# 1. SUMMARY

Upon buildout of the proposed Vista Canyon project and assuming no solid waste would be recycled (a worst-case scenario), the proposed project would generate a total of 46,541.9 pounds of solid waste per day, or approximately 8,493.9 tons of solid waste per year. The proposed project with the residential overlay option would generate a total of 33,285.4 pounds of solid waste per day, or approximately 6,074.6 tons of solid waste per year. It can be assumed that the proposed project would meet the current recycling goals of the community and, therefore, generate approximately 4,586.7 (without overlay) or 3,280.3 (with overlay) tons of solid waste per year. The recycled water diversion rate is based on the most recent City diversion rate of 54 percent of waste disposal.<sup>1</sup>

Cumulative development under the Santa Clarita Valley Build-Out scenario would generate 468,614 tons per year of solid waste with the proposed project and 468,435 tons per year of solid waste with the proposed project with the residential overlay option, as well as hazardous waste. The proposed project's 8,493.9 tons per year (without recycling) would represent 1.8 percent of this Valley-wide total and the proposed project with the residential overlay option's 6,074.6 tons per year (without recycling) would represent 1.3 percent of this Valley-would represent 1.3 percent of this Valley-wide total.

Cumulative development under the proposed One Valley One Vision (OVOV) General Plan scenario would generate 429,655 tons of solid waste per year. The proposed project would cumulatively contribute approximately 8,493.9 tons of solid waste per year, or 2.0 percent of the total amount of solid waste that is expected to be generated by buildout under the proposed OVOV General Plan. The proposed project with the residential overlay option would also cumulatively contribute by generating approximately 6,074.6 tons of solid waste per year, or 1.4 percent of the total amount of solid waste that is expected to be generated by buildout under the proposed OVOV General Plan.

There is potential for alternative solid waste disposal technologies to be developed and legislatively approved in the future given the market forces that drive the solid waste industry, which could substantially reduce landfill disposal. However, until other disposal alternatives adequate to serve existing and future uses for the foreseeable future are employed, the potential project and cumulative solid and hazardous waste impacts are considered significant and unavoidable.

California Department of Resources Recycling and Recovery (CalRecycle), Countywide Profile fro Los Angeles County, Jurisdiction Profile for City of Santa Clarita, http://www.calrecycle.ca.gov/Profiles/Juris/JurProfile2.asp ?RG=C&JURID=468&JUR=Santa+Clarita. Accessed March 23, 2010.

#### 2. INTRODUCTION

#### a. Solid Waste Disposal Options

The City of Santa Clarita is responsible for developing plans and strategies to manage solid waste generated within its jurisdiction. The Los Angeles County Department of Public Works (LACDPW) is responsible for developing plans and strategies to manage and coordinate the solid waste generated (including hazardous waste) in the unincorporated County areas and addressing the disposal needs of Los Angeles County as a whole.

To reduce solid waste, alternative methods for the collection, transfer, disposal, and the reduction, recycling and reuse of solid waste have been implemented. The City's solid waste reduction methods include: residential curbside comingled 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. For example, 20 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 measures to reduce the amount of solid waste that would be sent to landfills. That being said, prediction of the type of disposal and recycling options that would 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 and expansions, no implementation of other disposal options and no disposal at landfills located outside of Los Angeles County. It is unlikely that this worst-case scenario would occur.

Information in this section was derived from the year 2000 annual updates to the City of Santa Clarita's *Source Reduction and Recycling Element* (SRRE) (July 22, 1991), *Household Hazardous Waste Element* (HHWE) (August 2, 1991), and *Non-Disposal Facility Element* (April 15, 1994). Additionally, information for this section was gathered from *Approaching an Integrated Solid Waste Management System for Los Angeles County* (May 2, 1997), the *Annual AB 939 Report for 2000* (August 2001), and *Waste Generation Base Year Study for Reporting Year 2000* (March 2002). These studies are hereby incorporated by reference and available for public review and inspection at City of Santa Clarita, 23920 Valencia Boulevard, Santa Clarita, California 91355.

Since 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.<sup>2</sup>

# b. 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 seen as undesirable land uses; consequently, approvals for new landfills and expansions of existing landfills have proven very difficult to obtain, often taking several years. This situation has focused increased public attention on what is believed to be decreasing landfill capacity.

#### (1) California Integrated Waste Management Act

In 1989, California enacted the California Integrated Waste Management Act of 1989 (Assembly Bill 939), which requires cities and counties to reduce the amount of solid waste entering landfills by recycling, reuse, and waste prevention efforts. This legislation established a mandate that solid waste disposal in the state be reduced by at least 50 percent by the year 2000.

More specifically, the California Integrated Waste Management Act requires every city and county in the state, as part of the Countywide Integrated Waste Management Plan, to prepare a Source Reduction and Recycling Element that identifies how each jurisdiction would meet the mandatory state waste diversion goals of 25 percent by the year 1995 and 50 percent by the year 2000. The purpose of Assembly Bill 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 the California Integrated Waste Management Act 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.

<sup>&</sup>lt;sup>2</sup> GBB, Solid Waste Management Consultants, *Approaching an Integrated Solid Waste Management System for Los Angeles County, California* (May 2, 1997).

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. Assembly Bill 939 established the following waste management hierarchy:

- Source Reduction
- Reuse
- Recycling
- Composting
- Transformation
- Disposal

With the passage of Senate Bill 1016 (Solid Waste Disposal Measurement Act of 2008), jurisdictions are still required to divert waste at a rate equal to or greater than 50 percent. But rather than calculate a straight percentage value, the diversion rate is now based on the amount of tons of waste disposed per person per day.

As of March 2010, neither the California Integrated Waste Management Board nor the State Legislature has introduced new legislation to set diversion requirements beyond, the 50 percent as still stands with the passage of Senate Bill 1016, as discussed above.

#### (2) CalRecycle Model Ordinance

Subsequent to the adoption of 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) directed CalRecycle (formerly known as 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 CalRecycle model, the CalRecycle model took effect for that local agency. The City of Santa Clarita chose to use the CalRecycle model ordinance by adopting City Resolution No. 93-97 in July 1993.

The model ordinance (provided in **Appendix 4.9**) 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 project<sup>3</sup> 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.

#### (3) City of Santa Clarita Source Reduction and Recycling Element

The City of Santa Clarita's Source Reduction and Recycling Element (SRRE) was prepared in response to AB 939. It described the policies and programs that were implemented by the City to achieve the state's mandates of 25 and 50 percent waste disposal reductions by 1995 and 2000, respectively. Per the Integrated Waste Management Act, the SRRE projects disposal capacity needs for a 15-year period. The current SRRE 15-year period commenced in 1991. However, the City of Santa Clarita is required to submit an annual review that discusses the progress achieved in implementing the programs and/or facilities described in the Source Reduction and Recycling Element.<sup>4</sup> The City of Santa Clarita is in full compliance with the SRRE with regard to preparation of plans and policies.

<sup>&</sup>lt;sup>3</sup> CalRecycle, Local Jurisdiction Sample Documents, Ordinances, Resolutions, and Policies, CalRecycle Model Ordinance on Recycling Space Allocation – AB 1327, http://www.calrecycle.ca.gov/LGCentral/Library/ LocalDocs/Policy.htm. Accessed March 23, 2010. 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."

<sup>&</sup>lt;sup>4</sup> CalRecycle, Regulations: Title 14, Natural Resources Division 7, CIWMB, Chapter 9. Planning Guidelines and Procedures for Preparing and Revising Countywide Regional Agency Integrated Waste Management Plans, http://www.calrecycle.ca.gov/Laws/Regulations/Title14/ch9a9.htm#top. Accessed March 24, 2010.

#### (4) City of Santa Clarita Household Hazardous Waste Element

AB 939 requires every city and county within the state to prepare a Household Hazardous Waste Element (HHWE) to provide for the management of household hazardous waste generated by the residents within its jurisdiction. The City's 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 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.

#### (5) City of Santa Clarita Non-Disposal Facility Element

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 two 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. The Chiquita Canyon Landfill received approval to operate a composting facility and the composting operation was initiated in October 1996.

The City amended the NDFE to include seven additional facilities that sort construction and demolition debris materials, green waste, and commingled recyclables. The City Council adopted a resolution for the 2008 amendment to the NDFE, and the State approved the NDFE in March 2009. The following facilities are included in the City's NDFE through Amendment Number One:<sup>5</sup>

- Agromin Green Materials, Composting, Stevenson Ranch: Greenwaste composting operation that accepts agricultural and green materials.
- Downtown Diversion, Los Angeles: Large volume construction, demolition, and inert debris processing facility. It accepts construction and demolition materials.
- WM/East Valley Diversion, Sun Valley: Large volume construction, demolition, and inert debris processing facility. It accepts construction and demolition materials.
- Chiquita Canyon Landfill Composting Facility: Green waste composting facility.
- Community Recycling/Resource Recovery, Inc.: Large volume MRF and transfer station.

<sup>&</sup>lt;sup>5</sup> City of Santa Clarita, Agenda Report, Public Hearing, Resolution Adopting Amendment Number One Dated November 2008 to the City of Santa Clarita Nondisposal Facility Element, http://www.santa-clarita.com /cityhall/agendas/council/print\_item\_html.asp?ID=4040.

- Santa Clara Organics, Fillmore: Chipping and grinding facility that accepts green materials only.
- Sun Valley Paper Stock, Sun Valley: Large volume transfer and processing facility that accepts a variety of recyclable materials.

The NDFE Amendment Number One also contains updated information regarding the Chiquita Canyon Greenwaste Composting Facility and adds additional services that are provided by Community Recycling/Resource Recovery, Inc., beyond their composting operation as identified in the City's original NDFE.

State law required the amendment to be presented to the Local Task Force for comment. The additional facilities listed on the amendment were presented to the Task Force for their approval on November 20, 2008.

#### (6) 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 City-wide 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. The City's diversion rate for 2006 was 54 percent of waste disposal.<sup>6</sup>

#### (7) State Recycling Market Development Zone

The City of Santa Clarita requested and was granted designation as a State Recycling Market Development Zone (RMDZ). This designation provides the City with a small amount of funding and staff support from the CalRecycle to assist in the creation of business enterprises that take recycled materials and make them into marketable products for sale.

#### (8) City of Santa Clarita Construction and Demolition Ordinances

The City has adopted two construction and demolition ordinances – Ordinance 05-9<sup>7</sup> (June 28, 2005) and Ordinance 08-1 (February 12, 2008). Ordinances 05-9 and 08-1 apply to all new construction projects valued over \$500,000 and all tenant improvements valued at over \$100,000. These ordinances require covered projects to recycle a minimum of 50 percent of all inert materials (concrete, dirt, rock, and sand) and recycle a minimum of 50 percent of all other materials (wood, drywall, cardboard, metal, etc.)

<sup>&</sup>lt;sup>6</sup> CalRecycle, "Countywide, Regionwide, and Statewide Jurisdiction Diversion Progress Report," http://www.ciwmb.ca.gov/LGTools/mars/JurDrSta.asp?VW=In (2009).

<sup>&</sup>lt;sup>7</sup> City of Santa Clarita, Municipal Code, §15.46.010, "Construction and Demolition Materials Management."

generated during a covered project. Covered projects shall comply with the provisions of Chapter 15.46 of the City's Municipal Code through Conditions of Approval (COA) and shall submit a Construction and Demolition Materials Management Plan to the City's Building and Safety Division for review and approval by the City's Director of Field Services or the Director's designee.

#### (9) Los Angeles Countywide Siting Element

In 1997, the County of Los Angeles prepared a County-wide siting element that estimated the amount of solid wastes generated in the County and proposed various diversion and alternate disposal options.

#### (10) 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 Countywide Siting Element.

#### (11) County of Los Angeles Solid Waste Management Action Plan

In 1988, the County of Los Angeles Board of Supervisors approved the Lost Angeles County Solid Waste Management Action Plan to provide for the long-range management of the solid waste generated within the County. The plan includes source reduction, recycling and composting programs, household hazardous waste management programs, and public education awareness programs. The plan concludes that landfilling will remain an integral part of the waste management system and calls for the establishment of 50 years of in-County permitted landfill capacity, as well as the County's support for the development of disposal facilities out of the County.

#### (12) County of Los Angeles Source Reduction and Recycling Element

The County's SRRE was prepared in response to Assembly Bill 939. It describes policies and programs that will be implemented by the County for unincorporated areas in order to achieve the state's mandates of 25 and 50 percent waste disposal reductions by the years 1995 and 2000, respectively. Per the California Integrated Waste Management Act, the Source Reduction and Recycling Element projects disposal capacity needs for a 15-year period. The current SRRE's 15-year period commenced in 1993.

#### (13) County of Los Angeles Household Hazardous Waste Element

The California Integrated Waste Management Act also requires every city and county within the state to prepare a Household Hazardous Waste Element that provides for the management of household hazardous waste generated by the residents within its jurisdiction. The County's HHWE household hazardous waste management program, consisting of collection and public education/information services, has been developed to serve residents throughout the County in a convenient and cost-effective manner. In addition to reducing the amount of waste that might otherwise be sent to a landfill, as required by the California Integrated Waste Management Act, these programs are important facets in the County's effort to clean- up the solid waste stream.

#### (14) County of Los Angeles Non-Disposal Facility Element

The California Integrated Waste Management Act requires every city and county within the state to prepare and adopt a Non-Disposal Facility Element that identifies all existing, expansions of existing, and proposed new non-disposal facilities that will be needed to implement the local jurisdiction's Source Reduction and Recycling Element. The County's NDFE identifies 20 existing materials recovery facilities/transfer stations, and nine proposed material recovery facilities as non-disposal facilities that the County intends to utilize to implement its SRRE and meet the diversion requirements of the California Integrated Waste Management Act. In addition, the County's NDFE also identifies the utilization of four landfill facilities, operated by the County Sanitation District of Los Angeles County, for diversion of yard/green waste, which is intended to be used as alternative daily cover at the landfills.

#### 3. EXISTING CONDITIONS

Like many areas in Southern California, the City of Santa Clarita is faced with a continuous annual increase in solid waste generation and diminishing disposal capacities. Construction and demolition debris materials account for almost 22 percent of the state's waste stream.<sup>8</sup> Through the City's existing construction and demolition ordinance and education and recycling program, at least 60 percent of all material from construction, demolition, and renovation is diverted.<sup>9</sup>

The City is responsible for ensuring the provision of adequate trash removal for all properties within its incorporated boundaries. This is achieved through franchise agreements with waste management companies. The City provides the following services to the community through the franchise agreements:

- Weekly curbside residential trash/green waste and recycling service
- Trash and recycling services for multi-family, commercial/industrial and institutional facilities
- Christmas tree Recycling
- Green waste recycling
- Neighborhood clean-up events (up to 20 per year at the request of residents)

<sup>&</sup>lt;sup>8</sup> CalRecyle, "Construction and Demolition Debris Recycling," http://www.calrecyle.ca.gov/ConDemo/ (2008).

<sup>&</sup>lt;sup>9</sup> CalRecyle, "Construction and Demolition Debris Recycling," (2008).

- Waste management and recycling at various special events throughout the year
- Sharps mailback program
- Manure recycling
- Two clothing recycling drives each year

In addition to the services provided by the waste haulers, the City provides the following:

- Door-to-door household hazardous waste collection (e.g., antifreeze, batteries, oil and paint)
- Comprehensive education program
- Recycling Market Development Zone, which provides low interest loans to businesses that wish to form or expand for the purpose of selling products made from recycled materials, or to process recyclable materials

Currently, there are no permanent recycling facilities located within the City. However, there are six privately owned redemption/buy-back centers. There is also a bulky item collection center offered to City residents by the City's franchised residential haulers. At the buyback centers, glass, aluminum, or plastic beverage containers are redeemable for cash.

The City, in November 2002, instituted a pilot program to recycle diapers. The pilot program occurred over a six-month period and ended in May 2003. Through the pilot program, disposable diapers from 200 families were collected curbside and brought to a processor sited in Sun Valley, where they are sanitized and treated, then separated and removed for reuse in products such as plastic wood, roof shingles, vinyl wood sidings, and wallpaper. Upon completion of the pilot program in the spring of 2003, the City of Santa Clarita determined, through cost benefit analysis, that the diaper program was not feasible as a City-wide program.<sup>10</sup>

The City's 1994 NDFE identifies two existing facilities and one proposed facility: the existing Chiquita Canyon Composting Facility, the existing Community Recycling and Resource Recovery Composting Facility, and the proposed Chiquita Canyon Materials Recovery Facility (MRF).<sup>11</sup> The City's Amendment Number One includes the following additional facilities:<sup>12</sup>

• Agromin Green Materials Composting (green waste composting facility)

<sup>&</sup>lt;sup>10</sup> CalRecycle, Archived Documents, www.calrecycle.ca.gov/archive/IWMBMtgDocs/mtgdocs/.../00018603.doc. Accessed March 23, 2010.

<sup>&</sup>lt;sup>11</sup> City of Santa Clarita, Nondisposal Facility Element (1994).

<sup>&</sup>lt;sup>12</sup> City of Santa Clarita, Nondisposal Facility Element Amendment Number One (2008).

- Chiquita Canyon Landfill Composting Facility (green waste composting facility)
- Community Recycling/Resource Recovery, Inc. (large volume MRF and transfer station)
- Downtown Diversion (large volume construction and demolition debris processing facility)
- WM/East Valley Diversion (large volume construction and demolition debris processing facility)
- Santa Clara Organics (chipping and grinding facility)
- Sun Valley Paper Stock (large volume transfer and processing facility)

It is the goal of the City to ultimately divert as much as 75 percent of the City's trash from landfills to recycling.

### a. Existing Solid Waste Generation

In 2008, approximately 144,552 tons of solid waste was generated by uses in the City of Santa Clarita.<sup>13</sup>

The project site is currently vacant, except for a single-family residence and small storage yard on the southwestern portion of the site. Therefore, the amount of solid waste generated by existing on-site uses is minimal.

# b. Existing Solid Waste Collection and Disposal

#### (1) Solid Waste Collection

Six 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—one for commercial/industrial uses, one for residential uses. 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 which provides the greatest economic advantages to the hauler based on location and disposal fees.

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

<sup>&</sup>lt;sup>13</sup> CalRecycle, "Jurisdiction Disposal and ADC by Facility-Disposal During 2008 for Santa Clarita," http://www.calrecycle.ca.gov/Profiles/Juris/JurProfile2.asp?RG=C&JURID=468&JUR=Santa+Clarita. Accessed September 22, 2010.

receive Los Angeles area waste by rail car, are currently in the permitting process. And, 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.<sup>14</sup>

#### (2) Solid Waste Disposal

The City of Santa Clarita is served primarily by three Class III (non-hazardous) landfills:

- Chiquita Canyon Landfill
- Antelope Valley II Landfill
- Lancaster Landfill

These landfills are located near the City of Santa Clarita, as shown in **Figure 4.9-1**, **Landfills Serving the City of Santa Clarita**. A majority of the solid waste generated in the City is exported to the Chiquita Canyon Landfill, with the remaining solid waste exported to the Antelope Valley Landfill and Sunshine Canyon Landfill in Sylmar. **Table 4.9-1**, **Existing Landfill Statistics that Serve the City of Santa Clarita** shows the current average daily volume, remaining capacity, and closing date of the three landfills discussed above.

Table 4.9-1
Existing Landfills Statistics that Serve the City of Santa Clarita

Landfill Name	Current Average Daily Volume Permitted	Remaining Permitted Capacity	Expected Closing Date
Chiquita Canyon Landfill	6,000 tons	35,800,000 cubic yards	11/24/2019
Antelope Valley II Landfill	1,800 tons	8,206,000 cubic yards	12/31/2037
Lancaster Landfill	1,700 tons	19,088,739 cubic yards	8/2/2012

Source: CalRecycle, Facility/Site Search, http://www.calrecycle.ca.gov/SWFacilities/Directory/Search/. Accessed September 22, 2010.

<sup>&</sup>lt;sup>14</sup> The U.S. Supreme Court has ruled that jurisdictional solid waste disposal restrictions infringe on a landfill operator's ability to actively participate in interstate commerce. 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. (*Philadelphia v. New Jersey* (1978) 437 U.S. 617.)



SOURCE: Impact Sciences, Inc. - October 2010

FIGURE **4.9-1** 

Landfills Serving the City of Santa Clarita

112-024•10/10

In 2008, the City disposed of 145,472 tons of waste with a population of 176,030;<sup>15</sup> the per capita waste generation was 1,652.8 pounds, which equals 4.33 pounds per capita per day.<sup>16</sup> The City reports substantial progress in diverting waste from landfills with its solid waste management programs. In 1990, only 6 percent of solid waste was diverted, by 1998, 42 percent waste diversion was occurring. In 2006, the City's diversion rate was 54 percent.<sup>17</sup>

It is extremely speculative to identify specific options that will be implemented to dispose of solid waste 20, 50, or 100 years from now. The City's SRRE, which demonstrated how the jurisdiction would meet the Integrated Waste Management Act's mandated diversion goal of 50 percent on and after January 1, 2000, noted 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 the 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
- Construction of a MRF

Solid waste collection within the Santa Clarita Valley is by private haulers, and waste is taken to Chiquita Canyon Landfill, Antelope Valley Landfill in Palmdale, or the Lancaster Landfill in Lancaster. The Simi Valley Landfill in Simi Valley and the Toland Road Landfill in Ventura County could all conceivably accept waste from the City and are included in this discussion for that reason. Currently, the Toland Road Landfill is restricted to receiving wastes that originate from designated transfer stations in Ventura County only. Several of the landfills identified have the potential to be expanded in order to provide additional capacity. Of these landfills, Lancaster and Sunshine Canyon Landfills have active proposed expansion plans. Both of these landfills could serve the City as well as the surrounding region.

<sup>&</sup>lt;sup>15</sup> California Department of Finance, Table 2: E-5 Estimates for Cities, Counties, and State, 2001-2008 (2008).

<sup>&</sup>lt;sup>16</sup> The per capita waste generation was contrived in the following manner: 145,472 tons of waste/ 176,030 residents yields 0.826 tons/person/year. 0.826 tons/person/year\* 2000 lbs yields 1,652.8 lbs/resident/year. 1,652.8 lbs/resident/year divided by 365 days/year yields 4.53 lbs/resident/day.

<sup>&</sup>lt;sup>17</sup> Michelle Lovato, "Garbage: What a terrible waste," Santa Clarita Valley The Signal (December 30, 2008), pp. A1 and A6.

**Table 4.9-2**, **Existing Landfill Capacity and Regional Needs Analysis for Los Angeles County**, identifies the anticipated remaining capacity and anticipated remaining years of operation for each landfill, assuming no expansion, no new landfill development, and no export of solid waste out of the County and state.<sup>18</sup>

Waste diversion will increase the life expectancy of landfills, but not eliminate the need for new landfill space. On August 29, 2000, the Community Services District (CSD), a consortium of 78 cities and the County of Los Angeles, signed agreements to purchase the Eagle Mountain Landfill in Riverside County, which is subject to pending litigation,<sup>19</sup> and the Mesquite Regional Landfill in Imperial County. Solid waste from the CSD would be transported to land proposed for landfills by rail.

#### c. Landfill Expansion and Development Plans

#### (1) Expansion Plans

Four of the landfills identified in **Table 4.9-3**, **Proposed Major Landfill Expansion Plans in Los Angeles County**, the Antelope Valley Recycling and Disposal Facility, Chiquita Canyon Landfill, Lancaster Landfill and Recycling Center, and Sunshine Canyon Combined City/County Landfill, are in the process of applying for expansion approvals in order to provide additional capacity. All of these landfills could serve the City of Santa Clarita, including the project site, as well as the surrounding region. **Table 4.9-3** provides a summary of the expansion plans for above mentioned landfills. Expansion of these landfills would provide an additional 122,826,000 tons of capacity with a daily capacity of 17,500 tons.

<sup>&</sup>lt;sup>18</sup> County of Los Angeles, 2006 Annual Report for the Los Angeles County Countywide Siting Element (2006).

<sup>&</sup>lt;sup>19</sup> County of Los Angeles, "Chapter 9: Public Services and Facilities Element," Draft General Plan (2008).

						1	2	3	4	5	6	7	8	9	10		11	12	
											EXISTING	LANDFIL	LS	-					- Class III
					Class III								L	R		Sun	shine		Landfill Daily
			Total	Maximum Daily	Landfill	Antelope		R	R	~		Pebbly	Puente	San	R	_			Disposal
	Waste	<b>D</b> (	Disposal	Transformation	Disposal	Valley	Bradley	Burbank <sup>6</sup>	Calabasas	Chiquita <sup>6</sup>	Lancaster <sup>7</sup>	Beach <sup>6</sup>	Hills	Clemente	Scholl <sup>6</sup>	County	City	Whittier <sup>6,8</sup>	_ Capacity
Voar	Generation Rate (trid_6)	Diversion	Need	(trad-6)	Need (trid-6)				Romai	Expected	Daily Tonnage	6 Day Aver	rage (tpd-6)	n Tono)					Shortfall (Excess) (tnd-6)
2006	76.305	50%	38 152	1 724	30 715	977	1 447	125	1 492	4 853	<u>u Lanunn Capa</u> 1 221	86	12 079	2 65	1 431	2 693	4 118	268	(Excess) (tpu-0)
2000	10,000	0070	00,102	1// 21	00,710	92	0.1	3.0	79	11.0	13.5	0.087	26.6	0.041	64	14	4.3	4 4	
2007	76 771	50%	38,386	2 069	36.317	1 400	200	126	1.501	5 000	1 700	87	12 500	2.67	1 440	3 500	4 000	269	4 668
2007	,	0070	00,000	_,,	00,01	1,100	_00	120	1,001	0,000	1), 00	0	1_)000	,	1/110	E	1,000	_0,	2,000
						8.8	С	3.0	7.4	9.5	12.9	0.085	22.7	0.040	6.0	3.1	3.0	4.3	
2008	77.772	50%	38,886	2.069	36.817	1.800		127	1.521	5.000	1.700	8.8	12.500	2.70	1.459	3,500	4.500	273	4.425
	,			_,		E			_,	-,					_,,	-,	_)		-,
						17.2		2.9	6.9	7.9	12.4	0.082	18.8	0.039	5.5	2.0	1.6	4.2	
2009	78,947	50%	39,474	2,069	37,405	1,800		129	1,544	5,000	1,700	8.9	13,200	2.74	1,481	3,500	4,500	277	4,262
										Ε						Ε	E		
						16.6		2.9	6.5	38.4	11.9	0.079	14.7	0.038	5.0	20.9	49.2	4.1	
2010	80,583	50%	40,292	2,069	38,223	3,600		132	1,576	5,000	3,000	9.1	13,200	2.80	1,512	11,0	000	283	(1,092)
													Е						
						15.5		2.8	6.0	36.8	11.0	0.076	10.6	0.037	4.6		66.7	4.0	
2011	82,190	50%	41,095	2,069	39,026	3,600		135	1,607	5,000	3,000	9.3	13,200	2.86	1,542	11,0	000	288	(358)
						14.3		2.8	5.5	35.2	10.0	0.073	6.4	0.036	4.1		63.2	3.9	
2012	83,798	50%	41,899	2,069	39,830	3,600		137	1,639	5,000	3,000	9.5	13,200	2.91	1,572	11,0	000	294	375
						13.2		2.8	5.0	33.7	9.1	0.070	2.3	0.0354	3.6		59.8	3.8	
2013	85,501	50%	42,751	2,069	40,682	3,600		140	1,672	5,000	3,000	9.7	13,200	2.97	1,604	11,0	000	300	1,153
						12.1		2.7	4.4	32.1	8.1	0.067	С	0.0345	3.1		56.4	3.7	
2014	87,418	50%	43,709	2,069	41,640	3,600		143	1,710	5,000	3,000	9.9		3.04	1,640	11,0	000	307	15,227
						11.0		2.7	3.9	30.6	7.2	0.064		0.0335	2.6		52.9	3.6	
2015	89,207	50%	44,604	2,069	42,535	3,600		146	1,745	5,000	3,000	10.1		3.10	1,674	11,0	000	313	16,044
						9.9		2.6	3.4	29.0	6.3	0.061		0.0326	2.1		49.5	3.5	
2016	90,951	50%	45,475	2,069	43,406	3,600		149	1,779	5,000	3,000	10.3		3.16	1,706	11,0	000	319	16,840
						8.7		2.6	2.8	27.4	5.3	0.058		0.0316	1.5		46.1	3.4	
2017	92,686	50%	46,343	2,069	44,274	3,600		152	1,813	5,000	3,000	10.5		3.22	1,739	11,0	000	325	17,632
						7.6		2.5	2.2	25.9	4.4	0.055		0.0306	1.0		42.7	3.3	
2018	94,321	50%	47,160	2,069	45,091	3,600		155	1,845	5,000	3,000	10.7		3.28	1,769	11,0	000	331	18,378
						6.5		2.5	1.7	24.3	3.5	0.051		0.0296	0.4		39.2	3.2	
2019	95,958	50%	47,979	2,069	45,910	3,600		157	1,877	5,000	3,000	10.9		3.34	1,800	11,0	000	337	19,125
						5.4		2.4	1.1	22.8	2.5	0.048		0.0285	С		35.8	3.1	
2020	97,708	50%	48,854	2,069	46,785	3,600		160	1,911	5,000	3,000	11.1		3.40		11,0	000	343	21,757
						4.2		2.4	0.5	21.2	1.6	0.044		0.0275			32.4	3.0	
2021	99,537	50%	49,769	2,069	47,700	3,600		163	1,947	5,000	3,000	11.3		3.46		11,0	000	349	22,626

 Table 4.9-2

 Existing Landfill Capacity and Regional Needs Analysis for Los Angeles County

						1	2	2	4	5	6	7	8	0	10	11	1	19	
						1	2	5	7	5	0	1	0	2	10	1.	L	12	_
											EXISTING	<b>G LANDFILL</b>	<u>s</u>						Class III
					Class III								L	R		Suns	hine		Landfill Daily
			Total	Maximum Daily	Landfill	Antelope		R	R			Pebbly	Puente	San	R				Disposal
	Waste		Disposal	Transformation	Disposal	Valley	Bradley	Burbank <sup>6</sup>	Calabasas	Chiquita <sup>6</sup>	Lancaster <sup>7</sup>	Beach <sup>6</sup>	Hills	Clemente	Scholl <sup>6</sup>	County	City	Whittier <sup>6,8</sup>	Capacity
	Generation	Percent	Need	Capacity	Need					Expected	Daily Tonnage	6 Day Avera	ige (tpd-6)						Shortfall
Year	Rate (tpd-6)	Diversion	(tpd-6)	(tpd-6)	(tpd-6)				Remai	ning Permitte	d Landfill Capa	acity at Year'	s End (Millio	n Tons)					(Excess) (tpd-6)

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 2006 through 2021.

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 1/1/06 to 12/31/06.

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. Whittier Landfill has a disposal limitation of 350 tons per day per email communication with Nelly Castellanos, July 6, 2006.

<u>Legend:</u>

C Closure due to exhausted capacity/permit expiration

*E* Expansion becomes effective

*L* Does not accept waste from the City of Los Angeles and Orange County *R* Restricted Wasteshed

CIWMB California Integrated Waste Management Board

Source: Los Angeles County Department of Public Works, Los Angeles County Countywide Integrated Waste Management Plan 2006 Annual Report – Part II: Siting Element Assessment, Appendix E-2.7, May 2008.

Landfill	Operator/ Owner	Anticipated Expansion Capacity (million tons)	Current Daily Capacity (tons)	Years of Additional Capacity	Expansion Location
Antelope Valley Recycling and Disposal Facility Expansion	Waste Management of California, Inc.	8.96	3,200	8	Between Landfill 1 and Landfill 2
Chiquita Canyon Landfill Expansion	Waste Connections	32.0	6,000	21	Horizontal and Vertical Expansion
Lancaster Landfill and Recycling Center Expansion	Waste Management of California, Inc.	0.936	1,700	4	N/A
Sunshine Canyon Combined City/County Landfill Expansion	Republic Services of California LLC	80.93	6,600	22	Adjacent
	Totals	122.83	17,500	55	

Table 4.9-3 Proposed Major Landfill Expansion Plans in Los Angeles County

Source: County of Los Angeles Public Works Department, Countywide Summary Plan and Countywide Siting Element, 2006 Annual Report Lost Angeles County Countywide Integrated Waste Management Plan, June 2008),pp. 22–23.

# d. Hazardous Material Collection and Disposal

As discussed above, the City of Santa Clarita has prepared a HHWE to provide for management of household hazardous waste generated by the residents within its jurisdiction. Certain uses and activities generate hazardous waste that must be disposed at locations other than Class III or unclassified landfills. A generator is a person or business whose acts or processes produce hazardous waste or who, in some other manner, causes a hazardous substance or waste to become subject to the California Hazardous Waste Control Law (Health and Safety Code, Sections 25100–25249). These hazardous materials then need to be disposed of or transported to a licensed disposal or treatment facility. Generators that use hazardous materials and/or generate hazardous waste are responsible for the disposal of the waste. There are many licensed private contractors that transport and dispose hazardous waste.

The LACDPW has indicated that existing hazardous waste management facilities within the County are inadequate to meet the waste currently generated within Los Angeles County.<sup>20</sup> However, there are several Class I and II landfills that exist in southern and central California that can currently accept hazardous waste generated within the County. Each is described briefly below:

- Laidlaw Landfill, Buttonwillow, Kern County, California: This facility accepts hazardous and nonhazardous waste and is permitted as a Class I landfill. The facility has no restrictions for the amount of waste that can be accepted on a daily basis.
- Kettleman Hills Landfill, Kettleman City, Kings County, California: This is a Class I permitted landfill that accepts hazardous and non-hazardous waste with no capacity restrictions.
- McKittrick Waste Treatment Site, McKittrick, Kern County, California: This facility is a Class II permitted landfill that accepts hazardous and non-hazardous waste. The facility has a capacity restriction of 412 cubic meters daily.

# 4. **PROJECT IMPACTS**

The proposed project would generate solid waste during the construction and operational stages of development. 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.

# a. Significance Threshold Criteria

According to Appendix G of the *California Environmental Quality Act (CEQA) Guidelines,* a project would have a significant impact on solid waste disposal services if the project would

- be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs, or
- not comply with federal, state, and local statutes and regulations related to solid waste.

The *State CEQA Guidelines* do not identify any quantitative standards for determining the significance of a new development project's solid waste generation.

<sup>&</sup>lt;sup>20</sup> Written correspondence from Rod Kubomoto, Watershed Management Division, County of Los Angeles Department of Public Works (April 21, 2004).

#### b. Construction-Related Impacts

Site preparation (vegetation removal and grading activities) and construction activities would generate a total of approximately 16,452 tons, or an average of approximately 4,113 tons per year, of construction wastes over the four year buildout of the project assuming no recycling, or approximately 8,884 total tons assuming a 54 percent diversion rate.<sup>21</sup> 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 incremental and intermittent increase in solid waste disposal at landfills and other waste disposal facilities within Los Angeles County.

Generally, typical construction-related solid waste is composed of small scrap materials and construction employee food waste. The waste generation typically occurs over short periods and ceases upon completion of the construction stage; in the case of the proposed project, construction would occur intermittently over an estimated four-year period. The project would comply with the requirements set forth in Los Angeles County's recently proposed amendment to Title 20, Utilities, Chapter 20.87, Construction and Demolition Debris Recycling, of the Los Angeles County Code; the amendment would require recycling and reuse of construction and demolition debris in the unincorporated areas of the County, as well as preparation of a Construction and Demolition Debris Recycling and Reuse Plan (RRP), to be submitted to the Department of Public Works, Environmental Programs Division, after an application for a permit has been filed for a project. In compliance with this code section, mitigation would be adopted to require the project proponent to prepare a Waste Management Plan to recycle, at a minimum, 50 percent of the construction and demolition debris, and submit the plan to the Los Angeles County Environmental Programs Division. Furthermore, the project would comply with the City of Santa Clarita's Construction and Demolition Ordinances (Ordinance 05-9 [adopted June 28, 2005] and Ordinance 08-1 [adopted February 12, 2008]). Under these ordinances, the proposed project would be required to recycle a minimum of 50 percent of all inert materials (concrete, dirt, rock, and sand) and recycle a minimum of 50 percent of all other materials (wood, drywall, cardboard, metal, etc.). The proposed project would also be required to submit a Construction and Demolition Materials Management Plan to the City's Building and Safety Division for review and approval by the City's Director of Public Works or the Director's designee. As discussed above, an adequate amount of landfill space has not been ensured to accommodate long-term solid waste generation at current disposal rates. Therefore, even with mitigation, the project's construction-related solid waste impact to Class III landfills would be considered significant.

<sup>&</sup>lt;sup>21</sup> Assumes a generation rate of 90 tons per acre of construction waste; project gross developable acreage is 182.8.

Construction activities could also generate hazardous waste products. A licensed hazardous waste disposal expert would be required to dispose of all hazardous materials, such as contaminated soils or asbestos containing materials, in accordance with applicable regulations (i.e., South Coast Air Quality Management District's [SCAQMD] rules and regulations for asbestos). Hazardous waste disposal would be handled and disposed of in accordance with all appropriate state and federal laws. Because of the many laws and regulations associated with the disposal of hazardous waste, it would have to be determined at the time of disposal where any certain hazardous waste would be taken. The permitted Class I and II landfills currently in operation within Southern California can currently accommodate hazardous debris generated during project implementation. However, as noted above, land suitable for landfill development or expansion is quantitatively finite and limited due to numerous environmental, regulatory, and political constraints. Therefore, impacts to hazardous waste disposal facilities are considered significant.

#### c. Operation-Related Impacts

#### (1) **Proposed Project**

At buildout, the project would generate 46,541.9 pounds of solid waste per day, or approximately 8,493.9 tons per year, as shown in **Table 4.9-4**, **Daily Project Solid Waste Generation for the Proposed Project (No Recycling)**. This quantity represents the project's solid waste generation under a worst-case scenario without any recycling activities in place. Under the City's ordinance, however, the uses within the project site would be required to provide adequate areas for collecting and loading recyclable materials in concert with Countywide efforts and programs to reduce the volume of solid waste entering landfills. Although the project would generate approximately 8,493.9 tons of solid waste per year, it can also be assumed that the project would meet the current recycling goals of the community, and in actuality, only generate approximately 4,586.7 tons per year due to City diversion rates and a mandate to divert at least 50 percent of potential waste disposal.

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 also reasonable to assume that new facilities and other options will be created to meet demand and reap the financial benefits of providing this service. However, since approved or proposed local landfill space is finite, project impacts are considered significant. And, even with mitigation, the project's solid waste impact would be considered significant.

Hazardous waste generation and disposal would be handled and disposed of in accordance with all appropriate state and federal laws. Because of the many laws and regulations associated with the disposal of hazardous waste, it would have to be determined at the time of disposal where any particular type of hazardous waste would be taken. The existing permitted Class I and II landfills in operation within southern and central California can accommodate hazardous debris and waste generated during project operation. Because existing hazardous waste management facilities in the County are currently inadequate, and because landfill space is a finite resource, the increase in hazardous waste generation throughout the project's lifetime would cause a significant impact unless additional landfill space or other disposal alternatives are approved.

Duity I	lojeet bolla via	ste Generation for the	i ioposeu i iojee	t (ito Keeyeiiig	5'
. I.I.			Total Waste Generation	Total Waste Generation	Total Waste Generation
Land Use	Units	Generation Factor	(pounds/day)	(tons/day)	(tons/year)
Single-Family Residential	96 du	11.18 lbs/du/day <sup>1</sup>	1073.3	0.5	195.9
Multi-Family Residential	1,021 du	6.41 lbs/du/day <sup>1</sup>	6,544.6	3.3	1,194.4
Hotel	200 rooms	2.0 lb/room/day <sup>2</sup>	400.0	0.2	73.0
Retail	164,000 sq. ft.	2.5 lb/1,000 sq.ft./day3	410.0	0.2	74.8
Office	646,000 sq. ft.	0.059 lb/sq.ft./day <sup>4</sup>	38,114	19.1	6,956.9
Oak Park – Open Space	7 acres	N/A <sup>5</sup>	0	0	0
Water Reclamation Plant	1 acre	N/A <sup>5</sup>	0	0	0
	Total		46,541.9	23.3	8,493.9

# Table 4.9-4 Daily Project Solid Waste Generation for the Proposed Project (No Recycling)

Source: CalRecycle, Estimated Solid Waste Generation Rates, http://www.calrecycle.ca.gov/wastechar/wastegenrates/. Accessed March 23, 2010.

Notes:

<sup>1</sup> This Generation Factor was derived from the Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts (Ventura County Solid Waste Management Department). Single-Family Residential 2.04 tons/unit/year = 11.18 lbs/unit/day. Multi-Family Residential 6.41lbs/du/day = 1.17 tons/unit/year.

<sup>2</sup> This Generation Factor was derived from the Stevenson Ranch Draft EIR (Phase IV) LA County, as shown on CalRecycle, Estimated Solid Waste Generation Rates website.

<sup>3</sup> This Generation Factor was derived from the Stevenson Ranch Draft EIR (Phase IV) LA County, as shown on the CalRecycle, Estimated Solid Waste Generation Rates website. See http://www.ciwmb.ca.gov/wastechar/wastegenrates/Commercial.htm.

<sup>4</sup> This Generation Factor was derived from the Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts (Ventura County Solid Waste Management Department), as shown on CalRecyle, Estimated Solid Waste Generation Rates website. See http://www.ciwmb.ca.gov/wastechar/wastegenrates/Commercial.htm.

<sup>5</sup> Both of these uses on the project site are not anticipated to generate any amount of solid waste. Therefore, the contribution of solid waste generated by the project from the Oak Park and Water Reclamation Plant portion of the proposed project would be o tons of solid waste per year.

#### (2) Proposed Project with the Residential Overlay Option

At buildout, the proposed project with the residential overlay option would generate 33,285.4 pounds of solid waste per day, or approximately 6,074.6 tons per year, as shown in **Table 4.9-5**, **Daily Project Solid** 

Waste Generation for Proposed Project with the Residential Overlay Option (No Recycling). This quantity represents the project's solid waste generation under a worst-case scenario without any recycling activities in place. Under the City's ordinance, however, the uses within the project would be required to provide adequate areas for collecting and loading recyclable materials in concert with Countywide efforts and programs to reduce the volume of solid waste entering landfills. Although the project would generate approximately 6,074.6 tons of solid waste per year, it can also be assumed that the project would meet the current recycling goals of the community and, in actuality, only generate approximately 3,280.4 tons per year due to City diversion rates and a mandate to divert at least 50 percent of potential waste disposal.

Table 4.9-5
Daily Project Solid Waste Generation for Proposed Project with the Residential Overlay Option
(No Recycling)

Land Use	Units	Generation Factor	Total Waste Generation (pounds/day)	Total Waste Generation (tons/day)	Total Waste Generation (tons/year)
Single-Family Residential	96 du	11.18 lbs/du/day <sup>1</sup>	1,073.3	0.5	195.9
Multi-Family Residential	1,254 du	6.41 lbs/du/day <sup>1</sup>	8,038.1	4.0	1,467.0
Retail	164,000 sq. ft.	2.5 lb/1,000 sq.ft./day <sup>3</sup>	410.0	0.2	74.8
Office	396,000 sq. ft.	0.059 lb/sq.ft./day <sup>4</sup>	23,364.0	11.7	4,263.9
Hotel	200 rooms	2.0 lb/room/day <sup>2</sup>	400.0	0.2	73.0
Oak Park – Open Space	7 acres	N/A <sup>5</sup>	0	0	0
Water Reclamation Plant	1 acre	N/A <sup>5</sup>	0	0	0
	Total		33,285.4	16.6	6,074.6

Source: CalRecycle, Estimated Solid Waste Generation Rates, http://www.calrecycle.ca.gov/wastechar/wastegenrates/. Accessed March 23, 2010.

Notes:

<sup>1</sup> This Generation Factor was derived from the Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts (Ventura County Solid Waste Management Department). Single-Family Residential 2.04 tons/unit/year = 11.18 lbs/unit/day. Multi-Family Residential 6.41lbs/du/day = 1.17 tons/unit/year.

<sup>2</sup> This Generation Factor was derived from the Stevenson Ranch Draft EIR (Phase IV) LA County, as shown on CalRecycle, Estimated Solid Waste Generation Rates website.

<sup>3</sup> This Generation Factor was derived from the Stevenson Ranch Draft EIR (Phase IV) LA County, as shown on CalRecycle, Estimated Solid Waste Generation Rates website. See http://www.ciwmb.ca.gov/wastechar/wastegenrates/Commercial.htm.

<sup>4</sup> This Generation Factor was derived from the Guidelines for Preparation of Environmental Assessments for Solid Waste Impacts (Ventura County Solid Waste Management Department), as shown on CalRecycle, Estimated Solid Waste Generation Rates website. See http://www.calrecycle.ca.gov/wastechar/wastegenrates/Commercial.htm

<sup>5</sup> Both of these uses on the project site are not anticipated to generate any amount of solid waste. Therefore, the contribution of solid waste generated by the project from the Oak Park and Water Reclamation Plant portion of the proposed project would be o tons of solid waste per year.

Additionally, as discussed above, it is reasonable to assume that new facilities and other options will be created to meet demand and to reap the financial benefits of providing this service. However, as approved or proposed local landfill space is finite, project impacts are considered significant. Therefore, even with mitigation, the project's generation of solid waste would be considered significant.

# 5. MITIGATION MEASURES ALREADY INCORPORATED INTO THE PROJECT

The following project design features already are incorporated into the project.

- Solid waste collection/recycling areas will be compatible with nearby structures, 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.
- The collection/recycling areas will accommodate front-loader packing trucks, including maneuvering room.
- The driveways and/or travel aisles will be of adequate width and maneuverability space for unobstructed garbage collection, trash container storage and vehicle access and clearance.
- Signs will be posted 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.

# 6. MITIGATION MEASURES PROPOSED BY THIS EIR

The following mitigation measures are recommended to minimize project impacts.

4.9-1	Recycling/separation areas will be located in close proximity to dumpsters for non-
	recyclables, elevators, loading docks, and primary internal and external access points.

- **4.9-2** Recycling/separation areas will not conflict with any applicable federal, state, or local laws relating to fire, building, access, transportation, circulation, or safety.
- **4.9-3** Recycling/separation areas will be conveniently located for those persons who deposit, collect, and load the recyclable materials.
- **4.9-4** Recycling containers/bins will be located so as to not block access to each other.
- **4.9-5** Yard waste will be reduced through the use of xeriscaping techniques and the use of drought-tolerant and native vegetation in common area landscaping, wherever possible.
- **4.9-6** For commercial developments and residential buildings having five or more living units, no refuse collection or recycling areas will be located between a street and the front of a building.
- **4.9-7** On-site trash compactors will be installed for non-recyclables in all restaurants/food services areas.

- **4.9-8** The project will comply with City recycling requirements, including the number and location of recycling and waste bins.
- **4.9-9** First-time buyers and businesses will receive educational material on the City's waste management efforts. Educational material shall be passed to consecutive buyers using the CC&Rs.
- **4.9-10** The applicant shall comply with all applicable state, regional, and local regulations and procedures for the use, collection, and disposal of solid and hazardous wastes.
- **4.9-11** During construction, recycling bins for glass, metals, paper, wood, plastic, greenwastes, and cardboard will be placed on-site to ensure their use by construction workers and will be trucked to recycling/processing facilities.
- **4.9-12** In construction specification and bid packages, building materials made of recycled materials will be required, to the extent possible and feasible.

# 7. CUMULATIVE IMPACTS

As discussed earlier in this section, new landfills 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).<sup>22</sup>

In the future, haulers likely will have continued 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 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 that 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 under two conditions, (1) the buildout expected from the existing City of Santa Clarita General Plan and existing Los Angeles County Santa Clarita Valley Area Plan (known also as the Santa

<sup>&</sup>lt;sup>22</sup> GBB, Solid Waste Management Consultants, *Approaching an Integrated Solid Waste Management System for Los Angeles County, California* (May 2, 1997).

Clarita Valley Cumulative Build-Out Scenario), and (2) the buildout expected from the proposed OVOV General Plan.

#### a. Santa Clarita Valley Cumulative Build-Out Scenario

The Santa Clarita Valley Cumulative Build-Out Scenario entails buildout of all lands under the existing land use designations indicated in the existing City of Santa Clarita General Plan, the existing 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 4.9-6**, **Cumulative Development Activity – Santa Clarita Valley Cumulative Build-Out Scenario with the Proposed Project**. Under this scenario, which includes the proposed project, total solid waste generation would be 468,614 tons per year (see **Appendix 4.9** for detailed calculations). The project's share of 8,493.9 tons per year would represent 1.8 percent of this total.

	with the Propose	ea Project	
Land Use Types	Cumulative Buildout w/o Project	Proposed Project	Cumulative Buildout w/ Project
Single-Family	93,281 du	96 du	93,337 du
Multi-Family	48,013 du	1,021du	49,034 du
Mobile Home	2,699 du		2,699 du
Commercial Retail	19,949,030 sq. ft.	164,000 sq. ft.	20,113,030 sq. ft.
Hotel	2,071 rooms	200 rooms	2,271 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	278,954 students	199 students	279,153 students
High School	12,782 students	61 students	12,843 students
College	29,948 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.

Table 4.9-6 Cumulative Development Activity – Santa Clarita Valley Cumulative Build-Out Scenario with the Proposed Project

	Cumulative Buildout		Cumulative Buildout
Land Use Types	w/o Project	Proposed Project	w/ Project
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.	646,000 sq. ft.	7,026,520 sq. ft.
Medical Office	133,730 sq. ft.		133,730 sq. ft.
Golf Course	1,238.0 ac		1,238.0 ac
Developed Parkland	464.3 ac		493.3 ac
Undeveloped Parkland	1,000.0 ac		1,000.0 ac
Special Generator	413.0 sg		413.0 sg

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

<sup>1</sup> Santa Clarita Valley Consolidated Traffic Model (November 2002). Includes existing development and active pending General Plan Amendment requests.

<sup>2</sup> Special Generators include Wayside Honor Ranch, Six Flags Magic Mountain, Travel Village, CHP Office, and Aqua Dulce Airport.

Additionally, under the scenario that includes the proposed project with the residential overlay option, as presented below in **Table 4.9-7**, **Cumulative Development Activity – Santa Clarita Valley Cumulative Build-Out Scenario with Proposed Project with the Residential Overlay Option**, total solid waste generation would be 468,435 tons per year (see **Appendix 4.9** for detailed calculations). The proposed project with the residential overlay option's share of 6,074.6 tons per year would represent 1.3 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.

# b. Proposed OVOV General Plan Build-Out Scenario

The proposed OVOV General Plan Build-Out Scenario in this case represents the buildout of the City of Santa Clarita boundaries along with the proposed City of Santa Clarita SOI (Sphere of Influence) under the proposed OVOV General Plan. A list of the expected land use types at buildout of the proposed OVOV General Plan is shown below in **Table 4.9-8**, **OVOV General Plan Buildout Land Uses**. Under this scenario, which includes the proposed project, total solid waste generation would be 429,655 tons per year (see **Appendix 4.9** for detailed calculations). The proposed project's contribution under this scenario is approximately 8,493.9 tons per year, or 2.0 percent of the total cumulative solid waste that would be generated under the proposed OVOV General Plan at its buildout.

#### Table 4.9-7

#### Cumulative Development Activity – Santa Clarita Valley Cumulative Build-Out Scenario with Proposed Project with the Residential Overlay Option

		Proposed Project w/	
	<b>Cumulative Buildout</b>	<b>Residential Overlay</b>	<b>Cumulative Buildout</b>
Land Use Types	w/o Project	Component	w/ Project
Single-Family	93,281 du	96 du	93,337 du
Multi-Family	48,013 du	1,254 du	49,267 du
Mobile Home	2,699 du		2,699 du
Commercial Retail	19,949,030 sq. ft.	164,000 sq. ft.	20,113,030 sq. ft.
Hotel	2,071 rooms	200 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	278,719 students	234 students	278,953 students
High School	12,774 students	69 students	12,843 students
College	29,948 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.	396,000 sq. ft.	6,776,520 sq. ft.
Medical Office	133,730 sq. ft.		133,730 sq. ft.
Golf Course	1,238.0 ac		1,238.0 ac
Developed Parkland	464.3 ac		493.3 ac
Undeveloped Parkland	1,000.0 ac		1,000.0 ac
Special Generator	413.0 sg		413.0 sg

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

<sup>1</sup> Santa Clarita Valley Consolidated Traffic Model (November 2002). Includes existing development and active pending General Plan Amendment requests.

<sup>2</sup> Special Generators include Wayside Honor Ranch, Six Flags Magic Mountain, Travel Village, CHP Office, and Aqua Dulce Airport.

Additionally, the proposed project with the residential overlay option would produce approximately 6,074.6 tons of solid waste per year (see **Appendix 4.9** for detailed calculations). As discussed above, the proposed OVOV General Plan Buildout (which includes the areas within the City of Santa Clarita and the areas within the City of Santa Clarita SOI) would generate approximately 429,655 tons of solid waste. Therefore, the proposed project with the residential overlay would represent approximately 1.4 percent of the solid wasted expected to be generated by the OVOV General Plan.

Again, 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.

# 8. CUMULATIVE MITIGATION MEASURES

The State of California requires cities and counties to reduce the amount of solid wastes entering existing landfills by recycling, reuse, and waste prevention efforts. In addition, many jurisdictions have adopted recycling ordinances, specifically applicable to construction and demolition debris, to reduce the amount of recyclable waste disposed of at landfills. New projects are required to participate in the programs in effect in their jurisdictions. At this time though, no additional mitigation measures, other than those identified above, are considered feasible.

# 9. UNAVOIDABLE SIGNIFICANT IMPACTS

Until long-term landfill space or other disposal alternatives are identified to serve existing and future uses for the foreseeable future, project and cumulative solid and hazardous waste impacts would be considered unavoidably significant.

	Cumulative Buildout of the City of
Land Use Types	Santa Clarita and City SOI
Single-Family Residential Units	77,975 du
Multi-Family Residential Units	65,327 du
Mobile Home Units	3,420 du
Senior Active Units	2,352 du
Commercial Center	21,126,810 sq. ft.
Commercial Shops	2,104,110 sq. ft.
Hotel	2,527 rooms
Sit-Down Restaurant	289,720 sq. ft.
Fast-Food Restaurant	64,420 sq. ft.
Movie Theater	3,600 seats
Health Club	138,000 sq. ft.
Car Dealership	530,000 sq. ft
Elementary School/Middle School	51,667 students
High School	18,500 students
College	36,062 students
Hospital	365,160 sq. ft.
Library	91,400 sq. ft.
Church	997,460 sq. ft.
Day Care	540 students
Industrial Park	36,687,270 sq. ft.
Business Park	7,797,080 sq. ft.
Manufacturing/Warehouse	3,268,690 sq. ft.
Utilities	1,032,440 sq. ft.
Regional Post Office	780,000 sq. ft.
Commercial Office	8,483,890 sq. ft.
High-Rise Office	300,000 sq. ft.
Medical Office	730,560 sq. ft.
Post Office	50,000 sq. ft.
Golf Course	1,338 ac
Developed Parkland	1,040.2 ac
Undeveloped Parkland	890 acres
Special Generator	380.13 sg

# Table 4.9-8OVOV General Plan Buildout Land Uses

Source: City of Santa Clarita, April 2, 2009.

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

<sup>2</sup> Special Generators include Wayside Honor Ranch, Six Flags Magic Mountain, Travel Village, CHP Office, and Aqua Dulce Airport.