



## **SECTION 5.14**

### **Water Supply**

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## 5.14 WATER SUPPLY

This section describes the existing water purveyors in the Santa Clarita Valley and their service areas, and summarizes important characteristics applicable to the water service area in the Santa Clarita Valley, which includes the project site. The data found in the section provides an important background to understanding water supplies and demand in the Santa Clarita Valley generally, as well as understanding the proposed project's water demand and supplies.

As noted in Section 2.5, Incorporation by Reference, of this EIR, the *Draft and Final Program Environmental Impact Report for the City of Santa Clarita's Proposed One Valley One Vision General Plan* (September 2010 and May 2011, respectively and certified on June 14, 2011) in their entirety have been incorporated by reference for use in this EIR (being referred to as *General Plan EIR* in this section and throughout the EIR). These documents provide the first-tier CEQA analysis (refer to Section 2.6, CEQA Document Tiering); thus, the analysis in this section need not be repetitive of the previous analysis, and as such, will focus solely on the determination project-related impacts not previously analyzed. As noted in Section 2.5, the *General Plan EIR* concluded significant unavoidable water supply even with the incorporation of mitigation measures.

### 5.14.1 REGULATORY SETTING

#### ADOPTED GROUNDWATER MANAGEMENT PLAN

In 2001, as part of legislation authorizing Castaic Lake Water Agency (CLWA) to provide retail water service to individual municipal customers, Assembly Bill (AB) 134 included a requirement that CLWA prepare a groundwater management plan in accordance with the provisions of *Water Code* Section 10753.

CLWA adopted the Groundwater Management Plan (GWMP) on December 10, 2003. The GWMP contains four management objectives, or goals, for the Basin, including (1) development of an integrated surface water, groundwater and recycled water supply to meet existing and projected demands for municipal, agricultural and other water uses; (2) assessment of Basin conditions to determine a range of operational yield values that use local groundwater conjunctively with supplemental State Water Project (SWP) supplies and recycled water to avoid groundwater overdraft; (3) preservation of groundwater quality, and active characterization and resolution of groundwater contamination problems, including perchlorate; and (4) preservation of interrelated surface water resources, which includes managing groundwater in a manner that does not adversely impact surface and groundwater discharges or quality to downstream basins.

#### 2009 BASIN YIELD UPDATE

In April 2009, the purveyors in Santa Clarita Valley determined that an updated analysis was needed to further assess groundwater developed potential and possible augmentation of the groundwater operating plan, partly in preparation for the next UWMP in 2010, and in part because of recent events that are expected to impact the future reliability of the principal supplemental water supply for Santa Clarita Valley (i.e., from the State Water Project).



The primary objective of the updated analysis of groundwater basin yield in the Santa Clarita Valley was to evaluate the planned utilization of groundwater by the Santa Clarita Valley purveyors, while considering potential impacts on traditional supplemental water supplies from the State Water Project, and recognizing ongoing pumping by others for agricultural and other private water supply. The objective also included the sustainability of the groundwater resources and the physical ability to extract groundwater at desired rates.

## CITY OF SANTA CLARITA

### GENERAL PLAN

Applicable goals, objectives, and policies from the *General Plan Land Use, Conservation and Open Space*, and *Safety Elements* are listed below.

#### Environmentally Responsible Development

**Goal LU 7:** Environmentally responsible development through site planning, building design, waste reduction, and responsible stewardship of resources.

**Objective LU 7.2:** Ensure an adequate water supply to meet the demands of growth.

**Policy LU 7.2.2:** If water supplies are reduced from projected levels due to drought, emergency, or other unanticipated events, take appropriate steps to limit, reduce, or otherwise modify growth permitted by the General Plan in consultation with water districts to ensure adequate long-term supply for existing businesses and residents.

**Policy LU 7.2.3:** Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.

**Objective LU 7.4:** Promote water conservation through building and site design.

**Policy LU 7.4.1:** Require the use of drought tolerant landscaping, native California plant materials, and evapotranspiration (smart irrigation systems).

**Policy LU 7.4.2:** Require the use of low-flow fixtures in all non-residential development and residential development with five or more dwelling units, which may include but are not limited to water conserving shower heads, toilets, waterless urinals and motion-sensor faucets, and encourage use of such fixtures in building retrofits as appropriate.

#### Responsible Management of Environmental Systems

**Goal CO.1:** A balance between the social and economic needs of Santa Clarita Valley residents and protection of the natural environment, so that these needs can be met in the present and in the future.



**Objective CO. 1.1:** Protect the capacity of the natural “green” infrastructure to absorb and break down pollutants, cleanse air and water, and prevent flood and storm damage.

**Policy CO 1.1.1:** In making land use decisions, consider the complex, dynamic and interrelated ways that natural and human systems interact, such as the interactions between energy demand, water demand, air and water quality, and waste management.

**Objective CO 1.5:** Manage urban development and human-built systems to minimize harm to ecosystems, watersheds, and other natural systems, such as urban runoff treatment trains that infiltrate, treat and remove direct connections to impervious areas.

**Objective CO 2.3:** Conserve areas with significant mineral resources, and provide for extraction and processing of such resources in accordance with applicable laws and land use policies.

**Policy CO 2.3.5:** Promote remediation and restoration of mined land to a condition that supports beneficial uses, which may include but are not limited to recreational open space, habitat enhancement, groundwater recharge, or urban development.

#### Water Resources

**Goal CO 4:** An adequate supply of clean water to meet the needs of present and future residents and businesses, balanced with the needs of natural ecosystems.

**Objective CO 4.1:** Promote water conservation as a critical component of ensuring adequate water supply for Santa Clarita Valley residents and businesses.

**Policy CO 4.1.1:** In coordination with applicable water suppliers, adopt and implement a water conservation strategy for public and private development.

**Policy CO 4.1.2:** Provide examples of water conservation in landscaping through use of low water use landscaping in public spaces such as parks, landscaped medians and parkways, plazas, and around public buildings.

**Policy CO 4.1.3:** Require low water use landscaping in new residential subdivisions and other private development projects, including a reduction in the amount of turf-grass.

**Policy CO 4.1.4:** Provide informational materials to applicants and contractors on the Castaic Lake Water Agency’s Landscape Education Program, and/or other information on xeriscape, native California plants, and water-conserving irrigation techniques as materials become available.

**Policy CO 4.1.5:** Promote the use of low-flow and/or waterless plumbing fixtures and appliances in all new non-residential development and residential development of five or more dwelling units.



**Policy CO 4.1.6:** Support amendments to the building code that would promote upgrades to water and energy efficiency when issuing permits for renovations or additions to existing buildings.

**Policy CO 4.1.7:** Apply water conservation policies to all pending development projects, including approved tentative subdivision maps to the extent permitted by law. Where precluded from adding requirements by vested entitlements, encourage water conservation in construction and landscape design.

**Policy CO 4.1.8:** Upon the availability of non-potable water services, discourage and consider restrictions on the use of potable water for washing outdoor surfaces.

**Objective CO 4.2:** Work with water providers and other agencies to identify and implement programs to increase water supplies to meet the needs of future growth.

**Policy CO 4.2.2:** Require new development to provide the infrastructure needed for delivery of recycled water to the property for use in irrigation, even if the recycled water main delivery lines have not yet reached the site, where deemed appropriate by the reviewing authority.

**Policy CO 4.2.3:** Promote the installation of rainwater capture and gray water systems in new development for irrigation, where feasible and practicable.

**Policy CO 4.2.6:** Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.

**Goal CO 4:** An adequate supply of clean water to meet the needs of present and future residents and businesses, balanced with the needs of natural ecosystems.

**Objective CO 4.4:** Promote measures to enhance water quality by addressing sources of water pollution.

**Policy CO 4.4.2:** Support the cooperative efforts of property owners and appropriate agencies to eliminate perchlorate contamination on the Whittaker-Bermite property and eliminate the use of any industrial chemicals or wastes in a manner that threatens groundwater quality.

### Greenhouse Gas Reduction

**Goal CO 8:** Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.

**Objective CO 8.3:** Encourage the following green building and sustainable development practices on private development projects, to the extent reasonable and feasible.

**Policy CO 8.3.1:** Evaluate site plans proposed for new development based on energy efficiency pursuant to LEED (Leadership in Energy and Environmental



Design) standards for New Construction and Neighborhood Development, including the following:

- a) location efficiency;
- b) environmental preservation;
- c) compact, complete, and connected neighborhoods; and
- d) resource efficiency, including use of recycled materials and water.

**Policy CO 8.3.3:** Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions.

**Program Environmental Impact Report for the City of Santa Clarita's One Valley One Vision General Plan (General Plan EIR)**

The Draft Program Environmental Impact Report (September 2010) and Final Environmental Impact Report (May 2011, certified June 14, 2011) provide analysis and mitigation measures for water supply impacts associated with buildout of the General Plan. The mitigation measures are restated below and would be required as applicable, per a determination by the City of Santa Clarita.

Water Supply Demand and Groundwater Supply

MM3.13-1 (Policy LU 4.5.2)

Encourage the provision of usable open space that is accessible to employees and visitors, and discourage the provision of large areas of water-consuming landscaping that are not usable or accessible.

MM3.13-2 (Policy LU 4.5.3)

Promote the inclusion of state-of-the-art technology within business complexes for telecommunications, heating and cooling, water and energy conservation, and other similar design features.

MM3.13-3 (Policy LU 7.2.1)

Monitor growth, and coordinate with water districts as needed to ensure that long-range needs for potable and reclaimed water will be met.

MM3.13-4 (Policy LU 7.2.2)

If water supplies are reduced from projected levels due to drought, emergency, or other unanticipated events, take appropriate steps to limit, reduce, or otherwise modify growth permitted by the General Plan in consultation with water districts to ensure adequate long-term supply for existing businesses and residents.



MM3.13-5 (Policy LU 7.2.3)

Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.

MM3.13-6 (Policy LU 7.4.1)

Require the use of drought tolerant landscaping, native California plant materials, and evapotranspiration (smart) irrigation systems.

MM3.13-7 (Policy LU 7.4.2)

Require the use of low-flow fixtures in all non-residential development and residential development with five or more dwelling units, which may include but are not limited to water conserving shower heads, toilets, waterless urinals and motion-sensor faucets, and encourage use of such fixtures in building retrofits as appropriate.

MM3.13-8 (Policy CO 1.1.1)

In making land use decisions, consider the complex, dynamic, and interrelated ways that natural and human systems interact, such as the interactions between energy demand, water demand, air and water quality, and waste management.

MM3.13-9 (Policy CO 4.1.1)

In coordination with applicable water suppliers, adopt and implement a water conservation strategy for public and private development.

MM3.13-10 (Policy CO 4.1.2)

Provide examples of water conservation in landscaping through use of low water use landscaping in public spaces such as parks, landscaped medians and parkways, plazas, and around public buildings.

MM3.13-11 (Policy CO 4.1.3)

Require low water use landscaping in new residential subdivisions and other private development projects, including a reduction in the amount of turf-grass.

MM3.13-12 (Policy CO 4.1.4)

Provide informational materials to applicants and contractors on the Castaic Lake Water Agency's Landscape Education Program, and/or other information on xeriscape, native California plants, and water-conserving irrigation techniques as materials become available.

MM3.13-13 (Policy CO 4.1.5)

Promote the use of low-flow and/or waterless plumbing fixtures and appliances in all new non-residential development and residential development of five or more dwelling units.



MM3.13-14 (Policy CO 4.1.6)

Support amendments to the building code that would promote upgrades to water and energy efficiency when issuing permits for renovations or additions to existing buildings.

MM3.13-15 (Policy CO 4.1.7)

Apply water conservation policies to all pending development projects, including approved tentative subdivision maps to the extent permitted by law. Where precluded from adding requirements by vested entitlements, encourage water conservation in construction and landscape design.

MM3.13-16 (Policy CO 4.1.8)

Upon the availability of non-potable water services, discourage and consider restrictions on the use of potable water for washing outdoor surfaces.

MM3.13-17 (Policy CO 4.2.1)

In cooperation with the Sanitation District and other affected agencies, expand opportunities for use of recycled water for the purposes of landscape maintenance, construction, water recharge, and other uses as appropriate.

MM3.13-18 (Policy CO 4.2.2)

Require new development to provide the infrastructure needed for delivery of recycled water to the property for use in irrigation, even if the recycled water main delivery lines have not yet reached the site, where deemed appropriate by the reviewing authority.

MM3.13-19 (Policy CO 4.2.3)

Promote the installation of rainwater capture and gray water systems in new development for irrigation, where feasible and practicable.

MM3.13-20 (Policy CO 4.2.5)

Participate and cooperate with other agencies to complete, adopt, and implement an Integrated Regional Water Management Plan to build a diversified portfolio of water supply, water quality, and resource stewardship priorities for the Santa Clarita Valley.

MM3.13-21 (Policy CO 4.2.6)

Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.

MM3.13-22 (Policy CO 8.3.3)

Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions.





## **5.14.2 ENVIRONMENTAL SETTING**

### **WATER SERVICE**

#### **CASTAIC LAKE WATER AGENCY**

The CLWA is a public agency that serves an area of 195 square miles in Los Angeles and Ventura counties. CLWA is a water wholesaler that provides approximately one-half of the water for Santa Clarita households and businesses. CLWA operates two potable water treatment plants, storage facilities, and over 17 miles of transmission pipelines. CLWA supplements local groundwater supplies with SWP water from northern California. This water is treated and delivered to the local water retailers. The four retail purveyors served by CLWA are the Los Angeles County Waterworks District 36, Newhall County Water District (NCWD), CLWA Santa Clarita Water Division (SCWD), and Valencia Water Company (VWC).

CLWA also delivers highly treated recycled water from one of the two water reclamation plants in the Santa Clarita Valley owned by the Sanitation Districts of Los Angeles County, in order to meet non-potable water demands (golf courses and landscape irrigation, etc.).

In 2001, CLWA signed the Memorandum of Understanding Regarding Urban Water Conservation in California (MOU) on behalf of the CLWA service area, as recommended in the Amended 2000 UWMP. By signing the MOU, CLWA became a member of the California Urban Water Conservation Council (CUWCC) and pledged to implement all cost-effective Best Management Practices (BMPs) for water conservation. CLWA has implemented 13 of the 14 BMPs recommended by CUWCC (one BMP is currently under revision by CUWCC). CLWA has estimated that conservation measures within the service area can reduce total water demands by approximately ten percent.

#### **RETAIL WATER PURVEYORS**

Four retail water purveyors provide water service to most residents of the Santa Clarita Valley:

- The Los Angeles County Waterworks District 36 service area encompasses approximately 7,635 acres with 1,400 connections and includes the Hasley Canyon area and the unincorporated community of Val Verde. The district obtains its water supply from CLWA and from local groundwater.
- The Newhall County Water District (NCWD) service area includes portions of the City and unincorporated portions of Los Angeles County in the communities of Newhall, Canyon Country, Saugus, and Castaic with 9,600 connections. The district supplies water from local groundwater and CLWA imported water.
- CLWA Santa Clarita Water Division (SCWD) service area includes portions of the City of Santa Clarita and unincorporated portions of Los Angeles County in the communities of Canyon Country, Newhall, and Saugus with 28,700 connections. SCWD supplies water from local groundwater and CLWA imported water. SCWD is owned by CWLA, and its service area includes the project site. As a result, SCWD is the retail water purveyor for the project.



- The Valencia Water Company (VWC) service area includes a portion of the City of Santa Clarita and unincorporated portions of Los Angeles County in the communities of Castaic, Stevenson Ranch, and Valencia with 30,000. VWC supplies water from local groundwater; CLWA imported water, and recycled water.

As of 2008, the retail water purveyors served approximately 69,700 connections in the Santa Clarita Valley.<sup>1</sup>

## **WATER SUPPLY**

The current water supply for the Santa Clarita Valley is derived from five primary sources:

- Groundwater from the Alluvial Aquifer;
- Groundwater from the Saugus Formation;
- Imported SWP Water;
- Dry Year Groundwater Banking Programs; and
- Recycled Water.

The sources of water supply within CLWA's service area can be characterized as: (1) local supplies consisting of groundwater and recycled water; and (2) imported supplies that are transported via the SWP and consisting of SWP contract amounts and dry year supplies delivered from groundwater banking programs.

Potential future water sources include acquisition of additional imported water supplies, additional recycled water, desalination, storm water runoff, increased dry year Saugus pumping, and additional SWP reliability projects. Demand side management programs (conservation) is also considered a component of water supply resulting from efforts by CLWA and other retailers to reduce water demands on a long-term basis.

## **LOCAL WATER SUPPLIES**

### **Groundwater**

Groundwater is drawn from two aquifer systems within the Santa Clara River Valley East Sub-basin (Basin), one of the several sub-basins identified along the Santa Clara River in Los Angeles and Ventura counties. The Basin is approximately 22 miles long east to west and 13 miles wide. The shallow aquifer system is designated the Alluvial Aquifer and the deeper aquifer is designated the Saugus Formation. It is estimated that approximately 200,000 acre-feet (AF) of water is in storage in the Alluvial Aquifer and approximately 1.65 million AF of potentially usable groundwater is present from depths of 500 to 2,500 feet in the Saugus Formation. Neither aquifer system is in overdraft at the present time. The Basin has not been adjudicated and has not been identified as over drafted or projected to be over drafted by the Department of Water Resources.

Total pumpage from the Alluvial Aquifer in 2004 was approximately 33,800 AF, an increase of approximately 200 AF from 2003. Of the total Alluvial Aquifer pumpage in 2004, 56 percent (approximately 19,000 AF) was for municipal water supply, and the remaining 44 percent was

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<sup>1</sup> Vista Canyon Draft Environmental Impact Report, Impact Sciences, Inc., October 2010.



utilized for agricultural and other miscellaneous. Over the previous 20 years, total pumpage from the Alluvial Aquifer has ranged from a low of approximately 20,000 AFY in 1983 to slightly more than 43,000 AFY in 1999. The Alluvial Aquifer has a sustainable yield ranging from 30,000 to 40,000 AFY. The total annual groundwater production from the Alluvial Aquifer (urban and agricultural production) over the last 10 years has averaged approximately 35,000 AFY, approximately 10 percent higher than earlier estimates of the practical or perennial yield. However, there is no evidence of undesirable conditions that might be an indication of aquifer overdraft.

Total pumpage from the Saugus Formation in 2004 was 6,500 AF, an increase of approximately 2,300 AF from 2003. Of the total Saugus Formation pumpage in 2004, most (5,700 AF) was for municipal water supply, and the remainder (800 AF) was for agricultural and other miscellaneous uses. Groundwater pumpage from the Saugus Formation peaked in the early 1990s and the declined steadily; pumpage remained stable, at an average of approximately 4,800 AFY, since 1998. On a long-term average basis since the importation of SWP water, total pumpage from the Saugus Formation has ranged from a low of approximately 3,700 AFY in 1999 to a high of nearly 15,000 AFY in 1991; average pumpage from 1980 to present has been approximately 7,000 AFY. It is estimated that the Saugus Formation has a sustainable operational yield of 7,500 to 15,000 AFY, and that extraction can be increased on an infrequent basis to range from 15,000 to 35,000 AFY, without creating undesirable conditions (overdraft). However, the increase to 35,000 AFY would be temporary and would need to return to, or be reduced below, the historical range of 7,500 to 15,000 AFY once rainfall patterns returned to normal in order to avoid long-term adverse affects to the aquifer.

## **Recycled Water**

Wastewater that has been highly treated and disinfected can be reused for landscape irrigation and other purposes. It is not suitable for use as potable water. In 1993, CLWA completed a Reclaimed Water System Master Plan (Master Plan), to use recycled water as a reliable water source to meet some non-potable demand within Santa Clarita Valley.

Recycled water service was initiated in July 2003 in accordance with CLWA's Draft Reclaimed Water System Master Plan (2002). The amount of recycled water used for irrigation purposes, at a golf course and in roadway median strips, was approximately 310 AF in 2008. CLWA completed programmatic CEQA analysis in early 2007 for full implementation of the recycled water system as outlined in the Master Plan. CLWA has been preparing the design of the second phase of the Recycled Water Master Plan that will take water from the Saugus Water Reclamation plant and distribute it to identified users to the north, across the Santa Clara River and then to the west and the east, which will include service to Santa Clarita Central Park.

## **IMPORTED SUPPLIES**

### **State Water Project Overview**

In 1951, the California legislature authorized construction of a large state water storage and delivery system. Eight years later, in 1959, the legislature authorized the submission for voter approval of a \$1.75 billion general obligation bond issue to build the SWP system. The voters approved the measure, which enabled California Department of Water Resources (DWR) to commence construction of the SWP.



The DWR operates and manages the SWP facilities. The SWP is the largest state-built, multi-purpose water project in the country. The SWP was designed and built to deliver water, control floods, generate power, provide recreational opportunities, and enhance fish and wildlife habitats. SWP water supplies are used for both urban and agricultural uses throughout California. The SWP facilities consist of a complex system of dams, reservoirs, power plants, pumping plants, canals and aqueducts to deliver water.

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 a maximum annual allocation of SWP water, which is stated in Table A to the contract (Table A Amount, or allocation).

There are currently 29 SWP contractors with water supply contracts with DWR. A SWP contractor may annually request that DWR deliver water in the following year in any amount up to the SWP contractor's Table A Amount. The SWP contracts provide that in a year when DWR is unable to deliver the full amount of contractor requests, deliveries to contractors will be reduced so that total deliveries equal total available supply for that year. Some SWP contractors, including CLWA, historically have never requested delivery of their full annual amount because lower growth, other water supplies and water conservation efforts have held their demand below projections. Other SWP contractors historically have ordered their full Table A Amount nearly every year.

Existing long-term SWP water supply contracts called for the annual delivery of 4,103,651 acre-feet of Table A water by 1997 through SWP facilities, gradually increasing to a maximum of 4,172,686 acre-feet by 2020. Actual demand, however, has also not developed as projected, owing to circumstances, which have changed since the long-term contracts were signed in the 1960s. The changes include slower population growth, changes in local land use, local water conservation programs, and conjunctive-use programs. The most SWP Table A water delivered to date (2003) in any year was about 3.5 million acre-feet in 2000. The demands for SWP water are expected to increase as the population of California continues to increase.

### **5.14.3 SIGNIFICANCE THRESHOLD CRITERIA**

The *City of Santa Clarita Local CEQA Guidelines* (Resolution 05-38) adopted on April 26, 2005 and the Initial Study Environmental Checklist form in *CEQA Guidelines* Appendix G serve as the thresholds for determining the significance of impacts relating to water services. As such, a project would be considered to have a significant environmental impact if it would result in the following:

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be



reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

#### 5.14.4 PROJECT IMPACTS AND MITIGATION MEASURES

- **CONSTRUCTION AND OPERATION OF THE PROPOSED PROJECT COULD RESULT IN AN INCREASED DEMAND FOR WATER.**

**Level of Significance Before Analysis and Mitigation:** Potentially Significant Impact.

**Impact Analysis:** The proposed project is a rural equestrian-based community that involves the development of 99 single-family residential units within approximately 172.6 acres of lot area (187.3 total acres). The residential lots would range in size from approximately 0.7-acre to two or more acres. The on-site open space lots, exclusive of the 5-acre neighborhood park (that is assumed to be irrigated), total approximately 39 acres, and streets total approximately 17 acres. As such, approximately 56 acres of the project site are assumed not to be irrigated. For the purposes of this analysis, all residential lot areas, neighborhood park, and common areas are assumed to be 100 percent irrigated.

Table 5.14-1, Estimated Water Demand, summarizes the estimated water demand for the proposed project. Based on a water duty factor of one acre-foot per single-family residential unit, which includes indoor and outdoor water use on each residential lot, 99 single-family residential units would create a net water demand of approximately 99 acre-feet per year.<sup>2</sup> The Santa Clarita Water Division estimates that the irrigation rate for residential developments is approximately 1.8 AF per acre per year.<sup>3</sup> Therefore, conservatively assuming that all land besides the 56 acres of open space and streets is 100 percent irrigated (116 acres), irrigation would require approximately the proposed project would create a total water demand of 110.2 acre-feet per year.

It should be noted that the estimated water demand is not reflective of the anticipated water usage because the total acres for residential lots would be greater than 73.5 and the acres of irrigated land would be lower. Thus, the anticipated water demands for the proposed project would be less than conservative estimate provided.

**Table 5.14-1  
Estimated Water Demand**

Land Use Category	Amount	Water Duty Factor	Water Demand (AFY)
Single-family residential*	99 units	1.0 AFY per unit	99.0
Non-irrigated land (open space lots and on-site streets)	56 acres	0.0 AFY per acre	0.0
Irrigated land**	6.2 acres	1.8 AFY per acre	11.2
<b>Total</b>			<b>110.2</b>
*Includes indoor and outdoor water use.			
** Assuming 100 percent irrigation and a total of 109.8 acres of residential lots.			

<sup>2</sup> Written communication with David Lawrence, Director of Engineering, Santa Clarita Water Division on May 9, 2006.

<sup>3</sup> Ibid.





No water facilities or distribution lines currently exist on-site. According to the SCWD, the proposed project would require new water service facilities and additions to existing facilities (such as tank storage, pumping and related piping).<sup>4</sup> Therefore, the proposed project would be required to pay all applicable fees to finance the expansion costs necessary to provide water service distribution lines to the site.

The proposed project would create an increased water demand of 110.2 acre-feet per year, which represents approximately 0.19 percent of the available water supply in the Santa Clarita Valley. The SCWD has stated the agency has sufficient water supplies available to serve the proposed project and no new entitlements would be necessary.<sup>5</sup> As such, less than impacts would result in this regard.

The development potential of the proposed project is consistent with the *General Plan*, and has been accounted for in the associated Environmental Impact Report. It is important to note that the project is proposing 99 units, which is 130 units less than 229 dwelling units allowed under the *General Plan*'s land use designations for the project site.

In summary, there would be sufficient water supply to meet the project's water demand under an average/normal water year, single dry year, or multiple dry years. In addition, the proposed project would include development of a distribution system that would provide sufficient capacity for domestic and fire flow requirements. However, Mitigation Measures WS-1 through WS-6 are recommended in order to ensure impacts to water supply and distribution remain at less than significant levels. Therefore, with implementation of the Mitigation Measures WS-1 through WS-5 and compliance with the *Municipal Code* and *General Plan* goals and policies, impacts on a project-specific basis would be less than significant.

***Mitigation Measures:***

- WS-1 Landscape irrigation plans shall include drought-tolerant and native plants (consistent with General Plan EIR Mitigation Measures 3.13-6 and 3.13-11).
- WS-2 Landscape irrigation plans shall incorporate low-water-use devices (such as ET controllers, drip irrigation, etc.), to the extent feasible (consistent with General Plan EIR Mitigation Measures 3.13-6 and 3.13-11).
- WS-3 Water conservation measures as required by the State of California shall be incorporated into all irrigation systems.
- WS-4 The project applicant shall require the installation of low-flow fixtures in all residential units, which may include but are not limited to water conserving shower heads, toilets, waterless urinals and motion-sensor faucets, and encourage use of such fixtures in building retrofits as appropriate (consistent with General Plan EIR Mitigation Measures 3.13-7 and 3.13-13).
- WS-5 Prior to commencement of use, all uses of recycled water shall be reviewed and approved by the State of California Health and Welfare Agency, Department of Health Services.

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<sup>4</sup> Ibid.

<sup>5</sup> Ibid.



- WS-6 Prior to the issuance of building permits, the project applicant shall finance the expansion costs of water service extension to the subdivision through the payment of connection fees to the appropriate water agency(ies).

**Level of Significance After Analysis and Mitigation:** Less Than Significant Impact.

## 5.14.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD INCREASE THE DEMAND FOR WATER IN THE SANTA CLARITA VALLEY.**

**Level of Significance Before Analysis and Mitigation:** Potentially Significant Impact.

**Impact Analysis:** The following discussion focuses on the cumulative impacts to water availability associated with current and future projects in the City and in the general vicinity of the project site, which are listed in Section 4.0, Basis of Cumulative Analysis. The SCWD's UWMP takes into account the future water demands of proposed development projects based on housing, population and employment growth forecasts for the City. Adequate water supply would be available in normal and dry years to serve the proposed project. Water availability for related cumulative projects would be determined on a case-by-case basis. In accordance with SB 610, a water supply assessment would be required for projects exceeding established development thresholds. The SCWD, or applicable water district, would review site-specific development plans to determine the impact on existing water mains. Individual projects would be required to pay the cost to relocate existing water mains impacted by new development. The development potential of the proposed project and related cumulative projects are consistent with the *General Plan*, and has been accounted for in the associated Environmental Impact Report. Thus, the proposed project and related cumulative projects would not generate new or additional impacts beyond those already identified in the *General Plan EIR*. In conclusion, with implementation of project-specific mitigation measures, determined by City staff as part of the plan review, and General Plan EIR mitigation measures, as applicable, and compliance with the *Municipal Code* and *General Plan* goals and policies, cumulative impacts would be less than significant.

**Mitigation Measures:** Refer to Mitigation Measures WS-1 through WS-6 and General Plan EIR Mitigation Measures 3.13-1 to 3.13-22. No additional mitigation measures are required.

**Level of Significance After Analysis and Mitigation:** Less Than Significant Impact.

## 5.14.6 SIGNIFICANT UNAVOIDABLE IMPACTS

All potentially significant impacts related to water service can be reduced to a level less than significant with implementation of applicable General Plan EIR and project-specific mitigation measures, and compliance with the UDC and General Plan goals and policies. As such, implementation of the proposed project would not result in any significant unavoidable water services impacts.



## 5.14.7 SOURCES CITED

*Santa Clarita General Plan*, adopted June 14, 2011.

*Draft Program Environmental Impact Report for the City of Santa Clarita's Proposed One Valley One Vision General Plan*, Impact Sciences, Inc., September 2010.

*Final Program Environmental Impact Report for the City of Santa Clarita's Proposed One Valley One Vision General Plan*, Impact Sciences, Inc., dated May 2011, certified June 14, 2011.

Written communication with David Lawrence, Director of Engineering, Santa Clarita Water Division on May 9, 2006.

*Vista Canyon Draft Environmental Impact Report*, Impact Sciences, Inc., October 2010.





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