood, meeting FEMA flood design standards would remove flood impacts from the site, while meeting design criteria established by FEMA, consequently allowing the same number of lots as proposed. The project encroaches upon the existing FEMA flood hazard area, as residential lots 338 through 352 along the southern site boundary would be located within the 100-year flood hazard area. This potentially significant impact would be mitigated by the installation of the buried bank stabilization that would protect the above-noted residential units from floodwaters and subsequent impacts, and consequently would remove these units from the potential for flooding. Because an overall minimum 100-foot setback between the riparian edge and proposed development, project-wide, would not be preserved, this was considered a significant impact on the riparian ecosystem Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-78. This impact is identified as an unavoidable significant impact on p. 4.6-125.

As originally proposed in the Draft EIR, the project would have resulted in the following FEMA area modifications, all of which are consistent with, but have less impact than, river-related improvements approved in the NRMP:

- Bank stabilization and toe protection along project Areas A1, A2, and B resulting in removal or elevation of approximately 34 acres of mostly agricultural and non-native grassland/range land from the floodplain;
- Additional bank stabilization for the Bouquet Canyon Bridge, and the Newhall Ranch/Golden Valley Road Bridge crossing and related stabilization, which comprise 7.5 acres of the FEMA area; and
- Trail improvements, which comprise 1 acre of the FEMA area.

Revised Draft EIR Section 4.6, Biological Resources, p. 59, and Section 4.20, Floodplain Modifications, p. 1.

The total area of the floodplain impacted by the project as proposed is 34 acres, or only about 10 percent, of the total 330 acre FEMA area, and only about 5 percent of the project area. As set forth in detail in Sections 4.2, Flood, and 4.20, Floodplain Modifications, of the Draft EIR and 4.6 of the Revised Draft EIR, and as summarized thoroughly in **Response 4**, above, the construction of these improvements within the floodplain do not significantly adversely affect the river or the floodplain. As discussed above, analysis shows that the project, as proposed even before additional set backs, would only minimally change flood inundation levels for a variety of flood events, including the 100-year flood (see Section 4.20, Figures 4.2010-c through 4.2012f), and it would not adversely affect habitat or species occupying the river.

In Planning Commission meetings to consider the Draft EIR, the project has been modified to set development and buried bank stabilization farther back from the river. As a result of these modifications, the bank stabilization has been moved back further from the river from along project Areas A1 and E. This results in a reduction in the area removed or elevated out of the FEMA area from an area of approximately 34 acres to an area of approximately 8.4 acres. As a result of this project modification, the total area of the floodplain impacted by the project, as proposed, constitutes only about 5 percent of the FEMA area, and only about 2.5 percent of the entire project area.

The portion of the project, as revised, that is in the FEMA 100-year floodplain consists of the very most upland areas within the flood plain. These areas affected do not contain sensitive riparian resources and are inundated infrequently, i.e., in the event of a 100-year flood.

Compliance with the NRMP and these project modifications further assure that the project modifications to the river floodplain will not have significant adverse affect on the river or its resources.

It should be clarified that, despite common usage, the FEMA area of the river, totaling approximately 330 acres, does not represent an accurate depiction of the 100-year floodplain area of the river as is not supported by engineering analysis. The NRMP definition of the river floodplain is far more accurate than the FEMA definition, because it is based on engineering analysis and river resource assessment.

Response 27

The comment claims that the overall imperviousness increases due to the project have not been calculated in the Draft EIR. See **Response 8**, above.

Increased watershed imperviousness causes several water quantity and quality issues including (1) increased flow rates and volumes, (2) increased runoff water temperatures, (3) increased loadings caused by the buildup and subsequent wash-off of pollutants, and (4) other water chemistry changes caused by the type of impervious surface (e.g., pH changes, leaching of pollutants from building materials, etc.). Therefore, while it is true that the addition of impervious surfaces without water quality controls would degrade water quality, as shown in the Draft EIR analysis evaluating proposed condition without mitigation, adding controls assures addition of imperviousness won't degrade water quality significantly. See Draft EIR Section 4.8.1. For example, detention ponds proposed by the project provide peak attenuation that minimizes (1) erosive flows occurring at or below the water quality design flow rate; (2) sedimentation of particles and particle-bound pollutants; and (3) some infiltration and evaporation of runoff volumes.

Estimating the increase in total impervious area is not the best measure for assessing water quality impacts. A more important measure of the impacts of imperviousness is the directly connected imperviousness area (DCIA). This is so because runoff from impervious areas may flow to pervious areas and never reach the receiving stream. Site Planning BMPs in Draft EIR Section 4.8.1, Water Quality, p. 55, will include minimizing DCIA by "draining parking lots to landscaped areas or bioretention facilities." Also, impervious areas that have canopy for interception of rainfall, will not result in the same levels of runoff (rates and volumes) and associated pollutant loading as impervious areas without canopy (Keating, J. 2002 "Trees: The Oldest New Thing in Stormwater Treatment?" *Stormwater*, Vol. 3, No. 2). Preserving existing native trees and shrubs and planting additional ones, as stated in the Draft EIR, will increase canopy interception. (See Draft EIR headings 4.8.1.6 and 4.8.1.7.c.)

The water quality treatment analyses in the Draft EIR Section 4.8.1, Water Quality, do not attempt to quantify or take credit for the water quality improvement attained through implementation of these site design BMPs. Therefore, the current Draft EIR analysis overstates the water quality impact of the project because site design BMPs are specified as required project design features in the Draft EIR. However, the treatment that they provide is not included in the analysis of post-development water quality impacts. Nevertheless, the water quality impact analysis, without taking credit for these effective site design BMPs, demonstrates that increases in impervious surface and volume of storm water does not create significant adverse water quality impacts so long as controls, such as the extended detention basins identified as PDFs, are implemented to control runoff water quality in the post-development condition.

Overall increases in impervious surfaces were calculated without taking into account credit for site planning BMPs that are incorporated into the project. See Draft EIR Table 4.8.1-11. In calculating increases in imperviousness, the riverbed was not included as open space. Based on the increases in

impervious surfaces, new mean annual runoff volumes were calculated. Using the increased post-development mean for annual runoff volumes, and taking into account pollutants of concern associated with urban development, predictions of post-development pollutant loads and concentrations were modeled or qualitatively determined. These were compared with pre-development loads and concentrations, and with benchmark receiving water quality standards. The increases in impervious surfaces and associated increases in runoff volumes do, therefore, serve as the basis of the very detailed water quality impact analysis set forth in Section 4.8.1, Water Quality, of the Draft EIR. As discussed in **Comment Letter 20,** Ventura Coastkeeper, **Response 6**, the increases in runoff volume that form the basis of the water quality analysis in Section 4.8.1 of the Draft EIR actually overstate post-development storm water runoff volumes. Therefore, the analysis in the Draft EIR is conservative.

Response 28

See **Response 4, Response 5, Response 8, Response 9,** and **Response 11,** above.

This comment criticizes the Draft EIR's Water Quality analysis for using loading estimates from the LA County stormwater manual rather than actual data collected on site. The analyses in the Draft EIR and supporting Water Quality Technical Report are very detailed for all pollutants of concern. For many of those pollutants of concern, for which sufficient empirical data is available, quantitative analysis of pre and post-development pollutant loads and concentrations are modeled to allow direct comparison of the post-development and existing condition. The post-development runoff condition is then compared to benchmark receiving water quality standards. The analysis complies with *CEQA Guidelines*, quite thoroughly addresses water quality standards, and is very detailed compared to typical water quality analyses performed for environmental documentation. The commenter has not identified which analyses are insufficient, so further response to the comment is not feasible. (See Draft EIR Section 4.8.1, Water Quality, headings 5 and 6, and Tables 4.8.1-7, 9, 10, 12, 13, 14, 15, 16, and 17.)

The Regional Board has commented on the Draft EIR, and has not questioned or objected to the use of the LA County stormwater data for purposes of estimating pollutant loads and concentrations associated with specific land uses. On-site runoff water quality data for urban land uses is not feasible to collect, and is not necessary to attain meaningful predictions of project water quality impacts for several reasons.

No runoff water quality data has historically been collected at the site. Additionally, it is not currently possible to collect runoff water quality data specific to urban land uses from on-site areas as necessary to estimate post-development pollutant loads because the site is not yet developed with urban land uses. Therefore, representative reference water quality data that is land-use specific must be used to allow

comparison of runoff water quality from urban land uses versus open space and agricultural land uses, and assessment of the surface water quality changes likely to result from project construction.

As discussed in Section 4.8.1, Water Quality, of the Draft EIR, use of the LA County storm water data, which is land use specific and does address urban land uses, is appropriate because the data are representative of post-development conditions that can be expected at the project site. The LA County data are considered appropriate for the analysis because, in proximity to the proposed project, these data are the only land use-based EMC data with a statistically significant number of data points above analytical detection limits to provide a reasonable estimate of average pre and post- development runoff loads and concentrations. In addition, the data is considered appropriate because it was assembled by a reputable source, the Los Angeles County Department of Public Works (LADPW), as the lead permittee for the regional MS4 Permit issued by RWQCB. Further, the data set is an extensive set of land use-specific event mean concentrations (EMC) collected and documented between 1994 and 2001.

These data are further considered representative because they reflect water quality for both large and small storms throughout the wet season. Thus the average EMCs are more representative of the modeled annual averages rather than individual storm events. Finally, the data is representative because the climate, precipitation, soils, and infiltration conditions of the areas from which the LA County data was collected are quite similar to those on, and in the vicinity of the project site.

Response 29

The comment suggests that, in addition to the Q-cap analysis, stormwater flow and loadings under normal, non-burned conditions be analyzed. For purposes of assessing water quality impacts, mean annual runoff volumes, rather than peak flow volumes or "bulk and burn" runoff estimates were used to calculate pollutant loads and concentrations. Mean annual runoff volumes are calculated with an entirely different methodology than that used for flood control and hydrology analysis, for exactly the reason the commenter suggests. Use of "bulk and burn" estimates yields storm water runoff volumes that are much higher than the volumes produced by typical storms. As a result, if "bulk and burn" runoff volumes were used to model post-development pollutant concentrations, the mode would predict greater dilution than can reasonably be expected. Thus, "bulk and burn" estimates were used for flood control runoff estimates, not for purposes of estimating mean annual runoff, or pollutant loads or concentrations.

Mean annual runoff volumes were estimated using the Rational Formula, which is the most frequently used urban hydrology method in the United States. (Walesh, S. 1989 Urban Surface Water Management John Wiley & Sons, Inc. NY) The LA County "bulk and burn" method was not used. Pollutant loads and

concentrations were estimated using the mean annual runoff and Schueler's (1987) Simple Method. The *Water Quality Technical Report*, dated February 2004 at Table 7 provides the rainfall statistics for Newhall Ranch that were used to create a rainfall record. See Draft EIR at Appendix 4.8. The result of this methodology is a more accurate estimate of pollutant loading that appropriately emphasizes the water quality impacts from lower frequency, small storms that more adversely affect water quality.

Response 30

The citation to the Draft EIR Section 4.8.1, Water Quality describing increases in pollutant loads demonstrates that the Draft EIR did not ignore these impacts. In fact, the Draft EIR Section 4.8.1, Water Quality, at Tables 4.8.1-12 and 13 analyzes increases in overall loadings of TN and TP, and nitrogen quantitatively, and then Table 4.8.1-6 and pp. 4.8.1-78–80 compares post-development loads and concentrations for a full array of nutrients to benchmark receiving water standards. As a result of the comparison with receiving water standards, the Draft EIR conclude that increases in nutrient loads, including TN and TP, do not violate water quality standards, and, specifically, do not contribute to excessive algae growth.

The analysis was conducted comparing end of pipe stormwater runoff to receiving water quality standards. In fact, the comparison of discharges with receiving water standards overstates project impacts. As a result, the analysis produces a very conservative water quality impact, particularly when, as in the case of the proposed project, the receiving water is ephemeral, does not exhibit excessive algae growth, is not impaired for nutrients within the reach accepting project runoff, and is typically hydrologically disconnected from downstream reaches of the river except during larger storm events. Also, see **Comment Letter 20**, Ventura Coastkeeper, **Response 7** explaining the generally conservative approach to water quality impact estimation taken in the Draft EIR.

The analysis of TN and TP impacts associated with increases in loads of those pollutants is conservative for two additional reasons. First, nutrient loads are generally less of a water quality issue than nutrient concentrations. Increases in nutrient loads generally result in less adverse physical water quality impacts than increases in nutrient concentrations because nutrients naturally cycle between organic and inorganic forms in the environment. Nutrients only become a problem when the most readily available forms are present at concentrations that cause accelerated biological growth. For this reason, the current nitrogen TMDL is expressed as concentrations rather than loadings. As shown in the Draft EIR Section p. 4.8.1-72, Table 4.8.1-13, concentrations of phosphorus and nitrate are expected to decrease.

Second, the Draft EIR analysis is conservative, and overstates nutrient impacts of the project, because it compares TN concentrations with receiving water benchmarks for nitrogen, nitrate-nitrogen, and nitrite-nitrogen. There are no TMDLs or water quality standards for TN, but there are standards for nitrogen, nitrate, and nitrite. Therefore, TN was compared to the available nutrient water quality standards. Only a small fraction of TN (total nitrogen) is composed of these forms of nitrogen for which numeric objectives have been established. As shown in the Draft EIR, although total nitrogen concentrations are predicted to increase slightly, the TN concentrations are still below the thirty-day limit for nitrate plus nitrite. This is only a fraction of total nitrogen. Similarly, TN concentrations are well below Basin Plan standards for nitrogen, which is only a portion of TN.

The Draft EIR not only fully acknowledges potential water quality impacts that may result from increased loadings of TP and TN, it conservatively uses the increase in loadings as an indication of potential impact, and concludes no impact only by further comparing increases in TP and TN to receiving water quality standards.

The pollutant loading model conservatively overestimates loadings for the post-developed conditions because no volume losses are assumed in the structural BMPs. Additionally, source control BMPs were not modeled. Therefore, the slight increases in metals loads are likely overstated. Further, post-development metals concentrations are predicted to be below the CTR criteria applicable to the receiving water. Again, the comparison of end of pipe discharges to receiving waters constitutes a conservative analysis. In this case, where receiving water criteria are not exceeded, the conclusion that the impacts due to copper, lead, and zinc are negligible is fully supported by the technical analysis.

Post-development dissolved copper is predicted to be 20ug/L, below the CTR criteria (at both hardness levels). In comparisons with the CTR objectives, the acute levels were considered due to the episodic nature of storm events.

Post-development dissolved lead is predicted to be 5.6 ug/L, well below the CTR criteria (at both hardness levels). In comparisons with the CTR objectives, the acute lead levels are considered due to the episodic nature of storm events, as demonstrated in Draft EIR Table 4.8.1-6; see also p. 4.8.1-80. Draft EIR Table 4.8.1-16 shows a comparison with CTR acute criteria for copper, lead, and zinc.

The predicted project discharge concentrations are well below CTR criteria. CTR criteria are set by EPA at levels that specifically take into account toxicity to aquatic life. Therefore, risk of bioaccumulation is negligible. This is so particularly considering the ephemeral nature of the river and the quality of the runoff that would occur from the project area.

As for accumulation in the sediments, the risk is also minimal. The detention basins are expected to remove the majority of the suspended sediment and associated particulate-bound metals prior to reaching the river. The detention basins will be maintained regularly, and are not to be designed in a manner conducive to wildlife use. As discussed in Draft EIR Section 4.8.1, Water Quality, p. 61,the basins will be designed so that they will not hold water for more than 24–40 hours, and, considering maintenance activities and design, will not be attractive for wildlife use.

Further, large stream systems naturally have large amounts of bedload sediment movement. Therefore, pollutants generally will not accumulate in the stream sediments, but will be regularly flushed out during large flows.

Response 31

Hardness levels are based on the calcium and magnesium concentrations, which are primarily a function of local geology. Therefore, hardness levels in the vicinity of the proposed project would be expected to be representative of the hardness levels at the discharge points to the river. Water quality data collected by the USGS (Sta. ID 342507118380301) approximately 0.3 mile below Castaic Creek (which is immediately downstream from the proposed project) indicates the hardness is typically above 300 mg/L as $CaCO_3$ (346 mg/L for 10/19/1999 and 365 mg/L for 5/2/2000). A more extensive, but less recent data set (1975-1985) collected by the USGS downstream of the proposed project near the LA County - Ventura County border (Sta. ID 11108500) indicates the average hardness is about 580 mg/L as $CaCO_3$. The 10th percentile at this location for the same period of record is about 490 mg/L as $CaCO_3$.

Considering the weight of evidence provided by the available hardness data, the use of 200 mg/L as an estimate of hardness for the purposes of evaluating the water quality impacts with respect to the CTR criteria is conservative, in that use of the lower hardness value overstates water quality impacts associated with metals (i.e., lowers the toxicity threshold). The use of the lower hardness value overstates water quality impacts because increasing hardness has the effect of decreasing toxicity because many metals, including copper, lead, and zinc, will form complexes with calcium and magnesium making them less available for uptake by aquatic organisms.

It is not clear what the commenter means by the "untranslated" metals limits. The CTR criteria for copper, lead, and zinc require an estimate of the hardness. While the tabulated values in the CTR are based on a hardness of 100 mg/L, those values are for purposes of illustrating the formula only. They are not the criteria. The criteria are stated as formulas using actual or estimated hardness. In the Draft EIR, hardness is estimated conservatively to be 200 mg/L. This hardness value is used to calculate the

applicable CTR criteria in accordance with the required formula. As a result, hardness values used to estimate loads and concentrations of metals are conservative, and provide an adequate prediction of post-development water quality condition.

Response 32

Qualitative analysis is appropriate to evaluate water quality impacts associated with pesticides because pesticides in the LA County urban runoff data are either not detected or are detected at a very low frequency (less the 15 percent). Pesticides are most detected in LA County's stormwater monitoring. When they are detected, the concentrations minimally exceed detection levels. No reliable, land use specific water quality data regarding concentrations or loads of pesticides is available. Draft EIR Section 4.8.1, Water Quality, p. 47 notes that when in the absence of statistically reliable data on pesticide concentrations in urban runoff, quantitative analysis of pesticides is inappropriate.

The Draft EIR Section 4.8.1, Water Quality, pp. 58–59 specifies that all pesticide application shall be managed through educational and other source control efforts. The integrated fertilizer and pesticide management plan required by the Draft EIR will assure that post-development runoff contains negligible pesticide loads and concentrations, as seen in the LA land use data.

Response 33

The Draft EIR requires landscape managers for common areas to create an integrated fertilizer and pest management plan consistent with the practices, standards, and the list of acceptable chemicals developed by the LAUSD for common areas. This publicly available information will guide the development of the integrated management plan.

While the information is publicly available, the following summarizes the general guidelines drawn from LAUSD that will be used to develop the integrated fertilizer and pest management plan prior to installation of landscaping in common areas:

A summary of the steps outlined in the LAUSD integrated pest management procedures manual for developing a pest management plan include (1) define roles of occupants, pest managers, and decision makers, (2) set pest management objectives, (3) set pest management action thresholds, (4) inspection and monitoring of sites, (5) habitat modification, (6) appropriate low-risk pesticide application, (7) evaluation of results, and (8) good record keeping. The manual also provides guidelines on landscape monitoring. The LAUSD IPM policy can be found at: http://www.laschools.org/efm/mo/ipm/docs/

ipmpolicyretype.pdf. The LAUSD IPM procedures manual can be found at: http://www.laschools.org/efm/mo/ipm/docs/ipm-procedures-manual.pdf.

Response 34

Only common areas can be reasonably and credibly restricted as to pesticide use. CC&Rs can and would be prepared and recorded to place pesticide use restrictions on single-family residential common areas maintained by an HOA for multi-family residential areas where common areas are prevalent. CC&Rs would cover park areas. A total of 346.6 acres (137.7 acres for park and open space, and 226.9 acres for residential, commercial and roadway uses) are proposed for development. Of that total, approximately 125 acres, or 36 percent of the developed area will be park or common area open space subject to pesticide/fertilizer restrictions.

It is not true that private pesticide use is virtually unregulated. EPA and FIFRA regulate pesticides and pesticide usage, and EPA regularly issues regulations restricting private pesticide usages. For example, as the Draft EIR Section 4.8.1, Water Quality, pp. 58–59 and 82–84 points out, two pesticides with the greatest deleterious water quality impacts, chlorpyrifos, and diazanon are barred for residential use.

In addition to restriction of pesticides by preparation of an integrated pest management plan for common areas, pesticides will also be controlled by construction BMPs incorporated into the SWPPP and by proposed PDFs. Because pesticides typically bind tightly to soils and sediment, construction and post-development BMPs that control sediment and erosion also control transport of pesticides in runoff. These BMPs supplement the BMPs requiring preparation of an integrated fertilizer and pesticide management plan in accordance with LAUSD standards. This combination of BMPs will effectively control pesticides in runoff.

During the construction phase, a SWPPP must be prepared in accordance with standards and requirements of the General Construction Activity Permit and the MS4 Permit. In accordance with the requirements of those permits, the SWPPP must specify erosion and sediment controls that will effectively control erosion and sedimentation as outlined in Draft EIR Section 4.8.1 pp. 66–69. The BMPs must meet BAT/BCT standards. With implementation of the SWPPP, unintended movement of soils will be limited during clearing, grading, and construction activities. Therefore, to the extent that existing soils contain any pesticides, controlling erosion and sediment in runoff from the site will control the transport of pesticides that might be bound to that sediment.

In the post-development conditions, PDFs that control sediment will also serve to control discharges of pesticides, which are typically found in runoff bound to sediment. Examples of these PDFs are discussed in the Draft EIR and include such structural BMPs as extended detention basins, swales and hydrodynamic separators acting as sediment controls, and source control BMPs, including efficient irrigation and homeowner education as outlined in Draft EIR Section 4.8.1, Water Quality, pp. 56–65.

The multiplicity of BMPs, in addition to the integrated fertilizer and pesticide management plan will effectively reduce potential impacts of pesticides on water quality to a level of insignificance. This is regardless of the percentage of common area versus private residential area.

Response 35

The Draft EIR provides the types of BMPs that must be incorporated into the project, and mandate the sizing formula for sizing structural BMPs to assure treatment in accordance with the MS4 and SUSMP. Pollution removal efficiencies are calculated based on the ASCE/EPA BMP database (www.bmpdatabase.org), which is currently the most extensive peer-reviewed BMP database available for assessing the performance of BMPs. The pollution control effectiveness of BMPs can be calculated based solely on the information provided in the Draft EIR and ASCE/EPA BMP database.

The Draft EIR discusses preliminary sizing of water quality control BMPs, and evaluates the compliance of those BMPs pursuant to the minimum County SUSMP criteria, based on a 0.75-inch runoff event. Therefore, the Draft EIR analysis of pollutant removal efficiency is understated. This is so because, the Draft EIR mandates that the final capacity of the basins, when designed in conjunction with the preparation of storm drain improvement plans and the project-specific SUSMP prior to grading permit, will be increased to provide capacity to accept the volume of project equivalent to runoff 80 percent of annual runoff volume. See Draft EIR pp. 4.8.1-60–62, 4.8.1-87, Fig. 4.8.1-2, Drainage Concept Map; Final EIR **Appendix G**, GeoSyntec *Additional Hydrology and Water Quality Analyses for the Riverpark Project Technical Report*, dated October 13, 2004. As discussed in the GeoSyntec *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, prepared after the Draft EIR was released to the public, the final capacity of the basins will be designed to capture 80 percent of annual runoff, which for volume-based BMPs is a design storm depth of 1.15 inches over the impervious area of the project. The impervious area of the project refers to the area within development envelopes proposed by the project that will be impervious after construction, as opposed to landscaped or natural area within these envelopes. This design storm depth was determined using USEPA's Storm Water Management Model (SWMM) and is equivalent to treatment BMP volumetric sizing criteria 2 set forth in the LARWQCB MS4 Permit. The size of the facilities will be finalized during the design stage by the project engineer with the final hydrology

study. This will be prepared and approved to ensure consistency with the EIR analysis prior to issuance of a fine grading permit.

The GeoSyntec *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, dated October 13, 2004, further clarifies site planning and treatment control BMPs incorporated into the project (Please see Final EIR **Appendix G**). This information further assures the feasibility of incorporating BMPs sized in accordance with the Draft EIR standards, into design level plans prepared for the project. However, since design level analysis cannot be conducted until the preparation of storm drain improvement plans, the GeoSyntec Analysis addresses BMPs at a planning level.

The size of the treatment BMPs cannot be finalized until storm drain routing is determined during the facility design stage and preparation of storm drain improvement plans. However, as permitted by CEQA, the Draft EIR mandates the types of BMPs that must be used, and the standards and criteria for designing the BMPs. On this basis, the Draft EIR then analyzes, the impacts of the project on water quality both without the proposed BMPs, and with the BMPs. The Draft EIR understates the full water quality benefit that the specified BMPs and design criteria will achieve. The GeoSyntec *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, dated October 13, 2004 confirms that it is feasible to incorporate BMPs mandated by the Draft EIR that comply with the standards and sizing criteria established by the Draft EIR analysis. As a result, BMPs are addressed at a level of detail that is more than adequate under CEQA.

Response 36

The project has been modified such that the City will maintain the basins.

The project, and the City, as a co-permittee, will comply with the MS4 permit, which requires the City to verify inspection and maintenance for structural and treatment control BMPs (please see MS4 Permit, Part 4.D.8 in Draft EIR Appendix 4.8). In the case of the proposed project, the City's verification will consist of assuring that required inspection and maintenance of the facilities occurs by City staff, and that funding provided for ongoing maintenance and inspection is provided. In addition, pursuant to the MS4 Permit, the City will track, inspect, and ensure proper operation and maintenance of BMPs in compliance with the standards of the MS4 Permit for commercial facilities constituting Critical Sources. This includes restaurants, retail gas, and automotive service facilities. See MS4 Permit, Part 4.C. With these provisions, ongoing inspection, maintenance, and operation of water quality facilities are sufficiently assured.

Response 37

The areal extent of impact on riverbank and riverbed of the various structures and activities listed by the commenter was initially identified in the NRMP and subsequent ACOE, CDFG, and RWQCB Permit applications for such activities along identified portions of the Santa Clara River, including the portion through the Riverpark site. The total amount of both temporary and permanent impact associated with buried bank stabilization and various bridge crossing structures associated with the Riverpark project is also discussed in the Revised Draft EIR Section 4.6, Biological Resources, beginning on p. 4.6-76.

Response 38

Riverpark Draft EIR Section 4.20, Floodplain Modifications, indicates that modifications to the riverbed would not impact any endangered, threatened, or rare species. Draft EIR Sections 4.2, Flood, and 4.8.1, Water Quality, further conclude that the project, as designed and with mitigation in place, will not cause significant project-level or cumulative hydrology or water quality impacts.

Response 39

The comment asserts that bank stabilization, including buried bank stabilization, is known to cause erosion/sedimentation problems and act hydrologically the same as a concrete channel. However, the Riverpark Draft EIR and Revised Draft EIR Section 4.6 adequately analyze and address these issues. Please see **Response 1**, above.

Riverpark Draft EIR Section 1.0, Project Description provides a thorough discussion of the type and extent of bank stabilization to be installed along the river corridor. Section 4.6, Biological Resources, of the Revised Draft EIR adequately addresses the loss of, or disturbance to, riparian and upland habitat and associated plant and animal species as a result of bank stabilization. Please see also Draft EIR Sections 4.2, Flood, and 4.20, Floodplain Modifications. Several of these impacts (e.g., loss of riparian habitat) were determined to be unmitigable significant impacts of the project. As discussed in the Revised Draft EIR (p. 4.6-80), most areas subject to bank stabilization will be immediately revegetated with native plant species similar to that being removed. All graded areas associated with the buried bank stabilization will be returned to naturalized contours and will be vegetated with native plant species. Mitigation Measure 4.6-1 provides a number of measures that will minimize impacts of bank stabilization on natural resources. According to a more recent evaluation prepared by URS, entitled, *Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan Area – Summary* (Final EIR **Appendix C**), when bank stabilization (buried bank stabilization) is placed upland from the active

channel, floodplain, and terrace geomorphological units of the river, the bank stabilization had less of an impact on the hydrologic and ecological functions of the riparian system. This report also concluded that bank stabilization (such as that proposed by the Riverpark project) that includes native plant restoration allows for increased buffer, and that the buffer also protects the river from sediment erosion.

Further, Draft EIR Sections 4.2 and 4.8.1, which thoroughly address potential erosion and sedimentation impacts. These analyses have been supplemented by the *Additional Hydrology and Water Quality Analyses for the Riverpark Project* prepared by GeoSyntec (Final EIR **Appendix G**), and the URS evaluation, discussed above.

Response 40

The commenter suggests the methods to avoid increased erosion/deposition effects. Please see **Response 39,** above.

Response 41

The commenter gives no specifics as to how the cumulative impact analysis to water quality and aquatic resources is flawed except to state that they "are likely much greater…." The City believes that the Draft EIR and Revised Draft EIR cumulative analyses address all potential cumulative impacts. Please see **Responses 1** through **6**, above. Nonetheless, the comment expresses the opinions of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

In addition, see SCOPE **Response 7**, Ventura Coastkeeper **Responses 1**, **2**, **3, 6,** and **7**.

As explained in the Draft EIR Section 4.8.1, Water Quality, pp. 65–90 and Section 4.20, Floodplain Modifications, p. 68, the cumulative water quality impacts, and cumulative impacts to sensitive resources in the river are less than significant with respect to water quality. The analyses discuss compliance with regulations, permit conditions, and the requirements of regional plans, i.e., the Basin Plan, the General Construction Permit, and the MS4 Permit. These discussions are sufficient to mitigate water quality impacts to less than significant. The Draft EIR demonstrates that project runoff meets the requirements and objectives of these regulations, permit conditions and regional plans. The purpose of the regulations, permit requirements and regional plans is to protect receiving waters and to assure their compliance with applicable water quality standards. The analyses show that, based on incorporation of appropriate BMPs

into the construction and post-construction stages of the project, compliance with these requirements will render cumulative water quality impacts of the project on the river to a less than significant level.

With respect to the biological resources of the river, Revised Draft EIR Section 4.6, Biological Resources and Draft EIR Section 4.20, Floodplain Modifications, shows that compliance with the NRMP and implementation of the stated mitigation measures mitigates impacts from the project on ecological resources to a less than significant level. The Glenn Lukos Associates *Hybrid Functional Assessment*, dated September 2004, and the URS *Draft Hybrid Functional Assessment of Wetland and Riparian Habitats for Newhall Ranch*, dated July 2004 further support this conclusion and finds that the aquatic function of the site will improve in the post-development condition (See Final EIR **Appendix C**) This includes implementation of biological riparian and wetland mitigation. No evidence has been submitted that would indicate that the impact analysis is incorrect, or that the applicable regulations, permit conditions, and regional plan requirements are insufficient to protect receiving waters or biological resources of the river appropriately.

Response 42

The City does not concur with the commenter that Alternative 2 is the preferred alternative. Alternative conclusions take into considerations many factors, including but not limited to water quality and biological impacts. Please see Riverpark Draft EIR Section 6.0, Project Alternatives, pp. 6.0-37–40.

Response 43

Please see **Response 42,** above.

Response 44

Please see Riverpark Draft EIR Section 4.2, Flood, p. 4.2-5 for a definition of waters of the U.S.

Response 45

The comment expresses the opinions of the commenter. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

26. LETTER RECEIVED FROM THERESA SAVAIKIE, DATED MAY 6, 2004

Response 1

The comment expresses only the opinions of the commenter with respect to unspecified purported impacts due to previous development in the Santa Clara Valley and along the Santa Clara River, but does not raise any issue with respect to the contents of the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

It should be noted that the potential project-specific and cumulative impacts of the project on biological resources have been thoroughly analyzed in, Section 4.20, Floodplain Modifications, of the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources. Please see **Responses 2, 3,** and **4** to Friends of the Santa Clara River (**Comment Letter 17**).

Response 2

The assertion that the Riverpark project "relies" on the NRMP is inaccurate. The Riverpark project Draft EIR does not tier off of the NRMP EIR/EIS. Rather certain elements of the NRMP are incorporated into the Riverpark project, the project EIR and environmental analysis contained therein. Moreover, the City believes that the biological data obtained for the Riverpark Draft EIR is adequate and sufficient. Please see **Response 1** to SCOPE (**Comment Letter 18**), above.

Response 3

The Draft EIR specifically analyzes and addresses potential impacts to the drainages referred to in the comment. Please see Revised Draft EIR Section 4.6, Biological Resources, pp. 4.6-42–43. Additionally, since the Draft EIR and Revised Draft EIR were released to the public, an analysis entitled, *Hybrid Functional Assessment for Riverpark* (September 2004) has been prepared that further analyzes impacts to these drainages (see Final EIR **Appendix C**).

Response 4

When characterizing plant communities on any given project site, it is rare that every community will perfectly fit the descriptions offered by any one source of reference. As stated Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-9, only five of the 14 plant community descriptions followed either the CDFG Natural Heritage Division's list of communities or those of Holland. The vegetation in the remaining nine communities did not fit a defined plant community or association, as described by either CDFG or Holland and were, therefore, defined by their dominant species and, sometimes, associate species where two habitat types intergrade. This is an approach commonly used by botanists and other biologists when classifying vegetation communities and plant associations.

Response 5

The plant community identified in Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-16 was not identified as Riversidian alluvial fan sage scrub because the river-scour area was predominantly void of vegetation and best fit the generally accepted plant community known as riverwash.

Because of the diversity of species of oak trees (four) present on the project site within the "mixed oak/grass" plant community described on p. 4.6-16 of the Revised Draft EIR, this community most closely compares with "mixed oak/ grass" as described by CDFG than "Valley oak/coast live oak savannah" or "grassland" as the commenter suggests. These latter two plant communities generally have only one or two oak species present—Valley oak and or coast live oak.

Response 6

The intent of the statement in the Revised Draft EIR referred to by the commenter was to differentiate between those areas where impacts would be temporary in nature, and where habitat could eventually be restored, and those where there would be a permanent net loss of habitat. Because the proposed project design included measures to fully restore habitat areas temporarily disturbed as a result of grading or earth movement, and because the acres of SEA habitat that would be temporarily disturbed would not adversely affect the unarmored threespine stickleback, the endangered fish species for which the SEA was originally design to preserve, the temporary impact to these 13 acres was not considered to be significant under CEQA. As discussed in Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-83, because any permanent loss of habitat within a SEA would effectively reduce the overall size of the SEA, the permanent net loss of 24 acres within the SEA was considered a significant impact.

Response 7

The commenter incorrectly quotes the statement to which she is referring. The sentence correctly states that "[s]ignificant impacts resulting from project implementation would be mitigated *in part* (emphasis added) by preserving over 400 acres of the site as open space…." Other measures are included in the Revised Draft EIR that, in addition to the preservation of areas as open space, together mitigate habitat impacts. In addition, the preservation (including transfers to public agencies or deed restrictions) of habitat areas as open space is a commonly accepted form of mitigation by state and federal resource agencies, as well as by lead agencies of projects subject to CEQA environmental review. Moreover, after the Draft EIR and the Revised Draft EIR Section 4.6, Biological Resources, were released for public comment, the project was revised in three respects. First, to preserve even more of the river and its mature riparian resources, the project has been revised by relocating the bank stabilization from the park in the central portion of the project site in the east to the easterly commercial parcel in the west. The mature resource edge along this portion of the project site will now be preserved and an adjacent upland buffer of 100 feet will also be provided. Second, the project applicant has agreed to dedicate approximately 130 acres of the South Fork of the Santa Clara River (off the project site) to the City to be preserved as open space. Third, the project has been revised to move the equestrian trail north, outside of the river bottom and away from the river. Rather than separating from the multi-purpose trail before the western bridge abutment for the pedestrian/bike bridge (see Draft EIR, Section 4.12, Parks and Recreation, Figure 4.12-4, Recreation and Trails Plan), the equestrian trail will now remain within the multi-purpose trail and will cross over the Los Angeles Aqueduct on the pedestrian/bike bridge. (See **Revised Tentative Tract Maps, Appendix D.**) Concomitantly, the pedestrian/bike bridge will be widened from 20 to 25 feet, which will provide a minimum clearance of 20 feet on the bridge, large enough to accommodate all trail users. This project modification will reduce the potential impacts on riparian resources with which this commenter is concerned.

Response 8

See **Response 7** (above) regarding the preservation of habitat within open space areas as a form of mitigation. The Revised Draft EIR includes numerous measures that require the creation, restoration, and/or enhancement of habitat to mitigate the loss of like habitat. The RMMP proposed as part of Mitigation Measure 4.6-2 includes provisions for the maintenance and monitoring of such areas. Regarding the revisions to Mitigation Measure 4.6-2, please see **Response 20** to CDFG (**Comment Letter 8**), above.

Response 9

The Revised Draft EIR concludes that the loss of southern willow scrub, southern riparian scrub, and riverwash habitats are significant impacts of the project. The measures identified to mitigate these impacts refer only to the creation, restoration, and enhancement of riparian and river-associated habitat. Specifically, Mitigation Measure 4.6-1(d) states that "permanent removal of riparian habitats shall be replaced by creating riparian habitats of similar functions and values in the project areas. Wetland restoration shall be in-kind…." 4.6-1(f) states that "replacement habitat shall be designed to replace the functions and values of the habitats being removed." Additionally 4.6-1(e) states that "…the highest priority habitat restoration sites should be new riverbed areas created during the excavations for uplands for bank protection." This area is dedicated as open space-not for recreational purposes. Please see **Response 7**, above.

Response 10

The commenter incorrectly states that the phrase "since 1993" in the Revised Draft EIR, Section 4.6, Biological Resources, on p. 4.6-5 refers to amphibian surveys. The EIR is actually referring to avian surveys having been conducted on the site since 1993, and states that arroyo toad surveys, including California red-legged frog have occurred since 2001. (Revised Section 4.6, Biological Resources, pp. 4.6-5–6.) The dates for all other species surveys are clearly indicated in the Revised Draft EIR on p. 4.6-5. These reports are contained in Appendix 4.6 of the Draft EIR, and were included with the initial public circulation of the Riverpark Draft EIR. The Revised Draft EIR was circulated to allow the public to review the additions to Section 4.6, Biological Resources, regarding the western spadefoot toad, and the additions to Appendix 4.6. Therefore, only those technical reports not previously circulated were circulated with the Revised Draft EIR and are incorporated into appendices previously circulated.

Response 11

The comment expresses the opinions of the commenter that p. 4.6-18 of Section 4.6, Biological Resources, of the Revised Draft EIR incorrectly describes those who reported hearing vocalizations from western spadefoot toads emanating from the project site, and that those persons included, in past years, local biologists, and not simply lay persons. The commenter offers no evidence of her opinions. *CEQA Guidelines* Section 15064 (5) states "[a]rgument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous, or evidence that is not credible, shall not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion support by facts."

The Revised Draft EIR, Section 4.6, Biological Resources, is legally sufficient, as it reports on the findings of focused surveys conducted for western spadefoot toad in March and May of 2003 and March of 2004, discloses the facts that western spadefoot toad occurs on the site and were found during the March 2004 focused surveys, analyzes potential impacts to this species and its on-site habitat, concludes that those impacts are potentially significant, and suggests measures to mitigate these impacts. The particular expertise of the persons who reported hearing the species' vocalizations in unidentified prior years is therefore irrelevant. Even so, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because this comment does not raise a specific issue concerning the adequacy of the Revised Draft EIR, no further response can be provided.

Response 12

None of the bird species mentioned by the commenter is considered of special-status specifically by the CDFG. However, they are considered of "special concern" by the USFWS. The USFWS considers this phrase a "term of art" and does not connote any special consideration given by the USFWS to these species. Nevertheless, the four bird species addressed by the commenter will be added to Table 4.6-2 of the Revised Draft EIR

Response 13

The approach to both the field assessment and resulting discussion in Section 4.6, Biological Resources, p. 4.6-19 of the Revised Draft EIR was to only briefly address the common mammal species known to occur or likely to occur on the project site. More focus is given to the potential of special-status mammal species to occur as impacts to these species would more than likely trigger a potentially significant impact under CEQA, given the significance thresholds defined in the Draft EIR (p. 4.6-48), than would the presence of common mammal species. Based on an assessment of on-site habitats, all common and special-status mammal species with which suitable habitat occurs on the site are assumed to occur there, regardless of whether or not they were observed during field surveys. The Compliance Biology mammal report, contained within Appendix 4.6, refers the reader to Attachment A that provides a complete list of all species observed, detected, or with a potential to occur on the Riverpark project site.

The daytime pedestrian surveys and the nighttime spotlighting for sign or actual observations of wildlife are commonly accepted techniques of surveying target areas for mammal species. Both of these techniques are accepted by CDFG and other resource agencies as viable survey methodologies for mammal species.

Response 14

The use of scent stations is a commonly accepted method of attracting and identifying mammalian species occurring on a given project site. The surveying biologist used the appropriate materials for track detection and conducted the surveys at the appropriate time of day and year the range of target mammal species. The use of scent stations is also accepted by CDFG and other resource agencies as viable survey methodology for mammal species.

Response 15

Revised Draft EIR Section 4.6, Biological Resources, first sentence in the second paragraph under heading (2) Wildlife Species on p. 4.6-26 of the Draft EIR will be revised as follows: "Sixteen special-status species were observed during site surveys: western spadefoot toad (*Spea hammondii*), California thrasher (*Toxostoma redivivum*), oak titmouse (*Baelolphus inornatus*), Nuttall's woodpecker (*Picoides nuttalii*), Costa's hummingbird (*Calypte costae*)…."

The second sentence of that same paragraph will be revised as follows: "However, a total of 55 potential species are addressed in this report…."

Response 16

The commenter asserts that Table 4.6-2 in Revised Draft EIR Section 4.6, Biological Resources, (p. 4.6-27) incorrectly states with respect to two species of fairy shrimp that surveys found no indication of vernal or other seasonal pools on-site, and that soils present on-site are not suitable to support such pools. However, that statement is correct. Natural depressions underlain by hard claypan soils (a typical characteristic of vernal pools) capable of sustaining rainwater long enough to support breeding populations of fairy shrimp, western spadefoot toad, and other aquatic species do not occur on the site. (Please see Compliance Biology report, Final EIR **Appendix C**.)

Most of the rainpools that do occasionally form on the site are as a result of disturbances caused by grading or other land use activities that form temporary depressions that fill with rainwater. (Please see Revised Draft EIR Section 4.6, Biological Resources, Appendix 4.6, Compliance Biology report, March 15, 2004) For example, of the three rainpools that were observed containing spadefoots in 2004, one was formed by the construction of an adjacent asphalt road, another due to earth movement associated with dirt stockpiling activities, and the third is a large tire rut along a dirt road. (Please see Revised Draft

Riverpark EIR Section 4.6, Biological Resources, Appendix 4.6, Compliance Biology report, March 15, 2004)

None of the surveys conducted in 2003 and 2004 identified any such species of fairy shrimp. (Please see Draft EIR, Appendix 4.6 and Final EIR **Appendix C.**) Fairy shrimp were not seen in any of the seasonal rainpools on the project site, including both those that contained western spadefoot toads in March of 2004, and those that did not. (Please see Compliance Biology report, **Appendix C.**) There are only two occurrences, noted in the April 27, 2004 Federal Register for proposed critical habitat for the Riverside fairy shrimp, reported in the project region. The nearest is Cruzan Mesa, several miles from the project site, and the next nearest is from the Moorpark area, about 16 miles away. Both of these populations are defined by the USFWS as isolated. The four core populations include two in San Diego, one in Riverside County, and one in Orange County. The nearest occurrence of San Diego fairy shrimp in the CNDDB is in Orange County. (Please see Compliance Biology report and Federal Register, **Appendix C.**)

While the Revised Draft EIR states that there were no suitable seasonal pools occurring on the project site during the 2003 survey season, six seasonal pools were observed during spring of 2004. These pools only occurred on the project site recently due to alterations from human disturbance. Five of the six pools have occurred only this past year (2004) and one since the creation of the semi-paved road leading through the project site, none of which are vernal in nature. The soils supporting these pools are not typical of that found in vernal pools and are likely the reason they were not able to support water long enough for spadefoot toads to successfully metamorphose to toadlets. (Please see Compliance Biology report, Final EIR **Appendix C** and Revised Draft EIR Section 4.6, Biological Resources, Appendix 4.6, Compliance Biology report, March 15, 2004).

Response 17

The commenter questions how seasonal rainpools, such as the one located at the western entrance to the project site, could have been "overlooked" by the biologists surveying for western spadefoot toads. In fact, such pools, including the rainpool located at the western entrance to the site, were not overlooked, but were in fact surveyed during focused surveys conducted in March and May 2003, and March 2004. (Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-35, and Appendix 4.6, Compliance Biology March 2004 report, pp. 1–6; see also Final EIR **Appendix C**.)

Natural depressions underlain by hard claypan soils (a typical characteristic of vernal pools) capable of sustaining rainwater long enough to support breeding populations of fairy shrimp, western spadefoot toad, and other aquatic species do not occur on the site. (Please see Compliance Biology report, Final EIR

Appendix C.) Most of the rainpools that do occasionally form on the site are as a result of disturbances caused by grading or other land use activities that form temporary depressions that fill with rainwater. Please see Revised Draft EIR Section 4.6, Biological Resources, Appendix 4.6, Compliance Biology report, March 15, 2004.) Of the three rainpools that were observed containing spadefoots in 2004, one was formed by the construction of an adjacent asphalt road, another due to earth movement associated with dirt stockpiling activities, and the third is a large tire rut along a dirt road. (Please see Revised Draft EIR Section 4.6, Biological Resources, Appendix 4.6, Compliance Biology report, March 15, 2004.) Because the occurrence of the rainpools and the length of time rainpools last within the Riverpark site are highly variable due to the amount and type of soil disturbance that may have occurred during each year and to the amount, duration and timing of rainfall, suitable rainpools sufficient to support spadefoots may or may not form in a given year.

As the Compliance Biology report explains (see Appendix 4.6 to Revised Draft EIR Section 4.6, Biological Resources, pp. 1–2), two focused surveys for western spadefoot toads were conducted in March and May of 2003. Even though conditions were believed to be optimal for western spadefoot toads during the March 2003 focused survey, none were located on the project site, even within recurring seasonal rainpool 1, as described in the Compliance Biology report (March 2004), where toads were found in March 2004. (Id.) As reported, the conditions required to induce western spadefoot toads to emerge to breed are not fully understood, and, in the opinion of the expert biologist, it is likely that the toads were not found during the 2003 and 2002 surveys because one or more of the necessary seasonal conditions (amount and timing of rain, air temperature, and possibly the lunar stage) were not optimal for breeding when the surveys were conducted.

The western spadefoot toad spends most of its time estivating in a dormant to semi-dormant state in subterranean burrows and only emerges onto the surface to breed in seasonal rainpools following relatively warm rains, typically in late winter or early spring. (See Appendix 4.6 to Revised Draft EIR Section 4.6, Biological Resources.) Although much information exists regarding many of the life history requirements of western spadefoot toads, little is known about the complex biological cues that affect estivation, emergence from burrows, and breeding. While rainfall amount, temperature, and soil type are known factors that can influence emergence and the reproductive success of the spadefoot toad on any particular site, how these factors interact to cue the emergence from subterranean burrows and initiate breeding, as previously stated, is not fully understood. (See Appendix 4.6 to Revised Draft EIR Section 4.6, Biological Resources.)

Even so, it must be assumed that spadefoots were not observed during the 2003 surveys because site and climatic conditions were in some manner not appropriate for emergence from estivation or to initiate

breeding. In addition, because the entire period of breeding and hatching of larvae occurs within a matter of days and weeks, and can be significantly shortened by warmer temperatures, it is entirely possible that the surveys occurred during a time either before or after this activity occurs. It may also be possible that, for whatever reason, the conditions during 2003 were not appropriate for triggering breeding. From the little that is known about western spadefoot breeding ecology, the right combination of habitat and climatic variables must be present to both support this species on any particular site and to cue emergence from subterranean burrows and breeding. The Riverpark project site does not support ideal estivation or breeding habitat for the spadefoot. The combination of the low suitability and variability of habitat on the site, along with changing climactic factors, likely resulted in the negative findings of spadefoot during the 2003 surveys. (Please see Appendix 4.6 to Revised Draft EIR Section 4.6, Biological Resources.)

Moreover, 2004 appears to have been an optimal year for western spadefoot toad reproduction, as there were several other sightings in the Santa Clarita Valley area in 2004. As noted in the Final Additional Analysis to the Environmental Impact Report, County Project No. 98-008, Vesting Tentative Tract Map 52455, SCH No. 98021052, West Creek Project, Volume VI of VI, p. 4.1-4,

> "[r]egarding spadefoot toad habitat characteristics, in the spring of 2003, Mr. Bloom observed large numbers of breeding spadefoots within a large discarded tarp on property owned by Los Angeles International Airport. The tarp apparently trapped enough water to create a suitable breeding "pool" for the toads. As evidenced by this observation and the location of spadefoots within man-made retention basins on the West Creek site, this particular species is apparently capable of adapting to a variety of artificial habitats in which to breed." (See also Final EIR **Appendix C** *Results of Focused Western Spadefoot Toad Surveys on the West Creek Project Site, Compliance Biology*, June 11, 2004 and *Western Spadefoot Toad Habitat Enhancement and Monitoring Plan, West Creek Project Site, Compliance Biology*, August 2004.)

All of the above-cited locations were in areas disturbed by past use of the property or development activities. This evidence illustrates that the species adapts well to disturbed environments.

Response 18

See **Response 17** above.

Additionally, although spadefoot toads and fairy shrimp can co-occur in the same pools, fairy shrimp were not seen in any of the seasonal rainpools on the project site, including both those that contained western spadefoot toads in March of 2004, and those that did not. (Please see Final EIR **Appendix C** Compliance Biology report.) There are only two occurrences, noted in the April 27, 2004 Federal Register

for proposed critical habitat for the Riverside fairy shrimp, reported in the project region. The nearest is Cruzan Mesa, several miles from the project site, and the next nearest is from the Moorpark area, about 16 miles away. Both of these populations are defined by the USFWS as isolated. The four core populations include two in San Diego, one in Riverside County, and one in Orange County. The nearest occurrence of San Diego fairy shrimp in the CNDDB is in Orange County. (Please see Final EIR **Appendix C** Compliance Biology report, September 13, 2004 and Federal Register.)

Response 19

The possibility of observing any of the three reptile species addressed by the commenter will depend, on any given site, on the suitability of habitat, weather and temperature during the time of the surveys, and population levels, among other factors. Despite the fact that none of these species was observed during site surveys, suitable habitat for each of these species occurs on the site and, therefore, for the purposes of the Revised Draft EIR, Section 4.6, Biological Resources, these species were assumed to occur on the site. The comments made regarding the competency of the biologists conducting the surveys express the opinion of the commenter only.

Response 20

The statement "little to no ponding occurs on site" made in the Revised Draft EIR regarding the two-striped garter snake in Table 4.6-2 refers to the fact that no permanent ponds or water bodies, habitat preferred by this snake species, occurs on the site. Only seasonal ponding, in temporary depressions caused by earth-moving activities, has been observed on the site. The statement in Table 4.6-2 has been revised to state "[t]hough variable flows are known to occur seasonally, such flows are generally swift and little to no permanent ponding occurs on site" in order to clarify the statement.

Response 21

While the black-crowned night heron was observed on occasion along portions of the Santa Clara River during surveys conducted by Daniel Guthrie, exact locations of observations of most bird species were not mapped or described. Rather, all the bird species observed within a particular reach of the river was listed. Therefore, it is not possible to determine if the black-crowned night heron was actually observed on the Riverpark project, as the commenter maintains, or on a portion of the river near the project site. In addition, the portion of the river that passes through the project site does not support standing water (except during the winter months when rain events occur), preferred habitat for the night heron in which to prey on small fish and amphibians. Since the bird surveys were conducted in the late spring months,

when little or no water occurs on the site, it is unlikely that observations of the night heron by Mr. Guthrie occurred on the Riverpark project site. Nevertheless, the night heron will be added to Table 4.6-2 to indicate that this special-status species occurs in the vicinity of the project site and could occasionally forage on the site during large rain events.

Response 22

USFWS protocol surveys for the least Bell's vireo were conducted on the project site and none were detected. This species is addressed in the Revised Draft EIR Section 4.6, Biological Resources, Table 4.6-2.

Response 23

The commenter asserts that the estimate in Revised Draft EIR Section 4.6, Biological Resources, that there were 16 to 20 breeding pairs of western spadefoot toad present on the project site in the three rainpools where the toads were found in the March 2004 focused surveys lacks "supporting data or informational value." That assertion is erroneous. As Revised Draft EIR Section 4.6, Biological Resources, explains (p. 4.6-35), that estimate is based on the locations and number of occupied seasonal rainpools and number of egg masses observed during the March 2004 focused surveys. The full report on the March 2004 focused surveys (Compliance Biology March 2004) is included in Appendix 4.6 to Revised Draft EIR Section 4.6, Biological Resources. The estimate of 16-20 pairs of breeding toads is based on the observed number of larval toads within the pools when compared to the number of eggs that are known to be laid per breeding pair (several pairs in Occupied Rainpool 1, one pair in Occupied Rainpool 2, and 3 to 4 pairs in Occupied Rainpool 3). (Revised Draft EIR Section 4.6, Biological Resources, Appendix 4.6, pp. 3–5)

The commenter also questions the fact that western spadefoot toads were found on site during focused surveys conducted in March of 2004, but not during focused surveys conducted at the site in prior years. As the Compliance Biology report explains (see Appendix 4.6 to Revised Draft EIR Section 4.6, Biological Resources, pp. 1–2), two focused surveys for western spadefoot toads were conducted in March and May of 2003. Even though conditions were believed to be optimal for western spadefoot toads during the March 2003 focused survey, none were located on the project site, even within recurring seasonal rainpool 1, as described in the Compliance Biology report (March 2004), where toads were found in March 2004. (Id.) As reported, the conditions required to induce western spadefoot toads to emerge to breed are not fully understood, and, in the opinion of the expert biologist, it is likely that the toads were not found during the 2003 and 2002 surveys because one or more of the necessary seasonal conditions (amount and timing of rain, air temperature, and possibly the lunar stage) were not optimal for breeding when the surveys were conducted.

The western spadefoot toad spends most of its time estivating in a dormant to semi-dormant state in subterranean burrows and only emerges onto the surface to breed in seasonal rainpools following relatively warm rains, typically in late winter or early spring. (Please see Appendix 4.6 to Revised Draft EIR Section 4.6, Biological Resources.)

Although much information exists regarding many of the life history requirements of western spadefoot toads, little is known about the complex biological cues that affect estivation, emergence from burrows, and breeding. While rainfall amount, temperature, and soil type are known factors that can influence emergence and the reproductive success of the spadefoot toad on any particular site, how these factors interact to cue the emergence from subterranean burrows and initiate breeding, as previously stated, is not fully understood. (Please see Appendix 4.6 to Revised Draft EIR Section 4.6, Biological Resources.)

Even so, it must be assumed that spadefoots were not observed during the 2003 surveys because site and climatic conditions were not appropriate for emergence from estivation or to initiate breeding. In addition, because the entire period of breeding and hatching of larvae occurs within a matter of days and weeks, and can be significantly shortened by warmer temperatures, it is entirely possible that the surveys occurred during a time either before or after this activity occurs. It may also be possible that, for whatever reason, the conditions during 2003 were not appropriate for triggering breeding. From the little that is known about western spadefoot breeding ecology, the right combination of habitat and climatic variables must be present to both support this species on any particular site and to cue emergence from subterranean burrows and breeding. The Riverpark project site does not support ideal estivation or breeding habitat for the spadefoot. The combination of the low suitability and variability of habitat on the site, along with changing climactic factors, likely resulted in the negative findings of spadefoot during the 2003 surveys. (Please see Appendix 4.6 to Revised Section 4.6, Biological Resources.)

Moreover, 2004 appears to have been an optimal year for western spadefoot toad reproduction, as there were several other sightings in the Santa Clarita Valley area in 2004. As noted in the Final Additional Analysis to the Environmental Impact Report, County Project No. 98-008, Vesting Tentative Tract Map 52455, SCH No. 98021052, West Creek Project, Volume VI of VI, p. 4.1-4 "Regarding spadefoot toad habitat characteristics, in the spring of 2003, Mr. Bloom observed large numbers of breeding spadefoots within a large discarded tarp on property owned by Los Angeles International Airport. The tarp apparently trapped enough water to create a suitable breeding "pool" for the toads. As evidenced by this observation and the location of spadefoots within man-made retention basins on the West Creek site, this particular species is apparently capable of adapting to a variety of artificial habitats in which to breed." (See also Final EIR **Appendix C** *Results of Focused Western Spadefoot Toad Surveys on the West Creek Project Site*, Compliance Biology, June 11, 2004 and *Western Spadefoot Toad Habitat Enhancement and Monitoring*

Plan, West Creek Project Site, Compliance Biology, August 2004.) All of the above cited locations were in areas disturbed by past use of the property or development activities. This evidence illustrates that the species adapts well to disturbed environments.

Further, please see **Responses 17** and **18**, above**.**

The commenter also includes comments made regarding the competency of the biologist conducting the spadefoot survey, which merely express the opinion of the commenter. The biologist who conducted the surveys has done so for this particular species for numerous years and is recognized by the CDFG as qualified to conduct such surveys. Refer to **Response 17**, above, regarding the presence of seasonal pools on the site.

Response 24

Of the 10 bird species accounts in the Revised Draft EIR referred to by the commenter, only one account (yellow-billed cuckoo) concludes that no nest habitat for that species occurs on the site. The potential for nesting on the site by the other nine species ranged from "marginal" to "suitable." Focused nest surveys are typically not conducted for all bird species because of the fact that a particular species could nest one year on a site but not for the following year, due to a variety of factors. Not observing a nest of a particular bird species one year does not necessarily mean that this species could not nest there another year. If suitable nest habitat occurs on the site for a given species, whether or not it is marginal or highly suitable, it is assumed that the species could potentially nest there. For purposes of this Revised Draft EIR, this assumption was made for a number of bird species, and potential impacts on active nests of both common and special-status bird species were concluded by the Revised Draft EIR Section 4.6, Biological Resources, as potentially significant (pp. 4.6-70 and 4.6-72).

Response 25

It is a generally accepted position by biologists that a habitat area disturbed by human activities, such as disking operations, does not represent optimal habitat for a terrestrial species such as the black-tailed jackrabbit. While many such species have adapted to such areas and will often utilize them for foraging and even breeding, it would be misleading to represent such areas as "high quality" habitat for that species. Therefore, the disturbed habitat areas on the Riverpark site were objectively considered to be of "moderate" quality for the jackrabbit.

Response 26

The commenter asserts that the presence of a species precludes habitat from being anything other than high quality. This is incorrect. Please see **Response 25**, above. Moreover, just because a particular species is observed in a given location at any point in time does not necessarily mean that this location is "where they choose to forage or reside," as stated by the commenter. The animal could occur there for any number of reasons other than foraging or breeding, including dispersal, migration, or escape from predators or other danger. See **Response 25** (above) regarding the quality of the habitat on the site for the jackrabbit. See **Response 4** and **5** in **Comment Letter 8** (CDFG) regarding the significance of project impacts on black-tailed jackrabbit.

Response 27

The comment is acknowledged. As acknowledged in the Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-47, the City's policies and practices with respect to the SEA govern that portion of the project site within the SEA because it is within the jurisdiction of the City, not the County. .

Response 28

The commenter misreads this section of the Revised Draft EIR Section 4.6, Biological Resources. Contrary to the statements made by the commenter, the Revised Draft EIR (p. 4.6-51) concludes that a minimum 100-foot setback of development from the outer edge of riparian habitat associated with the river is necessary to adequately provide for the foraging and breeding habitat requirements of riparian wildlife and to maintain species diversity within the riparian ecosystem. The Revised Draft EIR establishes a significance threshold that preservation of *less* (emphasis added) than 100 feet of high quality upland habitat between the riparian resource and adjacent urban development would be a significant impact. Further, please see **Responses 12, 13,** and **17** to Friends of the Santa Clara River (**Comment Letter 17**) regarding the project's 100-foot buffer.

Response 29

The comment expresses the opinions of the commenter only. As such, the comment does not raise any issue with sufficient particularity to enable the City to respond by providing additional evidence, explanation or analysis to supplement the Draft EIR's cumulative impacts analyses. However, this comment is acknowledged and will be forwarded to the decision makers for their consideration. Because

the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

To the extent the comment was intended to summarize all prior comments in the comment letter, the City refers the commenter to **Responses 1** through **28**, above.

27. LETTER RECEIVED FROM THOMAS HAGLUND PH.D., DATE UNKNOWN

Response 1

Revised EIR Section 4.6, Biological Resources, p. 4.6-5 shall be revised as follows: delete the word "protocol" preceding "unarmored threespine stickleback."

Response 2

Focused surveys for western spadefoot toad were conducted in spring of 2003 and again in the spring of 2004. Both surveys included the particular site referenced in the comment. (Revised Draft EIR, Biological Resources, pp. 4.6-35, 72; Revised Section 4.6, Biological Resources, Appendix 4.6, *Results of Focused Western Spadefoot Toad Surveys on the Riverpark Project Site* (Compliance Biology, March 2004), pp. 1–5.) Although no western spadefoot toads were found during two focused surveys (in March and again in May) conducted in 2003, that species was found during the 2004 focused surveys, as reported in Revised Section 4.6, Biological Resources, at pp. 4.6-35, 72. (See also, Revised Section 4.6, Biological Resources, Appendix 4.6, *Results of Focused Western Spadefoot Toad Surveys on the Riverpark Project Site* [Compliance Biology, March 2004], pp. 1–2.) Several seasonal pools were identified within the project boundary in 2004, three of which contained spadefoot tadpoles. Page 4.6-26 of the Revised Draft EIR identified the spadefoot toad as occurring on the project site. As discussed in the Compliance Biology report included in Appendix 4.6 to Revised Draft EIR Section 4.6, Biological Resources (p. 2), there can be many reasons why western spadefoot toads emerge in one year to breed, but not in another year. See also **Responses 17, 18,** and **23** to **Comment Letter 26**, Teresa Savaikie.

Response 3

Surveys were conducted for this and other reptile species concurrently with surveys for the variety of other species conducted on the site (e.g., birds, mammals, plants, etc.). As stated in the Revised Draft EIR (Table 4.6-2, p. 4.6-29), suitable habitat for horned lizards occurs on the site. Consequently, although no individuals of this species were observed on the site, for the purposes of this EIR the horned lizard was assumed to potentially occur there. See also **Response 19** from **Comment Letter 26**, Teresa Savaikie.

Response 4

See **Response 3**, above. Surveys for general amphibian species were conducted concurrently with those for spadefoot toad, California red-legged frog, and arroyo toad. Please also see Final EIR, **Appendix C** for additional surveys conducted for the spadefoot toad, California red-legged frog, and arroyo toad.

Response 5

For the purposes of the Revised Draft EIR, species were assumed to be present on the site if suitable habitat occurs, it is within the known range of the species, and if no focused surveys were conducted that may conclude presence or absence.

Response 6

Impacts to the unarmored three-spine stickleback are addressed in Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-74. Impacts to this fish species were determined to be potentially significant. Also see the analyses and discussion in Draft EIR Section 4.20, Floodplain Modifications, and Appendix 4.20, Sensitive Aquatic Species Assessment Upper Santa Clara River, Entrix, Inc. February 25, 2004. Additionally, impacts to the stickleback were also analyzed in the NRMP that addressed various structures and modifications to the river channel, including bank stabilization. The NRMP was approved by the ACOE, CDFG, and RWQCB and measures were stipulated in the NRMP, and incorporated into the Draft EIR, that would minimize and mitigate potential construction impacts on the stickleback. The ACOE, CDFG, RWQCB, and USFWS ultimately issued appropriate permits to implement the NRMP.

Response 7

The bank stabilization proposed for most portions of the river will be buried; therefore, this bank stabilization will not be hard-sided. The soil covering the bank stabilization will be revegetated and restored to a habitat condition and river contour similar to that prior to disturbance. Please see **Response 6**, above.

Response 8

The comment expresses the general opinions of the commenter only. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Revised Draft EIR, no further response can be provided. Nevertheless, see Draft EIR Sections 4.2, Flood; 4.8.1, Water Quality; and 4.20, Floodplain Modifications, which conclude the project will not cause project-level or cumulative significant hydrology or water impacts. In addition, please see Final EIR **Appendix G**, *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, GeoSyntec (October 2004).

Response 9

See **Response 6**, above, regarding impacts to stickleback. The Draft EIR and Revised Draft EIR do indeed consider downstream impacts. Please see Draft EIR Sections 4.2, Flood; 4.8.1, Water Quality; and 4.20, Floodplain Modifications, and Revised Draft EIR Section 4.6, Biological Resources. In addition, please see Draft EIR Appendix 4.20, and Final EIR **Appendix G**, *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, GeoSyntec (October 2004).

Response 10

The use of the Santa Clara River as a movement corridor for both terrestrial as well as aquatic wildlife species is addressed beginning in Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-44. The use of the river by special-status fish species is addressed on p. 4.6-38. In addition, please see Draft EIR Section 4.20, Floodplain Modifications, and Appendix 4.20.

28. LETTER RECEIVED FROM HENRY SCHULTZ, SIERRA CLUB MAY 7, 2004

Response 1

This comment objects to the water supplies analyzed in the Riverpark Draft EIR due to the detection of ammonium perchlorate. The comment attaches, and relies upon, the Newhall County Water District Resolution 2004-3. The City does not concur with this comment.

For information responsive to this comment, please refer to **Topical Response 2: Groundwater Supplies and Perchlorate**; and **Topical Response 4: Newhall County Water District Resolution**.

Response 2

The comment states that the City may not include CLWA's 41,000 AF water transfer in its calculations of water supply for the Riverpark project. The City does not concur with this comment.

For information responsive to this comment, please refer to the Draft EIR, at pp. 4.8-19–20, and 4.8-61–75; **Topical Response 3: SWP Supplies – Reliance on the 41,000 AFY Water Transfer**; **Response 1** to **Comment Letter 23** from California Water Impact Network (Carolee K. Krieger), dated May 4, 2004; and **Response 11** to **Comment Letter 18** from Santa Clarita Organization for Planning and the Environment (Larry Kanner), dated May 3, 2004.

Response 3

The comment expresses the opinion that the Riverpark SB 610 Water Supply Assessment and the 2000 UWMP are "inaccurate" and "do not conform to existing legal requirements under the California Water Codes." The City does not concur with this opinion.

Based on the City's determination, both the Riverpark Draft EIR and the SB 610 Water Supply Assessment (see Appendix 4.8) accurately portray water supply and demand information pertinent to the Riverpark project. As to the comment about reliance upon the 2000 UWMP, the City notes that the 2000 UWMP was considered, along with numerous other water-related reports, studies, contracts, and other documents; however, the 2000 UWMP is now almost four years old, and legal requirements mandate that it must be updated every five years, with the next update due to be adopted on or before December 2005. The City also conducted its own independent assessment of the water supplies and demand available in the Santa

Clarita Valley. The City finds, based upon the entire record, that there is sufficient water available to serve the Riverpark project, in conjunction with other existing planned future uses in the Santa Clarita Valley. However, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

29. LETTER RECEIVED FROM DR. RANDY MARTIN, DATED APRIL 25, 2004

Response 1

The commenter erroneously claims that the Draft EIR fails to analyze potential mobile source impacts on off-site locations in the Bridgeport development immediately adjacent to Newhall Ranch Road. Table 4.5-5, Predicted Off-Site Roadway Noise Levels at Noise Sensitive Locations at Project Buildout, in Section 4.5, Noise, of the Draft EIR identifies project traffic noise contributions at the closest residential receptors along Newhall Ranch Road west of Bouquet Canyon Road. As shown, the increase in noise levels generated by project-specific and cumulative traffic would contribute a *maximum* of 0.2 dB(A) to future noise levels at these locations. This noise increase would be inaudible to residents along Newhall Ranch Road or to residents within Bridgeport.

Response 2

Please see **Response 1**, above. As stated in **Response 1,** above, the increase in noise levels generated by project-specific and cumulative traffic noise would be inaudible to residents along Newhall Ranch Road west of Bouquet Canyon Road. Therefore, existing developments along Newhall Ranch Road west of Bouquet Canyon Road would not experience a significant noise impact as a result of the proposed project.

It is true that locations within the Riverpark site that are currently proposed for residential uses would be exposed to noise levels that exceed the City's normally-acceptable noise standards, resulting in a significant noise impact unless mitigated. In addition, Section 4.5, Noise, of the Draft EIR concludes that certain off-site locations would also experience significant impacts due to projected increases in traffic noise unless mitigation. In certain locations, as the Draft EIR concludes, those impacts would be unavoidable, and, consequently, a statement of overriding considerations would be required if the project is approved.

Response 3

Please see **Responses 1** and **2**, above. Existing and projected future noise levels along Newhall Ranch Road as modeled by the Federal Highway Administration's *Highway Traffic Noise Prediction Model* are presented in Riverpark Draft EIR Section 4.5, Noise. Additional analysis of existing and projected future noise levels at specific locations along Newhall Ranch Road would not change the findings of the EIR that project-generated traffic would contribute a *maximum* of 0.2 dB(A) to future noise levels at the nearest

residences along Newhall Ranch Road. This noise increase would not be audible at these locations and would result in a less than significant noise impact.

Response 4

Through modeling, Section 4.5, Noise, of the Draft EIR projects that project-specific and cumulative traffic noise increases at the nearest residences along Newhall Ranch Road west of Bouquet Canyon Road would be 0.2 dB(A) or less, and less than significant. Project traffic noise at locations further away from the roadway (e.g., in yards, balconies, and within homes) would be even less audible and inaudible within homes with windows closed.

Trucks and motorcycles along Newhall Ranch Road, as well as acceleration and deceleration noise, are instantaneous noise events that are factored into the average noise levels along the roadway that are presented in Section 4.5, Noise. Through its Noise Element, the City of Santa Clarita has defined acceptable and unacceptable noise levels for the City in its *Noise and Land Use Compatibility Guidelines*. These noise levels are measured in CNEL (Community Noise Equivalent Level),[38] which is measured over a 24-hour period and adjusted to account for some individuals' increased sensitivity to noise levels during the evening and nighttime hours. Because this measurement covers a 24-hour period and because the noise model was adjusted for the future vehicle mix (i.e., passenger vehicles, motorcycles, buses, and light-, medium-, and heavy-duty trucks) along Newhall Ranch Road, future noise levels at the nearest residences along the roadway can be predicted. As discussed in **Response 3,** above, a significant cumulative noise impact would occur at the multi-family residences west of Bouquet Canyon Road.

Section 4.5, Noise, Mitigation Measure 4.5-21 ensures that interior noise levels are assured to be at or below 45 dB with the following:

> "4.5-21 Prior to issuance of building permits, a detailed acoustic analysis shall be performed for all residence in areas subject to noise levels in excess of normally acceptable noise levels for that use. The analysis shall be based upon final site grades, building orientation, and noise exposure, and shall specify all practical noise insulation features necessary to ensure interior residential noise environments do not exceed 45 dB(A). These noise insulation features may include, but are not limited to, the following:
>
> (a) All windows, both fixed and operable, shall consist of either double-strength glass or double-paned glass. All windows facing sound waves generated from the mobile source noise shall be manufactured and installed to

38 The Noise Element indicates considers both CNEL and Ldn equivalent for purposes of analysis. CNEL, however, is used for the noise impact analysis because it is more conservative than the Ldn and portrays a worst-case noise scenario, and it is commonly used throughout the State of California in noise impact analysis prepared for EIRs.

specifications that prevent any sound from window vibration caused by the noise source.

(b) Doors shall solid core and shall be acoustically designed with gasketed stops and integral drop seals.

(c) If necessitated by the architectural design of a structure, special insulation or design features shall be installed to meet the required interior ambient noise level.

(d) The exterior walls of living areas shall be of a special type construction and/or include special insulation, depending on the maximum ambient noise levels generated at any time in a particular area."

The level of detail for cumulative noise impacts presented in Section 4.5, Noise, is satisfactory for the project's Draft EIR. A request for a broader noise analysis along Newhall Ranch Road is more appropriately directed to the City of Santa Clarita and is not a responsibility of the proposed project.

Response 5

The commenter suggests that the Draft EIR should analyze "the safety issues of children utilizing the streets in this neighborhood." First, children should not be using streets in any neighborhood to play; to the extent that children cross streets, the customary safety precautions that are utilized throughout the City would protect children crossing streets in the commenter's neighborhood. Moreover, the Riverpark Draft EIR does not conclude that the Riverpark project would create a safety impact to the Bridgeport site, and the commenter does not offer any evidence that it would. It is speculative to assume that Riverpark residents would create a safety issue at Bridgeport. *CEQA Guidelines* Section 15064 (5) clearly states that "[a]rgument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous, or evidence that is not credible, shall not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion support by facts."

Response 6

The commenter complains that motorists in the City use the Bridgeport development streets as a "short-cut" from Newhall Ranch Road to McBean, and implies that the project would generate additional traffic crossing through Bridgeport. However, the commenter offers no evidence that the project would in fact generate such additional traffic trips. Such "short-cut" trips are apparently a current problem that has not been created by the project, and which is properly remedied by the City, not the project, through the use of appropriate traffic control measures. Existing issues within the Bridgeport community are not the responsibility of the project applicant.

Response 7

The comment refers to recommendations suggested by the commenter. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

Response 8

The commenter suggests that the Draft EIR should include information as to alternative sites where persons who currently use the project site for birding and hiking can find a similar location for such activities. First, the purpose of the Riverpark Draft EIR is to discuss and analyze the proposed project's potential environmental impacts. Finding options for finding similar unspoiled riparian corridors is not the responsibility of the Riverpark Draft EIR. Second, as the project site is and has continuously been private property, if current City residents are using the project site for birding and hiking without the applicant's permission, then they are trespassing.

30. LETTER RECEIVED FROM RON BOTTORFF, FRIENDS OF THE SANTA CLARA RIVER, DATED AUGUST 6, 2004

Response 1

The comment requests that the correspondence attached to the comment letter be included in the record. As requested, both the comment letter and all attachments will be part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 2

The comment raises issues regarding CLWA's SWP supplies, including the 41,000 acre-feet per year water transfer. For information responsive to this request, please refer to **Topical Response 3: SWP Supplies – Reliance on the 41,000 AFY Water Transfer**, and **Topical Response 4: Newhall County Water District Resolution**—both of which are found in the Riverpark Final EIR (SCH No. 2002091081). In addition, since public circulation of the Riverpark Draft EIR, CLWA circulated for review and public comment the Draft EIR for the 41,000 AFY water transfer project in June 2004 (SCH No. 1998041127). The CLWA Draft EIR evaluates the potential environmental impacts of the 41,000 AF water transfer project. The CLWA Draft EIR is incorporated by reference and is available for public review and inspection at CLWA, 27234 Bouquet Canyon Road, Santa Clarita, California 91350.

Response 3

The comment states that the effects of an earthquake or a levee break have not been assessed, relying upon a newspaper article regarding the Sacramento Delta. The comment is beyond the scope of the Draft EIR for the Riverpark project; and, therefore, no further response is needed or required. In any case, the Riverpark Draft EIR, Section 4.8, Water Service, Volume I (March 2004), at pp. 4.8-88–89, addressed local water contingency planning, including drought conditions, earthquakes and other natural catastrophes.

Response 4

Please see **Response 3**, above.

Response 5

Please see **Response 3**, above.

Response 6

The comment asks that the County respond to "recommendations" made by "two experts, Cathy Kelly and Jonas Minton." According to the comment, these individuals gave testimony regarding the SWP system before the Planning Commission of the City of Santa Clarita on June 29, 2004. The comment does not identify the "recommendations" made by the identified experts. This testimony was not presented during a Riverpark hearing, but was presented in an informational session for the Planning Commission. Nevertheless, the transcript of the entire proceedings before the Planning Commission of the City of Santa Clarita on June 29, 2004, is available for review and included in the Riverpark Final EIR. Based on a review of that transcript, Jonas Minton provided opinion testimony regarding the SWP system, and Katherine Kelly, Department of Water Resources, provided opinion testimony responsive to Mr. Minton. This information will be part of the record and made available to the decision makers prior to a final decision on the proposed project.

City staff has reviewed the transcript of that Planning Commission meeting and, contrary to the comment, nowhere in the transcript do either Ms. Kelly or Mr. Minton "suggest" that "planners should analyze the effect of cutbacks that would be required under the worst case historical delivery rate, 13% of Title (sic) A Amounts in 1991, on existing business and residents in the Santa Clarita Valley." Therefore, no further response is needed or required. Nevertheless, the comment will be part of the record and made available to the decision makers prior to a final decision on the proposed project.

In addition, regarding comments about groundwater supplies in the Santa Clarita Valley, please refer to Section 4.8, Water Service, of the Riverpark Draft EIR, pp. 4.8-32–42, for an analysis of the Valley's groundwater supplies.

Response 7

As requested, the public testimony provided by Jonas Minton and Katherine Kelly, Department of Water Resources, has been included in the record of the Riverpark Final EIR, and will be made available to the decision makers prior to a final decision on the proposed project.

31. LETTER RECEIVED FROM JOHN GONZALEZ, DATED APRIL 29, 2004

Response 1

The comment states that those persons who signed the attached petition were opposed to the grading of the ridgeline adjacent to those residents of Gavilan Drive. In response to concerns voiced by neighbors in the Emblem Tract, the project applicant has revised the project and will not be reducing the height of that portion of the ridge adjacent to the homes along Gavilan Drive in the Emblem neighborhood.

Response 2

The commenter believes that the number of school children generated by the project would crowd schools. With regard to schools becoming more crowded, please see Final EIR, **Appendix F** for correspondence from both districts indicating no impacts to the school systems based upon development of the Riverpark project.

Response 3

The comment is concerned with the safety issues relating to in/out traffic in the Emblem Tract. The information will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise a specific issue concerning the adequacy of the Riverpark Draft EIR, no further response can be provided.

Response 4

Please see **Response 1**, above, with regard to the hillside adjacent to the Emblem tract would not be graded. Nonetheless, Draft Riverpark EIR Section 4.4, Air Quality, p. 4.4-13 takes into sensitive receptors such as schools.

Response 5

The commenter indicated that residents' existence is being compromised by profit-minded entities. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

32. LETTER RECEIVED FROM LYNN PLAMBECK, SCOPE, MAY 18, 2004

Please see the **May 18, 2004 Transcript**, **Response 19**. Please see also **Topical Response 4: Newhall County Water District Resolution**.

33. LETTER RECEIVED FROM STACY KELLEHER, DATED JUNE 15, 2004

Response 1

The comment addresses itself to the number of unbuilt and built dwelling units in the City of Santa Clarita. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

34. LETTER RECEIVED FROM KAREN PEARSON, DATED AUGUST 31, 2004

Response 1

The commenter stated that her quality of life diminished with the construction of the Bouquet Center. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 2

The commenter noted that Newhall Land has been very cooperative and had expressed possibly building a wall behind Bouquet Center to the hill to block noise and pollution and the children from the condominiums form entering their rear yards. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

35. LETTER RECEIVED FROM CONNIE WORDEN-ROBERTS, DATED AUGUST 31, 2004

Response 1

The commenter noted she chairs the transportation committee's for both the Chamber of Commerce and the Valley Industrial Association and that these committee's have addressed and reviewed the importance of a fully integrated transportation system to serve the Santa Clarita Valley. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 2

The commenter stated that the transportation committee's for both the Chamber of Commerce and the Valley Industrial Association have unanimously voted to concur with the City Council that the completion of the Cross Valley Connector is the "number one priority for our City." This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 3

The commenter noted that the Riverpark proposal not only addresses a vital roadway but includes bank stabilization to protect the river as well. The commenter highlighted project aspects and compared to what was allowed by the City of Santa Clarita General Plan. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 4

The commenter reiterated, in their opinion, the importance of the Cross Valley Connector. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 5

The commenter urged approval of the Riverpark project. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

36. LETTER RECEIVED FROM ERIC SANCHEZ, WISHTOYO FOUNDATION, AUGUST 31, 2004

Response 1

The commenter stated that it is the responsibility of the developer to coordinate with Native American groups. The California Indian Council Foundation was consulted and provided monitoring during the Phase II archaeological test excavations, represented by Mr. Richard Angulo. Mr. Charlie Cooke was also consulted during the planning of the project. At his request, additional Phase II testing was conducted on site CA-LAN-3043, which Cooke monitored. Both the California Indian Council Foundation and Cooke have concurred with the adequacy of the fieldwork, the significance determinations that have resulted from the fieldwork and analysis, and the final recommendations for both sites

Response 2

The commenter requested that project developers should protect confidential information about sensitive Native American values, practices and specific locations of resources from disclosure to the public. No confidential information of any kind was contained in the Draft EIR.

Response 3

The commenter states that the Draft EIR fails to grasp the distinction between resources as cultural and resources as archaeological, and that, as a result, the assessment of the existence of significant resources within the project site and the mitigation measures are inadequate. However, 'archaeological resources,' by definition and by widespread usage, are included within the broader term 'cultural resources.' The comment does not specify how the Draft EIR's analyses and mitigation measures are defective, or suggest that additional cultural or archeological resources are contained within the project site, or suggest additional mitigation measures needed. Consequently, no further response is possible.

Response 4

The commenter believes the Draft EIR to be deficient because of its failure to consult with any members of the Tataviam community during the preparation of the Draft EIR, and mentions requirements under CEQA and unspecified federal laws. Federal laws governing tribal consultation only pertain to federally recognized tribes. The Tataviam community is not a federally recognized tribe, as the Wishtoyo Foundations acknowledges at Comment 34 below. Under federal law the Tataviam are therefore not

entitled to consultation. Furthermore, these federal laws are not applicable to this project, as the Wishtoyo Foundation acknowledges at **Comment 17**; state law provides authority for this permitting process. The developer and project archaeologists complied with CEQA and consulted with the local Native American community (Please see **Response 1** above), including the Tataviam community, of which Charlie Cooke is a widely recognized member.

Response 5

The commenter states that the Draft EIR is deficient because it fails to fully plan and consider for the possibility that more resources/ancestors may be unearthed during the development process, and that major events such as the breaking of the St. Francis Dam altered the surface such that it is likely that resources may be found. However, the Draft EIR includes mitigation measures that address the identification and protection of any additional cultural resources that may be found during project grading and construction (Mitigation Measure 4.18-3). The Draft EIR includes provisions allowing for the identification and protection of any additional cultural resources during project grading and construction, as the Wishtoyo Foundation in fact acknowledges at **Comment 49**. The western edge of the Riverpark project is over 2 miles upstream from the confluence of San Francisquito Canyon with the Santa Clara River, and the project area was not affected by the dam catastrophe.

Response 6

The commenter states that he believes that mitigation are inadequate for their failure to address ways in which impacts to cultural resources can be mitigated from a tribal perspective. The Draft EIR identifies mitigation measures that are adequate and appropriate under CEQA, as the Wishtoyo Foundation acknowledges at **Comment 9**. The comment does not provide any specific information as to how the mitigation recommended in the Draft EIR is deficient or how it could be improved. Consequently, no further response is possible.

Response 7

The commenter notes that cultural resources are protected under several state and federal laws. The identified federal laws are not applicable to the project; please see **Response 4**, above. Both sites CA-LAN-351 and -3043 were determined significant. The comments regarding CEQA's requirements addressing archaeological resources are acknowledged and the City believes that the archaeological reports prepared for the Riverpark site and the Draft EIR have been prepared in accordance with CEQA and the *CEQA Guidelines.*

Response 8

The commenter believes that the Draft EIR is not sufficient as an information document, since the work done on the cultural resources section is woefully inadequate and lacking in the basic understanding of the term cultural resources. The City disagrees with this comment, and believes that the Draft EIR's analysis and the mitigation measures proposed are appropriate and sufficient. Moreover, by the widely accepted and used definition, archaeological resources are cultural resources. The comment does not provide any specific information as to how the Draft EIR is deficient or how it could be improved. Consequently, no further response is possible.

Please see **Responses 3–7,** above.

Response 9

The commenter state's that the Draft EIR fails to take into consideration the distinction between cultural and archaeological resources, which renders the document inadequate. The City concurs with the Wishtoyo Foundation that the Draft EIR's determinations of the significance of the sites located within the project site and of the "most appropriate mitigation measures" are legally sufficient. However, in the City's opinion, neither federal nor state laws make a distinction between archaeological and cultural resources that would render the Draft EIR's determinations insufficient.

Response 10

The commenter stated that at a minimum the project developer must consult with members of the Tatavium community. Please see **Responses 1** and **4,** above.

Response 11

The commenter believes that the Draft EIR is inadequate for its failure to comply with state and federal guidelines regarding consultation with tribes and Indian community members. Please see **Responses 1** and **4,** above. The Native American Heritage Commission was sent copies of both Notices of Preparation prepared for the project and did not transmit any communication responding that any sacred sites were located on the project site.

Response 12

The commenter stated that the economic and social effects can be used to determine the significance of changes to the environment where, for example, construction of a road and resulting noise increases disturb religious practices. The commenter concludes that because proper Native American consultation was not obtained on this site, the Draft EIR could not make this judgment. However, such consultation was obtained. Please see **Responses 1** and **4,** above. The commenter is incorrect with regards to the impacts of social or economic information. The *CEQA Guidelines* Section 15131 states that "[e]conomic or social information *may* [emphasis added] be included in an EIR…." There is no requirement under the *CEQA Guidelines* that social or economic impacts be addressed.

Response 13

The commenter stated that the Native American Heritage Commission was not notified of the project. The commenter is incorrect. The Native American Heritage Commission was notified of the project by the State of California Office of Planning and Research two times—at the issuance of each Notice of Preparation (September 2002 and October 2003).

Response 14

The commenter provided case law with regard to the fact that the Native American Heritage Commission must be consulted. The Native American Heritage Commission was consulted with prior to preparation of the Riverpark Draft EIR. Please see **Response 13,** above.

Response 15

The commenter again states that the project should have consulted the Native American Heritage Commission and representatives of Native American tribes. Please see **Response 1, 4**, and **13,** above.

Response 16

The commenter outlined federal law requirements for consultation. Federal law is not applicable for this project. Please see **Response 4** above.

Response 17

The commenter outlined the National Historic Preservation Act consultation requirements. CEQA, not the National Historic Preservation Act, provides the legal requirements for this project. Section 106 is not applicable, as the Wishtoyo Foundation here acknowledges, because "The project, activity, or program must be under the direct or indirect jurisdiction of a federal agency.…" The City of Santa Clarita has jurisdiction over this project, not the federal government. Nonetheless, the CEQA review and the Federal Section 106 processes are similar in terms of process and intent. The City concurs with the Wishtoyo Foundation that the cultural resources studies are "sufficient to meet CEQA and federal requirements regarding archaeological resources that are significant."

Response 18

The commenter assumes that the project would need "certain permits or licenses to manage the Santa Clarita Valley area" and would require federal funds to operate. The proposed project is a privately funded development and would receive no federal funding to operate. Furthermore, the proposed project does not propose to "manage the Santa Clarita Valley area."

Response 19

The commenter assumes that federal laws pertain to the proposed project. The City disagrees. Please see **Responses 4, 17,** and **18,** above.

Response 20

The commenter believes that CA LAN-351 should be placed as eligible for listing to the National Register of Historic Places. The project has been designed so that site CA-LAN-351 will be preserved in open space. This opinion/comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 21

The commenter assumed that the project applicant has not investigated the classification of traditional cultural properties. Please see **Response 17,** above. Note further however that both sites CA-LAN-351 and -3043 are believed to be about 3500 years old. On this basis alone they are not eligible for

consideration as Traditional Cultural Properties because of their 3000+ years separation in time from the contemporary Tataviam community.

Response 22

The commenter outlined the Native American Graves Protection and Repatriation Act. The federal Native American Graves Protection and Repatriation Act (NAGPRA) pertains to graves, grave goods and sacred objects, understood to mean objects used in religious rituals and ceremonies. It does not, as is asserted, pertain to "Native American cultural item[s]" in any generic sense. No sacred artifacts or features have been found on site CA-LAN-3043; site CA-LAN-351 has not been tested archaeologically and will be preserved, though no sacred artifacts or features are known to be present on it either. NAGPRA, therefore, has no relevance to the Riverpark project.

Response 23

The commenter acknowledged that the Riverpark project was being funded by private interests, but asserts that it will nonetheless require state and federal funds for the needs of the proposed community. As discussed in **Response 18,** above, however, the proposed project is a privately funded development and would receive no federal funding to operate.

Response 24

The comment concluded that the project applicant for the Riverpark project has failed to create any plan of action for managing Native American cultural items that may be encountered during development of the site. The City disagrees. Please see **Response 5,** above. The commenter also states that "almost all of the sites of relevance" found on the site were determined to be insignificant. This is not true. Both CA-LAN-351 and -3043 have been determined significant, not insignificant, as is asserted.

Response 25

The commenter outlines NAGPRA regulations and indicates that the Riverpark EIR does not address NAGPRA issues. Please see **Response 22,** above. Contrary to what is asserted, NAGPRA has no requirement for tribal notification prior to the discovery of graves or sacred remains. Furthermore, NAGPRA's consultation process, following federal law, only involves federally recognized tribes, thereby excluding both the Tataviam and Fernandeño from inclusion.

Response 26

The commenter stated that consultation with Native American representatives must occur if resources are found on the project site and cites federal noticing requirements. Federal regulations do not govern the proposed project, as the Wishtoyo Foundation acknowledges at **Comment 17**. Nevertheless, all applicable notification requirements under state law were fulfilled. Please see **Responses 1**, **4**, **10**, **11,** and **13**, above.

Response 27

The commenter believes that the project developers and consultants have excluded well-respected scientists and does not believe that the archaeologists who prepared the Riverpark archaeological reports presented an honest effort to ensure that integrity in the archaeological sites is maintained. Additionally the commenter discusses the Ahmanson Ranch project and its alternatives. The Wishtoyo Foundation questions the professionalism, knowledge, honesty, and integrity of W&S Consultants, in part based on their previous consulting for the Ahmanson Ranch project. As a point of factual clarification, first, the technical report written by W&S Consultants for the Ahmanson Ranch project did not deem "six different sites on the Ahmanson Ranch as insignificant." It determined the six sites in question to be significant, following *CEQA Guidelines*, and recommended as the preferred option that they be preserved in open space. (The certified EIR sections on cultural resources for Ahmanson Ranch, which stated that these sites were not significant, were written by RMW Paleo, not W&S Consultants.) Second, the professionalism, honesty and integrity of W&S Consultants, which the Wishtoyo Foundation here attempts to impugn, is demonstrated in a number of ways: (a) The principles of the firm have a combined total of over 60 years of archaeological experience in this portion of Southern California, (b) They have published over a dozen books and 60 research articles on archaeology, (c) They have received special appreciation awards from the Candelaria Tribal Council and the California Indian Council Foundation (twice), along with the Simi Valley Historical Society, (d) They have received the Thomas King Award from the Society for California Archaeology for Excellence in Cultural Resource Management, (e) They have listed over 400 California archaeological sites on the National Register of Historic Places, (f) They have served on the State of California Historical Resources Commission, and (g) They currently serve as the Ventura County Cultural Heritage Board's anthropological and archaeological advisors. Third, the Wishtoyo Foundation acknowledges the expertise of W&S Consultants on the local region in **Comments 38–40**. Lastly, the comment does not indicate who the "well respected scientists" were that were not consulted on the project. Consequently no further response can be prepared.

Response 28

The commenter asserts that there has not been a good-faith effort to discover the baseline conditions as required by CEQA. The City disagrees; please see Draft EIR Section 4.18, pp. 4.18-2–21. The commenter gives no specifics as to how the Draft EIR has not provided baseline conditions and how it has not provided full disclosure; therefore, a specific response to the comment cannot be provided. However, this comment is acknowledged and will be forwarded to the decision makers for their consideration.

Response 29

The commenter states that the Draft EIR concludes that only one site can be considered significant, labeling two other sites as insignificant and that proposed grading would be less than significant. The City disagrees. The Draft EIR and the cultural resources technical report (Draft EIR Appendix 4.18), in fact, determined that both sites CA-LAN-351 and -3043 are significant. The Draft EIR provides mitigation to ensure that significant impacts to these sites do not occur. The Draft EIR does not conclude anywhere that grading is less than significant. The Draft EIR concludes for example, that grading activities would result in air quality impacts, but the document does not conclude that grading is significant or less than significant.

Response 30

The commenter claims that no ethnographic work was completed for the project site. However, the cultural resources technical report (Draft EIR Appendix 4.18) contains a lengthy ethnographic study. Please also see Draft EIR Section 4.18, Cultural Resources, p. 4.18-3.

Response 31

The commenter did not believe that the consultant who prepared the archaeological studies should prepare the ethnographic studies. The City disagrees. Please see **Responses 27** and **30,** above.

Response 32

The commenter provided an excerpt from the Draft EIR on the section regarding ethnographic study, which he claims demonstrates the consultant's inability to prepare an ethnographic study. The quoted section is a summary of the authoritative reference to the Tataviam in the *Handbook of North American Indians*, Vol. 8, written by Drs. Chester King and Thomas Blackburn. That is, this section summarizes the

existing anthropological consensus about the Tataviam, and it is Drs. King and Blackburn's opinion that the Tataviam were culturally extinct at the beginning of the 20th century, not the consultants.

Response 33

The comment states that the excerpt from the Draft EIR quoted in **Comment 32** erroneously implies that the Tatavium are extinct, which the commenter claims is untrue, and implies that proper consultation would have avoided that error. The City disagrees with the commenter's characterization of the information relayed by the Draft EIR. In fact, Native American consultation occurred, despite the absence of any legal requirement for it, in recognition of these facts.

Response 34

The commenter further suggests that the archaeologists' work for the site is weak and that the project applicant should retain another archaeologist. With regard to the suggestion that the project applicant retain a new archaeologist, this comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 35

The commenter stated that even the oak trees would have been planted by people hundreds of years before European colonization and plants and herbs utilized by local peoples are all meaningful. The commenter contends that even if sites are left in open space this ignores the significant ways that Tataviam religious practices and ceremony would be impacted. The commenter also noted that some grading has altered the landscaping of the site. The Wishtoyo Foundation here acknowledges that CA-LAN-351 will be preserved and left "in situ" in open space. The oak trees and other vegetation on the property grow wild and were not "planted by people hundreds of years before European colonization," as is asserted. Native Californians, including the Tataviam, are widely recognized to have been hunter-gatherer peoples, not farmers. There is no documented evidence of any kind confirming the unsupported claim that the Riverpark area has been used for "Tataviam religious practices and ceremony."

Response 36

The commenter outlines the parameters of the American Indian Religious Freedom Act (AIFRA), which he claims apply to the project. As noted in **Response 17,** above, however, CEQA, not the federal

American Indian Religious Freedom Act, is legal authority for this project. Furthermore, there is no archaeological, ethnographic, or historical evidence supporting the implied claim that the project area has been used for ceremonies or is somehow sacred.

Response 37

The commenter outlines the parameters of the AIFRA. Please see **Response 36,** above.

Response 38

The commenter believes that the Draft EIR fails to plan for the possibility that additional resources may be found on the project site. The City disagrees. Please see **Response 5,** above.

Response 39

The commenter noted how the failure of the St. Francis Dam may have impacted the site. The commenter also suggested that the Riverpark project could be equated to the destruction of the Mulholland Dam. However, the comment does not address the Draft EIR. Please see **Response 5,** above. The comment regarding a comparison of the Mulholland Dam to the project is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 40

The commenter noted how the failure of the St. Francis Dam may have impacted the site. The City disagrees. Please see **Response 5,** above.

Response 41

The commenter asserts that the survey/scanning methods used to assess the resources at the site were not adequate. The City disagrees. The archaeological studies meet all state and federal guidelines for the conduct of archaeological studies. The Draft EIR contains measures intended to ensure the recovery of any artifacts found during grading, as the Wishtoyo Foundation acknowledges at **Comment 49**.

Response 42

The commenter asserts that the proposed Mitigation Measures are insufficient to address potential impacts to cultural resources located on the property. The City disagrees. Both CA-LAN-351 and -3043 were determined significant, not insignificant. As the Draft EIR explains, CA-LAN-1824 and -1829 were recorded in 1986 by Dr. Louis Tartaglia, who conducted Phase II test excavations at CA-LAN-1824 in 1990. Both sites were located in the flood channel of the river. In 1990, Tartaglia could not relocate the original artifacts at CA-LAN-1824; Phase II testing failed to indicate the presence of a subsurface deposit. The only two extant artifacts on this site at that time, a mano and a piece of shellfish, were removed by Tartaglia. Both site areas were re-examined by Greenwood and Associates in 1991. CA-LAN-1824 could not be relocated, as it no longer existed as such. Greenwood and Associates likewise could not relocate CA-LAN-1929 in 1991; they also noted that it was originally recorded as two flakes and, as such, it in fact did not qualify as an archaeological site. Properly the two flakes should have been recorded as isolates. Not surprisingly, neither site could be relocated by W&S Consultants during their Phase I survey. Sites CA-LAN-1824 and -1829, in other words, no longer still exist.

The commenter alleges that the appropriate people were not contacted. Please see **Responses 1** and **4,** above.

Response 43

The commenter outlined how cultural resources are to be assessed. Please see **Responses 1** and **4,** above.

Response 44

The commenter suggests the best way to remedy the Draft EIR's purported defects is to consult and investigate the Native American perspective. The City has done so. Please see **Responses 1** and **4,** above.

Response 45

The commenter notes that all work must cease if remains, funerary objects and/or cultural objects are found. Please see **Response 1, 4,** and **5,** above.

Response 46

The commenter contends that the work prepares by the archaeological consultants was weak and he suggests that new archaeologists be hired. Please see **Response 27,** above.

Response 47

The commenter quotes portions of the Public Resources Code. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 48

The commenter has concerns with how the alternatives were selected and analyzed in the Draft EIR. The Riverpark Draft EIR addressed five alternative scenarios to the proposed project. In accordance with Section 15126.6(a) of the *CEQA Guidelines*,

> "[a]n EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation."

The City believes that the five alternatives considered: No Project, Santa Clara River Reduced Bank Stabilization, Ridgeline Preservation, Noise/Development Standards and Deletion of Santa Clarita Parkway directly reflect *CEQA Guidelines* Section 15126.6(b) "…the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project." Therefore, no further analysis of additional alternatives is required.

Response 49

The commenter quotes from Mitigation Measure 4.18-3. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 50

The commenter notes that measures are in place should cultural resources be found on the project site and he questions who would make the determinations. Please see **Responses 1** and **4,** above. As is outlined in Mitigation Measure 4.18-3, a qualified archaeologist would make archaeological determinations at the project site.

Response 51

The commenter stated that specific knowledge of Native American cultural values can only be obtained by the Native American community. The City did engage in all necessary consultations. Please see **Responses 1** and **4,** above.

Responses 52

The commenter stated that published notices and letters are generally not sufficient to ensure that Native American consultation requirements have been met. There is no CEQA legal requirement for Native American consultation, in the absence of the discovery of human burials. However please see **Response 1** and **4,** above.

Response 53

The commenter stated that Native Americans may be hesitant to share sensitive information concerning resource locations. The Freedom of Information Act in fact excludes archaeological site information. However, it is in the best interests of Native Americans who know of sensitive sites to disclose them to proper individuals so that sites are not unknowingly damaged.

Response 54

The commenter suggested that broad information can be shared in the early planning stages and once trust is established then additional information can be shared. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 55

The commenter noted that the Wishtoyo Foundation does not automatically reject development based on reasoned objectives. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 56

The commenter stated that the Native American voice has not been heard in the process thus far. The City disagrees. Please see **Responses 1** and **4,** above.

Response 57

The commenter stated that the significance of the whole has not been adequately surveyed or appreciated by the project applicant or the archaeologists. The City disagrees. The project area has been examined on three separate occasions by archaeologists, all of who have concurred on the findings, conditions, and significance of the sites. Please see Draft EIR Appendix 4.18 for all of the technical studies assessing the cultural resources on the project site.

Response 58

The commenter explained the sensitivities and priorities of Native Americans and how there must be fairness added to the equation. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

37. LETTER RECEIVED FROM STACEY KELLEHER, DATED AUGUST 31, 2004

Response 1

The commenter provided suggestions as to the potential location of pedestrian bridges. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

38. LETTER RECEIVED FROM LISA KASSNER, DATED SEPTEMBER 3, 2004

Response 1

The commenter urged the Planning Commission to reject the Riverpark project. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 2

The commenter noted that she had attended a meeting regarding a car wash on Soledad Canyon Road. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 3

The commenter believes that the car wash project was critiqued differently than the Riverpark project. The commenter wanted to know about air quality, river, and floodplain impacts. Please see Draft EIR Sections 4.2, Flood; 4.4, Air Quality; 4.8.1, Water Quality; and 4.20, Floodplain Modifications, and Revised Draft EIR Section 4.6, Biological Resources. The commenter gives no specifics as to what her issues are regarding air quality, the river, and floodplain. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 4

The commenter asked about the view of the project area. Visual resource impacts are discussed in Draft EIR Section 4.16, Visual Resources.

Response 5

The commenter stated that she and her neighbors love this area and are seeing it rampaged by development. This comment is acknowledged and will be forwarded to the decision makers for their

consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 6

The commenter asked about the traffic impacts, which would be much greater than a car wash. Traffic impacts of the proposed project are addressed in Draft EIR Section 4.3, Traffic/Access.

Response 7

The commenter states that if the Planning Commission cares enough to protect the City from a car wash then they should care enough to protect from a 1,100-unit development project. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

39. LETTER RECEIVED FROM JUDY REINSMA, DATED AUGUST 31, 2004

Response 1

The commenter stated that the Riverpark project should not be approved. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 2

The commenter states that the project would increase traffic. The commenter is correct in that additional trips would be on the roadways, some intersections would actually be improved because of the projects contribution to roadway improvements. As explained in the Draft EIR Section 4.3, Traffic/Access, at pp. 4.3-18, a method in which to model the improvement of surrounding intersections due to the implementation of the Cross Valley Connector involves the comparison of two scenarios: Scenario 1 – Interim Year/No Riverpark project and No Cross Valley Connector (Riverpark portion); and Scenario 2 – Interim Year/Riverpark project and Cross Valley Connector (portion through Riverpark). The Interim Year is generally 10 years into the future and would include additional traffic generated by projected ambient growth during that time frame.

The respective intersections and the comparison are as follows:

- Bouquet Canyon Road/Soledad Canyon Road – In Scenario 1, the intersection of Bouquet/Soledad would operate at Level of Service (LOS) D in the AM peak hour and LOS F in the PM peak hour. In Scenario 2, this intersection would operate at an LOS C in the AM peak hour and LOS E in the PM peak hour, a marked improvement over operating conditions in Scenario 1. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- McBean Parkway/Newhall Ranch Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS D in the PM peak hour. In Scenario 2, the respective LOS in the AM and PM peak hour remain at the same grade (LOS D), with minor improvement. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- Bouquet Canyon Road/Newhall Ranch Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS E in the PM peak hour. In Scenario 2, the LOS would improve, though remain at LOS D in the AM peak and improve in the PM peak hour to LOS D. Overall, intersection operations would improve in Scenario 2 as compared to Scenario 1. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- Seco Canyon Road/Bouquet Canyon Road – In Scenario 1, this intersection would operate at LOS E in the AM peak hour and LOS F in the PM peak hour. In Scenario 2, this intersection would remain at LOS E in the AM peak hour but would improve significantly to LOS D in the PM peak hour. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

- Valley Center Drive/Soledad Canyon Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS D in the PM peak hour. In Scenario 2, this intersection would operate at LOS B in the AM peak hour and LOS B in the PM peak hour, again a significant improvement as compared to Scenario 1. Please see City of Santa Clarita Riverpark staff report, June 15, 2004.

Response 3

The commenter noted that the project would increase air pollution. Although Draft EIR Section 4.4, Air Quality, does conclude that the project will have certain unavoidable significant impacts, the general air pollution in the Santa Clarita Valley is not caused by development in the Valley, but rather by development in other areas of Los Angeles County. See Final EIR **Appendix B**, the Environ report (July 2004).

Response 4

The commenter states that the demand for domestic and landscaped water would be increased. Draft EIR Section 4.8 analyzes both project-level and cumulative water demand.

Response 5

The commenter stated that the project would decrease the recharge area of the Santa Clara River watershed. Please see Draft EIR Appendix 4.8, *Effects of Urbanization on Aquifer Recharge in the Santa Clarita Valley*, CH2MHill, from February 22, 2004, which states:

> "Records show that groundwater levels and the amount of groundwater in storage were similar in both the late 1990s and early 1980s, despite a significant increase in the urbanized area during these two decades. This long-term stability of groundwater levels is attributed in part to the significant volume of natural recharge that occurs in the streambeds, which do not contain paved, urban land areas. On a long-term historical basis, groundwater pumping volumes have not increased due to urbanization, compared with pumping volumes during the 1950s and 1960s when water was used primarily for agriculture."

Response 6

The commenter stated that the project would impact schools. To the contrary, please see Final EIR, **Appendix F** for correspondence from both districts indicating no impacts to the school systems based upon development of the Riverpark project.

Response 7

The commenter states that the project would destroy an aesthetically pleasing River landscape and degrade the integrity of what the City could preserve the Santa Clara River. The City disagrees. The Riverpark project is not proposing to develop the Santa Clara River. In fact, the project applicant is proposing to preserve the majority of the river and surrounding riparian areas. In addition, the applicant will dedicate approximately 130 acres of the South Fork of the river to the City.

Response 8

The commenter stated that the only positive is that the project would bring construction jobs, benefit Lennar Corporation, and that the Cross Valley Connector is not sufficient reason to accept the project. The comment regarding profit and benefits of the project are acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 9

The commenter believes that the project would mostly impact local streets and the Cross Valley Connector would not alleviate that issue. The Traffic study prepared for the project, which can be found in Appendix 4.3, Traffic/Access, and Draft EIR Section 4.3, Traffic/Access, concluded differently.

Response 10

The commenter notes the efforts of Los Angeles to save its rivers and suggested that the City should do the same. However, the Riverpark project is not proposing to develop the Santa Clara River. Please see **Response 7**, above.

Response 11

The commenter noted an example of a beautiful river-park in Chico, California. The comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 12

The commenter stated that the Riverpark project be denied. The comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

40. LETTER RECEIVED FROM ALICE CONSTANTINE, AUGUST 31, 2004

Response 1

The commenter stated that in all things we should have balance. The comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 2

The commenter expresses her opinion that the roads currently do not have the capacity to handle 2200 more homes. The commenter is incorrect, however, as the project is proposing 1,123 dwelling units. The existing traffic conditions on City roadways and the potential project-level and cumulative impacts of the project are analyzed in Draft EIR Section 4.3, Traffic/Access.

Pre-Interim Year (Occupancy of up to 500 units, without Newhall Ranch Road/Golden Valley Road Bridge)

- Valencia Boulevard/Magic Mountain Parkway

Full-Buildout of Project

- Valencia Boulevard/Magic Mountain Parkway;
- Bouquet Canyon Road/Soledad Canyon Road;
- Seco Canyon Road/Bouquet Canyon Road; and
- Whites Canyon Road/Soledad Canyon Road.

The Draft EIR indicates that the City has determined that the above identified intersections are presently built out, with the exception of the Bouquet Canyon Road/Soledad Canyon Road intersection. Improvements to this intersection have commenced, and upon completion will result in this intersection being presently built out. The City of Santa Clarita General Plan Circulation Element states, "[e]xisting street improvements are, in some cases, not able to be modified due to right-of-way limitations and existing development." The General Plan acknowledges that benefits of improvements at such intersections are not outweighed by a combination of the potential time and cost of actions necessary to acquire the property, the physical and economic costs to businesses at the affected intersections, and the social costs that could occur if the affected businesses were forced to relocate.

Response 3

The commenter stated that the project's 2,200 units would result in 5,500 more vehicles on the roadways. However, the project proposes only 1,123 units, and Draft Riverpark EIR Section 4.3, Traffic/Access, p. 4.3-26 states that the proposed project would result in 13,274 trips. Traffic impacts are analyzed in terms of trips as opposed to the number of cars. Please see **Response 2**, above.

Response 4

The commenter stated her fear that the dust, noise, dirt, and traffic from construction of the project will be "too much." The commenter fails to give specifics as to how the dirt, dust, noise, and traffic will "too much," consequently no detailed response can be provided. However, the comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR, no further response can be provided. Even so, it should be noted that the project's potential construction and operational impacts are fully analyzed in the Draft EIR and Revised Draft EIR, and appropriate and feasible mitigation measures have been imposed.

Response 5

The commenter is curious about the pricing of homes in the Riverpark project and how it would affect the real estate values. The comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

41. LETTER RECEIVED FROM JEAN WIMS, AUGUST 31, 2004

Response 1

The commenter stated that she is in favor of increased roadway improvements to ease congestion but is opposed to both the Riverpark project and the Synergy project. The comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 2

The commenter stated that the schools cannot accommodate developments of this size. Please see Final EIR **Appendix F** for correspondence from both affected school districts indicating no impacts to the school systems based upon development of the Riverpark project. The comment regarding school capacity and the Synergy project is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR, no further response can be provided.

Response 3

The commenter requests that the City limit growth. The comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR, no further response can be provided. Nevertheless, it should be noted that the proposed project's density and intensity is substantially less than the City's General Plan and the property's current zoning would permit.

42. LETTER RECEIVED FROM LARRY RASMUSSEN, DATED AUGUST 31, 2004

Response 1

The commenter stated that he believes that the Riverpark project would be an enhancement to the community. The comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

43. LETTER RECEIVED FROM REGINA COLUMBO, AUGUST 31, 2004

Response 1

The commenter stated that adding more homes means adding more traffic and more air pollution, which is already egregious. The comment is acknowledged and will be forwarded to the decision makers for their consideration. However, because the commenter does not specifically comment on the Draft EIR, no further response can be provided.

Response 2

The commenter noted that she is strongly opposed to further degradation of wildlife habitat, particularly along the river and the destruction of more hillsides. The comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR, no further response can be provided.

Response 3

The commenter requested that the project be denied. The comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

44. LETTER RECEIVED FROM BARBARA WAMPOLE, FRIENDS OF THE SANTA CLARA RIVER, DATED MARCH 2, 2004

Response 1

The commenter noted that, although the Draft EIR had not yet been published, her organization commenter was concerned with the intrusion of development into the river and floodplain. As discussed in Section 4.2, Flood, meeting FEMA flood design standards would remove flood impacts from the site, while meeting design criteria established by FEMA, consequently allowing the same number of lots as proposed. The project encroaches upon the existing FEMA flood hazard area, as residential lots 338 through 352 along the southern site boundary would be located within the 100-year flood hazard area. This potentially significant impact would be mitigated by the installation of the buried bank stabilization that would protect the above-noted residential units from floodwaters and subsequent impacts, and consequently would remove these units from the potential for flooding.

Response 2

The commenter suggested that maintenance of linkages for wildlife movement be studied and provided. That information is contained in Section 4.6, Biological Resources, p. 4.6-44 of the Revised Draft EIR discusses the viability of a north-south corridor on the project site. The Draft EIR determines that upland portions of the site no longer function as a north/south wildlife corridor between the Santa Clara River and upland undeveloped areas largely due to surrounding development. The Riverpark project is located within the center of the City of Santa Clarita with existing and/or approved development generally occurring to the north, south, east, and west.

The Draft EIR further indicates that habitat used by wildlife as movement corridors link together large areas of open space that are otherwise separated by rugged terrain, changes in vegetation, human disturbance, or by the encroachment of urban development. The Santa Clara River corridor is an example of a wildlife corridor that links together large open space areas (San Gabriel Mountains, Santa Susana Mountains and the Angeles National Forest). This corridor is known to be an important migration and genetic dispersion corridor for many wildlife species occurring in the region.

Though clearly not a wildlife corridor, an area on the site that may be conducive to the limited movement of on-site wildlife may be the LADWP Pipeline corridor. Newhall Ranch Road and the Santa Clara River Regional Trail would both bridge over this corridor allowing for wildlife movement underneath. This

pipeline corridor would provide a route, without crossing Newhall Ranch Road, from the River to the undeveloped portions of the CLWA property. The areas directly outside of this pipeline corridor could be enhanced (via landscaping) to encourage its potential use for north/south movement of on-site wildlife. Please see **Response 4** to **Comment Letter 4** (State Department of Transportation).

Response 4

The commenter suggested that removing oak trees be strongly discouraged and that Native American sites need to be preserved. The project has been designed to minimize oak tree removal and encroachment, as it will remove 17 oak trees and replant 14 of those, and will undertake substantial mitigation measures and monitoring for the 14 replanted trees; please see Revised Draft EIR Section 4.6, Biological Resources, and Final EIR **Appendix C** (oak tree report). In addition, the project has been designed to preserve one significant cultural site in situ, and to mitigate for impacts to a second significant site; please see Draft EIR Section 4.18, Cultural Resources.

Response 5

The commenter requested that native vegetation be preserved in unaltered areas. The Revised Draft EIR Section 4.6, Biological Resources, analyzes impacts to wildlife habitat, among other issues. It concludes impacts to biological resources would be less than significant with the except of certain impacts that would remain significant after mitigation, including the total net loss of 280 acres of wildlife habitat/natural open space as a result of conversion of undeveloped property to developed, impacts to the SEA and associated riverine habitat (as identified by the resource line) and riverbed, and impacts to adjacent upland habitat within 100 feet of the riparian resource line. However, since the Revised Draft EIR was released to the public, the project has been revised (1) to push bank stabilization in the western portion of the project site along the Santa Clara River back even further to retain mature riparian resources, and (2) to dedicate to the City for preservation approximately 130 acres of the South Fork of the Santa Clara River.

Response 6

The commenter encouraged the City to provide natural buffers and leave the river and its tributaries natural. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. Nevertheless, please see **Responses 12, 13,** and **17** to **Comment Letter 17** (Friends of the Santa Clara River, April 2004).

Response 7

The commenter advocates choosing an alternative in the Draft EIR that avoids all development in the floodplain. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. Nevertheless, please see Draft EIR Section 6.0, Alternatives, for a full analysis of each of the project alternatives, including Alternative 2.

Response 8

The commenter offers an unsubstantiated opinion that the NRMP and its mitigation measures have failed. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR, no further response can be provided. Nevertheless, please see the URS evaluation entitled *Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan Area – Summary* (July 2004), which concludes that the NRMP has been successful.

Response 9

The commenter noted the challenge of minimizing risks to the health and well-being of the community as a part of the planning process. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Response 10

The commenter believes that the goal of minimizing risks to the health and well being of the community should not be compromised. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR, no further response can be provided.

45. LETTER RECEIVED FROM CALIFORNIA NATIVE PLANT SOCIETY DATED, MAY 10, 2004

Response 1

The commenter stated that the Draft EIR failed to address fragmentation issues to plant communities and habitat. Page 4.6-69 of the Revised Draft EIR Section 4.6, Biological Resources, addresses the net loss of wildlife habitat/natural open space as a result of project implementation. This section acknowledges that because most wildlife species depend on a variety of habitat types, i.e., plant communities, to meet various life history requirements, the habitats on the site, when considered together, have a greater value to wildlife than separately or individually. The net loss of several plant communities, by definition, results in less habitat available and often fragments the remaining habitat that is available. Consequently, the net loss of 280 acres of currently undeveloped land (made up of several plant communities) as a result of the project represented a substantial loss (and fragmentation) of habitat and was, therefore, considered a significant impact under CEQA.

Nevertheless, fragmentation of habitat associated with the Santa Clara River has been avoided through minimizing the amount of riverine habitat that will be affected such that this habitat will remain contiguous throughout the reaches of the river that pass through the project site boundaries. In addition, because the site is located within the center of the City of Santa Clarita with existing development generally occurring on all sides of the project site, most of the large blocks of upland plant communities that historically occurred in the area have already been fragmented and/or converted. The clustering approach of the proposed project will minimize fragmentation of the remaining upland habitat (after development) on the site, but existing development bordering the project will site essentially fragment remaining habitat on the site from other similar habitat in the region.

Response 2

The commenter believes that the Draft EIR failed to address the impacts of fire regulations and clearance activities to areas of native habitat. Fuel modification zones, particularly those expected to occur immediately adjacent to structures, are typically included in the grading "footprint" when assessing potential impacts on plant communities.

The acreage of habitat expected to be impacted by the Riverpark project included the potential for fuel modification zones. In addition, Draft EIR Section 4.13-3, Fire Services, addresses the potential impacts of fuel modification activities imposed by the fire department with implementation of Mitigation Measure 4.13-3 as follows:

> "The project shall prepare a Fuel Modification Plan, landscape plan and irrigation plan as required for projects located with a Very High Fire Hazard Severity Zone. The Fuel Modification Plan shall be submitted and approved by the County Fire Department prior to final map clearance. The Fuel Modification Plan shall depict a fuel modification zone in conformance with the Fuel Modification Ordinance in effect at the time of subdivision. The fuel modification plan shall not conflict with the revegetation plan as directed in Section 4.6, Biological Resources."

Response 3

The commenter stated that hazing machines should be strictly forbidden on or near the project site. The project does not propose any hazing machine mitigation.

Response 4

The commenter requested an explanation for the difference in acreages between the stated size of the project site (695 acres, p. 4.6-6) and the total acreage of all plant communities (727 acres, pp. 4.6-9–17) given in the Revised Draft EIR. The project site does indeed total 695 acres. However, as can be seen in Revised Draft EIR Section 4.6, Biological Resources, Figure 4.6-4, grading in some areas extends beyond the actual project boundary line. In some instances this is because of slope and topography considerations; a location for a proposed water tank that would serve the project also occurs (to the north) outside of the project boundary line. The analysis of impacts on plant communities is based on the extent of grading associated with the project, not necessarily just what is contained within the defined project boundary line.

Response 5

The commenter stated that the plant communities identified do not use the series and association levels commonly found in CDFG's nomenclature and the *Manual of California Vegetation* (Sawyer & Keeler-Wolf 1995). Eight of the plant community descriptions used in the Draft EIR, including, Riversidian sage scrub, coastal sage chaparral scrub, chamise chaparral, holly-leaf cherry, non-native grassland, southern willow scrub, mulefat scrub, and southern riparian scrub, do indeed follow the nomenclature used in CDFG's List of Terrestrial Plant Communities (2003). As explained on p. 4.6-9 of the Revised Draft EIR

Section 4.6, Biological Resources, some plant communities do not fit a defined plant community classification or treatment and are, therefore, defined by their dominant species and/or obvious associate species where two habitat types intergrade (e.g., mixed oak/grass). In some cases, the plant community is best described by physiographic features, such as "planted sage scrub" or "developed with mixed trees."

Response 6

The commenter states that the Draft EIR fails to comprehensively include all of the sensitive species on the September 2003 List of California Terrestrial Natural Communities. The plant communities described in the Revised Draft EIR Section 4.6, Biological Resources, include all common and sensitive communities observed and characterized on the site. No plant associations characteristic of Riversidian alluvial fan sage scrub were found within the project site boundaries. The community described as holly-leaf cherry (p. 4.6-14 of the Revised Draft EIR Section 4.6, Biological Resources) on the site is actually a type of chaparral scrub, as indicated by the associate scrub species found in this community and the shrub-like nature of the holly-leaf cherry plants, and is not characteristic of a "woodland" as stated by the commenter.

Response 7

The commenter stated that because the Draft EIR does not reflect current community classification, there is no classification available for "riverwash." As described on p. 4.6-16 of the Revised Draft EIR Section 4.6, Biological Resources, riverwash refers to the sparsely vegetated main channel of the Santa Clara River characterized by sandy riverwash and gravel. The riverbed and channel is highly susceptible to scouring during higher water flows; consequently, vegetation growth in the channel varies in species, density, and extent depending upon the frequency and extent of water flows and periods of low water and/or drought. Alluvial fan sage scrub and other scrub communities rarely occur in these areas due to the dynamic nature of the channel system. No evidence of these or other scrub communities stated by the commenter was found within the project site boundary.

Response 8

The commenter believes the mixed oak/grass to be of great biological significance because of the four oak species found within 2.3 acres. The oak trees associated with the mixed oak/grass plant community are described in detail in Revised Draft EIR, Section 4.6, Biological Resources, p. 4.6-17. As explained, this

community, as it occurs on the site, has not been characterized by CDFG as a sensitive habitat. However, as pointed out by the Revised Draft EIR, the oak trees in this community are protected by City ordinance.

Response 9

The commenter requests that the location of temporary construction sites be shown on the Draft EIR to comply with full disclosure of all impacts. The exact location and extent of temporary construction sites and access roads are not known at this time. However, as explained in Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-52, the locations of temporary construction sites and access roads will be shown on maps submitted with the Verification Request Letter submitted to the ACOE and CDFG for individual project approval. In addition, the construction plans will indicate the vegetation, if any, that will be temporarily disturbed and the activities to facilitate natural revegetation of these areas.

Response 10

The commenter states that a common practice for facilitating regeneration of native plant communities is appropriate salvage, storage, and re-distribution of topsoil. The mulching and distribution of native vegetation over temporarily impacted areas is also a common practice in native plant community regeneration. As stated on Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-52, disturbed areas will be monitored for five years after construction to document colonization by native plants. The Revised Draft EIR further states that if native plant cover does not reach 50 percent of the pre-construction native plant cover within three years, the applicant shall revegetate the temporary construction area in accordance with methods (more pro-active planting and revegetation techniques) specified in later mitigation measures. In addition, annual monitoring reports on the status of the natural recovery of temporarily disturbed areas shall be submitted to ACOE and CDFG. These agencies will ultimately approve the methods and results of these revegetation efforts.

Response 11

The commenter finds that the 1:1 mitigation proposed for permanent removal is unacceptable. Revised Draft EIR Section 4.6, Biological Resources, pp. 4.6-52–53 state that the 1:1 ratio only applies where planting/revegetation/restoration of habitat occurs two years in advance of the removal of habitat at a particular construction site. If replacement habitat cannot be installed two years in advance of the project, higher ratios (including 3:1) would apply. In addition, Revised Draft EIR Section 4.6, Biological Resources, Mitigation Measures h) and i), pp. 4.6-53–54 describe survival criteria and performance standards that must be met for all restoration areas, as well as corrective measures to be taken in the

event the survivorship criteria is not met. As further explained in the Revised Draft EIR Section 4.6, Biological Resources, replacement habitat shall be designed to replace the functions and values of the habitats being removed. The ratios of replacement that are ultimately used are intended to meet this functions and values replacement goal. In some cases, higher ratios may be necessary to achieve this goal; in other cases, lower ratios may be appropriate. It is also important to note that the measures listed in Revised Draft EIR Section 4.6, Biological Resources, pp. 4.6-52–59, including the replacement ratios within these measures, are taken from the NRMP that has been previously approved by ACOE and CDFG.

Response 12

The commenter does not make clear what "wetlands mitigation" is specifically being requested to be reviewed under CEQA. Revised Draft EIR Section 4.6, Biological Resources, Mitigation Measures a) through k) on pp. 4.6-52–54 (and again on pp. 4.6-87–98) specifically address steps and procedures that will be taken to mitigate for the loss of wetland and riparian habitats and provide specific performance standards and criteria to be adequate under CEQA. While sites that are predominantly open floodplain or areas created during the excavation of uplands for bank protection are not the only sites under consideration for wetland/riparian habitat restoration, these sites would allow for a net increase in wetland/riparian habitat to occur and would occur in areas not readily scoured by high water flows in the river. As explained in Mitigation Measure e) on p. 4.6-53 of the Revised Draft EIR Section 4.6, Biological Resources, creation of new riparian habitats will only occur at sites that contain "suitable hydrological conditions and surrounding land uses to ensure a self-sustaining functioning riparian habitat." In addition, as further explained in this measure, all sites will be approved by ACOE and CDFG as part of the Verification Request Letter submitted for individual projects or as part of the annual mitigation status report.

Response 13

The commenter believes that until such time that the Santa Clara River watershed is systematically treated from the head of the watershed downstream and when introduction is no longer an issue, the suggestion of removing Arundo to mitigate for mature wetland extirpation is not equitable mitigation. As stated in Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-54, this Mitigation Measure (l) refers to the removal of any number of exotic plant species and is not just limited to removal of Arundo. In addition, the removal of exotic plant species as an alternative to the restoration of riparian habitat is entirely at the discretion of the ACOE and CDFG and should only occur in areas where exotic removal would be "strategic in a watershed approach to weed management." Furthermore, this measure states

that "weed removal sites shall be selected in a logical manner to ensure that the eradication of weeds from specific sites will contribute to the overall control or exotics in the NRMP watercourses." Native riparian vegetation must become established in these areas and meet the revegetation plant cover goals established by ACOE and CDFG.

Response 14

The commenter states that no evaluation is provided for the basis of planted coastal sage scrub. The sage scrub areas planted along the Newhall Ranch Road corridor were not planted as mitigation for loss of this plant community in connection with a prior project. They were planted as a part of native seed mix to stabilize non-irrigated slopes previously cut and graded for the installation of water lines and slope drains. See Revised Draft EIR Section 4.6, Biological Resources, pp. 4.6-10, and p 4.6-62–63. As further noted there, the loss of these planted areas was not considered a significant impact. Therefore, no mitigation is required.

Response 15

Contrary to the commenter's statement, Riversidian sage scrub is not considered a sensitive plant community by CDFG in their 2003 List of California Terrestrial Natural Communities. In addition, even if it were listed as sensitive, the law (assumed here to be CEQA) does not require mitigation just because a community is considered "sensitive." Mitigation is required only for those resources on which impacts have been determined to be significant pursuant to the significance thresholds identified under CEQA.

Response 16

The commenter believes that the holly-leaf cherry analysis is faulty because mature holly-leaf cherry are a sensitive plant community. As explained in **Response 6**, above, the holly-leafed cherry vegetation on the project site has been characterized as a chaparral type community and has been classified, pursuant to the CDFG 2003 List of California Terrestrial Natural Communities, as holly-leafed cherry scrub. This specific community is not considered "sensitive" by CDFG. Please refer to **Response 15**, above, regarding mitigation requirements under CEQA.

Response 17

The commenter fails to see how, with 80 percent of the southern willow scrub impacted by the project, how the mitigation proposed would offset the impact. While approximately 78.9 percent of the southern

willow scrub vegetation on the site will be impacted by the project, this actual loss amounts to only 1.5 acres since relatively little of this community actually occurs on the site. Mitigation Measures a) through k) on pp. 4.6-52–54 of the Revised Draft EIR discuss in detail the mitigation of riparian habitat that will be impacted by the project. In particular, Mitigation Measure e) addresses creating riparian habitat in suitable locations that do not currently support such habitat. Depending on the replacement ratio utilized, this could result in a net increase of riparian habitat over what would be impacted by the project.

Response 18

The commenter fails to se how the preservation in perpetuity of part of the riparian scrub and "riverwash" mitigates the impact to the 30 acres. While the proposed project will indeed preserve large areas of intact riparian scrub and riverwash habitat, all riparian habitat that will be impacted by the project will also be replaced. Mitigation Measures a) through k) on pp. 4.6-52–54 of the Draft EIR discuss in detail the mitigation of riparian habitat, including the creation of additional habitat where none currently exist, that will be impacted by the project.

Response 19

The commenter quested how many oak trees would be removed and how many would be retained in open space (not landscaped). Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-71 discusses in more detail the loss of oak trees as a result of project implementation. Final EIR **Appendix C**, Riverpark Oak Tree Report, includes a discussion of the oak trees on the site and expected impacts to these trees. The oak tree map in this appendix depicts the oak trees and species proposed to be removed, relocated and/or preserved. Impacts on oaks were considered to be a significant impact. The mitigation of impacts on oak trees is discussed in Revised Draft EIR Section 4.6 Biological Resources, pp. 4.6-100–104.

Response 20

The commenter states that the first sentence of the second paragraph on p. 4.6-68 contradicts itself and adequate mitigation is required for the Southern California walnut. The first sentence of the second paragraph under section (m) on pp. 4.6-68 of the Revised Draft EIR will be revised to read as follows: "This area on the project site has a large component of non-native species and is not known to support special-status plant or wildlife species, with the exception of California black walnut (a CNPS list 4 species)." Because impacts on this species are not considered significant (please see the discussion on p. 4.6-70 of the Revised Draft EIR for an explanation as to why impacts on CNPS list 4 species on the project site are not considered significant), no mitigation is required.

Response 21

The commenter stated that while three species are identified as CNPS list 4 species (California walnut, Palmer's grappling hook and Pierson's morning glory) impacts for these species require full disclosure and mitigation under CEQA. As indicated in Revised Draft EIR Section 4.6, Biological Resources, (a) Special-Status Plant Species, p. 4.6-70 explains why the loss of CNPS list 4 species on the project site are not considered significant impacts under CEQA. Impacts to these species are fully disclosed in this section. Because these impacts are not considered significant, no mitigation is required.

Response 22

The commenter stated that the CNPS supports the salvage and retention of dead oaks as they can provide niches for a variety of animals. The commenter requests that the two dead Heritage oak trees be retained for their wildlife value. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not raise any other CEQA issue, no further response can be provided.

Response 23

The commenter stated that the common practice for facilitating regeneration of native plant communities and habitat is appropriate salvage, storage, and re-distribution of topsoil. See **Response 10**, above.

Response 24

The commenter finds that the 1:1 mitigation proposed for permanent removal is unacceptable. See **Response 11,** above.

Response 25

The commenter believes that until such time that the Santa Clara River watershed is systematically treated from the head of the watershed downstream and when introduction is no longer an issue, the suggestion of removing Arundo to mitigate for mature wetland extirpation is not equitable mitigation. See **Response 13**, above.

Response 26

The commenter requested an opportunity to provide public comment on the RMMP. Revised Draft EIR Section 4.6, Biological Resources, Mitigation Measures 4.6-2 a) through g), and Mitigation Measure 4.6-3 (pp. 4.6-98–99) and as revised in **Response 20, Comment Letter 8** (CDFG), include an appropriate level of detail of review by agencies as well as performance standards and criteria to be considered adequate under CEQA.

Response 27

The commenter stated that the CNPS does not consider additional surveys as mitigation to decrease impacts to sensitive plant species. As is explained in Mitigation Measure 4.6-5 of the Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-99, additional surveys are proposed to identify the locations of populations of these special-status plant species that may be impacted at the grading/construction plan level of operation. As stated in this measure, once plants/populations are identified that will be impacted, seeds will be collected and sown in appropriate habitats, and bulbs will be harvested and transplanted to areas of appropriate habitat prior to the impacts on these plants occurring. As is also stated in the measure, the goal of this program will be to produce replacement populations of in-kind plants reaching maturity, at a ratio of 1:1 with respect to the number and density of plants estimated to be lost. The successful implementation of this measure will replace that which was lost, thus resulting in no net loss of the species.

While the City agrees that transplanting for some species is experimental, similar transplantation plans drafted in part by Rancho Santa Ana Botanical Gardens that include the transplantation of bulbs of *Calachortus* sp. have been recently approved by Los Angeles County. As identified in Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-99, adaptive management and contingency actions will be incorporated into the Revised Mitigation and Monitoring Plan that specify what actions will be taken in the event the transplantation is not successful.

Response 28

The commenter states that the Draft EIR does not clearly present how the project avoided impacts "to the greatest extent practicable" and that she requests that the project be re-evaluated further for additional ways to reduce impacts to biological resources. Beginning on p. 4.6-87 of the Revised Draft EIR Section 4.6, Biological Resources, measures from the NRMP are presented that have been incorporated into the project that will minimize impacts on biological resources. In addition, p. 4.6-59 includes discussion of

other measures that have been taken to minimize such impacts, including pulling bank stabilization back further away from the river's edge than permitted under the NRMP, and removing bank stabilization (originally permitted by the NRMP) from the eastern terminus of the "toe protection" to the western bridge abutment for the Newhall Ranch Road/Golden Valley Road Bridge.

The project has been redesigned to pull back from the river even further when compared to the proposed project. This "pull back" results in less impact to biological resources (e.g., the proposed project would have resulted in approximately 25 acres of SEA impacts and the redesigned project results in about 8 acres of SEA). In addition, please see **Responses to Comment Letters 17** (Friends of the Santa Clara River, May 2004), **18** (SCOPE, May 2004), **20** (Ventura Coastkeeper, May 2004), **22** (Sierra Club, May 2004), **25** (Heal the Bay, May 2004), **26** (Teresa Savaikie, May 2004), and **44** (Friends of the Santa Clara River, March 2004) in the Final EIR. Please also see Final EIR **Appendix C**, *Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan Area – Summary* (URS, July 2004).

Additionally, Revised Draft EIR Section 4.6, Biological Resources, recommends the use of native species wherever possible.

Consequently, the Draft EIR and revision to the project site plan demonstrate a clear willingness to mitigate and modify the project to the "greatest extent practicable."

46. LETTER RECEIVED FROM KAREN PEARSON, DATED APRIL 20, 2004

Response 1

The commenter stated her concern with regard to the proposed transplanting of three Heritage oaks. Please see Final EIR, **Appendix C** for the Riverpark Oak Tree Report (Wallace) and the Oak Tree Survey (Johnson). Given the findings of these two reports, it is expected that the transplanting of the Heritage oak trees would be successful.

Response 2

The commenter voiced concern with regard to Areas C and D having a three-story height limit. Finally, since the Draft EIR was prepared and released for public review, the project has been revised to reduce the total number of residential units from 1,183 to 1,123, including, without limitation, converting Planning Area C from apartments to condominiums for a total of 419 single-family dwelling units, 324 apartments and 380 townhomes/condominiums. Nonetheless both Planning Areas C and D propose three-story structures. However, because the commentator does not specifically comment on the Draft EIR, or raise any other CEQA issue, no further response is required. However, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 3

The commenter noted that she was concerned about project viewshed impacts on her property in the Emblem neighborhood. In response to concerns voiced by neighbors in the Emblem Tract, the project applicant has revised the project in several respects. First, the nose of the ridgeline between the Emblem neighborhood and Area D will not be graded, and the development in Area D will be moved further away from that ridge. Second, a wall and landscaping will be built between the nose of the ridgeline and the commercial wall behind Von's (off the project site), to block the "window" through which Emblem residents are experiencing noise impacts from the existing Bouquet commercial center, and through which they would be able to view the structures in Area D. The wall would be constructed with decorative stone and would have adjacent landscaping. Finally, the project applicant has indicated a willingness to dedicate building rights on a portion of the ridge to ensure that the nose of the ridgeline will not be developed in the future. Please see **July 20, 2004 Planning Commission hearing transcript**, pp. 37–38, 43–44, 57, 71–72, and **August 31, 2004 Planning Commission hearing transcript**, p. 67.

Response 4

The commenter offered to the Planning Commission the opportunity to visit her home to gain a sense of how the project would affect her quality of life. Please see **Response 3**, above, which discusses project modifications, which would reduce visual impacts to her residence. Because the commentator does not specifically comment on the Draft EIR, or raise any other CEQA issue, no further response is required. However, the comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

Response 5

The commenter considered the proposal to shave back or cut down the height of the hill behind her home on Gavilan Drive unacceptable. Please see **Response 3**, above.

Response 6

The commenter noted that in addition to the aesthetic contribution, the hillside also provides a buffer for air and noise pollution. The Riverpark Draft EIR concludes that there would be significant and unavoidable impacts with regard to visual resources, noise and air quality. Please also see **Response 3,** above.

Response 7

The commenter expressed concern with the planning of the existing Bouquet Center. A wall and landscaping will be built between the nose of the ridgeline and the commercial wall behind Von's (off the project site), to block the "window" through which Emblem residents are experiencing noise impacts from the existing Bouquet commercial center, and through which they would be able to view the structures in Area D. The wall would be constructed with decorative stone and would have adjacent landscaping. Finally, the project applicant has indicated a willingness to dedicate building rights on a portion of the ridge to ensure that the nose of the ridgeline will not be developed in the future. Please see **July 20, 2004 Planning Commission hearing transcript**, pp. 37–38, 43–44, 57, 71–72, and **August 31, 2004 Planning Commission hearing transcript**, p. 67.

Response 8

The commenter expressed concern with the height limit of the apartment building that she believes would destroy her viewshed but add greater air, noise, and light pollution than she is currently subjected. Please see **Responses 3, 6**, and **7**, above, with regard to viewshed impacts and air and noise pollution. Draft EIR Section 4.6, Visual Resources, acknowledges that visual impacts from the overall development of the project site, including light and glare are considered to be significant and unavoidable. However Mitigation Measures 4.16-2, 3, and 4, as outlined in the Draft EIR, are proposed to mitigate light and glare impacts to the greatest extent practicable.

47. LETTER RECEIVED FROM ADRIAN AND JANE ADAMS, DATED JANUARY 13, 2005

Response 1

The commenter requested that the City Council not approve the proposed project. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not raise any other CEQA issue, no further response can be provided.

Response 2

The commenter stated that the river must be given its floodplain, as demonstrated by the rains that the area is currently experiencing. Please see Draft EIR Sections 4.2, Flood; 4.8.1, Water Quality; and 4.20, Floodplain Modifications, which conclude the project will not cause project-level or cumulative significant hydrology or water impacts. In addition, please see Final EIR **Appendix G**, *Additional Hydrology and Water Quality Analyses for the Riverpark Project*, GeoSyntec (October 2004) and *Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan Area – Summary* (July 2004).

Response 3

The commenter stated that the water supply must be saved. The City does not concur that the Santa Clarita Valley is experiencing water supply problems. The City has determined, based on the entire record, that the projected water supplies will be sufficient to satisfy the demands of the Riverpark project, in addition to existing and planned future uses in the Santa Clarita Valley.

Response 4

The commenter suggested that the City should stop the burden of excessive traffic and keep air from becoming any dirtier and unsafe to breathe. (The commenter stated that no one from AQMD spoke to the issue of air quality pertaining to the Santa Clarita Valley, and that there was no discussion of the Santa Clarita Valley's largest problem, poor air quality. Please see **Topical Response 5: Air Quality** and **Appendix B** (Environ International Corporation report) in the Final EIR and **Response 2**, above. Additionally, although the SCAQMD was not asked to speak to the Planning Commission, the SCAQMD did comment to the Draft EIR, and responses were prepared and are located in the Final EIR.

An article in the *Daily News*, Santa Clarita Edition, September 22, 2003, indicated that there were two other regions with worse air quality conditions than Santa Clarita-Crestline and Redlands. Moreover, please see **Topical Response 5: Air Quality** and Final EIR **Appendix B** (Environ International Corporation report).

48. LETTER RECEIVED FROM THE FRIENDS OF THE SANTA CLARA RIVER, DATED JANUARY 19, 2005

Response 1

The comment expresses only the opinions of the commenter with respect to the merits of the project and does not raise any issue with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project. However, this comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. Nevertheless, it should be noted that the potential cumulative impacts of the project have been thoroughly analyzed in the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources. Please see **Response 2**, below.

Response 2

The comment expresses the opinions of the commenter with respect to the effects of growth in the Santa Clara watershed over the last few decades. As such, the comment does not raise any issue with respect to the contents of the Draft EIR, or any environmental issue regarding the proposed project. However, this comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

It should be noted that the potential cumulative impacts of the project have been thoroughly analyzed in the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources, pp. 4.6-123–124:

> "[t]he above analysis indicates that potentially significant cumulative impacts could occur to various environmental biological resources due to the combined impacts of the proposed project and following nearby projects: Santa Clarita Parkway extension, Tesoro del Valle, Newhall Ranch Specific Plan, West Creek, North Valencia II Specific Plan, Valencia Commerce Center, and Curtis Sand and Gravel Mine Expansion. These resources include upland habitats such as coastal sage scrub, oak trees, riparian habitat associated with Santa Clara River, wildlife movement corridors, special-status species (including unarmored three-spine stickleback, western spadefoot toad, and arroyo toad), resources within SEA 23, and increased use of sensitive riparian resources by human and domestic animals. Potentially significant cumulative impacts include loss of riparian habitat, disturbance of riparian wildlife habitat due to nearby urban development, and effects on habitat for the unarmored three-spine stickleback, least Bell's vireo, western spadefoot toad, and the arroyo toad, when present. While most of these projects include the implementation of measures that will mitigate specific biological impacts, most will still result in a net loss of biological resources, particularly natural habitat areas.

Because of the high biological value of riparian and wetland habitats and because of the continued loss of these habitats throughout the region, the proposed Riverpark project's contribution to this loss, although relatively small, is considered a significant cumulative impact, both to the vegetation community itself, as well as to its value to the riparian ecosystem. Because of the time it takes for oak trees to reach maturity and contribute biological values equal to that currently occurring on the site, and due to continued loss of these trees in the region, the project's contribution to this loss is considered a significant cumulative impact without mitigation. Continued development in the area also cumulatively contributes to the increase of humans and domestic animals. Because of the substantial amount of disturbance to sensitive resource areas posed by this increase, the project's contribution to this increase is also considered cumulatively significant. Although the proposed project minimizes impacts to the biological resources within the SEA, the net loss of habitat within the SEA, combined with net losses of SEA habitats from other projects, effectively reduces the overall size of the SEA and is considered a significant cumulative impact.

When the potential cumulative effects of the above-mentioned projects are viewed from a regional wildlife movement perspective, the major movement corridors between the Santa Clara River Valley and the Santa Susana Mountains and Los Padres/Angeles National Forest lands would still be preserved. Therefore, no significant cumulative impacts would occur with respect to regional wildlife movement.

The project would result in unavoidable significant impact to the net loss of wildlife habitat/natural open space; loss of SEA and associated riparian habitat and riverbed and impacts to adjacent upland habitat within 100 feet of the riparian source line. All other impacts (e.g., oak trees) will be mitigated to less than significant."

Furthermore, Section 4.2, Floodplain Modifications, pp. 4.20-68 and 69 states that

"…the proposed project in combination with the construction of Santa Clarita Parkway across the Santa Clara River and project site and other development in the Santa Clarita Valley, would further modify the floodplain by installing an additional bridge across the river (see Figure 4.20-7, Bank Stabilization and Bridge Locations). This action would further alter flows in the river; however, as with the proposed project, the effects would only be observed during infrequent flood events that reach the buried banks (e.g., 50-year and 100-year flood events). As indicated above, the proposed project would cause an increase in flows, water velocities, water depth, and changes in the flooded areas. However, these hydraulic effects would be very minor in magnitude and extent… velocity changes in the river near the Santa Clarita Parkway Bridge would result in a very localized increase in velocity of five percent during the 2-year event that would dissipate approximately 200 feet downstream and 100 feet upstream of the bridge. Figures 4.20-12a–g, Santa Clara River Cumulative Conditions, show that the land area inundated by various flood events in the cumulative would also not vary significantly from existing and post-project conditions. When the construction of Santa Clarita Parkway across the river and project site is considered, the effects would still be insufficient to significantly alter the amount, location, and nature of aquatic and riparian habitats in the project area and downstream. Under the project with Santa Clarita Parkway Bridge, the river would still retain sufficient width to allow natural fluvial processes to continue. Hence, the mosaic of habitats in the river that support various Sensitive species would be maintained, and the populations of the species within and adjacent to the river corridor would not be significantly affected."

Section 4.4, Air Quality, pp. 4.4-73 and 74 explicitly state the cumulative impacts of the proposed project to air quality as follows:

> "…implementation of the recommended mitigation measures would reduce summertime CO emissions by 4.6 percent, VOC emissions by 17.7 percent, NO_x emissions by 9.3 percent, and PM_{10} emissions by 4.2 percent. The measures would reduce wintertime CO emissions by 75.3 percent, VOC emissions by 91.6 percent, NO_x emissions by 29.5 percent, and PM_{10} emissions by 85.3 percent. Since these represent emission reductions on a daily basis, they would be reduced by at least the summertime percentages on an annual basis, thereby exceeding the SCAQMD's performance standard for annual emissions reductions. The CEQA Air Quality Handbook does not identify any reduction efficiencies for emissions of SO_x. It should be assumed, however, that these measures would reduce emissions of SO_x by a minimum of one percent given that the minimum reduction for other mobile emissions is 4.2 percent. Therefore, the project would meet the annual emission reduction target of one percent and would not be considered cumulatively significant pursuant to the SCAQMD's recommended approach.
>
> Although this method is not included in the CEQA Air Quality Handbook as a way to assess cumulative air quality impacts, it is determined the project is within growth forecasts contained in the Growth Management Chapter of SCAG's RCPG, which forms the basis for the land use and transportation control portions of the 2003 AQMP. Therefore, it would be consistent with the 2003 AQMP, indicating that it would not jeopardize attainment of state and federal ambient air quality standards in the Basin.
> Even though the project shows at least a one percent per year reduction in project emissions of CO, VOC, NO_x, and PM_{10}, and likely a similar reduction in SO_x emissions, and even though the project is consistent with 2003 AQMP, as a conservative and "worst-case" approach, the project is considered to result in a significant adverse cumulative air quality impact and feasible mitigation is required."

Additionally, Section 4.16, Visual Resources, pp. 34 and 35 concludes that cumulative impacts to visual resources will be significant as follows:

> "[c]umulative impacts would include the conversion of vacant land to urban or suburban uses. Additionally, there would be a cumulative visual impact relative to the loss of vacant undeveloped land as viewed from the public roadways. The amount of visible natural vegetation would also decrease overall. Nighttime illumination and daytime glare would increase in the project site and the surrounding area as a result of cumulative project development.
>
> Development of the proposed project is currently planned to build out over a period of five years. As noted above, this development would occur within a generally urban and urbanizing area. The project's visible development areas, in combination with other development expected to occur within the project area before or during project buildout, would largely be compatible with the aesthetic character that currently exists, a visual character that is becoming more urbanized over time.
>
> In summary, the project and other proposed or on-going projects occur within infill development area within the Santa Clarita Valley. Development will result in changes to the appearance of the landscape as viewed from public roads. Proposed cumulative development will also contribute to cumulative night lighting and daytime glare and reflective impacts. Thus, cumulative impacts are considered significant."

Section 4.3, Traffic/Access, p. 4.3-61 concludes that the proposed project would not create cumulative impacts subject to the implementation of mitigation measures as follows:

> "[w]ithin the Santa Clarita Valley, the County and the City have established B&T Districts to manage the many significant infrastructure improvements planned to occur within the valley. The project site is located within the Bouquet Canyon District and the project will pay fees or construct eligible improvements.
>
> The Bouquet Canyon B&T District has recently been updated and is considered a full improvement district. The implication of this is that the B&T fees collected within the district have been calculated to cover all the anticipated improvements necessary to build out the arterial roadway network as outlined in the City's General Plan Circulation Element."

Section 4.2, Flood, and Section 4.8-1, Water Quality, concludes that the project would not create significant cumulative flood and water quality impacts with the following summation:

> "[i]t has been estimated that approximately 4 percent of that portion of the Santa Clara River watershed found in Los Angeles County would be developed and approximately 2.5 percent of the portion of the watershed found in Ventura County would be developed.[1] Each development project in the Santa Clara River watershed (1,634 square miles) will be of varying character and size, will have its own unique topographic and geologic characteristics, will have flood and water quality impacts that will be unique to the geologic/soil conditions of the site, to the tributary watershed in which it is located, and to the reach of the Santa Clara River to which it drains, either directly or indirectly, and will be subject to the development criteria of the jurisdiction in which it is located.
>
> All development within the portion of the watershed of the Santa Clara River located in Los Angeles County, including that within the City of Santa Clarita, is required to comply with the LACDPW Q-cap requirements to ensure that upstream or downstream flooding does not occur and to ensure that downstream erosion and sedimentation do not occur. Compliance with these requirements ensures consistency with the County's Q-cap model. Pursuant to LACDPW requirements, all drainage systems in developments that carry runoff from developed areas must be designed for the 25-year Urban Design Storm, while storm drains under major and secondary highways, open channels (main channels), debris carrying systems, and sumps must be designed for the 50-year Capital Flood Storm. LACDPW also prohibits significant increases in off-site post-development storm flows and significant increases in storm flow velocities. Development in the Los Angeles County portion of the watershed must also comply with LACDPW design criteria. As a result of compliance, overall storm runoff discharge quantities from the watershed under post-development runoff conditions would be less than or equal to existing conditions largely because the runoff would be free of the debris that is typical of undeveloped watersheds and flow velocities would not increase significantly. Because on-site facilities would already have been built for burned and bulked flows from undeveloped areas, they would have more than adequate capacity to accommodate off-site flows as the off-site portions of the drainage areas develop.
>
> Further, all development within the portion of the watershed of the Santa Clara River located within the jurisdiction of the RWQCB, including that within the City of Santa Clarita, is required to comply with the orders and regulations issued by the RWQCB, as

1 Alex Sheydayi, Deputy Director, Ventura County Public Works Agency, Flood Control Department, statement made at the Santa Clara River Enhancement and Management Plan Steering Committee Meeting, May 30, 1995.

well as those issued by the SWRCB, the NPDES, the County of Los Angeles, and the City of Santa Clarita and federal law during both construction and operation of the project. Further, each current and future development in the Santa Clarita Valley will also be required to meet all of those requirements to control storm water discharges of pollutants of concern for each such development.

As the analysis of project development demonstrates, development in minor drainage courses within Reach 7 of the Santa Clara River in compliance with these requirements would result in less than significant impacts. Additionally, as a policy, both the City of Santa Clarita and the LACDPW prohibit significant increases in flow velocity from a project site; therefore, adherence to this policy would result in no significant cumulative increases in velocity or erosion/sedimentation impacts along that portion of the Santa Clara River, which drains to this watershed.

Other projects within the City of Santa Clarita and Los Angeles County would be subject not only to the same general requirements as the proposed Riverpark project, but also to such other requirements as the City of Santa Clarita (as applicable), the LACDPW and the RWQCB may specifically identify for them based on their unique characteristics.

The analysis of project conditions, above, demonstrates that project development, which must comply with all of these City, County, state and federal requirements, would not create any significant impacts. Compliance with the Basin Plan, the General MS4 Permit and the General Construction Activity Storm Water Permit controls pollutants in runoff from the project, and thus runoff from the project causes no incremental increase in the cumulative impact of watershed-wide development.

Because the cumulative project storm water quality improvements in the City of Santa Clarita and Los Angeles County would be required to conform to all of the above-referenced requirements, no potentially significant cumulative project flooding impacts are expected to occur from the incremental impacts of the project. These water quality standards will ensure that no potentially significant cumulative impacts will occur.

a. Water Quality

If not properly controlled, the cumulative effects on water quality from future development within the Santa Clara River watershed could be adverse and potentially significant. The nature of the land uses involved, the manner in which runoff is controlled prior to discharge pursuant to the requirements of the controlling jurisdictions (i.e., LACDPW, City of Santa Clarita, Ventura County Flood Control District, SWRCB and RWQCB), and the manner in which urban wastes are managed and prevented from becoming part of the storm water runoff would all affect the significance of such cumulative water quality impacts by lessening them.

Overall, the project would be expected to improve surface water quality conditions in the watershed, as compared to existing conditions. The project would increase storm water runoff volumes in the watershed by increasing impervious surfaces at the site; however, as discussed in Section 4.2, Flood, overall storm water runoff will decrease. Moreover, as discussed above, in certain respects, water quality of the runoff from the site would be expected generally to improve over the existing conditions, particularly over the conditions in the agricultural areas. Those constituents whose concentrations and/or loading in runoff may increase with the proposed development are not expected to create significant adverse impacts and are anticipated to be controlled effectively through the use of project-specific BMPs (PDFs). Dry weather flows are expected to be adequately treated, and are unlikely to leave the site.

Regional plans and programs, including, without limitation, the Basin Plan and the General MS4 Permit are designed to preserve and enhance water quality and protect the beneficial uses of all regional waters within Region 4. The Basin Plan and the General

> MS4 Permit include narrative and numerical water quality objectives and parameters that must be attained or maintained to protect the designated beneficial uses of Reach 7 of the Santa Clara River. Through such means, the RWQCB regulates water quality in Los Angeles and Ventura Counties, including the Santa Clara River watershed, and it is the responsibility of the local jurisdictions (i.e., the City of Santa Clarita, LACDPW Watershed Management Division, the Ventura County Flood Control District and the RWQCB) to ensure that future development within the watershed would comply with the same or similar types of water quality requirements as the proposed project. Therefore, with these requirements in place, no cumulative water quality impacts are anticipated."

The Riverpark Draft EIR concludes with respect to noise that the proposed project would result in significant and unavoidable noise impacts to existing sensitive receptors and that because landfill resources are finite that the project would contribute to significant cumulative impacts to solid waste disposal Furthermore with respect to Section 4.1, Geological Resources; 4.7, Land Use; 4.8, Water Service; 4.10, Education; 4.11, Library Services; 4.12, Parks and Recreation; 4.13, Fire Services; 4.14, Sheriff Services; 4.15, Human Made Hazards; 4.17 Population/Housing/Employment would not result in significant cumulative impacts. Draft Riverpark EIR Section 4.19, Agricultural Resources concludes that the conversion of prime agricultural uses to prime farmland is a significant cumulative impact.

Response 3

The comment expresses only the opinions of the commenter with respect to the effects of encroachment of development into the Santa Clara River floodplain over the last few decades, and cites to articles that are not attached to the comment letter. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

It should be noted that the Revised Riverpark Draft EIR Section 4.6, Biological Resources, analyzes the proposed project's potential project-level and cumulative impacts to biological resources, including, without limitation, to the Santa Clara River and adjacent upland habitat throughout section (1) starting on p. 4.6-60, and section (5) starting on p. 4.6-75. Additionally, Section 4.20, Floodplain Modifications, concludes that the Riverpark project would not result in the decline of species for the following reasons:

> "[t]he long term historical record for the river indicates it has always been relatively dry in the site area and restoration to previous conditions should not be aimed at developing permanent water flows in this area. However, continued development in the drainage could result in more wastewater discharge that could increase the extent of surface flow and potentially improve conditions for stickleback and other native aquatic forms. As indicated below, no significant impacts to the three sensitive aquatic species addressed would occur as a result of the project implementation. This is generally due to the fact that no substantial change to the aquatic habitats that support Sensitive species would occur (for conclusions related to the more general biological impacts of the proposed

project, please see EIR Revised Section 4.6, Biological Resources). Specific reasons for the lack of significant impacts to these sensitive aquatic species are provided below.

Unarmored Threespine Stickleback

Occurrence of unarmored threespine stickleback on the project site is predicted to be very sporadic due to occasional strong storms or above average rainy seasons that may flush fish downstream from known established populations upstream. Site Nos. 1-3 (Areas of Standing Water) and proposed storm drain outlets provide possible areas that could maintain fish for temporary periods depending on the permanence of surface flow in the river and from these tributaries/storm drains. The implementation of project-related improvements are unlikely to affect stickleback from using the Santa Clara River on the project site.
The Flood Technical Report for Riverpark (PSOMAS, February 2004) prepared for the Riverpark project concludes that there would be no significant increase in water surface elevation, velocity, or sedimentation downstream of the project site as a result of project improvements. Based upon these facts, no impacts to downstream populations of UTS are expected.

Arroyo Toad

Occurrence of Arroyo Toad on the project site is unlikely, as the project site does not contain the habitat characteristics necessary for the permanent habitation of the species, primarily the lack of overflow pool habitat. Site No. 3 (Areas of Standing Water) contained associated damp substrata with willow and cattail patches, but not vegetated sandbars and overflow pool habitat parallel to the main channel. The other sites (Areas of Standing Water) and on-site drainages are not large enough to form overflow pools and, therefore, are not considered habitat.

The Flood Technical Report for Riverpark (PSOMAS, February 2004) prepared for the Riverpark project concludes that there would be no significant increase in water surface elevation, velocity, or sedimentation downstream of the project site as a result of project improvements. Based these facts, no impacts to downstream populations of Arroyo Toad are expected.

California Red-Legged Frog

California red-legged frogs occur rarely if at all in the Santa Clara River channel within or near the project site. The site lacks the appropriate spawning pools that are the ecologically central component of the California red-legged frog habitat.

The proposed project would modify the floodplain by placing bank stabilization along selected portions of the river, developing the floodplain areas behind the bank stabilization, and installing a bridge across the river. These actions would alter flows in the river; however, the effects would only be observed during infrequent flood events that reach the buried banks (e.g., 50-year and 100-year flood events). The proposed project would cause an increase in flows, water velocities, water depth; and changes in the flooded areas. However, these hydraulic effects would be minor in magnitude and extent. These effects would be insufficient to alter the amount, location, and nature of aquatic and riparian habitats in the project area and downstream. Under the project, the river would still retain sufficient width to allow natural fluvial processes to continue. Hence, the mosaic of habitats in the river that support various Sensitive species would be maintained, and the populations of the species within and adjacent to the river corridor would not be significantly affected."

Additionally, since the Draft EIR and its Revised Biological Resources section were released for public review, the project has been revised to push the proposed bank stabilization along the river from the park

in the central portion of the project site in the east to the easterly commercial parcel in the west further back to preserve the mature riparian resources along this edge of the river. (Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project* Technical Report, Figure 1, prepared by GeoSyntec, dated October 13, 2004 (Final EIR **Appendix G**), which depicts the previous project bank stabilization location compared to the revised plan showing an increased setback.) The mature resource edge along this portion of the project site will now be preserved and the buffer increased beyond that provided by the NRMP. Finally, the potential cumulative impacts of the project as a whole have been thoroughly analyzed in the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources.

Response 4

The comment expresses only the opinions of the commenter with respect to the effects of continued filling and channelization of the Santa Clara River over the last few decades; the commenter asserts unsubstantiated claims that continued filling and channelization of the river has altered and is altering the hydrology of the watershed, has increased storm runoff and decreased water quality, and that the river is now impaired for ammonia, chloride, coliform, nitrate/nitrite, and organic enrichment. This comment is acknowledged and will be forwarded to the decision makers for their consideration, but no further response is required since the comments are not addressed to the sufficiency of the Draft EIR or Revised Draft EIR or its analyses.

Even so, it should be noted that Revised Riverpark Draft EIR Sections 4.2, Flood; 4.8.1, Water Quality; and 4.20, Floodplain Modifications, fully analyze the proposed project's potential project-level and cumulative impacts referred to by the commenter. It should also be noted, that the project does not propose to fill or channelize the Santa Clara River, and that the reach of the river along which the proposed project site is located is impaired only for fecal coliform. As concluded in the Draft EIR Section 4.8.1, Water Quality, the proposed project will not create any project-level or cumulative impacts to the water quality in the river, either to the reach adjacent to the proposed project or in downstream reaches, as concluded in Sections 4.2, Flood, and 4.20, Floodplain Modifications.

As described in Revised Draft EIR Section 4.6, Biological Resources, p. 4.6-1, and Draft EIR Section 4.20, Floodplain Modifications, the applicant has proposed to minimize impacts of project development, including river-related improvements, on the water quality and biological resources of the river by complying with and/or improving upon the development areas, mitigation measures, and other conditions of the Natural River Management Plan (NRMP). The NRMP is a long-term management plan, prepared at the request of the ACOE and approved by ACOE, the CDFG, and the LARWQCB as

discussed in Revised Draft EIR Section 4.6, Biological Resources, at p. 4.6-2(a). The NRMP and the NRMP EIS/EIR reviewed proposed development envelopes, and evaluated the river-related facilities that would be associated with development in the envelopes, including bank protection, bridges, and floodplain changes. In those documents, the agencies and the public assessed the need for buffers between development and the river, to protect the biological and water quality resources provided by the river from indirect impacts. The documents also fully analyzed the impacts of river-related facilities associated with development, and imposed conditions, design restrictions, and mitigation measures related to buffers and construction and operation of river-related improvements associated with development. Based on implementation of the NRMP, ACOE, CDFG, and LARWQCB have approved and permitted river-related improvements associated with development of the Riverpark project.

The project has been designed in accordance with the requirements and conditions of the NRMP, as described in Revised Draft EIR Section 4.6, Biological Resources, and Draft EIR Section 4.20, Floodplain Modifications, and in certain areas pulls back from the NRMP-permitted development. Pursuant to the NRMP, the project will not channelize the river. In fact, the vast majority of the river adjacent to the 695-acre development site, consisting of approximately 330 acres, will remain in its natural state, as noted in Draft EIR Section 4.20, Floodplain Modifications, p. 4.20-36. Pursuant to the NRMP, only the following natural river management techniques, which have already been approved by ACOE, CDFG, and RWQCB, will be implemented to control flow. These techniques are described in the Revised Draft EIR Section 4.6, Biological Resources and Draft EIR Section 4.20, Floodplain Modifications:

(1) Naturalized bank stabilization consisting of buried layers of soil cement (a mixture of soil and Portland cement), which are buried under native soils and revegetated with native plants to create a natural, but protected bank;

(2) Naturalized toe protection – consisting of ungrouted rip-rap, A-jacks™, or unburied soil cement.

(3) Hardened gunite (the material used for channelization) is used only to reinforce the Newhall Ranch Road/Golden Valley Road Bridge abutments, and, for the entire project, affects less than 40,000 square feet of the river.

These innovative techniques minimize the adverse affects of flood control protection. As discussed in Revised Draft EIR Section 4.6 and Draft EIR Section 4.20, the alterations resulting from both development and naturalized stabilization and flood control techniques do not adversely affect the channel stability, sensitive habitats, or functions and value of the river. Further, as discussed in the URS analysis entitled, *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004 prepared by URS (Final EIR **Appendix C**), the prior implementation of NRMP-approved flood control and stabilization within Reach 7 and downstream reaches has not adversely affected, but rather has enhanced functions and values for the river. The NRMP predicts that compliance with its

terms and requirements will actually result in an increase of approximately 69 aces of natural riverbed and enhancement of habitat within the riverbed. (NRMP Section 3.0 at p. 5) As a result of compliance with the NRMP, channelization of the river and associated adverse impacts are avoided. This prediction has in fact been confirmed. (Final EIR **Appendix C**)

Additionally, as acknowledged in Draft EIR Section 4.8.1, Water Quality, at pp. 17–18, the reach of the river adjacent to the project site and receiving runoff from the project site is impaired only for high coliform count. This reach is not impaired for ammonia, chloride, coliform, nitrate/nitrite, and organic enrichment. As described in Draft EIR Section 4.20, Floodplain Modifications, at Section 3(a), during the majority of the year, the reach of the river receiving storm runoff from the proposed project site does not exhibit surface flows that are tributary to the impaired reaches of the river. This is so because the flow in the receiving reach of the river is largely and naturally ephemeral, with only intermittent areas being created by nuisance runoff. In addition, as indicated in Draft EIR Section 4.8.1-3(a), there are intervening sources of the pollutants impairing downstream reaches, which are discharging those pollutants downstream of the proposed project, including wastewater treatment plant discharges. As a result, runoff from the project area will only rarely be conveyed to the downstream, impaired reaches of the river, and the runoff will mix with wastewater treatment plant discharges and other discharges in those downstream reaches.

The reaches downstream from the project site are impaired for coliform, chloride, ammonia, nitrite, and organic enrichment. The RWQCBLAR has determined that historical rural and mining land uses and sewage treatment plants are actually the primary cause of these downstream water quality impairments to the river today, rather than the fill and channelization of the river as asserted by the commenter. As stated in the RWQCBLAR summary fact sheet for the Santa Clara River Watershed "[t]here are a number of 303(d)-listed impairments in the watershed which are primarily attributable to these existing rural and sewage treatment activities." See http://www.swrcb.ca.gov /rwqcb4/html/programs/ regional_program/ws_santaclara.html.

Finally, and most importantly, to the extent that the project might otherwise contribute to any existing water quality impairment in the receiving or downstream reaches of the river, the project has incorporated site planning, source control, and treatment BMPs. As explained in the Draft EIR Section 4.8.1, Water Quality, at pp. 4.8.1-37–45 and 4.8.1-70–96, runoff from the project with BMPs would adequately meet the receiving water quality standards (see Table 4.8.1-6, pp. 4.8.1-37–45), which include both water quality and hydrologic objectives. The in-depth quantitative and qualitative analyses in the Draft EIR conclude that the proposed development, including natural river management techniques,

would not significantly impact the river with respect to Basin Plan water quality objectives, Section 303-d listed pollutants, CTR criteria, or other water quality regulations. With respect to each of the pollutants of concern listed by the commenter, the Draft EIR, Table 4.8.1-6, shows that runoff discharged from the project site will not cause a violation of Basin Plan standards, TMDLs, or CTR criteria.

Response 5

Please see **Response 4**, above.

Response 6

The comment expresses the opinions of the commenter that cumulative impacts over the last few decades mentioned in earlier comments have not been addressed in the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

Even so, it should be noted that the potential cumulative impacts of the project have been thoroughly analyzed in the Draft EIR and further in the Revised Draft EIR Section 4.6, Biological Resources. A summary of cumulative impacts associated with the proposed project appears in **Responses 2** and **4**, above.

Response 7

The comment expresses the opinions of the commenter that cumulative impacts over the last few decades mentioned in earlier comments have not been adequately addressed in the EIRs for projects other than the proposed project this comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. Nevertheless, please see **Responses 2, 4**, and **6**, above.

Response 8

The comment expresses the opinions of the commenter that continued failure to address and act on cumulative impacts due to development is turning a large section of the river in and around the City of Santa Clarita into a "dead zone." This comment is acknowledged and will be forwarded to the decision

makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. Nevertheless, please see **Responses 2, 3, 4**, and **6**, above.

Response 9

The comment expresses the opinions of the commenter regarding the Santa Clara River, and, without substantiation, purports to report a general conclusion reached by the USFWS regarding the loss of riparian communities in general. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

It should be noted that, as discussed in Revised Riverpark Draft EIR Section 4.6, Biological Resources, the project would preserve the vast majority of the riparian resources associated with the Santa Clara River and would transfer those resources to the City of Santa Clarita for future management as natural open space. Additionally, since the Draft EIR and the Revised Biological Resources section were released for public review, the project has been revised to push the proposed bank stabilization along the river, from the park in the central portion of the project site in the east to the easterly commercial parcel in the west, further back to preserve the mature riparian resources along this edge of the river, and to dedicate additional portions of the South Fork of the Santa Clara River to the City. (Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project* Technical Report, Figure 1, prepared by GeoSyntec, dated October 13, 2004 (Final EIR **Appendix G**) which depicts the previous project bank stabilization location compared to the revised plan showing an increased setback.) These revisions would result in preservation of over 330 acres on site, and an increase in the buffer. Additionally, *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004 prepared by URS (Final EIR **Appendix C**) both characterizes and evaluates the quality of wetland and riparian habitats within selected areas of the Natural River Management Plan on the Santa Clara River. The report concludes that when bank stabilization is placed upland from the active channel (buried bank stabilization), floodplain, and terrace geomorphological units of the river, the bank stabilization had less of an impact on the hydrologic and ecological functions of the riparian system. The URS report also concluded that bank stabilization that includes native plant restoration allows for increased buffer (such as that proposed by the Riverpark project). The report states that the buffer also protects the river from sediment erosion. One example of how buried bank stabilization with (such as that proposed by the

Riverpark project) affected the quality of the riparian habitats within the reach sited in the report is the Jefferson Apartment complex.

> "[t]he downstream-most site is located east of I-5, between the Jefferson Apartments on the south bank and a commercial complex to the north. The north bank of the site is partially lined with exposed gunite, and buried soil cement bank stabilization is in place along the southern bank. The vegetation communities within this reach are best described as cottonwood/willow riparian forest, with southern willow scrub interspersed. This was the highest-scoring site (HFA Total Score = .88), largely due to the presence of a wide buffer between the river corridor and surrounding development. Even along the portion of the north bank where exposed gunite is in place, the channel width has not been excessively constrained and a riparian corridor is present between the active channel and developed uplands." *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004, p. 2 (Final EIR **Appendix C**).

Response 10

The comment expresses the opinions of the commenter regarding purported previously created impacts on the Santa Clara River due to bank stabilization, which the commenter erroneously refers to as "channelizing." This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, but no further response can be provided.

Again, the project does not propose to channelize the river, but only to install bank stabilization along a portion of the north side of the river within the project site. (See **Response 4**, above.) As Revised Riverpark Draft EIR Section 4.6 explains, the installation of bank stabilization in this part of the river was previously approved in the NRMP promulgated by the CDFG and the ACOE. As the Draft EIR further explains, the project as proposed and analyzed in the Draft EIR proposes modifications to the bank stabilization approved in the NRMP to move the bank stabilization further back from the river in certain locations. Additionally, as discussed in the Draft EIR and in Revised Section 4.6, Biological Resources, the project would preserve the vast majority of the riparian resources associated with the Santa Clara River and would transfer those resources to the City of Santa Clarita for future management as natural open space. Finally, as noted above, since the Draft EIR and the Revised Biological Resources section were released for public review, the project has been revised to push the proposed bank stabilization along the river from the park in the central portion of the project site in the east to the easterly commercial parcel in the west further back to preserve the mature riparian resources along this edge of the river, and to dedicate additional portions of the South Fork of the Santa Clara River (off the project site) to the City. (Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project* Technical Report, Figure 1, prepared by GeoSyntec, dated October 13, 2004 (Final EIR **Appendix G**)

which depicts the previous project bank stabilization location compared to the revised plan showing an increased setback.)

Further, as discussed in **Response 9**, above, the report prepared by URS entitled, *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004, (Final EIR **Appendix C**) concludes that when bank stabilization is placed upland from the active channel (buried bank stabilization), floodplain, and terrace geomorphological units of the river, the bank stabilization had less of an impact on the hydrologic and ecological functions of the riparian system. The URS report also concluded that buried bank stabilization that includes native plant restoration allows for increased buffer and beneficial effects (such as that proposed by the Riverpark project). The report states that the buffer also protects the river from sediment erosion.

Response 11

The comment expresses the opinions of the commenter regarding purported previously created impacts on the riparian and terrace habitats associated with the Santa Clara River. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

The project's potential project-level and cumulative impacts on biological resources and the Santa Clara River floodplain are fully analyzed in Sections 4.20, Floodplain Modifications, and in Revised Section 4.6, Biological Resources, in the Draft EIR. Potential impacts on biota throughout a much larger portion of the river, from the eastern Riverpark boundary to the west at Castaic Creek, including, without limitation, the reach of the river within the project site, were also analyzed previously in the EIR/EIS for the NRMP, incorporated into the Draft EIR by reference (*CEQA Guidelines* § 15150; see e.g., Section 4.6, Biological Resources, p. 4.6-3; Revised Section 4.6, Biological Resources, p. 4.6-3). Additionally, the report prepared by URS entitled, *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004, (Final EIR **Appendix C**) concludes that when bank stabilization is placed upland from the active channel (buried bank stabilization), floodplain, and terrace geomorphological units of the river, the bank stabilization had less of an impact on the hydrologic and ecological functions of the riparian system. The URS report also concluded that buried bank stabilization that includes native plant restoration allows for increased buffer and beneficial effects (such as that proposed by the Riverpark project). The report further concludes that the buffer also protects the river from sediment erosion.

Moreover, since the Draft EIR was released for public comment, the project has been revised by moving the bank stabilization in the area from the park in the central portion of the project site in the east to the easterly commercial parcel in the west further back from the river. As compared to the project design analyzed in the Draft EIR, this change would result preservation of mature riparian resources along the river in this location and in an increased buffer.

Response 12

The comment expresses the opinions of the commenter regarding purported previously created impacts on the Santa Clara River due to "urban edge effects, including illegal ORV use" which the commenter asserts "degrade riparian biological values." This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

The project's potential project-level and cumulative impacts on biological resources and the Santa Clara River floodplain are fully analyzed in Revised Draft EIR Section 4.6, Biological Resources, and Draft EIR Section 4.20, Floodplain Modifications. Urban edge effects are specifically discussed in Revised Draft EIR Section 4.6,Biological Resources at pp. 4.6-83–86 and are mitigated to a less than significant level by Mitigation Measures 4.6-13–19. In addition, as discussed in Revised Draft EIR Section 4.6, Biological Resources, potential impacts on biota throughout a much larger portion of the river, from the eastern boundary of the Riverpark site to the western boundary at Castaic Creek, including, without limitation, the reach of the river within the project site, as well as impacts from placing development within the floodplain and the SEA, were also analyzed previously in the EIR/EIS for the NRMP, incorporated into the Draft EIR by reference (*CEQA Guidelines* § 15150; see Revised Section 4.6, Biological Resources, p. 4.6-3). The NRMP permits development along the Santa Clara River, including, without limitation, the project site, along a development line it established, subject to certain mitigation measures. Subsequently, the beneficial effects of the NRMP provisions have been confirmed by a report prepared by URS entitled, *A Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004, (Final EIR **Appendix C**); that report concludes that when bank stabilization (buried bank stabilization) is placed upland from the active channel, floodplain, and terrace geomorphological units of the river, the bank stabilization had less of an impact on the hydrologic and ecological functions of the riparian system. The URS report also concludes that buried bank stabilization (such as that proposed by the Riverpark project) that includes native plant restoration allows for increased buffer and beneficial effects. The report further concludes that the buffer also protects the river from sediment erosion.

The proposed project was designed to comply with the NRMP and it incorporates all applicable mitigation measures. (See Revised Draft EIR Section 4.6, Biological Resources.) The project design also further improves upon the NRMP-permitted development. Revised Draft Riverpark EIR Section 4.6, Biological Resources, p. 4.6-80, states that

> "[a]s part of the Riverpark project, the applicant has elected to move certain components of the project further away from the river, and has eliminated bank stabilization in certain areas, than what was permitted by the NRMP, thereby, reducing the amount of riparian area impacted by development when compared with the riparian area that could be developed under the NRMP. As shown in Figure 4.6-7, a total of 13.2 net acres of riparian area that could be developed under the NRMP-related permits would no longer be developed if the Riverpark project were developed as proposed."

Additionally, the Riverpark project eliminates NRMP-approved bank stabilization from the eastern terminus of the "toe protection" to the western bridge abutment for the Newhall Ranch Road/Golden Valley Road Bridge (roughly half of the Riverpark site that is adjacent to the river).

Revised Riverpark Draft EIR Section 4.6, Biological Resources, p. 4.6-51, discusses the need for setbacks, or buffer zones, between riparian ecosystems and adjacent development. Several studies are referenced in that Section that address the home range requirements of riparian-dependent wildlife and the need for adjacent upland habitats to be included in these home ranges. North Valencia Annexation Buffer Study April 1997, conducted along the Santa Clara River that found that a minimum of 100 feet of high quality upland habitat, as measured from the edge of the riparian canopy, was necessary to provide for the foraging and breeding habitat requirements of riparian wildlife and to maintain species diversity within the riparian ecosystem. This distance is consistent with that recommended by several resource agencies and professional biologists familiar with the biological resources along the Santa Clara River. As a result, one of the thresholds used for determining whether the project had potentially significant impacts was whether or not it maintains a 100-foot buffer from the riparian resource edge (p. 4.6-78). For the reasons discussed there, the project was found to have significant and unavoidable impacts based on this threshold (pp. 4.6-78, 109). As Revised Draft EIR Section 4.6, Biological Resources, explains, there are two small areas where the proposed project encroaches within the approved development line as established by the NRMP and do not adhere to the 100-foot buffer standard. One such area encroaches approximately 80 feet in order to preserve a Heritage oak tree. The other encroachment of approximately 200 feet is at the Newhall Ranch Road/Golden Valley Road Bridge, due to the realignment of Newhall Ranch Road. The remaining portions of the project that would not adhere to the 100-foot buffer standard (but do comply with the NRMP development line) consist of lower value habitat adjacent to areas that have historically been disturbed by agricultural operations (Area A2) and areas characterized by high bluffs (portions of Area B) which limit the use of this upland zone by riparian species. Finally, the remaining encroachments within the 100-foot upland preserve occur due to the Santa Clara River

Regional Trail (primarily on the eastern portion of the project site where topography necessitates its location along the river).

However, after the Draft EIR and Revised Draft EIR Section 4.6, Biological Resources, were released for public comment (in March 2004), the project was revised in two respects. First, to preserve even more of the river and its mature riparian resources and create an increased buffer, the project has been revised by relocating the proposed bank stabilization along the river from the park in the central portion of the project site in the east to the easterly commercial parcel in the west further back from the river. (Please see *Additional Hydrology and Water Quality Analyses for the Riverpark Project* Technical Report, Figure 1, prepared by GeoSyntec, dated October 13, 2004 (Final EIR **Appendix G**) which depicts the previous project bank stabilization location compared to the revised plan showing a deeper setback.) Second, the project applicant has agreed to dedicate approximately 130 acres of the South Fork of the Santa Clara River to the City to be preserved as open space.

Response 13

The comment expresses the opinions of the commenter regarding purported previously created impacts on the Santa Clara River due to purported failures to provide adequate buffer zones protecting the riparian corridor but does not specifically comment on the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration, but no further response can be provided. Nevertheless, adequate buffer zone to protect the riparian corridor are fully analyzed in Revised Draft EIR Section 4.6. Please see **Responses 12**, above, and **Response 17**, below.

Response 14

The comment expresses the opinions of the commenter that the project will eliminate the function of the Santa Clara River terrace area as wildlife habitat or wildlife corridors, but does not specifically comment on the contents of the Draft EIR. This comment is acknowledged and will be forwarded to the decision makers for their consideration, but no further response can be provided. Even so, Revised Draft EIR Section 4.6 analyzes potential impacts on wildlife corridors. In addition, please see **Response 12**, above, and **Response 17**, below.

Please note further that NRMP measures a) through rr) have been incorporated into the project design, many of which will minimize the impacts to riparian vegetation and replace any vegetation temporarily or permanently removed. (Revised Riverpark Draft EIR Section 4.6, Biological Resources, pp. 4.6-87–98.) Therefore, the riparian vegetation that will be removed as a result of project implementation will not

substantially affect the ability of resident and non-resident species to use the river as a movement corridor. The project will also preserve and restore various amounts of upland habitat adjacent to the river system that will allow some species, especially larger mammals, to use those adjacent upland areas as movement corridors.

As the Draft EIR also explains (Revised Section 4.6, p. 4.6-8.), the Newhall Ranch Road/Golden Valley Road Bridge will afford the opportunity for wildlife, particularly large mammals, to move down the river corridor, as there will be adequate vertical and horizontal spacing, a natural (dirt, sand, vegetation) substrate on which to travel under the bridge structure, and an openness effect that will allow such wildlife to detect light, open space and habitat at the exiting end of the structure.

Response 15

The comment submits two scientific studies addressing edge effects and buffer zones in riparian systems which the commenter characterizes as supporting "the statement that urban development degrades adjacent biological resources," This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not raise any other CEQA issue, no further response can be provided.

Notwithstanding this, staff reviewed the two articles submitted by Friends of the Santa Clara River dealing with the design of buffers to determine if the articles apply to the project site. The first article, *Predicting the Impacts of Urbanization on Riparian Bird Communities*, was a study of three relatively narrow creeks in the San Francisco Bay area. The creeks were less than 45 feet wide, with a riparian corridor width of less than 240 feet. In contrast, the Santa Clara River riparian corridor and buffers are four to ten times wider. The study did not evaluate the direct effects of habitat alteration, but instead "focused on the ways in which intact remnants of riparian habitat have been affected by urbanization on adjacent lands [i.e., where no buffers currently exist]." The study also did not identify a minimum buffer width required for the maintenance of the integrity of riparian bird communities, but suggests that broader buffers better maintain riparian bird species richness. The study noted that species richness and density were negatively related to the abundance and proximity of bridges either because the bridges hindered free movement across gaps between sections of riparian habitat or because they were simply an indicator of the overall degree of adjacent urbanization. The study also stated that

> "[s]ome of the detrimental effects of urbanization on riparian bird communities can be minimized with proper planning. The single most important step that can be taken to conserve riparian bird communities in the face of urbanization is to minimize development in and along floodplains by maintaining broad buffers of undeveloped land

between developed areas and riparian habitats. Habitat restoration efforts, particularly those that broaden riparian corridors and link fragments of riparian habitat, would augment habitat area and enhance the value of existing habitat by further buffering riparian birds from human influences outside the corridor. Where development has occurred in close proximity to riparian habitats, efforts to minimize direct human disturbance of riparian plant and bird communities (e.g., by restricting access to riparian habitats) and replace exotic plants with native species would also benefit riparian bird communities."

Based on the City's biological consultant's review, this article is not directly applicable to the conditions found on the project site. For example, unlike the areas in the article, the project design (a) includes a bridge crossing, which was not found to cause significant impacts to riparian habitat; and (b) includes upland buffers between the river and proposed development. Furthermore, the Santa Clara River corridor through the project area is itself a very wide, long, and continuous wildlife corridor and habitat area that is larger than any addressed in the article.

The second article submitted by the commenter was also reviewed by City staff. The article is entitled, "Buffer Zones for Ecological Reserves in California: Replacing Guesswork with Science." This article is an informative review of buffer issues, which was generated from issues related to the design of reserves of the kangaroo rat habitat conservation plan in Riverside County. The article describes several approaches to quantifying edge effects in order to design buffer zones for nature reserves. The study suggests developing a buffering protocol that identifies the external forces likely to impact the sensitive species in question, determining the extent to which external forces are likely to penetrate the reserve boundary, and ranking those forces in terms of likely negative impact in order to produce a prioritized list of buffering requirements. As stated, the article studied the kangaroo rat reserve and did not specify a buffer distance for a riparian corridor, such as the Santa Clara River SEA 23. As a result, City staff believes that the only available and applicable evidence in directly assessing the "adequacy" of a buffer area for this riparian corridor is found in the site-specific studies and analyses that already have been performed along the river corridor within the project area. Please see Revised Draft EIR Section 4.6.

To the extent that the comment could be read to imply that the project contains inadequate buffers, please see **Response 12**, above, and **Response 17**, below.

Response 16

The comment asserts that "more studies are definitely needed on the impacts of development on riparian ecosystems" and that development along the Santa Clara River "is an experiment on a large scale with the fate of the river ecosystem in the balance," This comment is acknowledged and will be forwarded to

the decision makers for their consideration. Because the commenter does not raise any other CEQA issue, no further response can be provided. Nevertheless, the City has concluded that sufficient studies have been conducted and prepared to provide substantial evidence of the impacts of the project on riparian habitats, both project-specific and cumulative. Please see **Response 12**, above, and **Response 17**, below.

In addition to the *Functional Assessment of the Santa Clara River Within and Upstream of the Natural River Management Plan*, July 20, 2004, (Final EIR **Appendix C**), numerous studies and research have been conducted on the Santa Clara River riparian ecosystems (including the Riverpark project) as is acknowledged in Revised Draft Riverpark EIR Section 4.6, Biological Resources, pp. 4.6-2–4:

> "In order to use published information to preliminarily identify special-status plant and animal species (those species considered Rare, Threatened, Endangered, or otherwise sensitive by various state and federal resource agencies) that have been known to historically occur in the vicinity of the project site, the 2002 update of the California Natural Diversity Data Base (CNDDB) as well as the 2002 California Native Plant Society (CNPS) electronic data base, for the Newhall and Mint Canyon California USGS 7.5-minute quadrangle maps were reviewed. Other data sources reviewed included: (1) the Federal Register listing package for each federally listed Endangered or Threatened species potentially occurring on the project site or in the project vicinity; (2) literature from scientific sources pertaining to habitat requirements of special-status species potentially occurring on the project site; (3) other environmental or biological documentation of the project site (if available on the particular subject) or properties in the immediate vicinity; and (4) distributional information contained in Hall (1981) and Williams (1986) to determine the potential for common and special-status mammals to occur on the project site; Grinnel and Miller (1984) and Garrett and Dunn (1981) for common bird occurrences; Stebbins (1985) for reptiles and amphibians; California Department of Fish and Game (CDFG 2003), Sawyer, Keeler-Wolf (1995), Holland (1986) and Munz (1974) for plant community descriptions occurring within the project vicinity; and Pavlik (1992) and Skinner and Pavlik (1994) for oak tree information.
>
> Sources used to determine the sensitivity status of biological resources are: Plants – U.S. Fish and Wildlife Service (USFWS 1993 and 1996), California Department of Fish and Game (CDFG 2003), CNDDB 2002, and (CNPS) (Skinner and Pavlik 1994-1999); Wildlife – USFWS (1994 and 1996), CDFG (2003), CNDDB (2002), Williams (1986), and Remsen (1978); Habitats – California Department of Fish and Game (CDFG 2003) (pers. comm. Keeler-Wolf) and Sawyer, Keeler-Wolf (1995).
>
> (1) Background
>
> On November 30, 1998, the ACOE, CDFG, and the California Regional Water Quality Control Board (RWQCB) approved the Natural River Management Plan (NRMP) for the Santa Clara River. The NRMP is a long-term, master plan that provides for the construction of various infrastructure improvements on lands adjacent to the Santa Clara River and portions of two of its tributaries. More specifically, the NRMP governs a portion of the main-stem of the Santa Clara River from Castaic Creek to one-half mile east of the Los Angeles Department of Water and Power Aqueduct and portions of San Francisquito Creek and the Santa Clara River South Fork, Los Angeles County, California. The project site is located within the portion of the river now governed by the NRMP.

In connection with this approval, the following permits were issued by the following agencies:

- Army Corps of Engineers (ACOE) – Permit No. 94-00504-BAH under Section 404 of the Federal Clean Water Act. Section 404 of the Federal Clean Water Act allows for certain activities that result in the discharge of fill or dredged materials into "Waters of the U.S." or in this case the Santa Clara River. Prior to issuing this permit, the ACOE had completed an endangered species consultation (pursuant to Section 7 of the Federal Endangered Species Act) with the United States Fish and Wildlife Service.

- California Department of Fish and Game (CDFG) – 1603 Streambed Alteration Agreement No. 5-502-97 and Incidental Take Permit No. 2081-1998-49-5. In summary, the Streambed Alteration Agreement allows for activities that alter the "…natural flow or change the bed, channel or bank of the river…" The Incidental Take Permit applies to all state listed species pursuant to Fish and Game Code Section 2081(b).

- California Regional Water Quality Control Board (Los Angeles Region) – Order No. 99-104 related to waste discharge associated with the improvements included in the NRMP.

The NRMP was prepared in response to an ACOE request to prepare a long-range management plan for projects and activities potentially affecting the Santa Clara River and San Francisquito Creek. More specifically, the NRMP, and its certified EIS/EIR (NRMP EIS/EIR), analyze impacts associated with the implementation of various infrastructure improvements (bank stabilization, bridges, utility crossings, storm drain outlets, etc.) along and within portions of the Santa Clara River adjacent to Newhall Land properties, including the Riverpark project site. The NRMP, and its EIR/EIS, are available at the City of Santa Clarita, Planning and Building Services Department, 23920 Valencia Boulevard, Suite 302, Santa Clarita, California, and are incorporated in this EIR by reference.

Due to the discovery in 2001 of a southwestern arroyo toad (*Bufo californicus*) within the NRMP boundaries (in a location west of the confluence of San Francisquito Creek and the Santa Clara River, approximately 1.5 miles west of the Riverpark project site), additional Section 7 (of the Endangered Species Act) consultation between the ACOE and the U.S. Fish and Wildlife Service was initiated. Prior to initiating this consultation, the ACOE and CDFG had removed certain stretches of the Santa Clara River and San Francisquito Creek from the consultation area as these areas lacked the necessary habitat requirements for the arroyo toad. The areas covered by the NRMP but designated as "no may effect" included the Santa Clara River 1,000 feet upstream of the Bouquet Canyon Road Bridge (including most of the Riverpark site), San Francisquito Creek north of the Newhall Ranch Road Bridge and the South Fork of the Santa Clara River south of the Valencia Boulevard Bridge. This consultation, along with the preparation of a Biological Opinion (dated November 15, 2002) (Appendix 4.6), resulted in the issuance of a modification to the 1998 ACOE Section 404 Permit (issued June 23, 2003) (Appendix 4.6) that includes provisions for the protection of the arroyo toad in the affected NRMP area. (The Biological Opinion and the Section 404 modification are incorporated in this EIR and are also available at the City of Santa Clarita, Planning and Building Services Department, 23920 Valencia Boulevard, Suite 302, Santa Clarita, California.)"

As demonstrated above, substantial and sufficient research has been conducted on the ecology and the effects of development on the Santa Clara River, particularly with the EIR/EIS prepared for the NRMP and with the Riverpark EIR requiring no further study with regard to the proposed project.

Response 17

The comment expresses the general opinions of the commenter that "creating larger buffer zones to conserve more of the riparian community is a must." This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. To the extent this comment could be interpreted as suggesting that the project include a wider buffer zone, please see **Response 12**, above.

Response 18

The comment quotes from a paper relating to riparian bird communities submitted with the comment letter expressing the author's belief in the importance of "maintaining broad buffers of undeveloped land between developed areas and riparian habitats." This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. To the extent that the comment could be interpreted as suggesting that the project include a wider buffer zone, please see **Response 12**, above.

Response 19

This comment implies that the project does not create an "adequate buffer zone," that the project is, therefore, not consistent with Policy 5.3 under Goal 5 of the Land Use Element of the City's General Plan, and that only if the project created an "adequate buffer zone" could this policy of the City's General Plan be effectively implemented. The City disagrees with this comment. First, the City does not agree that there is only one method by which a development project within an SEA can be consistent with Policy 5.3 under Goal 5 of the Land Use Element of the City's General Plan. Had the City intended to limit the means and methods of implementing Policy 5.3 solely to provision of an "adequate buffer zone," it would have so provided in Policy 5.3. Instead, Policy 5.3 calls for consistency through "creative site planning techniques" (the comment omits the reference to site planning) to avoid and minimize, not simply avoid, disturbances in SEA areas. This policy can be achieved in many different ways, depending upon the circumstances of each development project and each development site.

Second, the City analyzed the project's consistency with the City's General Plan, and found it to be consistent. (Draft EIR Section 4.7, Land Use.) Based on the analyses contained in the Draft EIR, including, without limitation in the Revised Section 4.6, Biological Resources, the City specifically

concluded that the project is consistent with Policy 5.3. (Draft EIR Section 4.7, Land Use, pp. 4.7-67–68.) In turn, the Draft EIR's Revised Section 4.6, Biological Resources, contains the City's analyses with respect to the project's potential impacts on the Santa Clara River SEA (Id. pp. 4.6-81 and 4.6-83). Although approximately 90 percent of the habitat within the SEA will be preserved, the Revised Riverpark Draft EIR (p. 4.6-125) concludes that the net loss of 29 acres of habitat within the SEA as a result of project implementation is a significant impact under CEQA that cannot be fully mitigated. However, after the Draft EIR and the Revised Section 4.6, Biological Resources, were released for public comment, the project was revised in two respects. First, to preserve even more of the river and its mature riparian resources, the project has been revised by relocating the bank stabilization from the park in the central portion of the project site in the east to the easterly commercial parcel in the west. Second, the project applicant has agreed to dedicate approximately 130 acres of the South Fork of the Santa Clara River to the City to be preserved as open space.

Response 20

The comment suggests that the City develop an additional alternative to the project, which the commenter labels the "Floodplain/Terrace Avoidance Alternative," but it does not describe further.

The Draft EIR does in fact address the commenter's concerns that alternatives look at floodplain and terrace avoidance. As discussed in Draft EIR Section 6.0, Project Alternatives, the Draft EIR provides a reasonable range of alternatives, including Alternative 2, Santa Clara River Reduced bank Stabilization Alternative. This alternative addresses the option of setbacks not only from the 50-year Q-cap line, but also from the upland preserve and buffer, as suggested by the comment. This alternative would implement a setback of the Q-cap 50-year line or the upland preserve/buffer setback from the resource line—whichever is more restrictive—in order to preserve the entire river corridor.

As analyzed and discussed in Section 6.0, Alternatives, of the Draft EIR (pp. 6.0-3–13), however, this alternative, although environmentally superior to the proposed project on the basis of environmental impacts, alone, would provide fewer housing opportunities to meet the anticipated demand for housing expected in the Santa Clarita area. Implementation of Alternative 2 would result in a loss of approximately 54 single-family dwelling units from Planning Area A-1, 24 single-family units from Planning Area A-2, 1 acre of commercial property, 4 acres of active parkland, and 1 additional oak tree. (Id., p. 6.0-3.) Therefore, as the Draft EIR concludes (pp. 6.0-12–13), this alternative would too narrowly limit the housing opportunities on the site and thus would fail to meet the project objective of providing a substantial number of new housing units to accommodate projected regional growth in a location which is adjacent to existing and planned infrastructure, urban services, public transit, transportation corridors,

and major employment areas. (See Section 1.0, Project Description, p. 1.0-13 of the Draft EIR.) In order to meet that project objective, the alternative would have to provide for greater or more dense development in other areas; such intensified development would, in turn, likely create the same impacts as those created by the proposed project (if not more, due to the increased density and intensity).

Moreover, after the Draft EIR and the Revised Section 4.6, Biological Resources, were released for public comment, the project was revised in three respects. First, to preserve even more of the river and its mature riparian resources, the project has been revised by relocating the bank stabilization from the park in the central portion of the project site in the east to the easterly commercial parcel in the west. The mature resource edge along this portion of the project site will now be preserved and an adjacent upland buffer of 100 feet will also be provided. Second, the project applicant has agreed to dedicate approximately 130 acres of the South Fork of the Santa Clara River (off the project site) to the City to be preserved as open space. Third, the project has been revised to move the equestrian trail north, outside of the river bottom and away from the river. Rather than separating from the multi-purpose trail before the western bridge abutment for the pedestrian/bike bridge (see Draft EIR Section 4.12, Parks and Recreation, Figure 4.12-4, Recreation and Trails Plan), the equestrian trail will now remain within the multi-purpose trail and will cross over the Los Angeles Aqueduct on the pedestrian/bike bridge. (Final EIR **Appendix D, Revised Tentative Tract Maps**) Concomitantly, the pedestrian/bike bridge will be widened from 20–25 feet, which will provide a minimum clearance of 20 feet on the bridge, large enough to accommodate all trail users. This project modification will reduce the potential impacts on riparian resources with which this commenter is concerned.

Finally, as compared to the proposed project as revised, Alternative 2 would not lessen any potential impacts on either the arroyo toad or western spadefoot toad. The Draft EIR concludes that it is unlikely that impacts would occur to individual arroyo toads, due to the lack of suitable habitat in and adjacent to the Santa Clara River within the project site. (Revised Section 4.6, Biological Resources, pp. 4.6-28, 74.) Because western spadefoot toads inhabit shallow, temporary seasonal rainpools and vernal pools in upland areas. (Please see Revised Section 4.6, Biological Resources, Appendix Results of Focused Western Spadefoot Toad Surveys for discussion with regard to the toad's characteristics.) Alternative 2's configuration would not affect this species' habitat. (Id., pp. 4.6-28, 74)

Response 21

The commenter's request to redesign the eastern terminus of the proposed project trail system to end at Santa Clarita Parkway is noted. The design of the project trail system as proposed is consistent with the City of Santa Clarita General Plan. Moreover, proposed Santa Clarita Parkway will divide Planning Area

A-2 to the west and Planning Area B to the east. As explained in the Draft EIR Revised Section 4.6, Biological Resources, at p. 4.6-79, when discussing potential impacts of the trail system, the majority of Planning Area B is located on a bluff overlooking the Santa Clara River. Because the bluff is immediately adjacent to the river, the 100-foot upland preserve zone is located on top of the bluff and, therefore, any impacts to the 100-foot upland preserve zone within Planning Area B would occur on top of the bluff. The position of this upland zone at the top of the bluff's steep cliffs already limits the use of this upland area by riparian species such as small animals and some birds and, therefore, potential impacts to such species would also be limited.

Farther east, the trail's placement in proximity to the Santa Clara River would also allow humans and domestic animals greater access to sensitive areas, and such access could cause potentially significant impacts, which impacts are discussed in the Draft EIR. (Id. at pp. 4.6-79, 84–85) However, with the imposition of Mitigation Measures 4.6-13–18, such impacts would be reduced to a less than significant level.

In addition, since the Draft EIR and the Revised Section 4.6, Biological Resources, were released for public comment, the project has been revised to move the equestrian trail north, outside of the river bottom and away from the river. Rather than separating from the multi-purpose trail before the western bridge abutment for the pedestrian/bike bridge (see Draft EIR Section 4.12, Parks and Recreation, Figure 4.12-4, Recreation and Trails Plan), the equestrian trail will now remain within the multi-purpose trail and will cross over the Los Angeles Aqueduct on the pedestrian/bike bridge. (Final EIR **Appendix D, Revised Tentative Tract Maps**) Additionally, the pedestrian/bike bridge will be widened from 20 to 25 feet, which will provide a minimum clearance of 20 feet on the bridge, large enough to accommodate all trail users. This project modification will reduce the potential impacts on riparian resources with which this commenter is concerned.

Response 22

The commenter suggests that terminating the trail at Santa Clarita Parkway would avoid negative impacts to the eastern portion of the project area due to increased disturbance by humans, domestic animals, and ORVs. Please see **Response 21**, above. As discussed above, Revised Section 4.6, Biological Resources, of the Riverpark Draft EIR identifies an increase of disturbances caused by human impacts, ORV, and domestic animals in section (1) on p. 4.6-84 as a significant impact. Mitigation Measures 4.6-13–18 starting on p. 4.6-106 mitigate these impacts to a less than significant level.

In addition, since the Draft EIR and the Revised Section 4.6, Biological Resources, were released for public comment, the project has been revised to move the equestrian trail north, outside of the river bottom and away from the river. Rather than separating from the multi-purpose trail before the western bridge abutment for the pedestrian/bike bridge (see Draft EIR Section 4.12, Parks and Recreation, Figure 4.12-4, Recreation and Trails Plan), the equestrian trail will now remain within the multi-purpose trail and will cross over the Los Angeles Aqueduct on the pedestrian/bike bridge. (Final EIR **Appendix D, Revised Tentative Tract Maps**) Concomitantly, the pedestrian/bike bridge will be widened from 20 to 25 feet, which will provide a minimum clearance of 20 feet on the bridge, large enough to accommodate all trail users. This project modification will reduce the potential impacts on riparian resources with which this commenter is concerned.

49. LETTER RECEIVED FROM MARY INDERMILL, DATED JANUARY 25, 2005

Response 1

The commenter opposes development of the floodplain as described for aesthetic, environmental protection and because the floodplain is vulnerable to floods. The project encroaches upon the existing FEMA flood hazard area primarily with residential Lots 338–352 along the southern site boundary. This potentially significant impact would be mitigated by the installation of the buried bank stabilization that would protect the above-noted residential units from floodwaters and subsequent impacts, and consequently would remove these units from the potential for flooding. Furthermore, on January 12, 2005 FEMA issued a Conditional Letter of Map Revision (CLOMR) (see, **Appendix J**) conditionally approving a revision to the Flood Insurance Rate Map (FIRM) removing the flood hazard, upon construction of floodway improvements, from the above-referenced lots. This letter is attached. Please see **Responses** to **Letters 17** (Friends of the Santa Clara River, April 2004), **18** (SCOPE, May 2004), **20** (Ventura Coastkeeper, May 2004), **22** (Sierra Club, May 2004), **25** (Heal the Bay, May 2004), and **44** (Friends of the Santa Clara River, March 2004) in the Final EIR.

Response 2

The commenter stated that the City of Santa Clarita and its representatives could be liable to life and property loss due to flooding as a result of the project. Please see **Response 1**, above.

50. LETTER RECEIVED FROM MARC FLORES, DATED JANUARY 25, 2005

Response 1

The commenter had a concern with quality of life issues, that adding another housing development is short-sighted and values only the short-term influx of revenues from the developers. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not raise any other CEQA issue, no further response can be provided.

Response 2

The commenter stated that Santa Clarita Valley has enough problems with population density and increasing the density before the City has achieved equilibrium will complicate and increase problems. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided. Nevertheless, it should be noted that the project's density and intensity are substantially less than that permitted by the City's General Plan and the project site's current zoning, which would have permitted (considering slope density) development of 3,461 dwelling units, 1,898,903 square feet of Community Commercial floor area, 8,344,092 of Commercial Office floor area, and 767,881 square feet of Industrial Commercial floor area. Please see Draft EIR Section 4.7, Land Use, p. 4.7-7.

Response 3

The commenter stated that it was his opinion that if residents were allowed to vote on the project and all of the speakers and correspondence received against the project it would indicate that the people would vote against Riverpark. The commenter further asked if quality of life should be preserved or if open space should be filled with development and the subsequent consequences. The commenter also suggested a re-designed City logo to describe in his opinion what the City is becoming. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not raise any other CEQA issue, no further response can be provided.

51. LETTER RECEIVED FROM JOHN GONZALEZ, DATED JANUARY 25, 2005

Response 1

The commenter stated that the proposed project has the potential to become another La Conchita and referred to an article in the Daily News, Santa Clarita edition, dated January 24, 2005, which discussed impacts of recent floods and development that is situated too close to the Santa Clara River. The project encroaches upon the existing FEMA flood hazard area primarily with residential Lots 338–352 along the southern site boundary. This potentially significant impact would be mitigated by the installation of the buried bank stabilization that would protect the above-noted residential units from floodwaters and subsequent impacts, and consequently would remove these units from the potential for flooding. Furthermore, on January 12, 2005 FEMA issued a Conditional Letter of Map Revision (CLOMR) conditionally approving a revision to the Flood Insurance Rate Map (FIRM) removing the flood hazard, upon construction of floodway improvements, from the above-referenced lots. This letter is attached to this Final EIR (see, **Appendix J**). Please see **Responses** to **Letters 17** (Friends of the Santa Clara River, April 2004), **18** (SCOPE, May 2004), **20** (Ventura Coastkeeper, May 2004), **22** (Sierra Club, May 2004), **25** (Heal the Bay, May 2004), and **44** (Friends of the Santa Clara River, March 2004) in the Final EIR.

The article also discussed potential water quality impacts. Section 4.2, Flood, and Section 4.8-1, Water Quality, concludes that the project would not create significant cumulative flood and water quality impacts with the following summation:

> "It has been estimated that approximately 4 percent of that portion of the Santa Clara River watershed found in Los Angeles County would be developed and approximately 2.5 percent of the portion of the watershed found in Ventura County would be developed.[2] Each development project in the Santa Clara River watershed (1,634 sq. miles) will be of varying character and size, will have its own unique topographic and geologic characteristics, will have flood and water quality impacts that will be unique to the geologic/soil conditions of the site, to the tributary watershed in which it is located, and to the reach of the Santa Clara River to which it drains, either directly or indirectly, and will be subject to the development criteria of the jurisdiction in which it is located.
>
> All development within the portion of the watershed of the Santa Clara River located in Los Angeles County, including that within the City of Santa Clarita, is required to comply with the LACDPW Q-cap requirements to ensure that upstream or downstream flooding does not occur and to ensure that downstream erosion and sedimentation do not occur. Compliance with these requirements ensures consistency with the County's Q-cap model. Pursuant to LACDPW requirements, all drainage systems in developments that carry runoff from developed areas must be designed for the 25-year

2 Alex Sheydayi, Deputy Director, Ventura County Public Works Agency, Flood Control Department, statement made at the Santa Clara River Enhancement and Management Plan Steering Committee Meeting, May 30, 1995.

Urban Design Storm, while storm drains under major and secondary highways, open channels (main channels), debris carrying systems, and sumps must be designed for the 50-year Capital Flood Storm. LACDPW also prohibits significant increases in off-site post-development storm flows and significant increases in storm flow velocities. Development in the Los Angeles County portion of the watershed must also comply with LACDPW design criteria. As a result of compliance, overall storm runoff discharge quantities from the watershed under post-development runoff conditions would be less than or equal to existing conditions largely because the runoff would be free of the debris that is typical of undeveloped watersheds and flow velocities would not increase significantly. Because on-site facilities would already have been built for burned and bulked flows from undeveloped areas, they would have more than adequate capacity to accommodate off-site flows as the off-site portions of the drainage areas develop.

Further, all development within the portion of the watershed of the Santa Clara River located within the jurisdiction of the RWQCB, including that within the City of Santa Clarita, is required to comply with the orders and regulations issued by the RWQCB, as well as those issued by the SWRCB, the NPDES, the County of Los Angeles, and the City of Santa Clarita and federal law during both construction and operation of the project. Further, each current and future development in the Santa Clarita Valley will also be required to meet all of those requirements to control storm water discharges of pollutants of concern for each such development.

As the analysis of project development demonstrates, development in minor drainage courses within Reach 7 of the Santa Clara River in compliance with these requirements would result in less than significant impacts. Additionally, as a policy, both the City of Santa Clarita and the LACDPW prohibit significant increases in flow velocity from a project site; therefore, adherence to this policy would result in no significant cumulative increases in velocity or erosion/sedimentation impacts along that portion of the Santa Clara River, which drains to this watershed.

Other projects within the City of Santa Clarita and Los Angeles County would be subject not only to the same general requirements as the proposed Riverpark project, but also to such other requirements as the City of Santa Clarita (as applicable), the LACDPW and the RWQCB may specifically identify for them based on their unique characteristics.

The analysis of project conditions, above, demonstrates that project development, which must comply with all of these City, County, state and federal requirements, would not create any significant impacts. Compliance with the Basin Plan, the General MS4 Permit and the General Construction Activity Storm Water Permit controls pollutants in runoff from the project, and thus runoff from the project causes no incremental increase in the cumulative impact of watershed-wide development.

Because the cumulative project storm water quality improvements in the City of Santa Clarita and Los Angeles County would be required to conform to all of the above-referenced requirements, no potentially significant cumulative project flooding impacts are expected to occur from the incremental impacts of the project. These water quality standards will ensure that no potentially significant cumulative impacts will occur.

a. Water Quality

If not properly controlled, the cumulative effects on water quality from future development within the Santa Clara River watershed could be adverse and potentially significant. The nature of the land uses involved, the manner in which runoff is controlled prior to discharge pursuant to the requirements of the controlling jurisdictions (i.e., LACDPW, City of Santa Clarita, Ventura County Flood Control District, SWRCB and RWQCB), and the manner in which urban wastes are managed and prevented from becoming part of the storm water runoff would all affect the significance of such cumulative water quality impacts by lessening them.

Overall, the project would be expected to improve surface water quality conditions in the watershed, as compared to existing conditions. The project would increase storm water runoff volumes in the watershed by increasing impervious surfaces at the site; however, as discussed in Section 4.2, Flood, overall storm water runoff will decrease. Moreover, as discussed above, in certain respects, water quality of the runoff from the site would be expected generally to improve over the existing conditions, particularly over the conditions in the agricultural areas. Those constituents whose concentrations and/or loading in runoff may increase with the proposed development are not expected to create significant adverse impacts and are anticipated to be controlled effectively through the use of project-specific BMPs (PDFs). Dry weather flows are expected to be adequately treated, and are unlikely to leave the site.

Regional plans and programs, including, without limitation, the Basin Plan and the General MS4 Permit are designed to preserve and enhance water quality and protect the beneficial uses of all regional waters within Region 4. The Basin Plan and the General MS4 Permit include narrative and numerical water quality objectives and parameters that must be attained or maintained to protect the designated beneficial uses of Reach 7 of the Santa Clara River. Through such means, the RWQCB regulates water quality in Los Angeles and Ventura Counties, including the Santa Clara River watershed, and it is the responsibility of the local jurisdictions (i.e., the City of Santa Clarita, LACDPW Watershed Management Division, the Ventura County Flood Control District and the RWQCB) to ensure that future development within the watershed would comply with the same or similar types of water quality requirements as the proposed project. Therefore, with these requirements in place, no cumulative water quality impacts are anticipated."

52. LETTER RECEIVED FROM JOSEPH ROBIDEAUX, DATED JANUARY 25, 2005

Response 1

The commenter wanted to know who assumes liability for flood insurance in a flood plain. The private property owner is responsible for flood insurance should they own property in a flood zone. It should be pointed out that none of the future residential or commercial property owners within the Riverpark project will be required to obtain flood insurance. This has been confirmed by FEMA's approval of a Conditional Letter of Map Revision (CLOMR) dated January 12, 2005 (see, **Appendix J**). This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

53. LETTER RECEIVED FROM JOHN STEFFEN, DATED JANUARY 25, 2005

The commenter provided documentation with regard to truck exhaust and cancer causing toxins. Please see Riverpark Draft EIR Section 4.4, Air Quality, particularly the discussion of potential health effects of air quality pollutants at pp. 4.4-17–40, and **Topical Response 5, Air Quality** for additional air quality information. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR or raise any other CEQA issue, no further response can be provided.

RESPONSES TO WRITTEN COMMENTS RECEIVED AT THE MARCH 22, 2005 CITY COUNCIL PUBLIC HEARING

54. Written Comments received from Karen Pearson, dated March 22, 2005

1. The commenter submitted an agreement concerning Lot 526 and the hill behind Gavilan Drive. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR analyses, no further response can be provided.

55. Written Comments received from Petition Signers, dated March 22, 2005

1. The petition addressed the establishment of landscape maintenance district for Lot 526, maintenance of the hillside behind Gavilan Drive and those certain residents of the Emblem Tract. Please see **Written Response 54**, above.

56. Written Comments received from Diana Shaw, dated March 22, 2005

1. The commenter stated that her neighborhood didn't need to become traffic central. The commenter stated that she is not against low density (1,100) but flattening the hill is ungodly and egregious because of the floodplain. The project applicant has revised the project and will not be reducing the height of that portion of the ridge adjacent to the homes along Gavilan Drive in the Emblem neighborhood. We are unsure of the commenter's intent to associate flattening of the hill to the floodplain; therefore, no further response can be prepared. The commenter's statements regarding traffic issues and not being against low density are acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR analyses, or raise any other CEQA issue, no further response can be provided.

57. Written Comments received from John Gonzalez, dated March 22, 2005

1. The commenter believes that the City is planning too many houses. He further stated that over-population is not helping the community. Regional housing needs are addressed in the Final EIR, including, without limitation, in Draft EIR Section 2.0, Environmental and Regulatory Setting, Section 4.7, Land Use, and Section 4.17, Population/Housing/Employment, which concludes, among other things, that housing proposed by the project is consistent with the City's General Plan land use designations for the site and does not represent substantial growth or concentrations of population. This opinion/comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

Furthermore, the commenter stated that all of the problems have been voiced and for the City Council to please listen. This opinion/comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

58. Written Comments received from Richard Squires, dated March 22, 2005

1. The commenter wanted to know when it would become apparent that the City is already overdeveloped. The commenter stated that traffic is horrible and open space is being lost on a monthly basis. This opinion/comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

59. Written Comments received from Phil Althouse, dated March 22, 2005

1. The commenter stated that 1,100 units behind Vons and so close to the floodplain is foolishness. Growth is good, but overbuilding is destructive. This opinion/comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Final EIR or raise any other CEQA issue, no further response can be provided.

The commenter further stated that Bouquet Canyon Road is overcrowded. As explained in the Draft EIR Section 4.3, Traffic/Access, at pp. 4.3-18–19, a method in which to model the improvement of surrounding intersections due to the implementation of the Cross Valley Connector involves the comparison of two scenarios: Scenario 1 – Interim Year/No Riverpark project and No Cross Valley Connector (Riverpark portion); and Scenario 2 – Interim Year/Riverpark project and Cross Valley Connector (portion through Riverpark). The interim year is generally 10 years into the future and would include additional traffic generated by projected ambient growth during that time frame.

The respective intersections and the comparison are as follows:

- Bouquet Canyon Road/Soledad Canyon Road – In Scenario 1, the intersection of Bouquet/Soledad would operate at LOS D in the AM peak hour and LOS F in the PM peak hour. In Scenario 2, this intersection would operate at an LOS C in the AM peak hour and LOS E in the PM peak hour, a marked improvement over operating conditions in Scenario 1. Please see City of Santa Clarita Riverpark Staff Report, June 15, 2004 (Final EIR **Appendix I**).

- McBean Parkway/Newhall Ranch Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS D in the PM peak hour. In Scenario 2, the respective LOS in the AM and PM peak hour remain at the same grade (LOS D), with minor improvement. Please see City of Santa Clarita Riverpark Staff Report, June 15, 2004 (Final EIR **Appendix I**).

- Bouquet Canyon Road/Newhall Ranch Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS E in the PM peak hour. In Scenario 2, the LOS would improve, though remain at LOS D in the AM peak and improve in the PM peak hour to LOS D. Overall, intersection operations would improve in Scenario 2 as compared to Scenario 1. Please see City of Santa Clarita Riverpark Staff Report, June 15, 2004 (Final EIR **Appendix I**).

- Seco Canyon Road/Bouquet Canyon Road – In Scenario 1, this intersection would operate at LOS E in the AM peak hour and LOS F in the PM peak hour. In Scenario 2, this intersection would remain at LOS E in the AM peak hour but would improve significantly to LOS D in the PM peak hour. Please see City of Santa Clarita Riverpark Staff Report, June 15, 2004 (Final EIR **Appendix I**).

- Valley Center Drive/Soledad Canyon Road – In Scenario 1, this intersection would operate at LOS D in the AM peak hour and LOS D in the PM peak hour. In Scenario 2, this intersection

would operate at LOS B in the AM peak hour and LOS B in the PM peak hour, again a significant improvement as compared to Scenario 1. Please see City of Santa Clarita Riverpark Staff Report, June 15, 2004 (Final EIR **Appendix I**).

60. Written Comments received from Joyce Evans, dated March 22, 2005

1. The commenter was concerned with the destruction of wildlife habitat, increased traffic, and loss of hillsides. These comments are acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

61. Written Comments received from Valerie Johnson, dated March 22, 2005

1. The commenter indicated that she opposed the project recommendations. These comments are acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

62. Written Comments received from Mary Herr, dated March 22, 2005

1. The commenter would like to see the project become a park with a nature center where field trips with school children could occur to learn about river ecology. The commenter further stated that a nature center in the middle of town would make it easier for families to hike and experience nature. These comments are acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

2. The commenter believes that preserving the river should be a top priority as it is beautiful to drive by, hike, bike and walk along, it's free and requires little upkeep. These comments are acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

3. The commenter requested that the Newhall Ranch Road/Bouquet Canyon Road intersection not become as bad as the Valencia Boulevard/Bouquet Canyon Road intersection. Please see **Written Response 59**, above.

63. Written Comments received from Judith McClure, dated March 22, 2005

1. The commenter requested that the City Council reconsider project recommendations. The commenter was concerned with development allowed by Los Angeles County in addition to the air pollution and building in the floodplain. With respect to the reconsideration of project recommendations, this comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

With regard to air quality, although the Final EIR (concludes that the project would have significant and unavoidable air quality impacts due to mobile source emissions, which are under the control of the State of California, not the City of Santa Clarita, the regional study prepared by Environ International Corporation (see Final EIR **Appendix B**) concluded that the majority of the ozone and particulate matter air pollution in the Santa Clarita Valley is caused by transport of those pollutants into the Santa Clarita Valley from other parts of the South Coast Air Basin by weather conditions, and that the uses in the Santa Clarita Valley generate a relatively small portion of the Santa Clarita Valley's ozone and particulate matter pollution. The conclusions of this study have been confirmed, overall, by the study recently released by the South Coast Air Quality Management District entitled, *Santa Clarita Valley Subregional Analysis* (November 2004) located in Final EIR **Appendix B**. In addition, it should be noted that State and federal agencies are imposing new standards and regulations and instituting voluntary programs to help reduce emissions from diesel-powered on- and off-road vehicles, which, in turn, will help reduce ozone and particulate matter levels. Since the adoption of the Clean Air Act in 1970, air quality across the nation, and in the Los Angeles area (from which air pollution is transported to the Santa Clarita Valley), has improved and recently, in particular, violations of federal standards for ground-level ozone are down in California, according to air quality data compiled by the California Air Resources Board. See, for example, the air quality articles and information contained in Final EIR **Appendix K, Project Revisions and Additional Information**.

On or about January 12, 2005, FEMA issued a Conditional Letter of Map Revision to the City for the Riverpark project, by which FEMA conditionally approved revising the Flood Insurance Rate Map to acknowledge the flood protection that the project would provide. Based on the flood control improvements associated with the project, FEMA has determined that the proposed Riverpark project meets the minimum floodplain management criteria for the National Flood Insurance Program. For a copy of this letter, please see Final EIR **Appendix J, Hydrology**. Consequently, once the project is built, and the bank stabilization installed, FEMA will make a

final determination to revise the Flood Insurance Rate Map to exclude the proposed 15 residential units from the FEMA floodplain. Flood hazards (including 100-year flood) concerning the proposed project were address in detail in Draft EIR, Section 4.2, Flood, and in the hydrology technical reports in Draft EIR, Appendix 4.2, and Final EIR **Appendix G**.

2. The commenter stated that 1,000 new homes are too many in the heart of the City and that the project should be re-thought. These comments are acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

64. Written Comments received from Louise Hartwell, dated March 22, 2005

1. The commenter stated that she was a resident of the Emblem Tract and the project would bring more traffic to the gridlocked Bouquet Canyon Road. Please see the **Written Response 59,** above.

2. The commenter stated that she does not want the hill to be cut down or lowered. The project applicant has revised the project and will not be reducing the height of that portion of the ridge adjacent to the homes along Gavilan Drive in the Emblem neighborhood.

3. The comment addresses the adequacy of roadways in the Emblem Tract. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or EIR or raise any other CEQA issue, no further response can be provided.

   Additionally, the City of Santa Clarita has received letters from the Saugus Union School District and the William S. Hart Union High School District, each of which affirms that the School Facilities Agreement entered into between each District, respectively, and the Newhall Land and Farming Company would mitigate all impacts to school facilities, and that no further mitigation is required (see Final EIR **Appendix F**).

65. Written Comments received from Frank Ford, dated March 22, 2005

1. The commenter stated that he opposed the project as it is presently proposed. This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR raise any other CEQA issue, no further response can be provided.

2. The commenter requested that the project be taken out of the floodplain. Please see **Written Response 63**, above.

3. The commenter requested that the project should allow for a wildlife corridor to the Santa Clara River. The revised project includes the installation of the two guzzlers along the river to provide permanent water sources for wildlife will, together with the other project modifications, discussed above, enhance the use of the Santa Clara River as a wildlife movement corridor. (Revised Draft EIR Section 4.6, Biological Resources, pp. 4.6-44–47.) Enhancement of the aqueduct corridor under Newhall Ranch Road (where the road bridges over the aqueduct) will offer another potential wildlife movement corridor leading to the corridor in the river.

66. Written Comments received from Lucy Bats and Ed Fellon, dated March 22, 2005

1. The commenter stated that there are no creeks or rivers left and no space left for natural river ecology and asked the question when is development over development? This comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft EIR and/or Final EIR raise any other CEQA issue, no further response can be provided.

67. Written Comments received from Roger McClure, dated March 22, 2005

1. The commenter was concerned with development allowed by Los Angeles County in addition to building in the floodplain and urged reconsideration of the City Council's decision. Regarding development in the floodplain, please see **Written Response 63**, above. With respect to the reconsideration of project recommendations, this comment is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

68. Written Comments received from Carol Winkler, dated March 22, 2005

1. The commenter stated that the project would destroy natural habitat and cause unbearable traffic and pollution. This comment/opinion is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

2. The commenter stated that at the very least move the homes back from the floodplain. Regarding development in the floodplain, please see **Written Response 63**, above.

69. Written Comments received from Barbara Wampole, Friends of the Santa Clara River, dated March 22, 2005

1. The commenter attached a letter dated January 19, 2005 from the Friends of the Santa Clara River. Responses to this letter were previously prepared and can be found in responses to **Letter 48**.

70. Written Comments received from Marc Flores, dated March 22, 2005

1. The commenter noted that although the project would bring "quick cash" and short–term revenues, it would also bring long-term expenses in the form of a decreased quality of life that would affect neighborhoods including Bouquet Canyon and all of Santa Clarita Valley. This comment/opinion is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

2. The commenter stated that living in the Santa Clarita Valley is great but it is becoming more crowded and more unpleasant with additional new housing development. The commenter further noted that the residential, commercial and life quality equilibrium is in danger of being disrupted by the Riverpark development and urged denial of the entire project. Lastly, the commenter stated that even though adding new residents increases the tax base and revenue, the expense and bureaucracy needed to support the increased population cancels tax revenue increase. This comment/opinion is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

71. Written Comments received from Bruce McFarland, dated March 22, 2005

1. The commenter stated that enough was enough and urged the City Council to try and say no, and God will thank them. This comment/opinion is acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

72. Written Comments received from Ken Johnson, dated March 22, 2005

1. The commenter indicated that he opposed the project recommendations. These comments are acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

73. Written Comments received from Julian Krainin, dated March 22, 2005

1. The commenter stated that since moving to the Santa Clarita Valley over a year ago, he has begun to see the area decline in quality because of overbuilding, increased density and pollution. These comments are acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided.

74. Written Comments received from Katherine Squires, dated March 22, 2005

1. The commenter stated that she could not believe that the City Council was considering placing this development in the heart of the City. These comments are acknowledged and will be forwarded to the decision makers for their consideration. Because the commenter does not specifically comment on the Draft and/or Final EIR or raise any other CEQA issue, no further response can be provided. The commenter stated that traffic would be worse and schools would be overcrowded. With regard to traffic, not all traffic would be worse when compared to existing conditions, please see **Written Response 59**, above. With regard to schools, please see **Written Response 64**, above.