

SUMMARY

Upon project buildout, assuming no solid waste from the proposed project would be recycled (a worst-case scenario), the uses proposed in the master plan and the 54 condominium units would generate approximately 647 pounds of solid waste per day. This is equivalent to approximately 118 tons per year. Although these project components would generate approximately 118 tons of waste per year, it can be assumed that the project will meet the current City landfill diversion rate of 50 percent and, therefore, generate 59 tons per year. The master plan and 54 condominium unit project components may also generate household-type hazardous wastes. Other project components, including the extension of Dockweiler Drive and Deputy Jake Drive and dedication of 20.5 acres of vacant land for future parkland/open space purposes would not generate solid waste or hazardous waste. Additionally, installation of a 5.0-million-gallon water tank would not generate solid or hazardous waste. Cumulative development within the Santa Clarita Valley area would generate 393,455 tons per year of solid waste, as well as hazardous waste. The project's 118 tons per year (without recycling) would represent 0.03 percent of this valley-wide total. Land suitable for landfill development or expansion is quantitatively finite and limited due to numerous environmental, regulatory, and political constraints. This is not to say, though, that alternative solid waste disposal technologies that could substantially reduce landfill disposal will not be developed and legislatively approved in the future; given the market forces that drive the solid waste industry, it seems reasonable to assume they will. However, until other disposal alternatives that will be adequate to serve existing and future uses for the foreseeable future are found and because landfill space is a finite resource project, the potential project and cumulative solid and hazardous waste impacts are considered unavoidably significant.

EXISTING CONDITIONS

Introduction

The City of Santa Clarita has the responsibility to develop plans and strategies to manage solid waste generated within its jurisdiction. The Los Angeles County Department of Public Works (LACDPW) has the responsibility to develop plans and strategies to manage and coordinate the solid waste generated (including hazardous waste) in the County unincorporated areas and address the disposal needs of Los Angeles County as a whole. In the past, solid waste was simply collected and disposed of at landfills in the local vicinity. More recently, many jurisdictions—such as the County of Los Angeles—are stating that existing local landfill space may reach capacity in the very near future. Given recent landfill expansions and the proposed hauling of waste by rail to remote landfill locations, the City of Santa Clarita does not agree with these conclusions.

The City's methods to reduce the amount of waste disposed of in landfills include: residential curbside co-mingled recyclable materials collection (proposed), separation and recycling, commercial, and industrial recycling, and waste prevention education. The technology and economics for these options are changing on an almost daily basis based on the cost of virgin materials and landfill tipping costs. As an example, twenty years ago few people would have envisioned the amount of recycling that occurs today.

This EIR analyzes the solid waste impacts of the project and recommends known means to reduce the amount of solid waste going to landfills. Prediction, however, of the type of disposal and recycling options that will be available for on-site application in the future is difficult and speculative due to the changing dynamics of the field.

Specifically, this EIR section compares the solid waste generation of the proposed project with the capacity of the existing landfills operating within Los Angeles County that accept waste from municipalities and unincorporated areas. This is considered a worst-case scenario as it assumes no development of new landfills, no implementation of other disposal options and no disposal at landfills outside of Los Angeles County.

Information in this section was derived from the year 2000 annual updates to the City of Santa Clarita Source Reduction and Recycling Element (SRRE) (July 22, 1991), the City of Santa Clarita Household Hazardous Waste Element (HHWE) (August 2, 1991), and the City of Santa Clarita Non-disposal Facility Element (April 15, 1994), as well as Approaching an Integrated Solid Waste Management System for Los Angeles County, (May 2, 1997), the City of Santa Clarita Annual AB 939 Report for 2000 (August 2001), and the City of Santa Clarita Waste Generation Base Year Study for Reporting Year 2000 (March 2002).

Currently, most solid waste is disposed of in local landfills. Since 1997, the City has diverted from 44 to 51 percent through recycling efforts, in an increasing effort to meet the provisions of the California Integrated Waste Management Act (AB 939) to increase the diversion to 50 percent by year 2000 (discussed below). This diversion will increase the life expectancy of landfills, but not eliminate the need for new landfill space. As growth occurs throughout southern California, new landfill space will need to be developed and maximized and/or other waste disposal alternatives will need to be implemented.

It is extremely speculative to identify specific options that will be implemented to dispose of solid waste twenty, fifty, or one hundred years from now. The City of Santa Clarita SRRE notes that regional competition for ever-scarce landfill space makes planning uncertain. New capacity is highly problematic, reflecting a series of individual siting decisions as opposed to a comprehensive strategic choice. The City has adopted strategies to address solid waste needs:

- Aggressive implementation of diversion programs, including source reduction recycling efforts, composting and waste education prevention efforts;
- Dependence on Chiquita Canyon Landfill through 2019;
- Use of alternative regional landfills, including Sunshine Canyon, Puente Hills and Antelope Valley Landfills;
- Use of rail facilities as soon as these become available, to secure a more stable and dependable access to disposal capacity; and
- Construction of a Materials Recovery Facility.

Since the adoption of the City's SRRE and HHWE, there have been substantial changes in the methods of waste reduction and recycling. "Since the SRREs were prepared in the early 1990s, technologies have improved, new markets have developed, existing markets have expanded, and the overall economics of waste diversion are increasingly positive. The County believes that addition of new landfill capacity in the County promises to maintain competition for disposal, and thus will keep disposal costs down. However, inexpensive disposal is only one factor to consider in developing an integrated solid waste management program; source reduction, recycling, collection, transfer and composting are also factors to be considered. Landfills often have hidden (and potentially huge) costs associated with their operation, especially if environmental cleanup or risks to human health are involved. On the other hand, diversion has no such future costs and provides the current benefits of local jobs and raw materials for new or existing industries."¹

Plans and Policies for Solid Waste Disposal

A consequence of California's growth has been a substantial increase in solid waste generation, which has necessitated the need for additional landfill space. Landfills are also seen as undesirable land uses; consequently, approvals for new landfills and expansions of existing landfills have proven very difficult to obtain, often taking up to ten years. This situation has focused increased public attention on what is believed to be decreasing landfill capacity. In 1989, legislation in the State of California required cities

¹ Approaching an Integrated Solid Waste Management System for Los Angeles County, California, May 2, 1997, GBB, Solid Waste Management Consultants.

and counties to reduce the amount of solid wastes entering existing landfills, recycling, reuse and waste prevention efforts, pursuant to the California Integrated Waste Management Act (AB 939). This legislation established reduction mandates of at least 50 percent reduction by year 2000.

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) requires every city and county in the state to prepare a SRRE to its Solid Waste Management Plan that identifies how each jurisdiction will meet the mandatory state waste diversion goals of 25 percent by the year 1995 and 50 percent by the year 2000. The purpose of AB 939 is to “reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible.” Noncompliance with the goals and timelines set forth within AB 939 can be severe, as the bill imposes fines up to \$10,000 per day on jurisdictions (cities and counties) not meeting these recycling and planning goals.

The term “integrated waste management” refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. AB 939 has established waste management hierarchy as follows:

- Source Reduction
- Recycling
- Composting
- Transformation
- Disposal

California Integrated Waste Management Board Model Ordinance

Subsequent to the Integrated Waste Management Act, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Re-use and Recycling Access Act of 1991 (Section 42900-42911 of the Public Resources Code) directs the California Integrated Waste Management Board (CIWMB) to draft a “model ordinance” relating to adequate areas for collecting and loading recyclable materials in development projects. If by September 1, 1994, a local agency did not adopt its own ordinance based on the CIWMB model, the CIWMB model took effect for that local agency. The City of Santa Clarita chose to use the CIWMB Model Ordinance by adopting City Resolution No. 93-97 in July 1993.

The Model Ordinance (provided in **Appendix 5.11.2, Solid Waste Disposal Data**) is used by the City as the basis for imposing recycling conditions on new development projects and on existing projects that

add 30 percent or more to their existing floor area. The Model Ordinance requires that any new development project² for which an application is submitted on or after September 1, 1994, include "adequate, accessible, and convenient areas for collecting and loading recyclable materials." For subdivisions of single-family detached homes, recycling areas are required to serve only the needs of the homes within that subdivision. The Model Ordinance also requires recycling areas to be

- compatible with nearby structures;
- secured and protected against adverse environmental conditions;
- clearly marked, and adequate in capacity, number, and distribution;
- in conformance with local building code requirements for garbage collection access and clearance;
- designed, placed and maintained to protect adjacent developments and transportation corridors from adverse impacts, such as noise, odors, vectors, or glare;
- in compliance with federal, state, or local laws relating to fire, building, access, transportation, circulation, or safety; and
- convenient for persons who deposit, collect, and load the materials.

City of Santa Clarita Source Reduction and Recycling Element

The City of Santa Clarita Source Reduction and Recycling Element (SRRE) was prepared in response to AB 939. It describes policies and programs that will be implemented by the City to achieve the state's mandates of 25 and 50 percent waste disposal reductions by the years 1995 and 2000, respectively. Per the Integrated Waste Management Act of 1989, the SRRE projects disposal capacity needs for a 15-year period. The current SRRE 15-year period commenced in 2006. The City of Santa Clarita is in full compliance with the SRRE with regard to preparation of plans and policies.

City of Santa Clarita Household Hazardous Waste Element (HHWE)

AB 939 requires every city and county within the state to prepare an Household Hazardous Waste Element (HHWE) and to provide for management of household hazardous waste generated by the residents within its jurisdiction. The City household hazardous waste management program, consisting of collection and public education/information services, has been formulated to serve residents throughout the City in a convenient and cost-effective manner. In addition to reducing the amount of

² The ordinance defines a development project as "a project for which a building permit is required for a commercial, industrial, or institutional building, marina, or residential building having five or more living units, where solid waste is collected and loaded and any residential project where solid waste is collected and loaded in a location serving five or more living units."

waste that might otherwise be sent to a landfill as required by AB 939, these programs are important facets in the City's effort to clean up the solid waste stream. The City of Santa Clarita adopted its HHWE in 1991.

City of Santa Clarita Non-Disposal Facility Element (NDFE)

AB 939 requires every city and county within the state to prepare and adopt a Non-Disposal Facility Element (NDFE) identifying all existing, expansions of existing, and proposed new non-disposal facilities that will be needed to implement the local jurisdiction's SRRE. The City's NDFE identifies one proposed and one existing materials recovery facilities/transfer station that the City intends to utilize to implement its SRRE and meet the diversion requirements of AB 939. In addition, the City's NDFE also identifies the utilization of the Chiquita Canyon Landfill for diversion of yard trimmings.

City of Santa Clarita Beyond 50 Percent Waste Reduction by 2000

In July 1996 the City Council adopted the Beyond 50 Percent Waste Reduction by 2000 Report. The report identifies the current state of waste management service provided to residents. The report found that a franchise arrangement for Citywide refuse collection remains the most cost-effective alternative for the City to comply with the established waste reduction goal of 50 percent by year 2000.

Approaching an Integrated Solid Waste Management System for Los Angeles County

This report identifies issues regarding waste generation, waste management, and assumptions used in the Draft Countywide Siting Element.

Los Angeles Countywide Siting Element

In 1997, the County of Los Angeles prepared a Countywide siting element that estimates the amount of solid wastes generated in the County and proposes various diversion and alternate disposal options. The City of Santa Clarita disagrees with some of the findings and conclusions of the Los Angeles Countywide Siting Element.

City of Santa Clarita Integrated Solid Waste Management Program

The City of Santa Clarita has established a comprehensive Integrated Waste Management Program, which incorporates the hierarchy of preferred solid waste management practices as established by AB 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 include:

- Curbside residential and commercial recycling;
- Curbside Christmas tree recycling;
- Educational outreach;
- Yard trimming recycling;
- Certified oil recycling collection centers;
- Participation in the Household Hazardous Waste Program;
- Home Composting Program;
- City Facilities Recycling Program;
- City Facilities Procurement Policy;
- Door-to-door Oil and Filter Recycling; and
- Earth Month and Earth Day Activities.

Existing Solid Waste Generation

In 2000, approximately 307,465 tons of solid waste was generated by uses in the City of Santa Clarita.³ With implementation of the waste diversion measures mentioned previously, 134,632 tons, 43.8 percent, were diverted from landfills.⁴

Statewide Solid Waste Generation

In the State of California, 66.1 million tons of solid waste was generated in 2000.⁵ Some of the solid waste stream was diverted from landfills through various source reduction, recycling, and re-use efforts. The diversion rate in the state was 42 percent in 2000.⁶

Site-Specific Solid Waste Generation

Currently, the project site is occupied by the existing Master's College campus, undeveloped land and the improved Creekview Park. The campus is currently developed with one- and two-story classrooms, administration buildings, dormitories, and support facilities. There are more than 30 buildings totaling

³ City of Santa Clarita Waste Generation Base Year Study for Reporting Year 2000, p. E-3, March 22, 2002, SCS Engineers.

⁴ Ibid.

⁵ California Integrated Waste Management Board website, May 2004. www.ciwmb.ca.gov.

⁶ Ibid.

267,405 square feet. These buildings are scattered throughout the northern half of the project site. The remainder of the built campus includes 996 parking stalls, athletic fields, and open space. Based on institutional generation rates,⁷ 341.61 tons of solid waste is generated on the campus annually.

Existing Solid Waste Collection and Disposal in the City of Santa Clarita

Solid Waste Collection

Nine private haulers are franchised by the City of Santa Clarita Department of Public Works to collect residential, commercial, and industrial waste in the City of Santa Clarita. These haulers operate under three franchise systems—for commercial, residential uses, and temporary bins and roll-off box. Under the residential franchise, the three haulers provide semi-and fully automated weekly service for recycled materials, trash and yard trimmings. When collected, the waste may be taken to any landfill that is willing to accept it and that provides the greatest economic advantages to the hauler, based on location and disposal fees. At this time, the City exports the majority of its wastes to the Chiquita Canyon Landfill.⁸

Currently, most solid waste collected within Los Angeles County by private haulers is disposed of within the County. However, this is not to say with absolute certainty that independent solid waste haulers do not or would not take solid wastes over the County line. Landfills in the California desert, which would receive Los Angeles area waste by rail car, are currently in the permit process. Inter-county transfer of solid waste may occur in the near future if landfills outside of Los Angeles County provide greater economic advantages to haulers or if landfills within the County reach capacity. The US Supreme Court has ruled that jurisdictional solid waste disposal restrictions infringe on a landfill operator's ability to actively participate in interstate commerce.⁹ In that case, the court ruled that the City of Philadelphia could not prevent the State of New Jersey from bringing solid waste to Philadelphia for disposal.

Solid Waste Disposal

Table 5.11.2-1, Existing Landfill Capacity and Regional Needs Analysis for Los Angeles County, identifies the anticipated remaining capacity and anticipated remaining years of operation of each

⁷ California Integrated Waste Management Board. Estimated Solid Waste Generation Rates. <http://www.ciwmb.ca.gov/WasteChar/WasteGenRates>. Accessed on January 24, 2007.

⁸ Telephone communication with Richard Ledesma, Recycling Market Development Zone Administrator, Los Angeles County Department of Public Works, January 23, 2007.

⁹ Philadelphia vs. New Jersey, 98 Supreme Court 2531, 1978.

landfill, while **Figure 5.11.2-1, Locations of Major Los Angeles County Landfill Sites**, illustrates the locations of Los Angeles County landfills in relation to the project site.¹⁰

Recent expansions at the Chiquita Canyon, Antelope Valley, Lancaster, and Puente Hills Landfills are reflected in **Table 5.11.2-1**. A number of landfills in **Table 5.11.2-1** have an anticipated life expectancy that extends beyond 2017, which is the end of the current 15-year planning period based on the most recent report, the Los Angeles County Integrated Waste Management Plan, 2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element (published February 2004). For example, the Lancaster Landfill was approved for expansion to extend the life of this landfill to 2030,¹¹ and the Burbank, Chiquita Canyon, Pebbly Beach, San Clemente, Scholl and Whittier (Savage Canyon) Landfills are permitted until 2054, 2019, 2033, 2032, 2019, and 2025 respectively.¹²

The landfills in **Table 5.11.2-1** are classified as major landfills, which are defined as those facilities that receive more than 50,000 tons of solid waste per year. Additionally, these landfills are classified as Class III since they are permitted to accept only non-hazardous wastes. As shown in **Table 5.11.2-1**, with the approval of the Antelope Valley, Bradley, Chiquita, Lancaster, and Puente Hills Landfills expansions, Los Angeles County's landfills have adequate capacity to service the existing population and planned growth until the year 2017. However, capacity will extend beyond the year 2017, as noted above, particularly when combined with other events that have expanded landfill capacity within the County. This includes recent agreements between Orange County and Waste Management, Inc. (WMI), which diverts waste (168,000 tons per year), from San Diego County that was imported into Los Angeles County. This waste now goes to Orange County instead of Los Angeles County. Also, an agreement between Orange County and Taormina Industries, which mainly serves Los Angeles County, calls for 2,000 tons of solid waste per day to be diverted to Orange County landfills.¹³ After that time, the daily volume of solid waste generated would exceed the volumes that these landfills are permitted to accept unless new landfills or other disposal alternatives are approved.

As with the solid waste haulers, these landfills operate in a free-enterprise system. Their operating expenses and profits are obtained by collecting disposal fees from the haulers on a per ton basis. The

¹⁰ Table 5.11.2-1 is based on the Los Angeles County Department of Public Works, *Los Angeles County Integrated Waste Management Plan, 2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element*, February 2004.

¹¹ Telecommunication with Kay Krumwied, Lancaster Landfill, December 4, 2002. A life expectancy to 2030 assumes the acceptance of the maximum daily tonnage of 1,700 tons of solid waste.

¹² California Integrated Waste Management Board website, July 30, 2004.

¹³ *Approaching an Integrated Solid Waste Management System for Los Angeles County, California*, May 2, 1997, GBB, Solid Waste Management Consultants.

capacities of the landfills are regulated for the most part through the amount of solid waste that each particular facility is permitted to collect per day and in their total capacity.

Solid wastes collected from the Santa Clarita Valley area primarily go to the Chiquita Canyon Landfill (located immediately to the north and west of the project site), and/or to the Sunshine Canyon Landfill located in Sylmar, while other more distant landfills may also receive solid wastes from the area. For instance, the Antelope Valley Landfill in Palmdale, Bradley West Landfill in Sun Valley, Lancaster Landfill in Lancaster, and the Simi Valley Landfill in Simi Valley could all conceivably accept waste from the project area.

PROJECT IMPACTS

The project would generate solid waste during construction and operation. Where the solid wastes are disposed of and how they are recycled are driven by economics and adopted City of Santa Clarita and state regulations. Furthermore, the amount of solid waste entering landfills versus the amount generated would be based on a number of variables. These include market demand for recyclables (fluctuations in prices for recyclables will affect willingness to recycle certain materials), product packaging, purchase of reusable products (e.g., cloth diapers), disposal alternatives (incineration within co-generation plants), as well as recycling regulations.

Significance Threshold Criteria

According to the City of Santa Clarita Environmental Guidelines, a project would have a significant effect on the environment if it would

- be served by a landfill with insufficient capacity to accommodate the project's solid waste disposal need.

As solid waste collection service and landfill capacity already exist in the project area, the City's Environmental Guidelines will be used as significance threshold criteria. Therefore, for the purpose of this EIR, a project would cause a significant solid waste (including hazardous waste) impact if it does not implement measures to reduce the amount of solid waste entering landfills in accordance with state, county, and local standards and/or if future capacity at existing landfills would be inadequate to serve the project.

Table 5.11.2-1
Existing Landfill Capacity and Regional Needs Analysis for Los Angeles County

Year	Waste Generation Rate	Percent Diversion	Total Disposal Need	Maximum Daily Transformation Capacity	Class III Landfill Disposal Need	1	2	3	4	5	6	7	8	9	10	11	12	13	Class III Landfill Daily Disposal Capacity Shortfall (Excess)	
						EXISTING LANDFILLS														
						Antelope Valley	Bradley	R Burbank ⁶	R Calabasas	Chiquita ⁶	Lancaster ⁷	Pebblv Beach ⁶	L Puente Hills	R San Clemente ⁶	R Scholl ⁶	Sunshine	Whittier ⁶	Mesquite ⁶		
	Expected Daily Tonnage 6 Day Average (tpd-6)														(tpd-6)					
(tpd-6)	(tpd-6)	(tpd-6)	Remaining Permitted Landfill Capacity at Year's End (Million Tons)																	
2002	73,866	50.00%	36,933			847	2,245	128	1,041	4,681	864	14.3	11,761	2.3	1,194	5,714	269			
2003	74,422	50.00%	37,211	2,069	35,142	9.2	1.1	3.5	11.0	17.2	13.8	0.102	3.1	0.013	8.2	8.1	4.8		1,635	
						1,800	1,800	129	1,049	5,000	1,700	14.4	12,000 E	2.3	1,203	6,000	271			
2004	75,217	50.00%	37,609	2,069	35,539	8.6	0.6	3.5	10.7	15.7	13.3	0.098	40.6	0.012	7.8	6.2	4.8		(3,896)	
						1,800	1,500	131	1,060	5,000	1,700	14.5	13,200	2.4	1,216	11,000 E	274			
2005	76,798	50.00%	38,399	2,069	36,330	8.0	0.1	3.4	10.3	14.1	12.8	0.093	36.5	0.011	7.4	75.8	4.7		(3,662)	
						1,800	2,000 E	134	1,082	5,000	1,700	14.8	13,200	2.4	1,242	11,000	280			
2006	78,944	50.00%	39,472	2,069	37,403	7.5	3.2	3.4	10.0	12.6	12.3	0.088	32.3	0.011	7.1	72.4	4.6		(5,666)	
						1,800	5,000	137	1,112	5,000	1,700	15.2	13,200	2.5	1,277	11,000	288			
2007	81,099	50.00%	40,550	2,069	38,480	6.9	1.7	3.3	9.7	11.0	11.7	0.084	28.2	0.010	6.7	68.9	4.5		(4,666)	
						1,800	5,000	141	1,143	5,000	1,700	15.7	13,200	2.5	1,311	11,000	296			
2008	83,351	50.00%	41,675	2,069	39,606	6.4	C	3.3	9.3	9.4	11.2	0.079	24.1	0.009	6.3	65.5	4.4		1,379	
						1,800		145	1,175	5,000	1,700	16.1	13,200	2.6	1,348	11,000	304			
2009	85,470	50.00%	42,735	2,069	40,666	5.8		3.2	8.9	7.9	10.7	0.074	20.0	0.0083	5.8	62.1	4.3		2,363	
						1,800		149	1,204	5,000	1,700	16.5	13,200	2.7	1,382	11,000	312			
2010	87,522	50.00%	43,761	2,069	41,692	5.2		3.2	8.6	6.3	10.1	0.069	15.9	0.074	5.4	58.6	4.2		3,315	
						1,800		152	1,233	5,000	1,700	16.9	13,200	2.7	1,415	11,000	319			
2011	89,614	50.00%	44,807	2,069	42,738	4.7		3.2	8.2	4.8	9.6	0.063	11.7	0.0066	5.0	55.2	4.1		(15,714)	
						1,800		156	1,263	5,000	1,700	17.3	13,200	2.8	1,449	11,000	327	20,000		
2012	91,623	50.00%	45,811	2,069	43,742	4.1		3.1	7.8	3.2	9.1	0.058	7.6	0.0054	4.5	51.8	4.0	98.9	(14,782)	
						1,800		159	1,291	5,000	1,700	17.7	13,200	2.9	1,482	11,000	334	20,000		
2013	93,589	50.00%	46,795	2,069	44,726	3.5		3.1	7.4	1.6	8.5	0.052	3.5	0.0048	4.0	48.3	3.9	97.7	(13,869)	
						1,800		163	1,319	5,000	1,700	18.1	13,200	2.9	1,513	11,000	341	20,000		
2014	95,838	50.00%	47,919	2,069	45,850	3.0		3.0	7.0	0.1	8.0	0.047	C	0.0039	3.6	44.9	3.8	96.6	5,375	
						1,800		167	1,350	C	1,700	18.5		3.0	1,550	11,000	350	20,000		
2015	98,073	50.00%	49,036	2,069	46,967	2.4		3.0	6.5		7.5	0.041		0.0029	3.1	41.5	3.7	95.5	6,412	
						1,800		163	1,319		1,700	18.1		2.9	1,5133	11,000	341	20,000		
2016	100,318	50.00%	50,159	2,069	48,090	1.9		2.9	6.1		7.0	0.035		0.0020	2.6	38.0	3.6	94.4	7,454	
						1,800		174	1,414		1,700	19.4		3.1	1,622	11,000	366	20,000		
2017	102,300	50.00%	51,150	2,069	49,081	1.3		2.8	5.7		6.4	0.029		0.0011	2.1	34.6	3.5	93.3	8,374	
						1,800		178	1,442		1,700	19.7		3.2	1,654	11,000	373	20,000		
						0.7		2.8	5.2		5.9	0.023		0.0001	1.6	31.2	3.4	92.2		

ASSUMPTIONS:

- ¹ The Waste Generation Rate (excluding the inert waste being handled at permitted unclassified landfills) was estimated using the CIWMB’s Adjustment Methodology, utilizing population projection available from State Department of Transportation, and employment and taxable sales projections available from UCLA.
- ² Diversion Rate is 50 percent for years 2002 through 2017.
- ³ Expected Daily Tonnage Rates are based on permitted daily capacity for the Antelope Valley, Chiquita, Lancaster, Puente Hills, and Sunshine Landfills. The expected daily tonnage rate for Burbank, Calabasas, Pebbly Beach, San Clemente, Scholl, and Whittier (Savage) Landfills are based on the average daily tonnages for the period of 1/1/02 to 12/31/02.
- ⁴ Expected Daily Tonnage Rate for Bradley Landfill Expansion is based on the historical use of this landfill.
- ⁵ “tpd-6”: tons per day, 6 day per week average.
- ⁶ Anticipated closures per CIWMB website, <http://www.ciwmb.ca.gov/swis>, accessed July 30, 2004: Burbank-2054; Chiquita-2019; Pebbly Beach-2033; San Clemente-2032; Scholl-2019; Whittier-2025.
- ⁷ Anticipated closure 2030, per telecommunication with Kay Krumwied, Lancaster Landfill, December 4, 2002.
- ⁸ Anticipated beginning of operations, per conversation with Theresa Dodge, Sanitation Districts of Los Angeles County, April 30, 2008.

LEGEND:

- C Closure due to exhausted capacity
- E Expansion becomes effective
- L Does not accept waste from the City of Los Angeles and Orange County
- R Restricted Wasteshed
- * Includes additional 2,567 tpd-6 of capacity due to agreements between Orange County and private companies which divert 2,567 tpd-6 towards Orange County landfills
- CIWMB California Integrated Waste Management Board
- Source: Los Angeles County Department of Public Works, Los Angeles County Countywide Integrated Waste Management Plan 2002 Annual Report – Part II: Siting Element Assessment, Appendix E-2.7, February 2004.

Construction-Related Impacts

Site preparation (vegetation removal and grading activities) and construction activities would generate a total of approximately 566.73 tons of waste, or an average of approximately 56.67 tons per year of construction wastes over the ten year buildout of the uses proposed within the master plan and 54 condominium units, assuming no recycling, or approximately 283.37 total tons assuming a 50-percent diversion rate.¹⁴ The proposed extension of Dockweiler and Deputy Jake Drives, removal of the 0.75-million-gallon water tank east of The Master's College property and replacement with a 5.0-million-gallon water tank would also generate solid waste during construction. These waste materials are expected to be typical construction debris, including wood, paper, glass, plastic, metals, cardboard, and green wastes. Construction activities could also generate hazardous waste products. The wastes generated would result in an intermittent increase in solid waste disposal at landfills and other waste disposal facilities within Los Angeles County. The parkland/open space dedication project component would not involve construction and would, therefore, not generate construction waste.

According to the City's Environmental Guidelines, unless construction-related wastes are recycled, construction solid waste generation would have a significant impact on the capacity of the City's solid waste management system. During construction, the project would comply with state, county, and local standards and regulations including the City of Santa Clarita Construction and Demolition Ordinance and, therefore, would result in a less than significant impact with respect to the threshold contained in the City's Environmental Guidelines. However, as an adequate amount of landfill space has not been ensured to accommodate long-term solid waste generation at current disposal rates, even with mitigation, the project's construction-related solid waste impact would be considered significant.

Operation-Related Impacts

Buildout of the project is estimated to require approximately ten years. At buildout, uses proposed by the master plan and the 54 proposed condominium units would generate approximately 647 pounds of solid waste per day, or 118 tons per year, as shown in **Table 5.11.2-2, Daily Project Solid Waste Generation**.¹⁵ This quantity represents the project's solid waste generation under a worst-case scenario without any recycling activities in place. Under the City Model Ordinance, however, the uses within the project would be required to provide adequate areas for collecting and loading recyclable materials in concert with

¹⁴ Assumes a generation rate of 90 tons per acre of construction waste. Development area is 274,298 square feet or 6.3 acres.

¹⁵ This solid waste generation may also include household-type hazardous wastes. Examples of household hazardous wastes include drain openers, oven cleaners, toilet bowl cleaners, ammonia-based cleaners, floor and furniture polishes, enamel or oil-based paints, anti-freeze, pesticides/herbicides/fungicides, pool acids.

Countywide efforts and programs to reduce the volume of solid waste entering landfills. Although the project would generate approximately 118 tons per year, it can also be assumed that the project will meet the current recycling goals of the community and in actuality, only generate approximately 59 tons per year due to City diversion rates and a mandate to divert at least 50 percent of potential waste disposal. Other project components, including the extensions of Dockweiler and Deputy Jake Drives and the dedication of 20.5 acres of vacant land for future parkland/open space purposes would not generate solid waste or hazardous waste. Additionally, operation of a 5.0-million-gallon water tank would not generate solid or hazardous waste.

Recent expansion approvals and proposals for expansion at several County landfills compel the conclusion that solid waste disposal facilities and other options will be available in the future. It is reasonable to assume that new facilities and other options will be created to meet this demand and to reap the financial benefits of providing this service. However, as only four facilities have recently been approved for expansion, project impacts are considered significant. Therefore, even with mitigation, the project's solid waste impact would be considered significant.

Table 5.11.2-2
Daily Project Solid Waste Generation

Land Use	Units	Generation Factor	Total Waste Generation (pounds/day)	Total Waste Generation (tons/year)
Residential – Condominiums	54 dwelling units	5.31 lb/day	286.74	52.33
Institutional	600 students	0.6 lb/person/day	360	65.70
Total			646.74	118.03

Source: California Integrated Waste Management Board. "Estimated Solid Waste Generation Rates." January 19, 2007. <http://www.ciwmb.ca.gov/WasteChar/WasteGenRates>.

MITIGATION MEASURES ALREADY INCORPORATED INTO THE PROJECT

- 5.11.2-1:** During site preparation and construction activities, the project applicant shall comply with all state, County and City regulations and standards with respect to solid waste reduction, recycling and disposal, including compliance with Assembly Bill 939, which requires a minimum of 50 percent of solid waste diversion from landfill disposal.

MITIGATION MEASURES PROPOSED BY THIS EIR

- 5.11.2-2:** Solid waste collection/recycling areas are to be compatible with nearby structures (match existing architecture and have a solid roof), secure, protected against adverse environmental conditions, clearly marked, adequate in capacity, number and distribution, and contain a sufficient number of bins, to serve the recycling needs of the development.
- 5.11.2-3:** Design and construct collection/recycling areas to accommodate front-loader packing trucks, including maneuvering room.
- 5.11.2-4:** Design and construct driveways and/or travel aisles with adequate width and maneuverability space for unobstructed garbage collection, trash container storage and vehicle access and clearance.
- 5.11.2-5:** Post signs at all access points of the recycling areas that clearly identify all recycling and solid waste collection and loading areas and the materials accepted therein.
- 5.11.2-6:** Commercial and industrial development must have a minimum of 2 yard containers for the first 10,000 square feet and 1 container for each additional 20,000 square feet.
- 5.11.2-7:** Multi-family development must have one 3-yard recycle bin and one 3-yard garbage bin for each 10 dwelling units. Bins shall be arranged in enclosures to house 2 or 4 bins with half of the area designated for recycling.
- 5.11.2-8:** Locate recycling/separation areas in close proximity to dumpsters for non-recyclables, elevators, loading docks, and primary internal and external access points.
- 5.11.2-9:** Locate recycling/separation areas to not be in conflict with any applicable federal, state or local laws relating to fire, building, access, transportation, circulation, or safety.
- 5.11.2-10:** Locate recycling/separation areas so they are convenient for those persons who deposit, collect, and load the recyclable materials.
- 5.11.2-11:** Place recycling containers/bins so that they do not block access to each other.
- 5.11.2-12:** Reduce yard waste on the project site through the use of xeriscape techniques and the use of drought-tolerant and native vegetation in common area landscaping wherever possible.

- 5.11.2-13:** If possible, kitchen, garage, or garden design shall accommodate trash and recyclable components to assist in the City's recycling efforts. This includes a design to accommodate a minimum of three 90-gallon containers in locations allowable under the Covenants, Codes, and Restrictions (CC&Rs).
- 5.11.2-14:** First-time buyers shall receive educational material on the City's waste management efforts. Educational material shall be passed to consecutive buyers using the CC&Rs.
- 5.11.2-15:** The applicant shall comply with all applicable state and Los Angeles County regulations and procedures for the use, collection, and disposal of solid and hazardous wastes.
- 5.11.2-16:** The applicant shall comply with the City of Santa Clarita Construction and Demolition Ordinance.

Construction

- 5.11.2-17:** Place recycling bins for glass, metals, paper, wood, plastic, greenwastes, and cardboard on construction sites to ensure their use by construction workers to then be trucked to recycling/processing facilities.
- 5.11.2-18:** In construction specification and bid packages, require building materials made of recycled materials, to the extent possible.

CUMULATIVE IMPACTS

As discussed earlier in this section, new landfills will need to be developed and/or other waste disposal options implemented to accommodate future growth. These options may include diversion/transformation as the preferred methods for addressing solid waste and specific and practical applications (i.e., market development, public education, and public policy initiatives).¹⁶ In the future, haulers will have flexibility to determine where solid waste is ultimately disposed of based on economic factors.

Because solid waste (including hazardous waste) can be disposed of outside of Los Angeles County and because solid waste disposal is driven by a free-enterprise system, it is reasonable to assume that, to some degree, solid waste generated by cumulative development would be disposed of outside Los Angeles County, and likely, outside of the State of California. Given this assumption, the cumulative projects area

¹⁶ Solid Waste Management Consultants, *Approaching an Integrated Solid Waste Management System for Los Angeles County, California*. May 2, 1997.

could encompass a geographic area beyond the jurisdictional boundaries of the City of Santa Clarita, Los Angeles County and could, conceivably, extend beyond state boundaries. It is beyond the scope of this EIR and too speculative to attempt to quantify the solid waste that could be generated by cumulative development that is proposed in greater Los Angeles County or the region beyond, or to assess the landfills that might be available or, more importantly, other solid waste disposal options which could be available. Therefore, the focus of this cumulative impact analysis is the cumulative impacts of this project in combination with other expected future growth in the Santa Clarita Valley at its buildout.

The Santa Clarita Valley Cumulative Build-Out Scenario entails buildout of all lands under the current land use designations indicated in the City of Santa Clarita General Plan, Los Angeles County Santa Clarita Valley Area Plan, plus the project, plus all known active pending General Plan Amendment requests for additional urban development in the unincorporated area of Santa Clarita Valley and in the City of Santa Clarita. A list of the future development activity (with and without the project) expected in the Valley under the Santa Clarita Valley Cumulative Build-Out Scenario is presented below in **Table 5.11.2-3**.

Under this scenario, which includes the project, total solid waste generation would be 393,455 tons per year (see **Appendix 5.11.2** for detailed calculations). The project's share of 118 tons per year would represent 0.03 percent of this total.

It is reasonable to assume that the market forces that drive the waste disposal industry will put pressure on the industry and governmental agencies to continually identify new economically feasible means of waste disposal in the future to accommodate this growth. However, because new facilities are not available, cumulative project impacts are considered significant.

CUMULATIVE MITIGATION MEASURES

There are no known feasible cumulative mitigation measures available at the time of this writing that would mitigate significant cumulative impacts.

Table 5.11.2-3
Cumulative Development Activity – Santa Clarita Valley Cumulative Buildout Scenario

Land Use Types	Cumulative Buildout w/o Project¹	Project	Cumulative Buildout w/ Project
Single Family	93,720 du		93,720 du
Multi-Family	48,703 du	54 du	48,757 du
Mobile Home	2,699 du		2,699 du
Commercial Retail	19,899,030 sq. ft.		19,899,030 sq. ft.
Hotel	2,071 rooms		2,071 rooms
Sit-Down Restaurant	283,790 sq. ft.		283,790 sq. ft.
Fast Food Restaurant	23,600 sq. ft.		23,600 sq. ft.
Movie Theater	3,300 seats		3,300 seats
Health Club	54,000 sq. ft.		54,000 sq. ft.
Car Dealership	411,000 sq. ft.		411,000 sq. ft.
Elem./Middle School	278,953 students		278,953 students
High School	12,843 students		12,843 students
College	29,348 students	600 students	29,948 students
Hospital	247,460 sq. ft.		247,460 sq. ft.
Library	171,790 sq. ft.		171,790 sq. ft.
Church	501,190 sq. ft.		501,190 sq. ft.
Day Care	785,000 sq. ft.		785,000 sq. ft.
Industrial Park	41,743,950 sq. ft.		41,743,950 sq. ft.
Business Park	8,424,330 sq. ft.		8,424,330 sq. ft.
Manufacturing/Warehouse	3,932,470 sq. ft.		3,932,470 sq. ft.
Utilities	1,150,240 sq. ft.		1,150,240 sq. ft.
Commercial Office	6,380,520 sq. ft.		6,380,520 sq. ft.
Medical Office	133,730 sq. ft.		133,730 sq. ft.
Golf Course	1,238.0 ac		1,238.0 ac
Developed Parkland	493.3 ac		493.3 ac
Undeveloped Parkland	1,000.0 ac		1,000.0 ac
Special Generator ²	413.0 sg		413.0 sg

Source: City of Santa Clarita

du = dwelling unit; sq. ft. = square feet; ac = acres; sg = special generator

¹ Santa Clarita Valley Consolidated Traffic Model (2004). Includes existing development, buildout under the existing City of Santa Clarita General Plan and Santa Clarita Valley Area Plan and active pending General Plan Amendment requests.

² Includes Wayside Honor Ranch, Six Flags Magic Mountain, Travel Village, CHP Office and Agua Dulce Airport.

UNAVOIDABLE SIGNIFICANT IMPACTS

Project-Specific Impacts

Land suitable for landfill development or expansion is quantitatively finite and limited due to numerous environmental, regulatory, and political constraints. This is not to say, though, that alternative solid waste disposal technologies that could substantially reduce landfill disposal will not be developed and legislatively approved in the future; given the market forces that drive the solid waste industry, it is reasonable to assume they will. However, until long-term landfill space or other disposal alternatives will be adequate to serve existing and future uses for the foreseeable future, project solid and hazardous waste impacts within the City will be considered unavoidably significant.

Cumulative Impacts

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