

5.0 ENVIRONMENTAL IMPACT ANALYSIS

24. UTILITIES AND SERVICE SYSTEMS—SOLID WASTE

1. INTRODUCTION

This section of the Draft Environmental Impact Report (EIR) analyzes the Project's potential impacts on solid waste facilities and service systems. The analysis estimates the amount of solid waste that would be generated by the Project and evaluates whether existing and future solid waste collection and disposal facilities could accommodate such waste. An assessment of the Project's consistency with applicable solid waste regulations is also included in this section. This analysis is based in part on the County of Los Angeles (County) Countywide Integrated Waste Management Plan 2012 Annual Report (2012 Annual Report) completed by the County Department of Public Works (Public Works) in August 2013.

2. EXISTING SETTING

a. Regulatory Setting

(1) State Regulations

(a) California Integrated Waste Management Act (Assembly Bill 939)

The California Integrated Waste Management Act of 1989 (IWMA) (AB 939) requires every city and county in the State to prepare a Source Reduction and Recycling Element in its Solid Waste Management Plan that identifies how the jurisdiction meets 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 reuse solid waste generated in the State to the maximum extent feasible."

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 established a waste management hierarchy as follows:

- Source Reduction
- Recycling

- Composting
- Transformation
- Disposal

In 2008 pursuant to the Per Capita Disposal Measurement System Act (Senate Bill 1016), the Department of Resources Recycling and Recovery (CalRecycle) implemented a new per capita disposal and goal measurement system that changes the emphasis from an estimated diversion measurement to an actual disposal measurement factor and evaluates program implementation efforts.^{1,2} As a result, the IWMA's 50 percent diversion requirement is now measured in terms of per capita disposal expressed as pounds per person per day.

Every two or four years, depending on the previous review's findings, each jurisdiction must go through a Jurisdiction Review in which CalRecycle may find that a jurisdiction has adequately implemented its diversion programs and has achieved the 50-percent equivalent per capita disposal requirement, or make certain other findings.³ For the most recent Jurisdiction Review covering the time period 2007–2011, the County's unincorporated areas were determined to have adequately implemented diversion programs and achieved the 50 percent equivalent per capita disposal requirement.⁴

(b) CalRecycle Board Model Ordinance

The California Solid Waste Re-use and Recycling Access Act of 1991 (Public Resources Code, Sections 42900–42911) directed the CalRecycle Management Board (formerly known as the California Integrated Waste Management Board) to draft a “model ordinance” relating to the provision of adequate areas for collecting and loading recyclable

¹ Senate Bill 1016 codified CalRecycle's historical approach by more explicitly focusing on program implementation, as well as implementing a simplified metric based on per capita disposal and changing the frequency of some reviews. The law now states that the annual per capita disposal rate is not determinative of jurisdiction compliance, but is only one factor among several that CalRecycle will use to evaluate diversion program implementation. Source: CalRecycle website, Local Government Central, CalRecycle Jurisdiction Reviews, www.calrecycle.ca.gov/lgcentral/reporting/biennial.htm, accessed March 11, 2015.

² CalRecycle website, Local Government Central, Goal Measurement, www.calrecycle.ca.gov/LGCentral/GoalMeasure/Default.htm, accessed March 11, 2015.

³ Email correspondence with Jennifer Wallin, Manager, Materials, Markets, and Local Assistance Division, CalRecycle, August 13, 2013.

⁴ Email correspondence with Jennifer Wallin, Manager, Materials, Markets, and Local Assistance Division, CalRecycle, August 13, 2013.

materials in development projects. The County uses the CalRecycle model ordinance as its own ordinance.

(c) California Health and Safety Code, Section 25218

Section 25218 of the California Health and Safety Code identifies the State as the responsible governing entity “to provide for an expedited and streamlined permitting and regulatory structure for household hazardous waste and conditionally exempt[s] small quantity generator waste collection and handling” by cities and counties.⁵ The CalRecycle Management Board has instituted a Used Oil Recycling and Household Hazardous Waste Program to prevent illegal disposal of used oil and household hazardous waste. The goals of the program include: (1) providing the public with convenient collection locations; (2) increasing the demand for re-refined oil; and (3) developing methods to motivate the public to recycle their used oil and hazardous waste.⁶

(d) Construction and Demolition Waste Materials Diversion Requirements (Senate Bill 1374)

The Construction and Demolition Waste Materials Diversion Requirements (SB 1374), codified as Public Resources Code Section 42919, requires jurisdictions to summarize in each annual IWMA report the progress made in diverting construction and demolition waste. CalRecycle must also adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition waste from landfills.

(e) Zero Waste California

Zero Waste California is a state program launched by CalRecycle in 2002 to promote a new vision for solid waste management. The Zero Waste California program provides that wasting resources is inefficient and the efficient use of natural resources should be achieved. The concept requires maximizing existing recycling and reuse efforts, while ensuring that products are designed for the environment and have the potential to be repaired, reused, or recycled. The Zero Waste California program promotes the goals of market development, recycled product procurement, and research and development of new and sustainable technologies.

⁵ *California Health and Safety Code, Section 25218 (c).*

⁶ *Re-refined oil is recycled oil product.*

(f) California Green Building Standards (CALGreen Code)

The 2013 California Green Building Standards Code, referred to as the CALGreen Code, sets minimum standards for new structures to minimize the State's overall carbon output.⁷ Under the CALGreen Code, new buildings are required to reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. Each local jurisdiction retains the administrative authority to exceed the new CALGreen standards. As described below, the County has adopted the County of Los Angeles Green Building Standards Code in compliance with the CALGreen Code.

(g) California's 75-Percent "Recycling" Goal (Assembly Bill 341)

Assembly Bill 341 (AB 341) established a policy goal that no less than 75 percent of solid waste generated in the State be source reduced, recycled, or composted by 2020 and required CalRecycle to provide a report to the Legislature recommending strategies to achieve that goal by January 1, 2014. AB 341 also mandated local jurisdictions to implement commercial recycling by July 1, 2012. CalRecycle's October 2013 Legislative Report regarding AB 341, entitled *Statewide Strategies to Achieve the 75 Percent Goal by 2020*, addresses the development of a sustainable system to both meet the 75 percent diversion goal and help achieve a number of other objectives: protecting public health and safety; reducing greenhouse gas emissions; expanding manufacturing infrastructure and creating green jobs; reducing local government costs; increasing renewable production of energy and fuel; and reducing reliance on export markets.⁸ Progress has been made via new legislative bills regarding organic wastes, plastic bags, mattresses, beverage containers, medical sharps waste, waste-to-energy, and product-related extended producer responsibility. Additionally, within its legislative report CalRecycle has identified the following six focus areas regarding waste management, within which 33 concepts have been defined to help achieve the 75 percent diversion goal:⁹

- Moving Organics Out of the Landfill
- Continuing Reform of the Beverage Container Recycling Program

⁷ California Building Standards Commission, CALGreen, www.bsc.ca.gov/Home/CALGreen.aspx, accessed March 11, 2015.

⁸ CalRecycle, *Update on AB 341, Legislative Report, Statewide Strategies to Achieve the 75 Percent Goal by 2020, October 2013*, www.calrecycle.ca.gov/75percent/UpdateOct13.pdf, accessed March 11, 2015.

⁹ CalRecycle, *Update on AB 341, Legislative Report, Statewide Strategies to Achieve the 75 Percent Goal by 2020, Appendix B, October 2013*, www.calrecycle.ca.gov/75percent/UpdateOct13.pdf, accessed March 11, 2015.

- Expanding the Recycling/Manufacturing Infrastructure: Permitting/Compliance Assistance and Financing
- Exploring New Models for State and Local Funding of Materials Management Programs
- Promoting State Procurement of Postconsumer Recycled Content Products
- Promoting Extended Producer Responsibility

(h) California Organics Recycling (Assembly Bill 1826)^{10,11}

Assembly Bill 1826 (AB 1826) was signed into law on September 28, 2014 and amended the Public Resources Code to require mandatory recycling of organic waste generated by certain commercial uses such as restaurants and grocery stores.

Beginning on April 1, 2016, businesses that generate eight cubic yards (cy) or more of organic waste per week must separate food scraps and yard trimmings, and arrange for recycling services for that waste in a specified manner. Beginning January 1, 2017, businesses that generate four cy or more of organic waste per week also will become subject to this requirement. Commencing January 1, 2019, businesses that generate four cy or more of commercial solid waste per week also will be required to arrange for organic waste recycling services. (Should CalRecycle make a specified determination, this triggering threshold for organics recycling could be reduced to two cy or more of commercial solid waste per week on or after January 1, 2020.)

AB 1826 also requires each local jurisdiction, on and after January 1, 2016, to implement an organic waste recycling program to divert organic waste from the subject businesses, except as specified for rural jurisdictions. Each jurisdiction also is required to report to CalRecycle regarding progress made in implementing an organic waste recycling program, and CalRecycle is required to assess each jurisdiction's compliance with the AB 1826 requirements. Furthermore, AB 1826 authorizes jurisdictions to charge and collect a fee from organic waste generators to recover the costs incurred in providing organic waste recycling programs.

¹⁰ California Legislative Information, AB-1826 Solid waste: organic waste, http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB1826, accessed April 23, 2015.

¹¹ BioCycle, "California's New Laws to Accelerate Organics Recycling," www.biocycle.net/2014/09/30/californias-new-laws-to-accelerate-organics-recycling/, accessed April 23, 2015.

As part of AB 1826, CalRecycle must identify and recommend actions to address permitting and siting challenges and encourage the continued viability of the State's organic waste processing and recycling infrastructure, in partnership with the California Environmental Protection Agency and other specified state and regional agencies. CalRecycle also is required to cooperate with local jurisdictions and industry to provide assistance for increasing the feasibility of organic waste recycling and identify certain financing mechanisms and funding incentives.

(2) County Regulations

(a) Los Angeles County General Plan

As discussed in greater detail in **Section 5.11**, Land Use and Planning, of this Draft EIR, the County's General Plan directs future growth and development in the County unincorporated areas and establishes goals, policies, and objectives that pertain to the entire County. The current General Plan, adopted in 1980, includes relevant policies that focus on the promotion of solid waste technology and the facilitation of recycling.

As also discussed further in **Section 5.11**, Land Use and Planning, the County circulated a draft General Plan update, entitled Los Angeles County General Plan 2035 (Draft General Plan), in January 2014 and a Draft EIR addressing the Draft General Plan in June 2014. This Draft General Plan contains a new Public Services and Facilities Element that includes a section on Solid Waste with stated goals of providing adequate disposal capacity and minimizing waste and pollution in the County.

The General Plan policy consistency analysis provided in **Section 5.11**, Land Use and Planning, indicates the Project would be consistent with applicable General Plan policies related to solid waste.

(b) Santa Clarita Valley Area Plan: One Valley One Vision 2012

As discussed in greater detail in **Section 5.11**, Land Use and Planning, of this Draft EIR, the recently updated Santa Clarita Valley Area Plan: One Valley One Vision 2012 (Area Plan) serves as a long-term guide for development over the next 20 years. The Area Plan ensures consistency between the General Plans of the County and the City of Santa Clarita (City) in order to achieve common goals. According to the Area Plan, the Santa Clarita Valley (Valley) is served primarily by three Class III landfills: Chiquita Canyon Landfill near Val Verde, the Antelope Valley Landfill in Palmdale, and Sunshine Canyon Landfill in Sylmar.¹² With approved expansions, these landfills will have capacity to serve

¹² As discussed below, Class III landfills accept non-hazardous municipal solid waste.

the Valley beyond 2020. In addition, the Area Plan notes that additional facilities are needed for sorting and resource recovery from solid waste, including materials recovery facilities, composting facilities, collection centers for electronic waste (e.g., discarded computers and televisions), and recycling facilities. Relevant policies within the Area Plan promote the use of recycled building materials, address mandatory residential recycling programs, and encourage the composting of green waste.

The Area Plan policy consistency analysis provided in **Section 5.11**, Land Use and Planning, indicates the Project would be consistent with applicable Area Plan policies related to solid waste.

(c) Solid Waste Management Action Plan

In 1988, the County's Board of Supervisors approved the Solid Waste Management Action Plan to provide for long-range management of the County's solid waste. This plan addresses source reduction, recycling and composting programs, household hazardous waste management programs, and public education awareness programs. The plan concludes that landfills 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 development of disposal facilities outside of the County.

(d) Countywide Integrated Waste Management Plan

In accordance with the IWMA, the County adopted its Countywide Integrated Waste Management Plan in 1996. This Plan includes the following components: Countywide Integrated Waste Management Summary Plan, Countywide Siting Element, Source Reduction and Recycling Element, Household Hazardous Waste Element, and Non-Disposal Facility Element, each of which is discussed briefly below. County Public Works publishes an annual report on the Plan's implementation status, including the elements described below. The 2012 Annual Report, dated August 2013, is the most recent report available.¹³ The County also publishes a Five-Year Review Report, the most recent of which was published in 2014.¹⁴

¹³ County of Los Angeles Department of Public Works, *County of Los Angeles Countywide Integrated Waste Management Plan 2012 Annual Report, August 2013*, <http://dpw.lacounty.gov/epd/swims/docs/pdf/CIWMP/2012.pdf>, accessed March 11, 2015.

¹⁴ County of Los Angeles Department of Public Works, *Los Angeles County Countywide Integrated Waste Management Plan, Five-Year Review Report, September 2014*, <http://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=2610&hp=yes&type=PDF>, accessed March 11, 2015.

(i) Countywide Integrated Waste Management Summary Plan

The Countywide Integrated Waste Management Summary Plan (Summary Plan), which was approved by the CalRecycle Management Board in 1999, describes the actions necessary to achieve the mandated waste diversion goals of AB 939. The Summary Plan also establishes Countywide goals and objectives for integrated waste management, establishes an administrative structure for preparing and managing the Summary Plan, describes the Countywide system of governmental solid waste management infrastructure, describes the current system of solid waste management in the County, summarizes the types of solid waste programs, describes programs that could be consolidated or coordinated Countywide, and analyzes the financing for these programs.

(ii) Countywide Siting Element

The Countywide Siting Element, approved by CalRecycle in 1998, projects waste generation and disposal capacity in the County for 15-year planning periods. The County is in the process of updating the Siting Element to reflect the most recent information regarding remaining landfill disposal capacity and the County's current strategies for maintaining adequate disposal capacity. The updated Siting Element is anticipated to be submitted to CalRecycle in 2016.¹⁵

(iii) Source Reduction and Recycling Element

The County's Source Reduction and Recycling Element, approved in 2010, was prepared in response to the IWMA and describes policies and programs for the County's unincorporated areas to achieve the state mandates of 25 and 50 percent waste disposal reductions by 1995 and 2000, respectively.^{16,17} As of January 2010, 86 out of 89 jurisdictions in the County (representing over 98 percent of the County's waste stream) had met or surpassed the 50 percent waste diversion goal or had received a "good faith effort" determination by CalRecycle.^{18,19}

¹⁵ County of Los Angeles Department of Public Works, *Transmittal of the 2012 Annual Report, Los Angeles County Countywide Integrated Waste Management Plan, Summary Plan and Siting Element Assessments*, August 1, 2013.

¹⁶ CalRecycle, *Model Source Reduction and Recycling Element (SRRE) Guidelines*, www.calrecycle.ca.gov/LGCentral/Library/SRRE, accessed March 11, 2015.

¹⁷ Electronic correspondence, Lena-Prudence Wiegand, *Integrated Waste Management Specialist*, CalRecycle, January 9, 2014.

¹⁸ County of Los Angeles Department of Public Works, *Los Angeles County Countywide Integrated Waste Management Plan, Five-Year Review Report*, April 2010, p. 10, <http://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=550&hp=yes&type=PDF>, accessed March 11, 2015.

(iv) Household Hazardous Waste Element

The IWMA requires every city and county within the State to prepare a Household Hazardous Waste Element in order to provide for the management of household hazardous waste generated by residents. The County's household hazardous waste management program, consisting of collection and public education/information services, serves 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 AB 939, these programs are important facets in the County's effort to clean up the solid waste stream.

(v) Non-Disposal Facility Element

The IWMA also requires every city and county within the State to prepare and adopt a Non-Disposal Facility Element identifying all existing, expansions of existing, and proposed new non-disposal facilities needed to implement the local jurisdiction's Source Reduction and Recycling Element. The County's Non-Disposal Facility Element 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 Source Reduction and Recycling Element and meet the diversion requirements of AB 939. In addition, the County's Non-Disposal Facility Element identifies four landfill facilities operated by the County Sanitation Districts of Los Angeles County (County Sanitation Districts) for the diversion of yard/green waste, to be used as alternative daily cover at the landfills.

(e) Construction and Demolition Debris Recycling and Reuse Ordinance

The County's Construction and Demolition Debris Recycling and Reuse Ordinance was adopted to increase the recycling and reuse of construction and demolition debris consistent with the goals of the IWMA. This ordinance provides the following recycling and reuse requirements for construction and demolition debris generated by development activities:

¹⁹ *Public Resources Code Section 41850 defines good faith effort as follows: when a city, county, or regional agency has made all reasonable and feasible efforts to implement those programs or activities identified in its Source Reduction and Recycling Element or Household Hazardous Waste Element, or alternative programs or activities that achieve the same or similar results. Source: CalRecycle, Good Faith Effort Analysis, <http://view.officeapps.live.com/op/view.aspx?src=http%3A%2F%2Fwww.calrecycle.ca.gov%2FArchive%2FIWMBMtgDocs%2Fmtgdocs%2F1998%2F10%2F00000058.doc>, accessed March 11, 2015.*

- At least 50 percent, determined by weight, of all soil, rock, and gravel must be reused unless a lower percentage is approved based on feasibility limitations. To the extent practicable, soil, rock, and gravel to be removed from a project site may not be commingled with other project construction and demolition debris.
- At least 50 percent, determined by weight, of all project construction and demolition debris, exclusive of soil, rock, and gravel, must be recycled or reused unless a lower percentage is approved based on feasibility limitations.
- Inert materials, exclusive of soil, rock, and gravel, may comprise no more than two-thirds, determined by weight, of the percentage of project construction and demolition debris required to be recycled or reused, unless a higher percentage of inert materials is approved based on a determination that the project will not otherwise generate sufficient construction and demolition debris to meet the required level of recycling or reuse.
- In the event the required percentages of construction and demolition debris have not been recycled or reused, every ton or fraction thereof that has not been recycled or reused as required constitutes a separate violation for which administrative penalties may be imposed.

As part of the requirements, development project applicants must submit a Recycling and Reuse Plan to the County Public Works Environmental Programs Division to ensure adequate construction and demolition reuse and recycling during development.

(f) County Green Building Standards and County Code

In 2013, in response to mandates set forth in the CALGreen Code, the County adopted the Los Angeles County Green Building Standards Code (Title 31), which adopts and incorporates by reference specified provisions of the 2013 CALGreen Code.²⁰ The purpose of Title 31 is to facilitate sustainability via planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and, environmental air quality. Title 31 is currently being revised to provide clarity for the development community, ensure consistency with the State and other local agencies, and advance sustainable construction standards in the County.

Other sections of the Los Angeles County Code (County Code) also address solid waste and seek to increase the amount of waste diverted from landfills. Specifically, County Code Section 22.52.2130 requires the recycling and/or salvaging for reuse of a

²⁰ *The County's 2008 ordinances are being repealed, and the more recently adopted Title 31 requirements apply to this Project.*

minimum of 50 percent of non-hazardous construction and demolition debris by weight from all residential projects containing less than five dwelling units regardless of gross floor area, and from hotels/motels, lodging houses, non-residential, and mixed-use buildings with a gross floor area of less than 10,000 square feet. In addition, Section 22.52.2130 requires the recycling and/or salvaging for reuse of a minimum of 65 percent of non-hazardous construction and demolition debris by weight from all residential projects containing at least five dwelling units regardless of gross floor area, and from hotels/motels, lodging houses, non-residential, and mixed-use buildings with a gross floor area of at least 10,000 square feet. When a project consists of any of these qualified types of development projects, the requirements of Section 22.52.2130 supersede County Code Section 20.87.040, which requires at least 50 percent of all construction and demolition debris to be recycled or reused, unless a lower percentage is approved by the County's Director of Public Works or his/her authorized representative.

(3) Previously Adopted Plans and Mitigation

(a) Newhall Ranch RMDP/SCP and EIS/EIR

The Project Site is included in the project area for the Applicant's Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP), shown in **Figure 3-5**, RMDP/SCP Project Area, in **Section 3.0**, Project Description, of this Draft EIR, which covers certain aspects of resource management for the Project and other nearby developments. As discussed in greater detail in **Section 4.1**, Environmental and Regulatory Setting, of this Draft EIR, the RMDP component of the Newhall Ranch RMDP/SCP project is a conservation, mitigation, and permitting plan for the long-term management of sensitive biological resources and development-related infrastructure in the River and tributary drainages within the 11,999-acre Specific Plan area and along the extension of Magic Mountain Parkway through the Project Site. The SCP component of the Newhall Ranch RMDP/SCP project is a conservation and management plan to permanently protect and manage a system of preserves designed to maximize the long-term persistence of the San Fernando Valley spineflower (*Chorizanthe parryi* ssp. *Fernandina*) (spineflower), a federal candidate and state-listed endangered plant species. The SCP encompasses the Specific Plan area, the Valencia Commerce Center planning area, and the Project Site, in order to conduct conservation planning and preserve design on the Project Applicant's land holdings in Los Angeles County that contain known spineflower populations.

The Newhall Ranch RMDP/SCP project was the subject of a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR) (SCH No. 2000011025) by the U.S. Army Corps of Engineers (Corps) and the California Department of Fish and Wildlife

(CDFW).^{21,22} At the time CDFW certified the EIR portion of the EIS/EIR in December 2010, it also adopted the Mitigation Monitoring and Reporting Plan (MMRP) for the RMDP/SCP project. This regulatory plan, required under CEQA, describes the mitigation measures, monitoring, and/or reporting plan for the Newhall Ranch RMDP/SCP project (including the Entrada South Project Site). CDFW adopted one mitigation measure to reduce potential impacts related to solid waste resulting from implementation of the Newhall Ranch RMDP/SCP project (see Mitigation Measure (MM) RMDP/SCP SWS-1 in **Appendix 2A**).

b. Existing Conditions

Demand for landfill capacity is continually evaluated by the County through preparation of the Countywide Integrated Waste Management Plan Annual Reports, the most recent of which is the 2012 Annual Report, dated August 2013. As with previous Annual Reports, the 2012 Annual Report assesses future landfill disposal needs over a 15-year planning horizon, based in part on forecasted waste generation and available landfill capacity. Several factors are used in the 2012 Annual Report to determine landfill capacity, including: (1) the expiration of various landfill permits (e.g., land use permits, waste discharge requirements permits, solid waste facilities permits, and air quality permits); (2) restrictions on the processing of waste generated outside given landfills' jurisdictions and/or watershed boundaries; and (3) operational constraints.

A brief discussion of the County's waste disposal at in- and out-of-County landfills and transformation facilities based on the most recent data available from the 2012 Annual Report is provided below. Also provided below are existing landfill capacity data and an overview of the various technologies currently in use to reduce solid waste disposal.

(1) Waste Disposal by the County of Los Angeles

(a) In-County Landfills

Landfills within the County are categorized as either Class III or unclassified landfills.²³ Non-hazardous municipal solid waste is disposed of in Class III landfills, while construction waste, yard trimmings, and earth-like waste are disposed of in unclassified (inert) landfills. Ten Class III landfills and one unclassified landfill with solid waste facility

²¹ *Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan, Final Joint Environmental Impact Statement and Environmental Impact Report, June 2010.*

²² *The California Department of Fish and Game was officially renamed the California Department of Fish and Wildlife as of January 1, 2013.*

²³ *There are no Class I or II landfills in the County.*

permits are currently permitted within the County.²⁴ **Figure 5.24-1**, County of Los Angeles Landfills, on page 5.24-14, illustrates the locations of County landfills in relation to the Project Site.

²⁴ *County of Los Angeles Department of Public Works, Los Angeles County Countywide Integrated Waste Management Plan Five-Year Review Report, September 2014. In addition to the ten Class III landfills currently operating, the Puente Hills Landfill closed on October 31, 2013.*

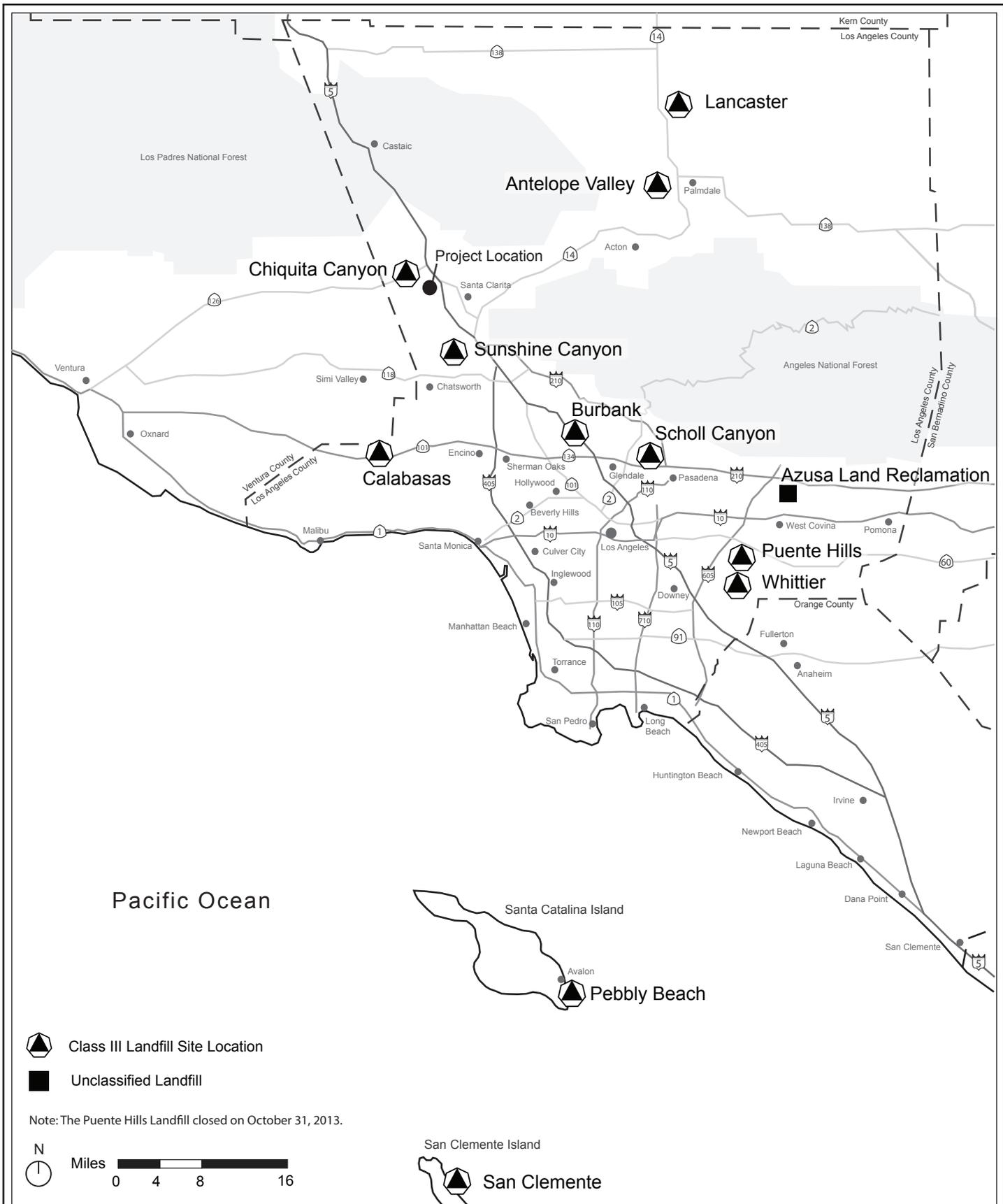


Figure 5.24-1
County of Los Angeles Landfills



(i) Class III Landfills

As is the case with solid waste haulers, landfills operate in a free-enterprise system. Their operating funds and profits are obtained by collecting disposal fees from the haulers on a per ton basis. Landfill capacity is regulated primarily through the amount of solid waste that each particular facility is permitted to collect on a daily basis relative to its capacity.

As shown in **Table 5.24-1**, Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills, on page 5.24-16, based on information provided in the 2012 Annual Report, an average daily total of 20,205 tons of solid waste were disposed of at the County's Class III landfills in 2012; a total of 6.304 million tons of waste were disposed of during all of 2012; and the remaining disposal capacity for the County's Class III landfills is estimated at approximately 123.09 million tons.²⁵ Based on 2012 annual disposal rates, there are approximately 19.5 years of permitted in-County landfill capacity remaining, taking into account all landfills and no wasteshed or daily landfill disposal limitations. In addition, approximately 0.570 million tons of solid waste were disposed of at County transformation facilities in 2012. Approximately 99 percent of this solid waste disposal was generated from within the County, with the remaining waste generated outside of the County. Assuming a Countywide diversion rate of 60 percent for 2012, the 2012 Annual Report estimates that approximately 21.5 million tons of solid waste were generated within the County in 2012.²⁶

As discussed in the 2012 Annual Report, without changes in the status quo, a shortage of permitted solid waste disposal capacity at in-County Class III landfills is projected by 2017. The status quo scenario assumes no expansions of existing landfills, no new landfills, no increase in the diversion rate, and no additional capacity from alternative technologies. However, utilizing one or a combination of non-status quo scenario(s), the 2012 Annual Report anticipates that future disposal needs can be adequately met through 2027 via a multi-pronged approach that includes successfully permitting and developing proposed in-County landfill expansions, utilizing available or planned out-of-County disposal capacity, developing necessary infrastructure to facilitate exportation of waste to out-of-County landfills, and developing conversion and other alternative technologies. Additionally, by continuing to enhance diversion programs and increasing the Countywide diversion rate, jurisdictions in the County may further ensure

²⁵ The estimated remaining capacity excludes the Puente Hills Landfill, which closed on October 31, 2013.

²⁶ County of Los Angeles Department of Public Works; County of Los Angeles Countywide Integrated Waste Management Plan 2012 Annual Report, August 2013.

**Table 5.24-1
Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills**

	Location	2012 Average Daily Disposal (tons)	2012 Total Disposal (million tons) ^a	Estimated Remaining Permitted Capacity as of 12/31/12 (million tons) ^b
Class III				
<u>Landfills Serving Santa Clarita Valley</u>				
Antelope Valley ^c	Palmdale	822	0.256	16.91
Chiquita Canyon ^d	Unincorporated	2,971	0.927	3.97
Sunshine Canyon City/County ^e	Unincorporated	7,107	2.217	74.37
<i>Subtotal</i>		<i>10,900</i>	<i>3.400</i>	<i>95.25</i>
<u>All Other Los Angeles County Landfills</u>				
Burbank ^f	Burbank	107	0.033	2.95
Calabasas ^g	Unincorporated	633	0.197	5.51
Lancaster ^h	Lancaster	682	0.213	12.27
Pebbly Beach ⁱ	Unincorporated	9	0.003	0.09
Puente Hills ^j	Unincorporated	6,950	2.168	[closed]
San Clemente ^k	Unincorporated	1	0.000	0.04
Scholl Canyon ^l	Glendale	675	0.211	3.41
Whittier ^m	Whittier	250	0.078	3.56
Class III Total Overallⁿ		20,205	6.304	123.09
Unclassified				
Azusa Land Reclamation	Azusa	286	0.089	64.13
Unclassified Total Overall		286	0.089	64.13
<p>^a Disposal quantities are based on actual tonnages reported by owners/operators of permitted solid waste disposal facilities to the County Public Works Solid Waste Information Management System.</p> <p>^b Estimated Remaining Permitted Capacity is based on landfill owners/operators' responses in a written survey conducted by County Public Works in May 2013, as well as site-specific permit criteria established by local land use agencies.</p> <p>^c The estimated remaining permitted capacity includes an addition of 9 million tons as a result of a proposed expansion approved on September 19, 2011.</p> <p>^d Proposed expansion pending. Land Use Permit (LUP) limits waste disposal to 30,000 tons per week. LUP expires November 24, 2019.</p> <p>^e The combined Sunshine Canyon City/County Landfill became effective December 31, 2008, based on a memorandum of understanding between the City of Los Angeles and the County.</p> <p>^f Limited to use by the City of Burbank only.</p> <p>^g Limited to the Calabasas wasteland as defined by County Ordinance No. 91-0003, which is composed of the incorporated cities of Hidden Hills, Agoura Hills, Westlake Village and Thousand Oaks; that portion of the City of Los Angeles bordered by the northerly line of Township 2 North on the north, Interstate Highway 405 on the east, Sunset Boulevard and the Pacific Ocean on the south, and the City</p>				

Table 5.24-1 (Continued)
Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills

<p><i>boundary on the west; and certain unincorporated areas in the Counties of Los Angeles and Ventura.</i></p> <p>^h <i>New Conditional Use Permit became effective on December 14, 2011, which allowed usage of the remaining design capacity of 12.3 million tons.</i></p> <p>ⁱ <i>LUP expires July 29, 2028.</i></p> <p>^j <i>This landfill closed on October 31, 2013.</i></p> <p>^k <i>This landfill is used solely by the U.S. Department of the Navy.</i></p> <p>^l <i>Limited to Scholl Canyon wasteland as defined by City of Glendale Ordinance No. 4780, which is defined as the incorporated cities of Glendale, La Canada Flintridge, Pasadena, South Pasadena, San Marino, and Sierra Madre; County unincorporated communities known as Altadena, La Crescenta, Montrose; unincorporated area bordered by the cities of San Gabriel, Rosemead, Temple City, Arcadia, and Pasadena; and the unincorporated area immediately to the north of the City of San Marino bordered by the City of Pasadena on the west, north, and east sides.</i></p> <p>^m <i>Limited to use by the City of Whittier and waste haulers contracted with the City of Whittier.</i></p> <p>ⁿ <i>Totals may not sum exactly due to rounding. The total estimated remaining capacity at Class III landfills excludes the Puente Hills Landfill, which closed on October 31, 2013.</i></p> <p><i>Source: Eyestone Environmental, 2015, based on information from County of Los Angeles Department of Public Works, County of Los Angeles Countywide Integrated Waste Management Plan 2012 Annual Report, August 2013.</i></p>

adequate disposal capacity is available to serve the needs of residents and businesses through the planning period.

To address the projected shortage of permitted solid waste disposal capacity at in-County Class III landfills by 2017 (without changes in the status quo), the 2012 Annual Report analyzes eight other scenarios under which the County could continue to meet the disposal requirements of AB 939. These scenarios are based on existing in-County Class III landfills and transformation facilities, proposed expansions of in-County Class III landfills, various levels of imports and exports, alternative technologies, and increased diversion. For example, as indicated in **Table 5.24-1**, Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills, a Class III facility within the County that has been proposed for expansion but has not yet been approved is the Chiquita Canyon landfill, the use of which would increase disposal capacity.²⁷

The Santa Clarita Valley is served primarily by the Chiquita Canyon, Antelope Valley, and Sunshine Canyon Landfills.²⁸ As shown in **Table 5.24-1**, Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills, an average daily

²⁷ A Draft EIR regarding the Chiquita Canyon landfill expansion (SCH No. 2005081071) was publicly circulated in July 2014.

²⁸ Santa Clarita Valley Area Plan: One Valley One Vision 2012, Chapter 2: Land Use Element, p. 46.

total of 10,900 tons of solid waste were disposed of at these three landfills in 2012; a total of 3.40 million tons were disposed of at these three landfills during all of 2012; and these landfills had an estimated remaining disposal capacity of approximately 95.25 million tons as of December 31, 2012, according to the 2012 Annual Report. Based on 2012 annual disposal rates, there are approximately 28 collective total years of permitted in-County landfill capacity remaining available at these three landfills. (ii) Unclassified Landfills

The County's unclassified landfill generally does not face capacity issues. As shown in **Table 5.24-1**, Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills, the remaining disposal capacity for Azusa Land Reclamation is estimated at approximately 64.13 million tons. In 2012, approximately 0.089 million tons of inert waste (e.g., soil, concrete, asphalt, and other construction and demolition debris) were disposed of at this facility. Given the remaining permitted capacity and based on the average disposal rate of 286 tons per day in 2012, this capacity will be exhausted in 718 years.²⁹ Thus, the unclassified landfill serving the County has adequate long-term capacity.

(b) Out-of-County Landfills

Solid waste disposal at out-of-County facilities has increased in recent years and is expected to continue to be necessary to meet the County's future disposal needs. As noted earlier, without out-of-County facilities, conversion technologies, or increased diversion rates, the County could have a shortage of in-County solid waste disposal capacity by 2017 due to challenges associated with the establishment of new landfills and the expansion of existing landfills. As shown in **Table 5.24-2**, Solid Waste Disposal and Estimated Remaining Capacity for Out-of-County Landfills, on page 5.24-19, in 2012 approximately 5,911 tons per day of solid waste that were generated within Los Angeles County were disposed of at out-of-County landfills. According to the 2012 Annual Report, landfill operations at the El Sobrante Landfill and the Simi Valley Landfill are forecasted to continue, whereas the import waste agreements for the three Orange County landfills will expire on December 31, 2015 (Frank R. Bowerman Sanitary Landfill and Prima Deshecha Sanitary Landfill) and June 30, 2016 (Olinda Alpha Sanitary Landfill). In 2012, approximately 38 percent (2,096 tons) of the total out-of-County average daily disposal occurred at these three Orange County landfills.

As also shown in **Table 5.24-2**, Solid Waste Disposal and Estimated Remaining Capacity for Out-of-County Landfills, waste-by-rail has the potential to create substantial

²⁹ County of Los Angeles Department of Public Works, County of Los Angeles Countywide Integrated Waste Management Plan 2012 Annual Report, August 2013.

**Table 5.24-2
Solid Waste Disposal and Estimated Remaining Capacity for Out-of-County Landfills**

Facility Location Owner/Operator	Rail Access	Distance from Downtown Los Angeles	2012 Average Daily Disposal Rate (tons per day)	Potential Disposal Capacity Available to Los Angeles County (tons per day)	2012 Average Los Angeles County Exported Quantity ^{a,b} (tons per day)	Permitted Daily Disposal (tons per day)	Remaining Permitted Disposal Capacity ^c (tons)
El Sobrante Landfill Riverside County Waste Mgmt., Inc.	No	60 miles	6,179	4,000	2,640	16,054	179 million
Frank R. Bowerman Sanitary Landfill^d Orange County O.C. Integrated Waste Mgmt. Dept.	No	45 miles	7,123	1,500	158	11,500	119 million
Olinda Alpha Sanitary Landfill^d Orange County O.C. Integrated Waste Mgmt. Dept.	No	30 miles	7,633	1,500	1,878	8,000	27 million
Prima Deshecha Sanitary Landfill^d Orange County O.C. Integrated Waste Mgmt. Dept.	No	60 miles	1,678	1,500	60	4,000	74 million
Simi Valley Landfill & Recycling Center Ventura County Waste Mgmt., Inc.	No	50 miles	2,124	850	766	6,000	94 million
Mesquite Regional Landfill Imperial County Sanitation Districts of Los Angeles County	Yes	210 miles	—	12,000	—	20,000	582 million
Total				21,350	5,502		

^a Estimated quantity based on the Disposal Reporting System information from the respective counties.

^b Waste exported to other out-of-county landfills accounts for another 409 tons per day. Total waste exported in 2012 was approximately 5,911 tons per day.

^c Estimated quantity provided by landfill operators in tons, otherwise a conversion factor of 1,200 pounds per cubic yard was used.

^d Remaining Permitted Disposal Capacity for Frank R. Bowerman Sanitary Landfill, Olinda Alpha Sanitary Landfill, and Prima Deshecha Sanitary Landfill were provided by OC Waste and Recycling Landfill Capacity Data Report as of June 30, 2012.

Source: County of Los Angeles Department of Public Works, County of Los Angeles Countywide Integrated Waste Management Plan 2012 Annual Report, August 2013.

solid waste disposal capacity. Waste-by-rail systems allow the County to transport waste via existing railways to remote out-of-County disposal facilities. They involve the collection of recyclable waste at materials recovery facilities and the loading of remaining non-hazardous wastes into rail-ready shipping containers. These containers are delivered by truck to local rail yard loading facilities where they are then transported to remote landfills designed and permitted to receive waste via rail. One waste-by-rail landfill is currently available for use by the County: the Mesquite Regional Landfill in Imperial County, located approximately 210 miles east of downtown Los Angeles along the Union Pacific Railroad. The Mesquite Regional Landfill is permitted to accept up to 20,000 tons per day with a total disposal capacity of 582 million tons of solid waste, which is equivalent to a lifespan of approximately 100 years. The County Sanitation Districts completed acquisition of the facility in 2002, and the Mesquite Regional Landfill became operational in 2008.

Solid waste generated within Los Angeles County that is disposed of at the Mesquite Regional Landfill will be collected at the Puente Hills Intermodal Facility in the City of Industry, where it will be loaded onto rail cars for transport to the Mesquite Regional Landfill. Operations at the Mesquite Regional Landfill will start once construction of the Puente Hills Intermodal Facility has been completed and all equipment has been purchased, there is sufficient demand for out-of-County disposal, and disposal at the Mesquite Regional Landfill is deemed economically feasible by the waste haulers. Construction of the Puente Hills Intermodal Facility started in 2009 and is scheduled for completion by the end of 2015. The County Sanitation Districts has indicated that the procurement of equipment to operate the facility will occur one year before actual operations of the facility is forecasted to start.³⁰

Based on the continuing operation of the El Sobrante and Simi Valley Landfills, as well as the operation of the Mesquite Regional Landfill, available disposal capacity for Los Angeles County at these three out-of-County landfills will be 16,850 tons per day.³¹ This amount of disposal capacity is equivalent to approximately 64 percent of the total 2012 average daily solid waste disposal for all of Los Angeles County and approximately three times the current amount of Los Angeles County solid waste disposal at out-of-County landfills in 2012.

³⁰ *Telecommunication with Ms. Maria Rosales, Project Engineer, County Sanitation Districts of Los Angeles County, January 27, 2015.*

³¹ *This analysis assumes that the import waste agreements for the three Orange County landfills would not be extended beyond their current expiration dates.*

(c) Transformation Facilities³²

There are two solid waste transformation facilities within Los Angeles County that convert, combust, or otherwise process solid waste for the purpose of energy recovery. The Commerce Refuse-to-Energy Facility processed approximately 0.102 million tons of solid waste in 2012 and has a permitted capacity of 0.146 million tons per year. The Southeast Resource Recovery Facility, located in the City of Long Beach, processed approximately 0.468 million tons of solid waste in 2012 and has a permitted capacity of 0.500 million tons per year. It is expected that these two facilities will continue to operate at their current permitted capacities through 2027 (i.e., through the 2012 Annual Report planning period). The owners and operators of these facilities have indicated there are no plans to increase the daily capacity at these facilities.³³

(d) Use of Conversion Technologies

The County is also exploring the use of conversion technologies to reduce future disposal needs as well as to address global climate change. These state-of-the-art technologies encompass a variety of processes that convert normal household trash into renewable energy, biofuels, and other useful products in an environmentally beneficial way. The Southern California Conversion Technology Demonstration Project is an initiative of the County.³⁴ Conversion technologies include thermal, chemical, and biological processes that break down solid waste into usable resources such as ethanol, biodiesel, and other green fuels.³⁵ As part of this effort, in 2010, the County Board of Supervisors approved a motion to facilitate the development of three demonstration conversion technology

³² *Per Title 14, California Code of Regulations, Section 18720, a transformation facility's principal function is to convert, combust, or otherwise process solid waste by incineration, pyrolysis, distillation, gasification, or to chemically or biologically process solid waste for the purpose of volume reduction, synthetic fuel production, or energy recover. Transformation facilities do not include biomass conversion or composting facilities.*

³³ *County of Los Angeles Department of Public Works, County of Los Angeles Countywide Integrated Waste Management Plan 2012 Annual Report, August 2013, pp. 24, 52, and 60, and Appendix E-2, Table 1.*

³⁴ *Southern California Conversion Technology, About Us, www.socalconversion.org/about-us, accessed March 11, 2015.*

³⁵ *Southern California Conversion Technology, Why Conversion Technologies?, www.socalconversion.org/vision/why-conversion-technologies/, accessed March 11, 2015.*

projects.³⁶ Construction of one of the three demonstration projects is underway; the remaining two demonstration projects are on hold.³⁷

(2) Solid Waste Generation

(a) Unincorporated Los Angeles County and City of Santa Clarita

As previously discussed, the IWMA's 50 percent diversion requirement is now measured in terms of per capita disposal expressed as pounds per person per day. A total of approximately 807,837 tons of solid waste was disposed of by land uses within unincorporated Los Angeles County during 2012.³⁸ For the residential population within unincorporated areas, the 50-percent per capita disposal target rate is 7.4 pounds per person per day, and the measured annual disposal rate was 4.2 pounds per person per day in 2012.^{39,40} For employees within unincorporated areas, the 50 percent per capita disposal target rate is 41.5 pounds per person per day, and the actual annual disposal rate was 25.0 pounds per person per day in 2012.⁴¹ As previously discussed, for the most

³⁶ County of Los Angeles Department of Governments, Board Motion of April 20, 2010, Item No. 44, Conversion Technologies in Los Angeles County Six Month Status Update: October 2010 Through April 2011 Update, April 21, 2011, www.socalconversion.org/pdfs/A3454-1_County_CT_Letter_04-21-11.pdf, accessed March 11, 2015.

³⁷ County of Los Angeles Department of Governments, Board Motion of April 20, 2010, Item No. 44, Conversion Technologies in Los Angeles County Six Month Status Update: April 2012 Through October 2012 Update, April 29, 2012, http://dpw.lacounty.gov/epd/conversiontechnology/CT_6_month_report_cover_memo_To_Each_Supervisor_04-29-13.pdf, accessed March 11, 2015.

³⁸ CalRecycle website, Jurisdiction Diversion/Disposal Rate Detail for Los Angeles—Unincorporated, Reporting Year: 2012, www.calrecycle.ca.gov/LGCentral/Reports/DiversionProgram/JurisdictionDiversionDetail.aspx?JurisdictionID=274&Year=2012, accessed March 11, 2015.

³⁹ CalRecycle website, Jurisdiction Diversion/Disposal Rate Detail for Los Angeles—Unincorporated, Reporting Year: 2012, www.calrecycle.ca.gov/LGCentral/Reports/DiversionProgram/JurisdictionDiversionDetail.aspx?JurisdictionID=274&Year=2012, accessed March 11, 2015.

⁴⁰ The 50 percent per capita disposal target is the amount of disposal that is approximately equivalent to the current 50 percent diversion requirement. To meet the 50 percent goal, jurisdictions must dispose of not more than their 50 percent per capita disposal target. For most jurisdictions, the 50 percent per capita disposal target is based on the average of 50 percent of total waste generation from 2003 through 2006 expressed in terms of per capita disposal. Source: CalRecycle website, www.calrecycle.ca.gov/LGCentral/Basics/PerCapitaDsp.htm#UsingPerCapita, accessed March 11, 2015.

⁴¹ CalRecycle website, Jurisdiction Diversion/Disposal Rate Detail for Los Angeles—Unincorporated, Reporting Year: 2012, www.calrecycle.ca.gov/LGCentral/Reports/DiversionProgram/JurisdictionDiversionDetail.aspx?JurisdictionID=274&Year=2012, accessed March 11, 2015.

recent Jurisdiction Review period of 2007–2011, the unincorporated County achieved the 50 percent equivalent per capita disposal requirement.⁴²

For comparison, CalRecycle has established disposal rate targets of 5.8 pounds per day per resident and 15.0 pounds per day per employee for the City of Santa Clarita. The City's actual disposal rates in 2012 measured 3.8 pounds per day per resident and 10.8 pounds per day per employee.⁴³

(b) Project Site

The Project Site is generally comprised of vacant land, some agricultural uses, a small plant nursery used by the adjacent Six Flags Magic Mountain, and abandoned oil wells and associated access roads. These uses contribute a quantitatively insignificant amount of solid waste to the area's waste stream.

(3) Solid Waste Collection

Within the County, solid waste management, including collection and disposal services and landfill operation, is administered by various public agencies and private companies. Construction waste is also collected by private contractors. Generally, all waste in the County's unincorporated areas is collected by private haulers that participate in a garbage disposal district system, a franchise agreement system, and/or an open market system. Under the garbage disposal district system, garbage collection and disposal services are provided to residents and businesses by private waste haulers that contract with County Public Works. Services in the garbage disposal districts include weekly collection of refuse, recyclables, and green waste from their respective carts or dumpsters as well as unlimited collection of bulky items and electronic waste upon request. Under the franchise waste collection systems that have been developed or are underway, agreements between the County and waste haulers to provide waste collection services to residents in the unincorporated areas specify that the waste haulers must abide by specific standards, rate control measures, and reporting requirements. As of August 2013, approximately 137 haulers were permitted by the County Department of Health Services to collect residential, commercial, and industrial waste in the unincorporated areas.⁴⁴

⁴² Email correspondence with Jennifer Wallin, Manager, Materials, Markets, and Local Assistance Division, CalRecycle, August 13, 2013.

⁴³ CalRecycle website, *Jurisdiction Diversion/Disposal Rate Summary (2007–Current)*, selection for "Santa Clarita," www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx, accessed March 11, 2015.

⁴⁴ Telecommunication with Saro Toutounjian, Commercial Franchise Employee, Los Angeles County, Department of Public Works, August 12, 2013.

Residents within the Santa Clarita Valley are served by a franchise waste collection system; the County has an exclusive agreement with Burrtec Waste Industries to provide disposal and recycling services in the Valley.⁴⁵

(4) Hazardous Materials Collection and Disposal

As discussed above, the County prepared a Household Hazardous Waste Element to provide for the management of household hazardous waste generated by residents. In addition to the cooperative agreement between the County and City of Los Angeles allowing all County residents to dispose of household hazardous waste at City of Los Angeles collection sites, County Public Works operates its own household hazardous waste collection events in conjunction with the County Sanitation Districts. These collections are one-day events at varying locations throughout the County where residents may drop off household hazardous waste and electronic waste.⁴⁶ Hazardous wastes are disposed of at Class I landfills (i.e., outside of the County).

Non-residential generators of hazardous waste include persons or businesses whose acts or processes produce hazardous waste or who, in some other manner, cause a hazardous substance or waste to become subject to the California Hazardous Waste Control Law.⁴⁷ These hazardous wastes require transport to a licensed disposal or treatment facility. However, the transport and disposal of hazardous materials is more complex than for typical Class III solid waste given the various forms of hazardous materials (e.g., solids, liquids, gasses, radioactive materials, etc.) and the associated varied regulatory requirements. Facilities that use hazardous materials and/or generate hazardous waste are responsible for the disposal of that waste and may employ any of a number of licensed private contractors for transport and disposal. While the County does not have its own hazardous waste facilities, there are contracted hazardous waste venues in the County that process (as distinguished from accepting for disposal) hazardous waste.⁴⁸

As to disposal facilities, the closest Class I/II landfill to the Project Site is the B-18 Landfill at the Kettleman Hills Facility located in Kings County. The facility is permitted to accept most types of hazardous wastes as defined by the U.S. Environmental Protection

⁴⁵ County of Los Angeles, Chief Executive Office, Letter to the Honorable Board of Supervisors, April 8, 2008, http://file.lacounty.gov/bc/q2_2008/cms1_086270.pdf, accessed March 11, 2015.

⁴⁶ County of Los Angeles, Department of Public Works, Events for Collecting Household Hazardous Waste, <http://ladpw.org/epd/hhw/collection.cfm>, accessed March 11, 2015.

⁴⁷ Health and Safety Code, Sections 25100–25249.

⁴⁸ Electronic correspondence, Nick Morell, Recycling Coordinator, Facilities Planning Department, Los Angeles County Sanitation Districts, November 21, 2013.

Agency (USEPA) and the State of California. Materials accepted at the Kettleman Hills Facility include asbestos debris, petroleum-contaminated soils and debris, soils and debris with metal contamination, household hazardous wastes from collection events, baghouse dusts, various ash waste, filter cake, catalyst solids, latex paint, groundwater, stormwater, clarifier water, and various sludges. To accommodate future hazardous waste generation, an expansion of the Kettleman Hills B-18 hazardous waste disposal facility is anticipated to open in 2015. The Subsequent EIR for the B-18 expansion project indicates that the life of the B-18 facility, which is nearing its existing permitted disposal capacity, would be extended by eight years. However, due to on-going efforts to increase the recycling of hazardous materials, the duration of disposal capacity at the B-18 facility may extend beyond the forecasted eight-year period. The Kettleman Hills facility's operator has also proposed an additional facility (the B-20 Landfill) that would further extend hazardous waste disposal capacity beyond that provided by the B-18 expansion project; the B-20 facility has not yet begun the permitting process. Refer to **Section 5.8, Hazards and Hazardous Materials**, of this Draft EIR for additional discussion of hazardous waste.^{49,50,51}

3. ENVIRONMENTAL IMPACTS

a. Methodology

The Project's potential solid waste impacts are based on an analysis of the estimated amount of waste to be disposed of as a result of Project construction and operation using appropriate generation/disposal rates and considering the remaining capacity at the facilities serving the Project area. Following state protocol, the analysis focuses on the amount of waste that would actually be disposed of at a landfill(s) following diversion (i.e., recycling, reuse, or other methods), as opposed to considering the total amount of waste generated.

(1) Construction

Anticipated solid waste generation associated with the Project's construction activities was determined using rates provided by the USEPA based on the types of land use and amount of floor area proposed for construction. The total amount of solid waste generated was then divided by the duration of Project construction and diversion was

⁴⁹ Waste Management, *Kettleman Hills Landfill Facility Overview*, <http://kettlemanhillslandfill.wm.com/factsheets/2011/facility-overview.jsp>, accessed March 11, 2015.

⁵⁰ Waste Management, *Kettleman Hills Landfill Facility Expansion*, <http://kettlemanhillslandfill.wm.com/facility-expansion/index.jsp>, accessed March 11, 2015.

⁵¹ Electronic correspondence, Jim Sook, District Manager II, Chemical Waste Management, Inc., Kettleman Hills Facility, February 24, 2014.

accounted for. The results of these calculations were compared with the available capacity at the landfills that currently accept construction waste from the Project area to assess the significance of the Project's solid waste disposal.

(2) Operation

The Project's anticipated waste disposal needs during operations were estimated using actual disposal rates provided by CalRecycle. Actual 2012 disposal rates for the City of Santa Clarita were used, as the waste generation, diversion, and disposal characteristics of Project residents and businesses are assumed to more closely mirror those of comparable uses in the adjacent City, as opposed to those of the unincorporated County which reflect a more extensive geography and a much broader range of land use types, densities, etc. The Project's estimated waste disposal quantity was then compared with the remaining capacity at the County's Class III landfills open to the Project Site to determine whether adequate capacity would be available to accommodate the Project. The Project's estimated waste disposal quantity was also compared with remaining capacity at the Chiquita Canyon, Antelope Valley, and Sunshine Canyon Landfills, which are the primary landfills that presently serve the Santa Clarita Valley.

b. Project Design Elements/Project Design Features

As discussed in **Section 3.0**, Project Description, of this Draft EIR, Project implementation would involve substantial earthwork but would not require soil export due to a balanced cut and fill operation. For purposes of calculating construction waste, the proposed 1,574 residential units are estimated to comprise 2,951,913 square feet of floor area, and the elementary school and two recreational centers are estimated to total 87,500 square feet.⁵²

The Project would comply with the County's Green Building Standards Code (County Code Title 31), which addresses sustainability via appropriate planning and design, waste diversion, and other requirements, as detailed below. Based on the applicable solid waste regulations and diversion requirements previously discussed, the Project would implement the following regulatory compliance measures:

- The Project Applicant would establish a Solid Waste Diversion Program requiring waste diversion of 65 percent during Project construction, in compliance with County Code.

⁵² Based on information provided by The Newhall Land and Farming Company.

- The Project Applicant shall ensure the construction contractor contracts for solid waste disposal services with a company that recycles demolition and construction-related wastes, as required per County Code and demonstrated to County Public Works prior to issuance of construction permits.
- The Project Applicant would initially establish a Solid Waste Diversion Program requiring waste diversion of 50 percent during Project operation, in compliance with the IWMA, and require that 75 percent of solid waste generated be source reduced, recycled, or composted once AB 341's recycling goal becomes effective in 2020.
- In the multi-family, commercial, and institutional development within the Project Site, the Project Applicant would provide accessible and convenient areas for collecting and loading recyclable materials in compliance with the County's recycling collection ordinance. These areas would be clearly marked and adequate in capacity, number, and distribution to serve the development.
- Commercial businesses subject to AB 1826 would be required to separate food scraps and yard trimmings, and arrange for recycling services for that waste. Accessible and convenient areas for collecting and loading organic waste would be provided on-site. These areas would be clearly marked and adequate in capacity, number, and distribution to serve the development.

c. Significance Thresholds

Based on Appendix G of the CEQA Guidelines and other relevant criteria, the Los Angeles County Department of Regional Planning has determined that a project would have a potentially significant impact related to solid waste based on the following criteria:

Threshold 5.24-1: Would the Project be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?

Threshold 5.24-2: Would the Project comply with federal, state, and local statutes and regulations related to solid waste?

d. Project Impacts

Threshold 5.24-1: Would the Project be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?

(1) Construction

(a) Solid Waste

Project construction activities would generate construction wastes (e.g., wood, concrete, asphalt, cardboard, brick, glass, plastic, and metal) that would be recycled or collected by private waste haulers contracted by the Applicant and taken for disposal at the County's inert landfills. The amount of construction waste anticipated to be generated was estimated using generation factors established by the USEPA. As shown in **Table 5.24-3**, Project Construction Waste Generation, on page 5.24-29, Project construction is estimated to generate a total of 8,055 tons of construction-related solid waste. As previously discussed, soil export would not occur.

The Applicant is committed to recycling practices throughout the Project's design, construction, and operational phases. Specifically, in accordance with County Code, 65 percent of construction waste (and demolition debris) would be recycled.⁵³ In addition, the construction contractor for the Project would contract for solid waste disposal services with a company that recycles demolition and construction-related wastes. When accounting for recycling, the Project would dispose of an estimated 2,819 tons of construction waste. However, even without recycling, the Project's total estimated construction waste generation of 8,055 tons would represent approximately 0.013 percent of the current estimated remaining capacity at the County's unclassified landfill (approximately 64.13 million tons, as shown in **Table 5.24-1**, Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills). As previously discussed, the unclassified landfill serving the County has adequate long-term capacity and generally does not face capacity shortages. Thus, the County's unclassified landfill would have adequate capacity to accommodate the total Project-generated construction waste.

In terms of daily waste disposal, it is not known precisely how much construction waste would be generated on a daily basis. For purposes of this analysis, it was assumed that construction would occur on 22 days each month for nine years. Under this assumption, the Project would generate approximately 8,055 tons of waste per day and, taking into account recycling, require the disposal of approximately 1.2 tons of solid waste per day, which would represent a small percentage (0.018 percent) of the total permitted daily capacity at the Azusa Land Reclamation landfill (6,500 tons per day according to the 2012 Annual Report).⁵⁴

⁵³ As the majority of the Project Site is undeveloped, a very limited amount of demolition debris would be generated.

⁵⁴ Daily waste disposal calculated as follows: 2,819 tons ÷ 9 years ÷ 12 months ÷ 22 days.

**Table 5.24-3
Project Construction Waste Generation**

Land Use	Size (sf)	Generation Rate ^a (lbs/sf)	Total (tons)
Residential	2,951,913	4.38 lbs/sf	6,465
Commercial	730,000	3.89 lbs/sf	1,420
Elementary School and Two Recreational Centers	87,500	3.89 lbs/sf	170
Total Generation (prior to recycling)			8,055
Total Disposal (after 65 percent recycling)			2,819
<hr/> <i>sf = square feet</i> <i>lbs = pounds</i> ^a U.S. Environmental Protection Agency, Report No. EPA530-98-010, <i>Characterization of Building-Related Construction and Demolition Debris in the United States</i> , June 1998, pages 2-3 and 2-4. Source: The Newhall Land and Farming Company; Eyestone Environmental, 2013.			

While it is unlikely that the construction waste disposal quantity would be distributed evenly throughout the nine-year construction period, even on peak construction days, the amount of construction waste generated would represent a small percentage of the permitted daily capacity at the Azusa Land Reclamation landfill.⁵⁵ Accordingly, construction of the Project would not result in the need for additional disposal capacity, and construction impacts with respect to landfill capacity would be less than significant.

(b) Hazardous Waste

Construction activities could also generate hazardous waste products. Specifically, grading and building construction could involve the use and subsequent disposal of fuel and oils associated with construction equipment, as well as coatings, paints, adhesives, and caustic or acidic cleaners. Hazardous waste generated in connection with construction activities would be collected, handled, and disposed of in accordance with all applicable County, regional, state, and federal laws and requirements, as outlined in detail in **Section 5.8**, Hazards and Hazardous Materials, of this Draft EIR. In particular,

⁵⁵ *In actuality, the majority of Project construction waste would be generated during the building construction phase, which is anticipated to occur over a 7.5-year period. Assuming an even distribution over the course of that phase, the average daily waste disposal (after recycling) would be approximately 1.4 tons, or roughly 0.02 percent of the County's unclassified landfill's permitted daily capacity. For comparison with a worst-case (although extremely unlikely) scenario, assuming disposal of all construction waste on a single day, the disposal amount (after recycling) would represent approximately 43.4 percent of the facility's permitted daily capacity.*

hazardous wastes would be conveyed to licensed treatment, disposal, and resource recovery facilities, as required.

With regard to hazardous waste disposal capacity, all permits for the Kettleman Hills B-18 hazardous waste disposal facility expansion have been issued, and the facility is currently under construction. It is anticipated that the facility could be operational as early as March 2015 or shortly thereafter. Based on forecasts included in the B-18 expansion Subsequent EIR, the expansion project would extend the life of the B-18 facility by eight years. Thus, the B-18 expansion facility would be available for nearly all of the Project's construction period. The facility's operator also has proposed an additional facility (the B-20 Landfill) that would further extend hazardous waste disposal capacity beyond that provided by the B-18 expansion project. As such, plans are underway for the expansion of hazardous waste capacity in order to continue to meet statewide demand. Therefore, impacts with respect to the disposal of hazardous waste during construction would be less than significant.

(2) Operation

(a) Solid Waste

As previously discussed, existing uses on-site contribute a quantitatively insignificant amount of solid waste to the Project area's waste stream.

As also previously discussed, the Project Applicant would incorporate compliance measures to address applicable solid waste regulations and diversion requirements. Specifically, initially at least 50 percent of the Project's operational waste would be recycled in compliance with the IWMA, and beginning in 2020 a total of 75 percent of waste would be source reduced, recycled, or composted in accordance with AB 341 requirements. To help achieve this standard, the Project Applicant would provide accessible and convenient areas for collecting and loading recycling materials for the multi-family, commercial, and institutional uses within the Project Site, in compliance with County requirements.

The amount of waste anticipated to be disposed of during Project operation was estimated using the actual disposal rates for the City as established by CalRecycle. As shown in **Table 5.24-4**, Project Solid Waste Disposal, on page 5.24-31, Project operation would result in the disposal of an estimated 7,914 tons of solid waste per year. This estimate is considered conservative as it does not account for increased solid waste diversion required by 2020 per AB 341, nor does it account for organic waste diversion to be implemented by certain commercial businesses beginning in 2016 per AB 1826.

In terms of landfill capacity, the 2012 Annual Report, as discussed previously, provides projections of solid waste disposal needs for Los Angeles County for a 15-year

**Table 5.24-4
Project Solid Waste Disposal**

Land Use	Residents or Employees^a	Disposal Rates (lbs./person/day)^b	Total Waste Disposal (tons/year)^c
Residential	5,288 residents	3.8	3,667
Office	1,740 employees	10.8	2,443
Retail	841 employees	10.8	1,658
School	82 employees	10.8	115
Park	16 employees	10.8	32
Total			7,914^d

du = dwelling unit
sf = square feet

^a Refer to **Section 5.14, Population, Housing, and Employment**, of this Draft EIR for calculations of the Project's residential population and employment, and particularly **Table 5.14-2, Project Employees**, therein for the employment factors used.

^b The solid waste diversion rates are based on the Actual 2012 Per Resident Disposal Rate and the Actual 2012 Per Employee Disposal Rate for the City of Santa Clarita, as established by CalRecycle.

^c The total waste disposal for Project employees at the proposed office uses and elementary school assumes operations would occur five days per week. The total waste disposal for Project residents and employees at the proposed retail and park uses assumes operations would occur seven days per week.

^{dc} Total may not sum exactly due to rounding.

Source: CalRecycle website, *Jurisdiction Diversion/Disposal Rate Summary (2007–Current)*, selection for "Santa Clarita," www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx, accessed March 11, 2015; and *Eyestone Environmental, 2015*.

planning period that is updated on an annual basis (i.e., each annual update addresses conditions for the following 15-year period). Specifically, the 2012 Annual Report provides nine scenarios of solid waste disposal projections, starting with Scenario I—Status Quo, which assumes no change in current conditions. Each of the other eight scenarios add different categories of solid waste management options, focusing on either: (1) reducing the amount of solid waste generated that needs to be disposed of at a landfill (i.e., diversion); or (2) expanding disposal (landfill) capacity. Specifically, the scenarios analyzed in the 2012 Annual Report include increasing solid waste diversion rates, utilization of alternative technology capacity, expanding in-County landfill capacity, and expanding out-of-County landfill capacity.

Historically, solid waste disposal has occurred largely or solely within landfills located in Los Angeles County. However, the trend in recent years has been to increase solid waste disposal at landfills located outside of the County. Thus, the proper context

within which to view the Project's potential solid waste impacts includes landfills located within, as well as outside of, Los Angeles County. Specifically, one out-of-County landfill is anticipated to be available for use by the County: the waste-by-rail Mesquite Regional Landfill in Imperial County, located along the Union Pacific Railroad.

Of the nine scenarios analyzed in the 2012 Annual Report, three scenarios (Scenarios I, II, and III) indicate a shortage of landfill capacity that first occurs in 2017 or 2018, depending on the scenario, with the shortfall continuing through the balance of the forecasting period (2027).⁵⁶ The largest shortfall in landfill capacity occurs under the Status Quo scenario (Scenario I) with a disposal capacity shortfall of 9,280 tons per day in 2027. This shortfall is equal to 28.5 percent of the total Los Angeles County solid waste disposal on a daily basis in 2027.

All of the remaining six scenarios studied in the 2012 Annual Report forecast sufficient landfill capacity to meet the County's solid waste disposal needs through the 2027 planning period.⁵⁷ This results from a combination of one or more of the following: increasing solid waste diversion rates (up to 65 or 75 percent, consistent with AB 341, from the current 60 percent level), increasing in-County and out-of-County landfill capacity, and increasing utilization of alternative technology capacity. Of the various solid waste management options available that demonstrate adequate landfill capacity through the 2027 planning period, one option calling for the expansion of out-of-County landfill capacity at Mesquite Regional Landfill already is nearly realized.

The Mesquite Regional Landfill is owned by the County Sanitation Districts (specifically, County Sanitation District No. 2), and is fully permitted and constructed. Solid waste disposed at the Mesquite Regional Landfill will arrive primarily by rail, although some haul by trucks is permitted. Given the distance, Los Angeles County solid waste would be transported to the landfill from the Puente Hills Intermodal Facility located in the City of Industry. Construction of the Puente Hills Intermodal Facility started in 2009 and is projected to be completed by the end of 2015. While the Mesquite Regional Landfill is fully permitted and constructed, the following three conditions need to occur for the Mesquite

⁵⁶ *The 2012 Annual Report defines these three scenarios as follows: Scenario I—Status Quo, Scenario II—Increase in Diversion Rate (up to 65 percent by 2025), and Scenario III—Utilization of Alternative Technology Capacity (up to 2,300 tons per day by 2021).*

⁵⁷ *The 2012 Annual Report defines these six additional scenarios as follows: Scenario IV—In-County Class III Landfill Expansions with Out-of-County Disposal Capacity; Scenario V—Increase in Available Out-of-County Disposal Capacity; Scenario VI—Maximizing Diversion Rate (up to 75 percent, considering AB 341 goal); Scenario VII—Increase in Alternative Technology Capacity (up to 3,500 tpd); Scenario VIII—Full Utilization of Out-of-County Disposal Capacity; and Scenario IX—Best-Case Scenario: All Solid Waste Management Options Considered Become Available.*

Regional Landfill to open and start accepting solid waste: (1) construction of the Puente Hills Intermodal Facility must be completed and the equipment required to operate the facility must be purchased; (2) there is a demand for increased out-of-County landfill capacity to meet Los Angeles County's disposal needs; and (3) disposal at the Mesquite Regional Landfill is an economical option for the waste hauling industry.

With regard to the first condition, the County Sanitation Districts, the entity that is constructing and will operate the Puente Hills Intermodal Facility, has indicated that construction of the Puente Hills Intermodal Facility will be completed by the end of this year, and funding for the purchase of the equipment to operate the Puente Hills facility has been secured. With regard to the second and third conditions, as previously discussed, 2017 is the first year in which a disposal shortfall is forecasted under Scenario I—Status Quo, which is the most conservative of the nine scenarios in the 2012 Annual Report. Based on the need for disposal facilities to accommodate waste generated within the County beyond 2017, it is anticipated that the disposal demand and economics would be in place to commence operation of the Mesquite Regional Landfill. Thus, the second and third conditions necessary to trigger operation of the Mesquite Regional Landfill would be met. Therefore, as all three conditions that are required for the Mesquite Regional Landfill to begin operations would be met, it is anticipated that the Mesquite Regional Landfill would become operational in 2017, or earlier if needed.

The 2012 Annual Report bases its projections of future solid waste generation on the growth forecast prepared by the UCLA Anderson Longterm Forecast for Los Angeles County (Anderson Forecast). The 2012 Annual Report uses the portion of the Anderson Forecast focusing on population and employment growth as well as growth in taxable retail sales for each year of the Annual Report's 15-year forecast period. The Anderson Forecast has projected greater increases in both population and employment growth over the 2012 to 2027 forecast period than SCAG's 2012 RTP forecast over the same time period. As the growth represented by the Entrada South Project is included in SCAG's 2012 RTP forecast and the Anderson Forecast indicates greater population and employment growth than the SCAG RTP forecast, it is anticipated that the growth represented by the Entrada South Project is also included in the Anderson forecast. On this basis, it is concluded that the population and employment growth represented by the Entrada South Project are part of the demographic forecasts used in the 2012 Annual Report.

The 2012 Annual Report indicates that the Mesquite Regional Landfill has a permitted daily disposal level of 20,000 tons per day, of which up to 12,000 tons per day is available for the disposal of solid waste generated from Los Angeles County. At this disposal level, the disposal capacity available to the County at the Mesquite Regional Landfill exceeds the shortfall in daily disposal capacity for all years through 2027 under the

most conservative forecasting scenario included in the 2012 Annual Report (Scenario I—Status Quo).⁵⁸ As these forecasts take into account population and employment growth, sufficient landfill capacity would be available to accommodate the growth forecasted to occur in Los Angeles County through 2027, the last year of the 15-year forecast included in the 2012 Annual Report.

In summary, the 2012 Annual Report identifies six scenarios with sufficient landfill capacity to meet the County's solid waste disposal needs through the 2027 planning period. Further, with the availability of the Mesquite Regional Landfill along with continuing use of existing operating landfills in accordance with their respective permit conditions, there is sufficient landfill capacity to accommodate the solid waste generated by the Entrada South Project. Potential increased diversion rates (e.g., implementation of AB 341), market demand, and on-going planning efforts using 15-year planning horizons to manage landfill capacity (e.g., Annual Reports prepared by the County Public Works Department) will further increase available capacity. As such, impacts with regard to landfill capacity during Project operations would be less than significant.

While the analysis above focuses on landfill capacity issues throughout the County, the Area Plan, as previously discussed, indicates that the Santa Clarita Valley is served primarily by the Chiquita Canyon, Antelope Valley, and Sunshine Canyon Landfills. Therefore, this analysis also considers Project solid waste generation in terms of average daily and total annual solid waste disposal at these three facilities. In 2012, these three landfills received 10,900 tons of solid waste on an average daily basis and 3,400,000 tons over the course of the entire 2012 calendar year, as shown in **Table 5.24-1**, Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills. Based on these disposal quantities, the Project's solid waste disposal requirements are equal to approximately 0.20 percent of the average daily solid waste disposal and 0.23 percent of the total annual solid waste disposal at the three Class III landfills that serve the Santa Clarita Valley.

In terms of future conditions, the Chiquita Canyon Landfill, based on data presented in the 2012 Annual Report, will reach its permitted disposal capacity in 2016. A major expansion to this landfill has been proposed, but has not yet been permitted.⁵⁹ Given this

⁵⁸ *The daily disposal shortfall under Scenario I—Status Quo is 9,280 tons per day in 2027, the last year of the 15-year forecast included in the 2012 Annual Report. At a Los Angeles County disposal capacity of 12,000 tons per day at the Mesquite Landfill, the entire 2027 shortfall can be accommodated at the Mesquite landfill and there would still be an additional disposal capacity of 2,720 tons per day before the daily capacity level from Los Angeles County would be reached.*

⁵⁹ *A Draft EIR regarding the Chiquita Canyon landfill expansion (SCH No. 2005081071) was publicly circulated in July 2014.*

status, for the purposes of this analysis, it is conservatively assumed that the Chiquita Canyon Landfill will close in 2016. The 2012 Annual Report also forecasts that the average daily tonnage disposed at the Sunshine Canyon Landfill will reach its permitted daily capacity in 2016 as well. As occupancy of the Entrada South Project would occur after this date (beginning in 2018), for the purposes of this analysis, it is conservatively assumed that disposal capacity at this landfill will not be available to receive solid waste generated by the Entrada South Project. The third landfill identified as serving the Santa Clarita Valley is the Antelope Valley Landfill. In 2012, this landfill had a daily disposal level of 822 tons per day, a maximum permitted daily capacity of 1,800 tons per day, and 16.91 million tons of remaining landfill capacity.

The 2012 Annual Report forecasts that, in 2027, the Antelope Valley Landfill will have a daily disposal level of 1,800 tons per day, with 9.9 million tons of remaining landfill capacity. The Antelope Valley Landfill is forecasted to reach its daily disposal limit of 1,800 tons per day in 2022. Accordingly, solid waste generated by those Project uses that become operational by 2022 presumably would be accommodated by the landfill before it reaches its daily disposal limit. However, the solid waste generated by Project uses occupied after 2022 would need to be disposed of at another facility. As solid waste is managed on a County-wide level, market demand drives the expansion of landfill capacity, and given that adequate disposal capacity would continue to be available under six different scenarios evaluated in the 2012 Annual Report, Project impacts with regard to solid waste disposal capacity would remain less than significant.

Further, the County will continue to address landfill capacity through the preparation of the Countywide Integrated Waste Management Plan Annual Reports. The preparation of each report provides sufficient lead time (15 years) to address potential future shortfalls in landfill capacity. Furthermore, in future years, it is anticipated that the rate of declining landfill capacity will slow considering the Source Reduction and Recycling Element, which describes policies and programs to be implemented to achieve further waste disposal reductions. In addition, as previously discussed, AB 341 established a state policy goal that no less than 75 percent of solid waste generated within the State be source reduced, recycled, or composted by 2020. The Project Applicant, in response to this policy initiative, would implement an on-site diversion plan to achieve this level of diversion, which would further reduce Project-related disposal needs.

Based on the preceding analysis and with compliance with the IWMA, County Code, and the County's recyclables collection ordinance, the Project's operational impacts with respect to solid waste landfill capacity would be less than significant.

(b) Hazardous Waste

Given the nature of the proposed uses, substantial amounts of hazardous waste are not anticipated to be generated with any regularity. Potentially hazardous materials used within the Project Site would include typical cleaning agents and common pesticides or herbicides for landscaping, and any associated hazardous waste would be collected, handled, and disposed of in accordance with all appropriate County, regional, state, and federal laws and requirements, as outlined in detail in **Section 5.8**, Hazards and Hazardous Materials, of this Draft EIR. In addition, implementation of required source reduction measures are anticipated to reduce the generation of operational hazardous waste streams. 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.

Although the County does not have its own hazardous waste disposal facilities, there are contracted hazardous waste venues in the County that process hazardous waste for eventual disposal, as previously discussed. The existing permitted Class I and II landfills in operation within southern and central California can accommodate household hazardous waste such as may be generated during Project operation. While existing hazardous waste disposal capacity is limited, the Kettleman Hills B-18 expansion project, which is anticipated to be operational as early as March 2015 or shortly thereafter, would increase hazardous waste disposal capacity by approximately 5 million cubic yards. Based on forecasts included in the B-18 Expansion Subsequent EIR, the expansion project would extend the life of the B-18 facility by eight years. Thus, the B-18 expansion facility would be available to accommodate hazardous waste generated by a portion of Entrada South development until such time that the landfill's capacity is reached. The facility's operator has also proposed an additional facility (the B-20 facility) that would further extend hazardous waste disposal capacity beyond that provided by the B-18 expansion project. This additional facility is still in the permitting process.

As such, and as discussed earlier, plans are underway for the expansion of hazardous waste capacity in order to continue to meet statewide demand. Due to required waste reduction efforts and the fact that typical operational hazardous waste would be conveyed to licensed treatment, disposal, and resource recovery facilities, it is not anticipated that the Project would result in a significant increase in demand for hazardous waste landfill capacity. Therefore, impacts with respect to the disposal of hazardous waste during Project operation would be less than significant.

Threshold 5.24-2: Would the Project comply with federal, state, and local statutes and regulations related to solid waste?

The Project Applicant would incorporate waste diversion and recycling practices throughout the Project's design, construction, and operational phases, consistent with the IWMA, AB 341, County Code, the General Plan, the Area Plan. Specifically, in accordance with County Code and IWMA requirements, 65 percent of Project construction waste and 50 percent of Project operational waste would be recycled. Additionally, in accordance with AB 341, the Applicant would implement a waste diversion program requiring 75 percent of the Project's operational waste to be source reduced, recycled or composted once AB 341's recycling goal becomes effective in 2020. Furthermore, the Project Applicant would comply with the County's requirements under Title 20, Chapter 20.87 and Title 20, Chapter 20.89 for recycling planning, recycling quantities, and associated reporting requirements. Accordingly, impacts with respect to compliance with solid waste regulations would be less than significant.

4. CUMULATIVE IMPACTS

Since landfill capacity is generally planned for on a County-wide basis, the geographic context for the cumulative impact analysis of solid waste is the County of Los Angeles. Continued growth within the County would cumulatively increase the demand for solid waste facilities. The County's future solid waste disposal needs discussed herein are based on data within the Countywide Integrated Waste Management Plan 2012 Annual Report prepared by County Public Works.

a. Construction

Construction activities associated with cumulative development between 2012 and 2024 (i.e., the anticipated Project buildout year) would generate construction and demolition waste and, thus, would cumulatively increase the need for waste disposal at the County's unclassified landfill. Like the Project, all future development projects in the area must comply with County Code requirements and would be expected to implement measures to ensure at least 50 percent, and 65 percent when applicable, of all non-hazardous construction and demolition debris is recycled or reused. Furthermore, as previously discussed, the County's unclassified landfill generally does not face capacity shortages and is expected to have sufficient capacity to accommodate cumulative demand for the foreseeable future. Therefore, cumulative construction impacts with respect to landfill capacity would be less than significant.

In addition, as with the Project, hazardous waste generated in connection with construction activities associated with future development through 2024 would be handled and disposed of in accordance with all applicable County, regional, state, and federal laws and requirements. As previously discussed, additional permitted capacity will soon be available, and plans are underway for the expansion of hazardous waste capacity in order to continue to meet statewide demand. Given that construction-related hazardous waste

would be conveyed to licensed treatment, disposal, and resource recovery facilities, a significant increase in demand for hazardous waste landfill capacity is not anticipated. Therefore, cumulative impacts with respect to the disposal of hazardous waste during construction would be less than significant.

b. Operation

According to the 2012 Annual Report, the forecasted waste generation within the County in 2024 (i.e., the anticipated Project buildout year) would be approximately 25,517,190 tons.⁶⁰ Assuming a 60 percent diversion rate, consistent with the diversion rate assumed in the 2012 Annual Report (which is conservative since AB 341 established a statewide policy goal to reduce, recycle, or compost 75 percent of waste by 2020, and since organic waste diversion required per AB 1826 is not accounted for), an estimated 10,206,876 tons of solid waste would need to be disposed at Class III landfills in 2024. The 2012 Annual Report indicates that this level of annual solid waste generation is equal to 31,346 tons per day. Based on the disposal capacity available at existing disposal facilities, this level of daily disposal demand would result in a shortfall of 7,395 tons per day. With the addition of the Mesquite Regional Landfill, which can accept up to 12,000 tons per day from Los Angeles County, adequate disposal capacity would be available to meet Los Angeles County's forecasted disposal needs in 2024 after accounting for forecasted growth. Further, the Project's estimated annual disposal of approximately 7,914 tons during operation would represent a small percentage (approximately 0.08 percent) of the estimated cumulative waste disposal in the County in 2024.

In addition, and as previously discussed, the 2012 Annual Report anticipates future disposal needs can be adequately met through 2027 via a multi-pronged approach that includes successfully permitting and developing proposed in-County landfill expansions, utilizing available or planned out-of-County disposal capacity, developing necessary infrastructure to facilitate exportation of waste to out-of-County landfills, and developing conversion and other alternative technologies. The County will continue to address landfill capacity through the preparation of the Annual Reports. The preparation of each annual report provides sufficient lead time (15 years) to address potential future shortfalls in landfill capacity. Furthermore, in future years, it is anticipated that the rate of declining landfill capacity would slow considering the Source Reduction and Recycling Element, which describes policies and programs to be implemented to achieve further waste disposal reductions. In addition, AB 341 established a state policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020, and

⁶⁰ *County of Los Angeles Department of Public Works, County of Los Angeles Countywide Integrated Waste Management Plan 2012 Annual Report, August 2013, Appendix E-2, Table 5.*

AB 1826 requires progressively increased organic waste diversion by certain commercial uses beginning in 2016. As such, cumulative impacts with respect to landfill capacity on a County-wide basis would be less than significant.

In addition, a secondary analysis of cumulative impacts was conducted for the Santa Clarita Valley in order to focus on the three landfills that primarily serve the Project area (i.e., Chiquita Canyon, Antelope Valley, and Sunshine Canyon Landfills). Anticipated growth within the Valley, including growth forecasted in the Area Plan, as well as those few related projects not already accounted for within the growth forecasts, would cumulatively increase the demand for disposal capacity within these facilities, as evaluated below.

Operation of the Project plus cumulative development occurring in the Valley between 2012 and 2024 would generate municipal solid waste and, thus, would cumulatively increase the need for waste disposal at the County's Class III landfills. Based on the actual 2012 disposal rates for the City of Santa Clarita published by CalRecycle, which are considered indicative of waste generation, diversion, and disposal characteristics of land uses throughout the Santa Clarita Valley, the annual amount of waste anticipated to be disposed of in conjunction with such growth was estimated at approximately 208,000 tons of solid waste per year.⁶¹

In terms of landfill capacity, this amount of annual solid waste disposal would represent approximately 0.22 percent of the estimated remaining capacity as of December 31, 2012, at the Chiquita Canyon, Antelope Valley, and Sunshine Canyon Landfills (collectively, approximately 95.25 million tons, as shown in **Table 5.24-1**, Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills). This amount of waste also would represent approximately 6.12 percent of the solid waste disposed at the same three Class III landfills in 2012 (approximately 3.4 million tons, as also shown in **Table 5.24-1**, Solid Waste Disposal and Estimated Remaining Capacity for County of Los Angeles Landfills). Based on data provided in the 2012 Annual Report, the Chiquita Canyon Landfill as currently permitted will cease operations in 2016, the Sunshine Canyon Landfill also will reach its daily disposal capacity in 2016, and the Antelope Valley Landfill will reach its daily disposal capacity in 2022. However, like the Project, solid waste generated by those cumulative land uses that become operational before 2022 presumably would be accommodated by the available landfills before they reach their daily disposal limits. Nonetheless, the solid waste generated by cumulative development occupied after

⁶¹ *This rough estimate takes into account the growth forecasted in the Area Plan (interpolated to 2024) as well as those few related projects not already accounted for within the growth forecasts, with the exception of those anticipated non-residential land uses for which employment data or appropriate factors were not available in order to apply the City of Santa Clarita per employee waste disposal rate.*

2022 would need to be disposed of at another landfill. As solid waste is managed on a County-wide level and influenced by market demand, and given that adequate disposal capacity would be available under six various scenarios studied in the 2012 Annual Report, cumulative impacts with regard to solid waste disposal capacity would be less than significant.

In addition and as previously discussed, it is anticipated that future disposal needs can be adequately met through 2027 via a multi-pronged approach, and the County will continue to address future landfill capacity through the preparation of the Annual Reports based on 15-year planning horizons. Additionally, implementation of AB 341 will promote the diversion of 75 percent of solid waste, and AB 1826 will promote organic waste diversion, thus serving to further reduce actual disposal rates. As such, cumulative operational impacts with respect to landfill capacity would be less than significant.

As it relates to hazardous waste, like the Project, such wastes resulting from the operation of cumulative development in the area would be collected, handled, and disposed of in accordance with all applicable County, regional, state, and federal laws. Moreover, implementation of required source reduction measures are anticipated to reduce the generation of operational hazardous waste streams. Given that construction-related hazardous waste would be conveyed to licensed treatment, disposal, and resource recovery facilities and that plans for the expansion of hazardous waste landfill capacity are underway, cumulative impacts with respect to the disposal of hazardous waste during operations would be less than significant.

c. Regulatory Compliance

With respect to regulatory compliance, similar to the Project, it is anticipated that the related projects and all other future development projects would implement source reduction and recycling measures, consistent with the IWMA, AB 341, AB 1826, the County's General Plan, Area Plan, and Green Building Standards (specifically Section 22.52.2130 of the County Code). In addition, the related projects and all other future development projects would be expected to comply with applicable requirements under Title 20, Chapter 20.87 and Title 20, Chapter 20.89 of the County Code regarding recycling planning, recycling quantities, and associated reporting requirements. Therefore, cumulative impacts with respect to compliance with solid waste regulations would be less than significant.

5. MITIGATION MEASURES

a. Newhall Ranch RMDP/SCP Mitigation Measures

CDFW previously adopted a mitigation measure to minimize solid waste impacts in connection with its adoption of the Newhall Ranch RMDP/SCP EIS/EIR. That RMDP/SCP

mitigation measure also applies to the Project. If the status of the RMDP/SCP EIS/EIR is unresolved or set aside in the pending litigation at the time the County considers the Project EIR for certification, this EIR recommends that the County adopt the companion Entrada South (ES) mitigation measure set forth below, as applicable, to mitigate the Project's solid waste impacts. Any italicized text provided in the parentheses below provides necessary updated information and/or clarifications, as needed.

MM ES 5.24-1/RMDP/SCP SWS-1: Prior to the issuance of grading permits, the project applicant shall prepare a Waste Management Plan pursuant to Los Angeles County Code, title 20, chapter 20.87, Construction and Demolition Debris Recycling. The Waste Management Plan shall include provisions for the recycling of a minimum of 50 percent of the construction and demolition debris, and the submittal of corresponding reports to the Los Angeles County Environmental Programs Division. *(In compliance with the County Code, the Project would establish a Solid Waste Diversion Program requiring waste diversion of 65 percent during Project construction. That compliance measure would exceed the requirements set forth in this mitigation measure.)*

b. Entrada South Project-Level Mitigation Measures

With implementation of the regulatory compliance measures and mitigation measure identified above, Project-level impacts with regard to solid waste would be less than significant. Therefore, no Project-specific mitigation measures would be required. Cumulative solid waste impacts also would be less than significant, and no mitigation measures would be required. Nonetheless, the following mitigation measure is recommended for adoption in order to ensure that the Project's impacts with respect to hazardous waste disposal remain less than significant:

MM ES 5.24-2: The Project Applicant, or its designee, shall distribute educational materials to the purchaser of each new production home on-site regarding the proper management and disposal of household hazardous waste.

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of relevant regulatory compliance measures and the identified mitigation measures, Project-level impacts with respect to solid waste would be less than significant. In addition, cumulative solid waste impacts would be less than significant.