

# COUNTYWIDE INTEGRATED WASTE MANAGEMENT PLAN

**2021 Annual Report** 

December 2022

Countywide Summary Plan & Countywide Siting Element



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# **ACRONYMS AND GLOSSARY OF TERMS**

ADC	Alternative Daily Cover
County	County of Los Angeles (Los Angeles County)
CSE	Countywide Siting Element (Siting Element)
LUP/CUP	Land Use Permit/Conditional Use Permit
DRS/RDRS	Disposal Reporting System/Recycling and Disposal Reporting System
EIR	Environmental Impact Report
EMSW	Engineered Municipal Solid Waste
EPR	Extended Producer Responsibility
FOC	Finding of Conformance
IDEFO	Inert Debris Engineered Fill Operation
LARA	Los Angeles Regional Agency also known as Los Angeles Area Integrated Waste Management Authority
LEA	Local Enforcement Agency
Public Works	Los Angeles County Public Works
PPD	Pounds per Person per Day
Regional Planning	County of Los Angeles Department of Regional Planning
Sanitation Districts	Sanitation Districts of Los Angeles County
SRRE	Source Reduction and Recycling Element
Summary Plan	Los Angeles County Countywide Integrated Waste Management Summary Plan
SWFP	Solid Waste Facility Permit
SWIMS	Solid Waste Information Management System
Task Force	Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force
TPD	Tons per Day, Based on 6 Operating Days per Week (tpd-6)
TPW	Tons per Week
TPY	Tons per Year
UCLA	University of California, Los Angeles
CalRecycle	California Department of Resources Recycling and Recovery

# WHAT IS THE ANNUAL REPORT

The California Integrated Waste Management Act of 1989, also known as Assembly Bill (AB) 939, mandates jurisdictions to meet a diversion goal of 50 percent by the year 2000, and thereafter. In addition, each county is also required to prepare and administer a Countywide Integrated Waste

Management Plan. This plan is comprised of the County's (and its cities') solid waste reduction planning documents, an Integrated Waste Management Summary Plan (Summary Plan), and a Countywide Siting Element (CSE). To assess compliance with AB 939, the Disposal Reporting System (DRS) was established to measure the amount of disposal from each jurisdiction. Comparing current disposal rates to baseyear solid waste generation determines whether each jurisdiction complies with the diversion mandate.

Los Angeles County Public Works (Public Works) is responsible for preparing the Summary Plan and the CSE. These documents were approved by the County, the County's cities containing a majority of the County's population, the County Board of Supervisors (Board), and the California Department of Resources, Recycling, and Recovery (CalRecycle). The Summary Plan, approved by CalRecycle on June 23, 1999, describes the steps to be taken by local agencies, acting independently and in concert, to achieve the state mandated diversion rate by integrating strategies aimed toward reducing,



reusing, recycling, diverting, and marketing solid waste generated within the County.

The CSE, approved by CalRecycle on June 24, 1998, identifies how the County and its cities would meet their long-term disposal capacity needs for a 15-year planning period to safely handle solid waste generated in the County that cannot be reduced, recycled, or composted.

The Electronic Annual Report (EAR), which contains an assessment of the Summary Plan

and Siting Element, was submitted to CalRecycle on August 2, 2021.

The purpose of the Annual Report is to provide an annual update to the Summary Plan and CSE. Public Works prepares the Annual Report to summarize the changes in solid waste management that have taken place since the approval of the Summary Plan and the CSE, including updated strategies to meet the long-term needs and maintain adequate disposal capacity.

# SUMMARY PLAN AND SITING ELEMENT ASSESSMENT **ELECTRONIC ANNUAL REPORT (EAR)** Summary Plan Assessment **Summary Plan** 1. Question: Does the Summary Plan need to be revised? **Response:** No. Siting Element Assessment **Total County or Agency Wide Disposal Capacity** 1. Question: Based on the best available estimates of current and future disposal, how many years of disposal capacity does your county or regional agency have? **Response:**

15

# Total County or Agency Wide Disposal Capacity

# 2. Question:

If you do not currently have 15 years of disposal capacity, describe your strategy for obtaining 15 years of capacity?

### **Response:**

Not applicable.

# **Siting Element Adequacy**

## 3. Question:

Does the Siting Element need to be revised? The Siting Element will need to be revised if you have less than 15 years disposal capacity and have not described a strategy for obtaining 15 years disposal capacity.

## **Response:**

Yes. On August 2, 2022, the County of Los Angeles Board of Supervisors certified the Final Environmental Impact Report and its associated environmental documents for the Los Angeles County Revised Countywide Siting Element (Revised Siting Element), as well as authorized Los Angeles County Public Works, acting as the lead agency, to release and submit the Revised Siting Element to each city within Los Angeles County for a State-mandated 90-day approval period. See time schedule:

Board authorization to release the Final Draft CSE and EIR to the cities for local adoption	August 2, 2022 (Completed)
Board of Supervisors' public hearing for final approval of the Final Draft CSE and Certifie EIR (upon local adoption)	d May 2023
CalRecycle review and approval	October 2023

The Revised Siting Element provides a description of the areas and strategies that may be used to address the State mandates for adequate disposal capacity during the planning period and discusses how those areas and strategies may help the County meet the disposal capacity requirements under various scenarios. The areas/strategies considered include the use of existing permitted disposal capacity, increase in diversion rates, utilization of out-of-County disposal facilities, and fostering the development of technologies that provide alternatives to landfill disposal. Please note that there are no proposed new or expansion of existing landfill and transformation facilities in the County identified in the Revised Siting Element.

# **SUMMARY PLAN**

The Summary Plan, approved by CalRecycle in 1999, was prepared by the County to describe the steps to be taken by

individual jurisdictions, acting independently and in concert, to achieve the 50 percent waste diversion mandate. Since 1999, the County and its cities have experienced several changes in regional solid waste management, demographics, economics, and public awareness of environmental stewardship. The County and cities continue to enhance and expand their waste reduction efforts while also adapting these strategies to changing conditions.

Individual jurisdictions within the County of Los Angeles continue to implement and enhance waste reduction, recycling, special waste, and public education programs identified in their

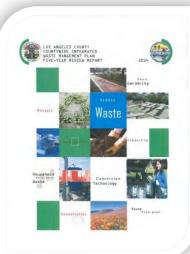
Source Reduction and Recycling Elements, Household Hazardous Waste Element, and Non-Disposal Facility Element (as updated through their Annual Reports). Through the Countywide and regional programs implemented by the County and the cities,

most jurisdictions have already met the 50 percent mandate and achieved significant, measurable results.

The County's latest Five-Year Review Report was approved by CalRecycle on October 13, 2020 and determined that an update to the Summary Plan was not necessary.

The following section is a summary discussion on the various regional solid waste issues that currently play a significant role in the County's continuing solid waste management efforts, including recent legislation, markets for recyclable materials, development of alternative technology facilities, diversion credit

for such facilities, and the State's 75 percent recycling goal.



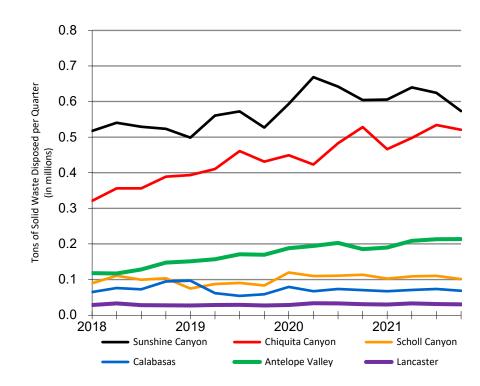
# **REGIONAL SOLID WASTE ISSUES**

# **Disposal Trend**

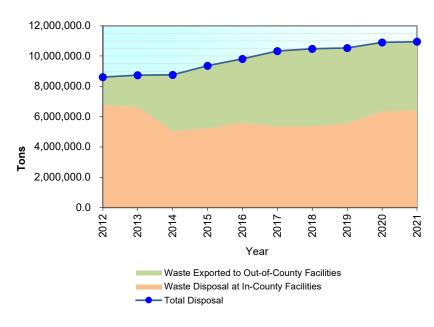
The amount of waste that residents and businesses generate and dispose of in the County has increased over the last decade. **Figure 1** shows a plateau between the years 2012 and 2014 with an increase from 2014 to 2017. The disposal remained relatively consistent from 2017 to 2019 but experienced another slight increase in 2020, ultimately flattening out from 2020 to the present.

**Figure 2** shows the disposal trends of major landfills within the County.

### Figure 2: Disposal Trend at Major Landfills



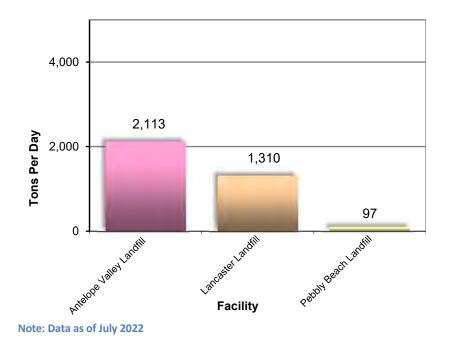




### **Green Waste as Alternative Daily Cover**

Due to the closure of Puente Hills Landfill in October 2013, jurisdictions that once depended on the facility to recycle their green waste as alternative daily cover (ADC) looked to other sites to recycle or compost their green waste. **Figure 3** shows the amount of green waste used as ADC at in-County landfills.

#### Figure 3: Use of Green Waste as ADC in 2021



Since the closure of Puente Hills, the County, the cities, and the waste management industry have been working towards developing alternatives for managing green waste. However, there are many challenges associated with green waste management, such as green waste capacity within the County due to difficulties in permitting and developing composting facilities, limited markets for compost made from green waste, and costs for long-distance transportation to out-of-County facilities and operations.

In addition, Assembly Bill (AB) 1594, which was signed by Governor Brown on September 28, 2014, provides that on and after January 1, 2020, green waste used as ADC will no longer receive diversion credit and will be considered disposal for purposes of AB 939. The passage of this bill encourages the County, the cities, and the waste management industry to develop alternatives for managing green waste.

## **Adequacy of Permitted Disposal Capacity**

As detailed in the section titled **Strategy for Maintaining Adequate Disposal Capacity** (Page 26), a shortfall in permitted solid waste disposal capacity within the County is not anticipated to occur within the next 15 years under current conditions. To meet disposal capacity needs during the planning period, jurisdictions in the County must further increase their waste reduction and diversion efforts, continue to encourage the development of alternative technologies, support the exportation of waste to out-of-County facilities, utilize the Waste-by-Rail system to Mesquite Regional Landfill, and, if found to be environmentally sound and technically feasible, expand in-County Class III landfill capacity.

# Waste-by-Rail System

The Waste-by-Rail (WBR) system is comprised of a remote intermodal yard and disposal facility, local materials recovery facilities/transfer stations, a local intermodal rail yard, and rail transportation. The starting point of the waste-by-rail system is

the Puente Hills Intermodal Facility (PHIMF), located near the Puente Hills Materials Recovery Facility. Residual waste from materials recovery transfer facilities and stations located throughout the County will be loaded onto rail carts at the PHIMF, and then transported via rail to the Mesquite Regional Landfill (MRL) for disposal.



The Sanitation Districts have completed planning and development of all the

WBR system components. The PHIMF will facilitate intermodal transfer of containers of up to two trains per day, or approximately 8,000 tpd of municipal solid waste.

The operation of the MRL and the WBR system is entirely dependent on the availability of in-county and near-county disposal capacity, diversion from landfills, and the cost of disposal. When the MRL/WBR disposal capacity is needed and when the tipping fees make MRL/WBR economically viable, then the system may begin operation. However, for the purpose of the disposal analysis in this report, the WBR system is assumed to begin its operation in 2025.

The WBR system will help ensure that solid waste disposal services continue to be provided to jurisdictions in Los Angeles County without interruption throughout the 15-year planning period, and into the future.

# Los Angeles County's Conversion Technology Efforts

To address the fraction of the waste stream that cannot be feasibly recycled, the development of conversion technology (CT) facilities is a vital aspect of the new paradigm and necessary to achieve a sustainable waste management future. Through the County's CT Program, Public Works continues to support and advance the efforts to establish CT facilities in Los Angeles County. The goal is to promote the highest and best use of resources while supporting the State's key environmental goals.

Public Works serves as the chair of the Los Angeles County Integrated Waste Management Task Force's Alternative Technology Advisory Subcommittee. This group evaluates and promotes the development of CT projects in Southern California, such as the ones described below.

## **Calabasas Landfill Anaerobic Digestion Facility**

In June 2022, Public Works released a Request for Proposals (RFP) to engage a private partner in the development of an anaerobic digestion (AD) facility at the County-owned Calabasas Landfill. When a potential developer is selected, Public Works will request approval from the Board of Supervisors (Board) to enter an exclusive negotiating agreement. With Board approval, the private developer will be responsible for designing, building, owning, and operating the AD facility.

# CR&R Waste and Recycling Services Anaerobic Digestion Facility

CR&R Waste and Recycling Services has begun operating the first two phases of an anaerobic digestion (AD) facility at their material recovery facility (MRF) and transfer station in Perris, CA. The facility has plans to scale up in four equal phases and ultimately digest up to 335,000 tons per year (tpy). Phases I and II have a total capacity of 167,500 tpy. CR&R is currently in the process of obtaining permits for the next two phases and has a goal for Phase III and Phase IV to begin operating by 2025. This project turns residential green waste and food waste into fuel that is used by the company's waste collection vehicles and into biomethane that is injected into the natural gas pipeline. In addition, CR&R has completed construction of an on-site organic waste MRF that is now fully operational. Public Works assisted CR&R in obtaining funding and provided technical assistance to the developers.



JWPCP holding tanks for food waste slurry. Photo courtesy of Los Angeles County Sanitation Districts

# Sanitation Districts of Los Angeles County - Food Waste Processing

The Sanitation Districts of Los Angeles County (Sanitation Districts) use a DODA<sup>®</sup> bio-separator food waste pre-processing technology at the Puente Hills MRF (PHMRF) to remove contaminants from source-separated food waste. The capacity of the bio-separator is 165 tpd of food waste and it currently processes an average of 45 tpd of food waste. The food waste is processed into a slurry at the PHMRF and then transported to the Districts' Joint Water Pollution Control Plant (JWPCP) in Carson, CA for co-digestion.

The Sanitation Districts continue to expand their food waste codigestion project at JWPCP. The capacity recently increased from 350 tpd to 600 tpd. In addition to food waste slurry from PHMRF, JWPCP also receives 300 tpd of food waste slurry through various contracts and is seeking additional long-term contracts. The biogas from co-digestion is used to create renewable power for the facility as well as vehicle fuel for the existing on-site fueling station.

Since July 2016, the County in partnership with the PHMRF has provided a rebate incentive to waste haulers that collect uncontaminated food waste diverted from commercial accounts in the unincorporated Los Angeles County areas and deliver the food waste to the PHMRF. Currently, one waste hauler is participating and providing food waste diversion services to four supermarkets in the San Gabriel Valley area. As of December 2021, the project has successfully diverted over 2,979 tons of food waste. The food waste is sent to the PHMRF for pre-processing and is eventually anaerobically digested JWPCP.

### **Rialto Bioenergy Facility**

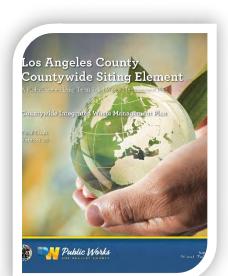
In 2020, Anaergia's Rialto Bioenergy Facility began operating. The facility uses anaerobic digestion to convert 700 tons per day of organic waste and 300 tons per day biosolids from municipal wastewater treatment plants into biomethane which is injected into the natural gas pipeline. Anergia's Organics Extrusion Press (OREX) operates at Waste Management's Sun Valley Recycling Park in Sun Valley, California. The OREX processing line has a capacity of 50 tons per hour and removes contaminants from source-separated organic waste, which is delivered to the Rialto Bioenergy Facility for digestion.

# **City of Los Angeles' Alternative Technology Efforts**

In 2017, the City of Los Angeles awarded exclusive franchise agreement contracts to waste hauling companies to provide solid waste, commingled recyclables, and organics collection, transfer, disposal, and processing services to commercial and multifamily establishments in the City. Through these contracts, the companies secured a dedicated waste stream, increasing the financial viability to develop new organic waste processing and CT facilities near the City of Los Angeles. By establishing this position in the market, it can be financially advantageous for these facilities to process organic waste originating from other jurisdictions in addition to the City.

# SITING ELEMENT REVISION

AB 939 requires each county to prepare a countywide siting element that describes how the county and the cities within the county, plan to manage the disposal of their solid waste for a 15year planning period. The existing CSE, dated June 1997, was approved by the County's cities containing a majority of the County's population. It was subsequently approved by the Board of Supervisors in January 1998, and by CalRecycle on June 24, 1998.



The current CSE revision, which covers the 15-year planning period of 2018-2033, reflects the following significant changes compared to the previous version:

✤ Removes two potential landfill sites, Elsmere and Blind Canyon Landfills, in accordance with a motion passed by the Board of Supervisors on September 30, 2003;

 Updates the goals and policies consistent with the new solid waste management paradigm (Figure 4), to enhance the comprehensiveness of Los

Angeles County's solid waste management system by

incorporating current and upcoming solid waste management processes and technologies;

- Promotes the development of alternatives to landfilling, such as CTs, on a Countywide basis; and
- Promotes the development and use of infrastructure to transport solid waste to out-of-County landfills, such as Mesquite Regional Landfill, to complement the County's waste management system.

The draft revised CSE and its environmental document were reviewed and approved by the Task Force and the 88 cities in Los Angeles County. The County Board of Supervisors and CalRecycle will undergo their own review and approval process in compliance with statutory and regulatory requirements.





# **GOALS AND POLICIES OF THE SITING ELEMENT**

The CSE establishes goals and policies for the County to maintain adequate permitted disposal capacity for a 15-year planning period. To provide adequate disposal capacity, the CSE offers strategies and establishes siting criteria for potential sites. Existing landfills (including those located out-of-County) are identified and analyzed based on their permitted disposal capacity and estimated closure date. Additionally, the CSE includes goals and policies to facilitate the use of out-of-County/remote landfills and to foster the development of alternatives to landfill disposal, such as CTs on a countywide basis.

The goals and policies<sup>1</sup> are either being or may have to be implemented by the County and cities in the County to meet the mandates of the AB 939. These goals are consistent with those listed in the Los Angeles County Solid Waste Management Action Plan (Action Plan)<sup>2</sup> and County Solid Waste Management Plan (CoSWMP)<sup>3</sup>.

The goals are as follows:

 To continue to promote extended producer responsibility, development of adequate markets to increase the use of recycled materials and compost products in an environmentally responsible manner.

- 2. To decrease the volume and tonnage of solid waste being disposed of at landfills by continuing to implement and expand source reduction, recycling, reuse, composting, and public education programs as well as promoting the development of alternative technologies which complement recycling efforts.
- 3. To promote, encourage, and expand waste diversion activities by solid waste facility operators.
- 4. To conserve Class III landfill capacity through recycling and reuse of inert waste, disposal of inert waste at inert waste landfills, increased waste disposal compaction rates, recycling of organic materials from the waste stream, and use of appropriate materials, such as tarps, for landfill daily cover, provided the use of such materials is environmentally appropriate and protects the health, welfare, and safety of the citizens in Los Angeles County, as well as the environment.
- 5. To protect the health, welfare, safety, and economic wellbeing of Los Angeles County by ensuring that the cities and the County unincorporated communities are served by an efficient and economical public/private solid waste disposal system.

<sup>&</sup>lt;sup>1</sup>The corresponding policies associated with each Goal can be found in the 1997 Los Angeles County Countywide Siting Element approved by CalRecycle on June 24, 1998. <sup>2</sup>The Action Plan was adopted by the County Board of Supervisors in April 1988 and was subsequently superseded by the County Integrated Waste Management Plan, which was

approved by the former California Integrated Waste Management Board (CIWMB) (now California Department of Resources Recycling and Recovery (CalRecycle)) in June 1999.

<sup>&</sup>lt;sup>3</sup> The CoSWMP was approved by the County's cities containing a majority of the County's population, the County Board of Supervisors, and the former CIWMB (now CalRecycle).

- 6. To foster the development of environmentally appropriate alternative technologies as alternatives to landfill disposal.
- 7. To provide siting criteria that considers and provides for the environmentally appropriate and technically feasible development of solid waste disposal facilities, including alternative technology facilities (e.g., conversion technology, transformation) and landfills.
- 8. To protect the health, welfare, and safety of all citizens of the 88 cities in Los Angeles County and the County unincorporated communities by addressing their solid waste disposal needs during the 15-year planning period through the development of environmentally appropriate and technically feasible solid waste management facilities for solid waste which cannot be reduced, reused, recycled, composted, or otherwise put to beneficial use.

This goal incorporates policies to:

- Enhance in-County landfill disposal capacity, and
- Facilitate utilization of remote and/or out-of-County disposal facilities.



# SOLID WASTE DISPOSAL FACILITIES

# **Permit Changes**

As of December 31, 2021, there are no permit changes to existing solid waste disposal facilities.



# **DISPOSAL ANALYSIS FOR 2021**

The 2021 disposal analysis consists of an analysis of solid waste generated within the County, solid waste disposed within the County, and solid waste exported to out-of-County landfills. To determine the amount of waste generated by Los Angeles County residents, a calculation was performed using the countywide solid waste disposal and diversion rate.

### Solid Waste Disposal

In 2021, the total amount of solid waste disposed of at in-county Class III landfills, transformation facilities, and out-of-County landfills was approximately 11.1 million tons (including an import amount of 179,872 tons). In addition, the amount of inert waste disposed at the permitted inert waste landfill totaled 402,989 tons. See **Table 1**, below for more detail.

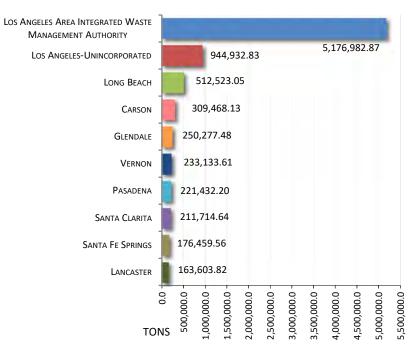
#### Table 1: 2021 Disposal Tonnage Breakdown

	Annual Disposal Tonnage (tons)	Daily Disposal Rate* (tons per day)
In-County Class III Landfills:	6,243,981	20,013
Transformation Facilities:	374,832	1,201
Exports to Out-of-County Landfills:	4,513,262	14,466
Subtotal Solid Waste Disposed:	11,132,074	35,680
Permitted Inert Waste Landfill:	402,989	1,292
Grand Total Solid Waste Disposed:	11,535,063	36,971

\*(Based on Six Operating Days/Week)

**Figure 5** below shows the top ten jurisdictions that disposed solid waste, including inert waste disposed at the permitted inert waste landfill, in and outside of the County in 2021.

#### Figure 5: Top 10 Jurisdiction Disposal Quantities in 2021



#### Note:

The Los Angeles Area Integrated Waste Management Authority/Los Angeles Regional Agency (LARA) consists of the following 18 Cities in Los Angeles County: Artesia, Beverly Hills, Bradbury, Downey, Duarte, Hermosa Beach, Hidden Hills, Los Angeles, Lynwood, Manhattan Beach, Palos Verdes Estates, Pomona, Rancho Palos Verdes, Redondo Beach, Rosemead, Sierra Madre, South Gate, and Torrance.

### **Waste Generation**

For the purpose of long-term disposal capacity planning, a countywide diversion rate of 65-percent was assumed for 2021. Based on a total disposal of 11.0 million tons (excluding inert waste and imports) and the 65-percent diversion rate, the County generated approximately 31.3 million tons, or an average of 100,295 tpd, of solid waste in 2021 (See **Table 2**).

### Senate Bill 1016

With the implementation of Senate Bill (SB) 1016, CalRecycle no longer calculates diversion rates for individual jurisdictions and as a result, countywide diversion rates are no longer provided by CalRecycle. The last diversion rates provided by CalRecycle were for 2006, which resulted in a countywide diversion rate of 58percent.

Under SB 1016, a target per capita disposal rate, using a 50percent diversion rate, is calculated using an approved jurisdiction-specific average of per capita generation rates between 2003 and 2006. To establish compliance with AB 939, each jurisdiction's per capita disposal rate is calculated for each reporting year and compared to their individual target rates. Table 2: 2021 Waste Generation and Disposal Quantities forMunicipal Solid Waste

А	В	С	D	E	F	
In-County Disposal		Exports to		Estimated	Calculated	
Class III Landfills	Transformation Facilities	Out-of- County Class III Landfills		Countywide Diversion Rate	2021 Solid Waste Generation*	
TONS	TONS	TONS	TONS	percent	TONS	
6,104,060	334,881	4,513,262	10,952,203	65	31,292,007	

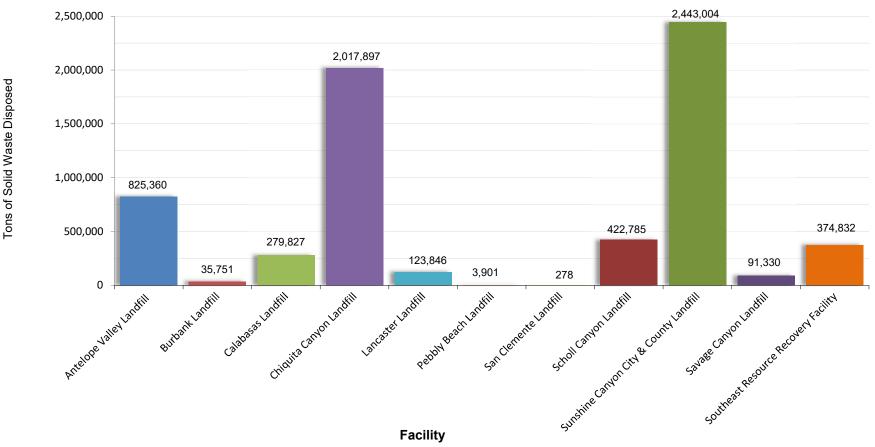
\* Data from permitted inert waste landfill and imports is excluded from these calculations.

Column A:	Total disposal at Class III landfills in Los Angeles County. Does not include waste imported from jurisdictions outside the County.
Column B:	Total disposal at transformation facilities in Los Angeles County. Does not include waste imported from jurisdictions outside the County.
Column C:	Waste exported by jurisdictions in Los Angeles County to disposal facilities located outside the County.
Column D:	Columns A + B + C.
Column E:	A Countywide Diversion Rate of 65-percent is assumed.
Column F:	Column D ÷ 35-percent (disposal percentage). This estimate is used to project the County's Class III landfill and transformation disposal needs through the year 2036.

# Waste Disposal at In-County Facilities

In addition to waste generated within the County, Class III landfills and transformation facilities in the County also received 179,872 tons, or 577 tpd, of waste from jurisdictions outside the

County in 2021. **Figure 6** shows the total amount of solid waste disposed at each Class III landfill and transformation facility, including imports from outside the County. Detailed information provided in **Appendix E-2, Table 4**.

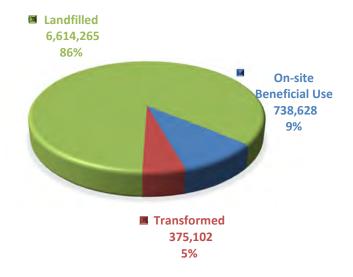


#### Figure 6: Disposal Quantities by Facility in 2021

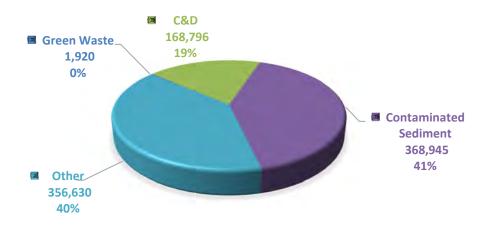
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When waste is received at Class III landfills and transformation facilities, some of it is recycled for on-site use, such as ADC, and some is sent off-site for recycling or processing. The remaining waste is landfilled or transformed into energy. If transformed, the residual ash is turned into ashcrete and used as road base for winter deck operating areas and other beneficial uses. **Figure 7** quantifies each of these activities. The various types of materials recycled or beneficially used on-site at Class III landfills are further broken down in **Figure 8**.

Figure 7: Types of Activities (Landfilled, Transformed and On-site Beneficial Use) at In-county Disposal Facilities (Tons)



#### Figure 8: On-site Beneficial Use (Tons)

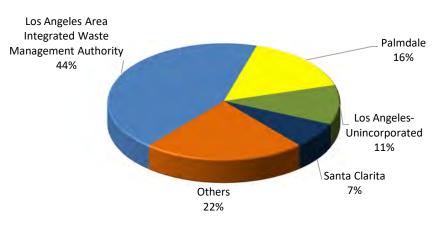


Note: The tonnage for mixed waste (86 tons per year) is not included in this chart as it is insignificant..

\*Excluding ash as beneficial use.

Note: The "landfilled" portion includes 552,590 tons of inert waste.

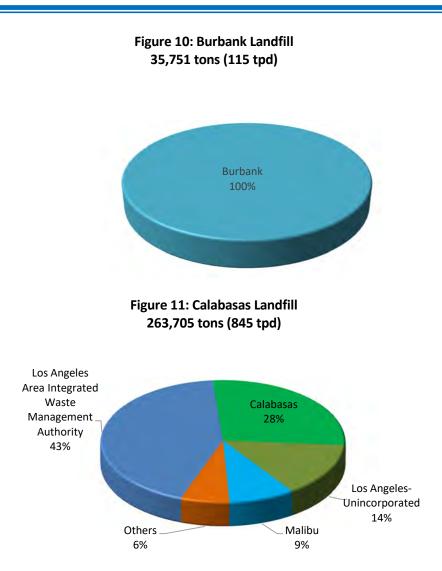
**Figures 9** through **19** show the annual disposal (excluding imports from outside the County) at each in-County facility in 2021, broken down by jurisdiction. The facilities with an "(R)" next to their names represent landfills with wasteshed restrictions<sup>4</sup>. A map showing the location of each facility is provided in **Appendix E-4**.



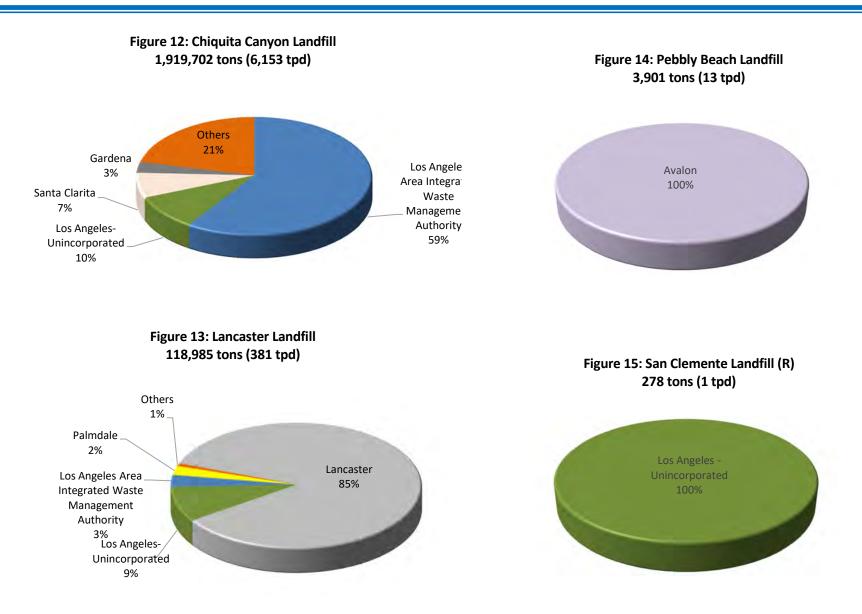
### Figure 9: Antelope Valley Landfill 804,732 tons (2,579 tpd)

#### Note:

The Los Angeles Area Integrated Waste Management Authority/Los Angeles Regional Agency (LARA) consists of the following 18 Cities in Los Angeles County: Artesia, Beverly Hills, Bradbury, Downey, Duarte, Hermosa Beach, Hidden Hills, Los Angeles, Lynwood, Manhattan Beach, Palos Verdes Estates, Pomona, Rancho Palos Verdes, Redondo Beach, Rosemead, Sierra Madre, South Gate, and Torrance.



<sup>&</sup>lt;sup>4</sup> **Wasteshed Restrictions** refers to a geographical area from which waste can logically be delivered to a given disposal facility. This term is synonymous with waste service area.



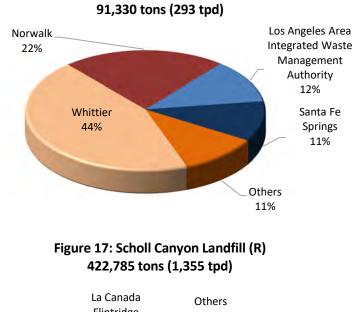


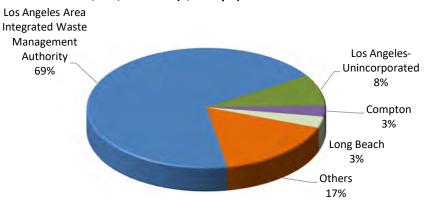
Figure 16: Savage Canyon Landfill (R)

# La Canada Others Flintridge 3% Unincorporated 7% Pasadena 41%

#### 334,881 tons (1,073 tpd) Others 25% Pasadena 3% Lakewood 4% Long Beach 53% Los Angeles Area Integrated Waste Management Authority 15%

Figure 18: Southeast Resource Recovery Facility

# Figure 19: Sunshine Canyon Landfill 2,443,004 tons (7,830 tpd)



# **Remaining Disposal Capacity at End of 2021**

## **Transformation Facilities**

As of December 31, 2021, there was one transformation facility operating in the County - Southeast Resource Recovery Facility (SERRF). SERRF had an average daily solid waste intake of 1,201 tpd (including an import amount of 128 tpd), which is equivalent to 374,832 tpy.

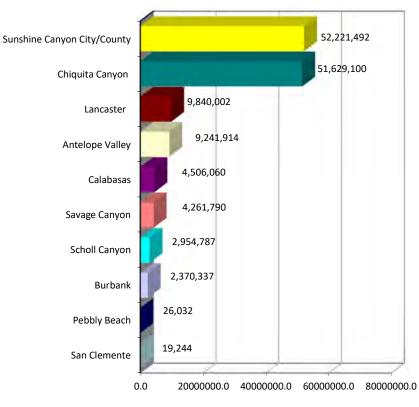
In 2018, the City of Long Beach announced an amended agreement to provide for the continued operation of SERRF until at least June 30, 2024. It is anticipated that SERRF will continue to operate at its current average daily rate until its closure. The owner and operator of SERRF has indicated that there are no plans to increase the permitted daily capacity.

# Class III Landfills

Public Works conducted a survey requesting landfill operators in the County to provide updates of their estimated remaining disposal capacities. Based on the results of the survey and considering permit restrictions, the total remaining permitted Class III landfill capacity in the County is estimated at 137.09 million tons.

**Figure 20** shows a breakdown of each landfill's remaining disposal capacity, in million tons. Detailed information is provided in **Appendix E-2, Table 4**.

#### Figure 20: Class III Landfill Estimated Remaining Disposal Capacity



Tons

The remaining life of each landfill is determined by dividing the landfill's remaining capacity by its average daily disposal, maximum permitted capacity, or permit restrictions (if specified). Generally, the variable with the smallest value is chosen. The lifespan of each landfill is shown in **Figure 21**.

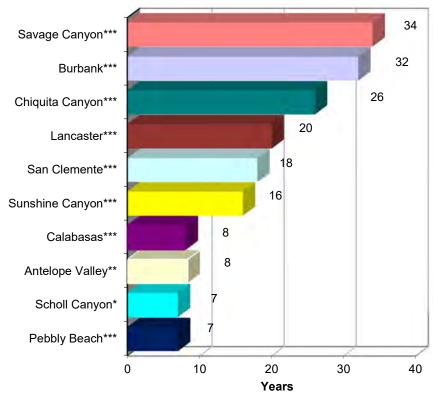


Figure 21: Class III Landfill Estimated Remaining Life

\* Landfill remaining life based on 2021 average daily disposal

\*\* Landfill remaining life based on maximum permitted capacity as of December 31, 2021.

\*\*\* Landfill remaining life based on land use/solid waste facility permit restrictions as of December 31, 2021.

### Permitted Inert Waste Landfill

As of 2021, Azusa Land Reclamation is the only permitted Inert Waste Landfill in the County that has a full solid waste facility permit. The remaining capacity of this landfill is estimated at 50.77 million tons, or 42.31 million cubic yards. Detailed information is provided in **Appendix E-2, Table 4**. Given the

23

remaining permitted capacity and the average disposal rate of 1,292 tpd in 2021, this landfill's capacity would be exhausted in 165 years; however, based on the landfill's solid waste facility permit closure date, the landfill expected to close in 24 years.

#### Inert Debris Facilities

Inert debris facilities include Inert Debris Engineered Fill Operations (IDEFO) and other facilities that process inert waste and other construction and demolition waste. In 2021, inert debris facilities (excluding Azusa Land Reclamation Co. Landfill) collectively handled nearly 3.62 million tons, or approximately 2.89 million cubic yards, of material in the County. Detailed information is provided in **Appendix E-2, Table 5**.

### Transfer and Processing Capacity

There are 51 permitted Large Volume Transfer/Processing Facilities, which can receive 100 tons of waste or more per operating day, and numerous facilities of smaller volume operating within the County. A transfer station/processing facility refers to a facility which receives, handles, separates, converts, or otherwise processes solid waste. There are three types of facilities that are recognized as transfer/processing facilities in this report: transfer stations, material recovery facilities, and construction, demolition, and inert debris processing facilities. Transfer stations typically transfer solid waste directly from one container to another or from one vehicle to another for transport, or temporarily store solid waste prior to final disposal at CalRecycle-permitted landfills or transformation facilities. MRFs refer to intermediate processing facilities designed to remove recyclables and other valuable materials from the waste stream. A construction, demolition,

and inert (CDI) debris processing facility refers to a site that receives any combination of construction and demolition debris, and Type A<sup>5</sup> inert debris per operating day for the purposes of storage, handling, transferring, or processing.

As local waste disposal capacity options diminish in the County, transfer and processing facility operators are expected to export waste to out-of-County landfills via truck or rail transport. A list



and

map of Large Volume Transfer and Processing facilities located within the County is provided in **Appendix E-4**.

# *On-going Efforts to Optimize Utilization of Existing Disposal Capacity*

Over the last decade, the County has encouraged waste diversion and recycling activities at landfills located in the unincorporated County areas through the land use permit process. The permit process includes a Waste Plan Conformance Agreement, which requires a landfill operator to implement waste diversion and recycling programs as well as other activities, both on and off-site to assist individual jurisdictions within the County in achieving the diversion mandate of AB 939. In addition, the Agreement contains provisions to encourage and assist residents in properly disposing their waste. These programs or activities may include the following:

# **Conservation of Capacity**

- Maximize available fill capacity at Class III landfills by improving compaction methods and diverting or reducing high-volume or low-density waste materials
- \* Conduct waste characterization studies

## **On-Site Reuse**

- Utilize waste materials received and processed at the landfill, such as shredded green waste, as a supplement to daily, intermediate, and final cover
- Use green waste for other beneficial uses, including composting
- Salvage wood waste for landscaping and erosion, weed, and fire break control

<sup>&</sup>lt;sup>5</sup> Type A inert debris includes, but is not limited to, concrete (including fiberglass or steel reinforcing bar embedded in the concrete), fully cured asphalt, crushed glass, fiberglass, asphalt or fiberglass roofing shingles, brick, slag, ceramics, plaster, and clay products.

 Salvage construction and demolition waste for road construction, erosion control, and other uses

## **Establishment of:**

- \* Materials recovery operations or facilities
- ✤ Used oil collection centers
- Drop-off or buy-back recycling centers

# Activities to Encourage Proper Disposal

- ✤ Free disposal days
- Waste tire processing
- ✤ Christmas tree recycling
- \* Acceptance of bulky items from residents free of charge
- As appropriate, providing reduced rates to customers for source-separated materials which can be diverted or otherwise salvaged at the landfill
- \* Public education activities

# **Provide Funding for:**

- Household hazardous and electronic waste collection events
- \* Research and development of alternative technologies

Active Class III landfills that have a Waste Plan Conformance Agreement with the County include Chiquita Canyon, Lancaster, and Sunshine Canyon City/County Landfills. Together, these landfills handle approximately 70-percent of in-County Class III waste. Due to the dynamic and varied nature of solid waste management in the County, the provisions of the Waste Plan Conformance Agreement for each landfill are tailored to meet the specific needs of the communities serviced by the landfill. As the economy continues to show signs of improvement, increasing the diversion rate and promoting advancements such as improving compaction methods, will prevent the remaining capacity of existing landfills from being depleted as quickly as previously projected and is expected to provide longer lifespans for in-County landfills.



# STRATEGY FOR MAINTAINING ADEQUATE DISPOSAL CAPACITY

This section discusses strategies on how the County plans to maintain adequate solid waste disposal capacity from 2021 to 2036. It includes an analysis which considers legislation, such as the mandatory commercial recycling and diversion of organic waste from landfills through organic waste recycling programs. The discussion first evaluates whether the existing permitted disposal capacity in the County will be able to accommodate the solid waste generated that cannot be reduced, reused, or recycled. Additionally, an evaluation of the existing disposal infrastructure and the current diversion rate analyzes whether there will be daily disposal capacity shortfall or reserve. The discussion goes on to present several scenarios applying various options for managing the residual solid waste. Inert waste landfills are not included in this discussion since the County currently has adequate permitted inert waste landfill capacity, as discussed earlier in Permitted Inert Waste Landfill (Page 23).

## **Definitions**

The following are a set of terms used throughout this section (all quantities are in tons per day (tpd)):

**Daily Disposal Demand** – The amount of solid waste generated minus the amount diverted by means of reuse, recycling, composting, or anaerobic digestion based on a 6-day-per-week operation at permitted solid waste disposal facilities.

**Daily Available Capacity** – The amount of solid waste permitted to be received at solid waste disposal facilities based on a 6-dayper-week operation in accordance with the terms, conditions, and wasteshed restrictions of the facility's SWFP, land use permit, waste discharge requirements, or any other permit regulating the operation - whichever is more restrictive.

**Disposal Capacity Reserve** – The amount of solid waste by which the total Daily Available Capacity exceeds Daily Disposal Demand.

**Disposal Capacity Shortfall** – The amount of solid waste by which Daily Disposal Demand exceeds the total Daily Available Capacity.

# **Evaluation of Existing Disposal Infrastructure**

### Waste Generation Projections

Projections of solid waste generation during the planning period were made using the "Adjustment Methodology" developed by CalRecycle. The Methodology requires knowledge of how the generated waste is distributed into the residential and nonresidential sectors as well as future population, employment, and real taxable sales.

Population, employment, and real taxable sales projections are available from the California Department of Transportation (Caltrans) and UCLA for each year of the planning period. The UCLA Long-Term Forecast, published in July 2021, was used since it focuses on the Los Angeles region, in contrast with the Caltrans' forecast, which is statewide and yields more general projections. Additionally, the UCLA forecast data is updated more frequently. **Figure 22** shows a graph of the parameters used in the analysis. The detailed data is provided in **Appendix E-2**, **Table 6**.

Based on the California 2008 Statewide Waste Characterization Study, the average Countywide waste distribution by sector is as follows:

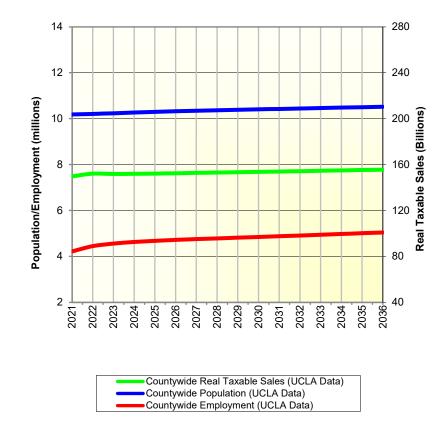
- Residential Sector Waste Generation = 30-percent of total waste generation
- Non-Residential Sector Waste Generation = 70-percent of total waste generation

## Daily Disposal Demand Projections

The quantity of Daily Disposal Demand depends on the amount of solid waste that may be diverted. As noted in **Waste Generation** (Page 16), a diversion rate of 65-percent was assumed for the analysis in this report. With this assumption, the amount of residual waste that requires disposal capacity is 35percent of the projected waste generation.

## Transformation Facility Capacity

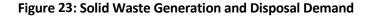
For the purposes of the analysis, as explained earlier in **Remaining Disposal Capacity at End of 2021** (Page 22), SERRF is assumed to provide up to 1,200 tpd of Daily Available Capacity through its closure date of June 2024.

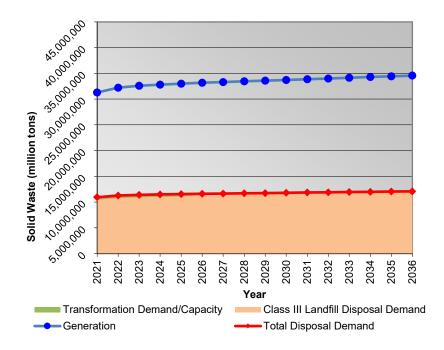


#### Figure 22: Population, Employment, and Real Taxable Sales

# Class III Landfill Capacity Need

Assuming no other options are available, such as exporting to out-of-County facilities or the development of new alternative technologies, the County's Class III landfill disposal needs are determined after considering the available transformation capacity. The result of the evaluation is plotted in **Figure 23**. Detailed information is provided in **Appendix E-2, Table 7**.





In **Figure 23** the area in orange illustrates the amount of disposal capacity needed from Class III landfills throughout the planning period. According to the analysis, the cumulative need for Class III landfill disposal capacity, approximately 148.14 million tons in 2033, will exceed the 2021 remaining permitted Class III landfill capacity of 137.09 million tons (Page 22). Detailed information is provided in **Appendix E-2, Table 7**.

Other constraints that may limit the accessibility of Class III landfill capacity include wasteshed boundaries, geographic barriers, weather, and natural disasters. Therefore, further detailed analysis that incorporates capacity options in addition to existing in-County infrastructure and permit constraints is necessary to provide a more thorough evaluation.

## **Scenario Analysis**

The scenario analysis considers the various capacity options that are currently available or may become available in the future to assist the County in meeting the Daily Disposal Demand. The analysis looks at the following:

**Existing In-County Class III Landfills and Transformation Facilities** – The analysis considers a facility's permitted capacity, termination date, and wasteshed restriction, if any.

**Proposed Expansions of In-County Class III Landfills** – The analysis assumes no proposed landfill expansions that will occur during the planning period.

**Imports and Exports** – The analysis considers imported and exported waste to and from out-of-county jurisdictions. Existing facilities in Kern, Orange, Riverside, San Bernardino, and Ventura Counties are currently accepting waste from the County. Future use of the waste-by-rail system to Mesquite Regional Landfill in Imperial County is also considered.

**Diversion Rate** – A 65 percent diversion rate is assumed in most of the scenarios. A potential increase in the diversion rate is assumed in some scenarios, considering that all jurisdictions in the County comply with state laws such as the mandatory commercial recycling and the diversion of organic waste from landfills through organics recycling programs. The potential development of composting and anaerobic digestion processing facilities, in response to these laws, is also assumed to contribute to the increase in diversion rate.

Alternative Technologies – Potential engineered municipal solid waste (EMSW) conversion facilities or other alternative technologies may be developed during the planning period. As discussed above, the anaerobic digestion capacity is incorporated into the assumption of an increased diversion rate, and is therefore, not included in the projections for potential available alternative technology capacity.

Given all the various capacity options, the analysis evaluated four potential scenarios during the 15-year planning period. **Table 3** summarizes the differences between the scenarios.



For all

four scenarios, the projected waste generation remains the same. The analysis closely examines how much Daily Available Capacity from existing Class III landfills is expected to be utilized during each year. The analysis ultimately evaluates whether we expect a reserve or shortfall in the Class III Landfill disposal capacity by assessing whether the Daily Disposal Demand can be met for each year during the 15-year planning period. No new landfills are expected to be permitted in the County during the planning period. Detailed information is provided in **Appendix E-3 Disposal Capacity Analysis Scenarios** 

#### Table 3: Scenario Comparison Table

Scenario Number	Existing Permitted In-County Disposal Capacity	Diversion Rate <sup>6</sup> ≥ 65 Percent	Exports to Out-of-County Landfills	Utilization of Additional Alternative Technology Capacity	Increase in Exports to Out-of-County Landfills
ا Utilization of Permitted In-County Disposal Capacity Only	~	~			
II Status Quo Scenario	~	~	$\checkmark$		
III Meeting Senate Bill 1383 Organic Waste Disposal Reduction Targets	~	~	~		
IV All Solid Waste Management Options Considered Become Available	~	~	~	~	~

<sup>&</sup>lt;sup>6</sup> Scenarios I and II assume a 65 percent diversion rate throughout the planning period. -Scenario III assumes an increase in diversion rate (up to 76 percent) to meet Senate Bill 1383 organic waste disposal reduction targets. Scenario IV assumes an increase in diversion rate (75-percent by 2025) considering all jurisdictions in the County comply with state diversion laws.

# Scenario I – Utilization of Permitted In-County Disposal Capacity Only

# Assumptions/Considerations:

- Use of Existing Permitted In-County Class III Landfills and Transformation Facilities only
- No Exports to Out-of-County Landfills

Scenario I assumes that all solid waste disposed will be managed by existing permitted in-County disposal infrastructure only. The scenario assumes continued diversion efforts by individual jurisdictions, resulting in a countywide diversion rate to 65percent throughout the planning period, and no expansions of existing landfills.

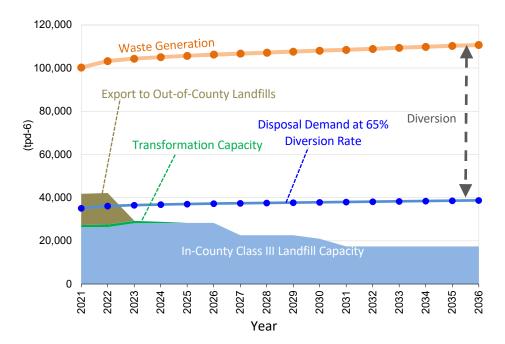
The following assumptions are made with respect to imports and exports:

**Imports** – The average waste import rate for 2021 was 577 tpd. However, for purposes of this analysis, the amount of waste imported to in-County landfills is projected to be at 600 tpd every year for the remainder of the planning period.

**Exports** – The amount of waste exported to out-of-County landfills in 2021 was approximately 14,466 tpd (which is equivalent to about 42 percent of the total disposal). For the purposes of this scenario, it is assumed that the use of available out-of-County disposal capacity will continue at a similar rate (42 percent) in 2022 and will not continue through the remainder of the planning period.

Based on these assumptions, a shortfall in disposal capacity is expected to occur in this scenario during the planning period. Detailed information is provided in **Appendix E-3**.

# Figure 24: Utilization of Permitted In-County Disposal Capacity Only Scenario



# Scenario II - Status Quo

# **Assumptions/Considerations:**

- Use of Existing Permitted In-County Class III Landfills and Transformation Facilities
- Use of Exports to Out-of-County Landfills

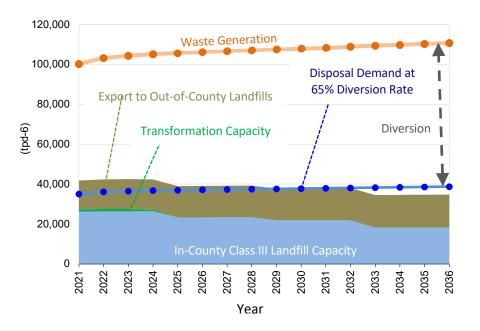
Scenario II assumes that all solid waste disposed will be managed by existing permitted in-County disposal infrastructure and available out-of-County landfill capacity. The scenario assumes continued diversion efforts by individual jurisdictions, resulting in a countywide diversion rate to 65-percent throughout the planning period, and no expansions of existing landfills.

The following assumptions are made with respect to imports and exports:

**Imports** – The average waste import rate for 2021 was 577 tpd. However, for purposes of this analysis, the amount of waste imported to in-County landfills is projected to be at 600 tpd every year for the remainder of the planning period.

**Exports** – The amount of waste exported to out-of-County landfills in 2021 was approximately 14,466 tpd (which is equivalent to about 42 percent of the total disposal). It is assumed that exports to out-of-County landfills will continue at that rate (42 percent) through the remainder of the planning period.

Based on these assumptions, a shortfall in disposal capacity is expected to occur in this scenario during the planning period. Detailed information is provided in **Appendix E-3**.



### Figure 25: Status Quo Scenario

## Scenario III – Meeting Senate Bill 1383 Organic Waste Disposal Reduction Targets

### Assumptions/Considerations:

- Use of Existing Permitted In-County Class III Landfills and Transformation Facilities
- Use of Exports to Out-of-County Landfills
- 76-percent diversion rate by 2028 and through the end of planning period

Along with the assumptions in Scenario II, Scenario III assumes the County meets the targets of SB 1383 which aim to reduce the landfill disposal of organic waste as follows: (1) a 50-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and (2) a 75-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2025.

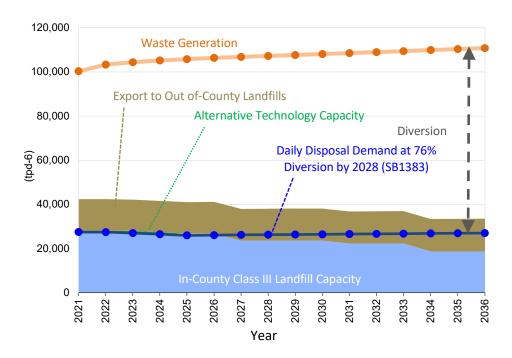
The following assumptions are made with respect to imports and exports:

**Imports** – The average waste import rate for 2021 was 577 tpd. However, for purposes of this analysis, the amount of waste imported to in-County landfills is projected to be at 600 tpd every year for the remainder of the planning period.

**Exports** – The amount of waste exported to out-of-County landfills in 2021 was approximately 14,466 tpd (which is equivalent to about 42 percent of the total disposal). It is assumed that export to out-of-County landfills will continue at that rate (42 percent) through the remainder of the planning period.

Based on these assumptions, a shortfall in disposal capacity is not expected to occur in this scenario during the planning period. Detailed information is provided in **Appendix E-3**.

# Figure 26: Meeting Senate Bill 1383 Organic Waste Reduction Disposal Targets Scenario



## Scenario IV - All Solid Waste Management Options Considered Become Available

#### Assumptions/Considerations:

- Use of Existing Permitted In-County Class III Landfills and Transformation Facilities
- Increase in Exports to Out-of-County Landfills through use of potential waste-by-rail capacity
- 75-percent diversion rate by 2025 and through the end of planning period
- Additional Alternative Technology Capacity

Scenario IV considers all solid waste management options become available throughout the entire planning period. The scenario assumes continued diversion efforts by individual jurisdictions, resulting in a gradual increase of the countywide diversion rate to 75-percent by 2025 and through the end of the planning period, and no expansions of existing landfills.

The following assumptions are made with respect to imports and exports:

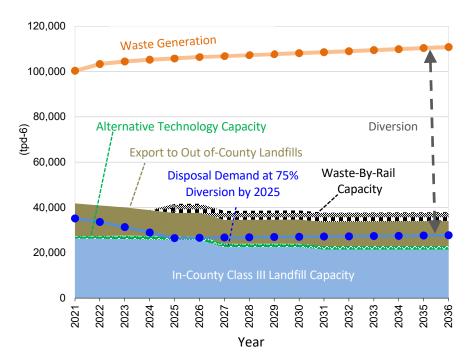
**Imports** – The average waste import rate for 2021 was 577 tpd. However, for purposes of this analysis, the amount of waste imported to in-County landfills is projected to be at 600 tpd every year for the remainder of the planning period.

**Exports** – The amount of waste exported to out-of-County landfills in 2021 was approximately 14,466 tpd (which is equivalent to about 42 percent of the total disposal). It is assumed that export to out-of-County landfills will continue at that rate (42 percent) through the remainder of the planning

period. In addition, a potential waste-by-rail capacity of 4,000 tpd is assumed to be available in the future.

Based on these assumptions, a shortfall in disposal capacity is not expected to occur in this scenario during the 15-year planning period. Detailed information is provided in **Appendix E-3**.

# Figure 27: All Solid Waste Management Options Considered Become Available Scenario



## Conclusion

The scenario analysis discussed earlier assesses the County's ability to meet the Daily Disposal Demand throughout the 15-year planning period under four different scenarios. Scenario III and IV assumes an increase in diversion rate, considering all jurisdictions within the County comply with state laws such as mandatory commercial recycling and the diversion of organic waste from landfills through organic waste recycling programs.

As demonstrated by the analysis, the County would be able to meet the disposal needs of all jurisdictions through the 15-year planning period for Scenario III and IV. However, as demonstrated by Scenario I, reliance on existing permitted in-County landfill capacity alone is insufficient in meeting the County's long-term disposal needs. To maintain adequate disposal capacity, individual jurisdictions within the County must continue to pursue all the following strategies:

- Maximize Waste Reduction and Diversion An increase in the Countywide diversion rate could significantly reduce the Daily Disposal Demand, extend landfill life, and ensure that the County, as a whole, will be able to meet the disposal needs of its residents and businesses. Therefore, all jurisdictions are strongly encouraged to continue to expand and enhance programs to maximize diversion.
- Study, Promote, and Develop Alternative to Landfilling The development of commercial-scale state-of-the-art CTs as a convenient alternative to landfilling appears to be an attainable goal. Jurisdictions must invest and actively

participate in the research, promotion, and development of alternative technology facilities by:

- Supporting legislation that places these facilities above landfilling in the waste management hierarchy;
- o Entering into waste commitment agreements; and
- Establishing partnerships with facilities and technology vendors.
- Develop In-County Solid Waste Processing, Transfer, and Recycling Infrastructure – The development of additional in-County solid waste management infrastructure, such as transfer/processing, composting, and anaerobic digestion facilities, would assist jurisdictions in achieving higher diversion rates and facilitate the transport of solid waste to out-of-County landfills.
- Enhance In-County Capacity and Out-of-County Disposal (including Waste-by-Rail) – Individual jurisdictions within the County may use the out-of-County disposal option to

achieve their solid waste management goals. Out-of-County disposal may not only be essential for the disposal of residual solid waste originating within the County in the future, but it may also supplement and



extend the life of the current in-County disposal capacity. As the disposal capacity within the County continues to diminish, and the siting of new and/or expansion of existing Class III landfills becomes increasingly difficult, out-of-County disposal options, such as the waste-by-rail system, will become more essential to meet the County's disposal needs.

The assumptions made on the scenario analysis are consistent with the goals and policies established in the CSE as well as legislation, such as mandatory commercial recycling and the diversion of organic waste from landfills through organic waste recycling programs. The County acknowledges that although some of the scenarios assume an increase in diversion rate, there will be significant challenges in developing the processing capacity needed. Therefore, maintaining adequate reserve (excess) capacity will be essential in ensuring that the disposal needs of the County are met throughout the 15-year planning period.

It should be noted that future conditions considered in this report are projections, and may change based on several factors, such as decisions made by the 89 individual jurisdictions or their waste management service providers and on other conditions such as changes in regulatory requirements, disposal rates, fuel costs, and traffic congestion.

Nevertheless, the preceding scenario analyses provide a useful tool to assess the ability of jurisdictions within the County to meet the disposal needs of residents and businesses under various conditions. Given that solid waste disposal is an essential public service, it must be provided without interruption to protect the health and safety of the public as well as the environment. Accordingly, major concerted actions must continue to be taken by individual jurisdictions towards expanding and enhancing waste reduction and recycling programs and implementing prudent solid waste management strategies.

## JURISDICTION/REGIONAL AGENCY CONTACT

### **Primary Contacts**

EMIKO THOMPSON Assistant Deputy Director Environmental Programs Division

Phone: (626) 458-3500 Fax: (626) 979-5389 E-Mail: ETHOMP@dpw.lacounty.gov

Mailing Address

Los Angeles County Public Works Environmental Programs Division P.O. Box 1460 Alhambra, CA 91802-1460

#### **Secondary Contacts**

CHRISTOHER SHEPPARD Senior Civil Engineer Environmental Programs Division

Phone: (626) 458-3501 Fax: (626) 979-5389 E-Mail: CSHEPPARD@dpw.lacounty.gov

VACANT Assistant Division Engineer Environmental Programs Division

Phone: (626) 458-3502 Fax: (626) 979-5389 E-Mail: Vacant [This Page Intentionally Left Blank]

# **APPENDIX E-1 SOLID WASTE FACILITY FACT SHEETS**

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# Antelope Valley Recycling and Disposal Facility

#### 1. FACILITY INFORMATION

	Owner: Waste Management of Californ		alifornia, Inc.	<b>Operator:</b> Waste Management of California, Inc.
	Address: 1200 West City Ranch Road, SWFP No: 19-AA-5624 Last 5-year Review Date: 11/10/2021			Operating Days: Monday-Saturday SWFP Issue Date: 08/13/2018 5-year Review Due Date: 11/10/2026
2.	REMAINING PERM	ITTED CAPACITY (a	as of December 31, 2021)	
	Remaining Permitted Capacity: Estimated Remaining Life: In-Place Density:		9,241,914 11 years (based on averaį 0.75 tons/cubic yard	12,322,552 cubic yards ge daily of disposal of 2,677 tpd, 307 days per year)
3.	MAXIMUM PERMI	TTED DAILY CAPA		
	Daily: Yearly Equivalent:		3,600 tons [1,123,200 tons]	[4,800 cubic yards] [1,497,600 cubic yards]
4.	2021 AVERAGE WA	ASTE QUANTITIES	DISPOSED (INCLUDING IMP	ORT QUANTITIES)
	Daily:	2,677 tons	[3,570 cubic yard	ds]
5.	LAND USE/CONDIT	IONAL USE PERM	<u>π</u>	
	Permit No.: 98-12		Effective: 06/21/2011 Modified: 01/11/2018	
6.	WASTE DISCHARGE REQUIREMENTS			
	Order No.: R6V-202	12-0042	Effective: 10/10/2001	
7.	FOC GRANT DATE – November 17, 2011			
8.	PERMITTED WAST	E <b>TYPES</b> - Solid was	ste	

- 9. FUTURE LAND USE No plans at this time
- 10. <u>RESTRICTIONS</u> There is no wasteshed or restriction on origin of waste. Based on the SWFP, the landfill is permitted to receive 3,600 tpd of MSW,1,948 tpd of materials for recycling and beneficial use, and limited to 1594 vehicles per day. Waste discharge material restrictions vary based on material type.

## Azusa Land Reclamation Company Landfill

#### 1. FACILITY INFORMATION

	Owner:	Azusa Land Reclamation	Inc.	<b>Operator:</b> Azusa Land Reclamation Inc.	
		1211 West Gladstone Str 19-AA-0013 • <b>Review Date:</b> 03/10/2022		<b>Operating Days:</b> Monday-Friday <b>SWFP Issue Date:</b> 11/12/2014 <b>5-year Review Due Date:</b> 03/10/2026	
2.	REMAININ	G PERMITTED CAPACITY (	as of December 31, 2021)		
	-	Permitted Capacity: Remaining Life: ensity:	50,771,568 26 years (based on avera 1.2 tons/cubic yard	42,309,640 cubic yards age daily of disposal of 4,074 tpd, 305 days per year)	
3.	MAXIMUN	1 PERMITTED DAILY CAPA	<u>CITY</u>		
	Daily: Yearly Equi	ivalent:	8,000 tons [2,440,000 tons]	[9,600 cubic yards] [2,928,000 cubic yards]	
4.	<u>2021 AVER</u>	AGE WASTE QUANTITIES	DISPOSED (INCLUDING IM	PORT QUANTITIES)	
	Daily:	1,275 tons	[1,530	cubic yards]	
5.	LAND USE/	CONDITIONAL USE PERM	IT		
		: Owner Participation Agr 01/27/1984	eement No.1 (incorporatec <b>Expiration:</b> None	l CUP No. C-151 of 4/9/75)	
6.	WASTE DIS	CHARGE REQUIREMENTS	<u>.</u>		
	Order No.:	R4-2009-0098	Effective: 09/03/2009		
7.	<u>FOC GRANT DATE</u> – 05/16/1996				
8.	PERMITTED WASTE TYPES – Inert Solid waste				
9.	FUTURE LAND USE - Open space				
10.	RESTRICTIC	<b>DNS</b> - 8,000 tpd per SWFP.	Only accepts inert solid wa	ste.	
11.	<u>REMARKS/</u>	<b>/<u>STATUS</u></b> - By Court Order,	, on October 2, 1996, the C	alifornia Regional Water Quality Control Board-Los Angeles region	

Note: Information above was provided by the landfill operator by completing the Annual Survey Form or through the Solid Waste Information Management System (SWIMS) as of September 2022. Data may vary from what was submitted by the landfill operator to CalRecycle's Recycling and Disposal Reporting System (RDRS). Calculated or assumed quantities are shown in brackets.

ordered the Azusa Land Reclamation Landfill to stop accepting Municipal Solid Waste. Facility currently accepts inert waste only.

## **Burbank Landfill No. 3**

#### 1. FACILITY INFORMATION

	Owner: City of Burbank - DPW			<b>Operator:</b> City of Burbank - DPW
	Address:         3000 North Bel Aire, Burl           SWFP No.:         19-AA-0040           Last 5-year Review Date:         07/9/2021			Operating Days: Monday-Friday SWFP Issue Date: 06/03/1997 5-year Review Due Date: 07/9/2026
2.	REMAINING PERMITTED CAPACITY (	as of December 31	<u>, 2021)</u>	
	Remaining Permitted Capacity: Estimated Remaining Life: In-Place Density:	[2,370,337 tons] 105 years (basec [0.55 tons/cubic	l on avera	4,309,704 cubic yards ge daily disposal of 135 tpd, 260 days per year)
3.	MAXIMUM PERMITTED DAILY CAPA	<u>CITY</u>		
	Daily:	240 tons	[436 cul	pic yards]
	Yearly Equivalent:	[57,600]	[104,72]	7 cubic yards]
4.	2021 AVERAGE WASTE QUANTITIES	DISPOSED (INCLUD	ING IMPO	DRT QUANTITIES)
	Daily (based on 6 days):	<b>138</b> tons	[251 cul	pic yards]
5.	LAND USE/CONDITIONAL USE PERM	IT		
	Permit No.: 2000-16	Effective: 11/13,	/2000	Expiration: None
6.	WASTE DISCHARGE REQUIREMENTS			
	Order No.: 93-062 Order No.: R4-2002-0154 Order No.: R4-2006-0007 Order No.: R4-2011-0052 Order No.: R4-2015-0069	Effective: 09/27, Effective: 09/26, Effective: 01/19, Effective: 03/03, Effective:	/2002 /2006	
7.	FOC GRANT DATE - 12/18/1986			
8.	PERMITTED WASTE TYPES - Solid was	ste		
9.	FUTURE LAND USE - Irrigated open sp	bace.		

- 10. <u>**RESTRICTIONS</u>** Origin of waste limited to the City of Burbank and is not open to the public.</u>
- 11. **<u>REMARKS/STATUS</u>** Limited to the City of Burbank use only.

## Calabasas Landfill

#### 1. FACILITY INFORMATION

	Owner: (	County of Los Angeles		<b>Operator:</b> County Sanitation District No. 2 of Los Angeles County
	(Lo SWFP No.: 1	5300 Lost Hills Road, Agou os Angeles County uninco 9-AA-0056 <b>eview Date:</b> 08/11/2019	proorated area)	Operating Days: Monday-Saturday SWFP Issue Date: 04/04/2016 5-year Review Due Date: 08/9/2024
2.	REMAINING	PERMITTED CAPACITY (a	<u>s of December 31, 2021)</u>	
		ermitted Capacity: emaining Life: sity:	4,506,060 tons 16 years (based on averag [0.59 tons/cubic yard]	7,637,389 cubic yards e daily disposal of 1088 tpd, 307 days per year)
3.	MAXIMUM F	PERMITTED DAILY CAPAC	ITY	
	Daily:		3,500 tons	[7,292 cubic yards]
	Yearly Equiva	alent:	[1,081,500 tons]	[2,253,125 cubic yards]
4.	2021 AVERA	GE WASTE QUANTITIES D	DISPOSED (INCLUDING IMPO	DRT QUANTITIES)
	Daily:	918 tons	[1,913 cubic yard	[s]
5.	LAND USE/C	ONDITIONAL USE PERMI	<u>r</u>	
	Permit No.: 5	5022-(5)	Effective: 08/23/1972	Expiration: None
6.	WASTE DISCI Order No.: 93 Order No.: R4 Order No.: R4 Order No.: R4	4-2006-0007 4-2009-0088	Effective: 09/27/1993 Effective: 01/19/2006 Effective: 07/16/2009 Effective: 03/03/2011	
7.	FOC GRANT I	<b>DATE</b> – None		
8.	PERMITTED	WASTE TYPES - Solid wast	te	
9.	FUTURE LAN	<b>D USE</b> - Open space		

- 10. <u>RESTRICTIONS</u> Origin of waste is limited to that generated in the Calabasas Wasteshed as defined by Los Angeles County Ordinance No. 91-0003.
- 11. <u>**REMARKS/STATUS**</u> Limited to the Calabasas Wasteshed as defined by Los Angeles County Ordinance No. 91-0003.

## Chiquita Canyon Landfill

#### 1. FACILITY INFORMATION

	Owner:	Waste Connections, Inc	<u>.</u>	<b>Operator:</b> Waste Connections, Inc.
		29201 Henry Mayo Driv (Los Angeles County uni 19-AA-0052 Review Date: 10/18/20	ncorporated area)	<b>Operating Days:</b> Monday-Saturday <b>SWFP Issue Date:</b> 10/19/2018 <b>5-year Review Due Date:</b> 10/18/2021
2.	REMAININ	G PERMITTED CAPACITY	(as of December 31, 2021)	1
	-	Permitted Capacity: Remaining Life: ensity:	[51,477,079 tons] 26 years (based on ave 0.983 tons/cubic yard	52,367,323 cubic yards rage daily disposal of 1,884,492 tons a year)
3.	MAXIMUN	1 PERMITTED DAILY CAP	ACITY	
	Daily:		12,000 tons	[12,208 cubic yards]
	Weekly: Yearly Equi	ivalent:	60,000 tons [3,120,000 tons]	[61,038 cubic yards] [3,173,957 cubic yards]
4.			DISPOSED (INCLUDING IN	
	Daily (base	d on 6 days):	6,5544 tons	[6,667 cubic yards]
5.	LAND USE/	CONDITIONAL USE PERM	<u>/IIT</u>	
	Permit No. Permit No.	: 89-081(5) Effectiv : 2004-00042-(5) Effectiv	e: 11/17/1997 e: 07/25/2017	<b>Expiration:</b> 11/24/2019 or when the maximum is reached, whichever is sooner. <b>Expiration:</b> 07/26/2047
6.	WASTE DIS	CHARGE REQUIREMENT	<u>s</u>	
			Effective: 09/27/1993 Effective: 11/02/1998 Effective: 01/19/2006 Effective: 03/03/2011	
7.	FOC GRAN	<u>T DATE</u> - 2018		

- 8. PERMITTED WASTE TYPES Solid waste
- 9. FUTURE LAND USE Non-irrigated open space
- 10. <u>RESTRICTIONS</u> Landfill cannot accept biosolids (water and wastewater sludge). There is no wasteshed restriction on origin of waste.

capacity

11. <u>REMARKS/STATUS</u> - The current Conditional Use Permit 89-081(5) (CUP) expired in June 2016 when the landfill reached its fill capacity limits. However, Department of Regional Planning issued a "Clean Hands Waiver" on March 17, 2016, allowing the landfill to continue its operation while processing the new CUP application. On July 25, 2017, the Board of Supervisors approved a new Conditional Use Permit for the Landfill's Expansion Project.

## Lancaster Landfill and Recycling Center

1.	FACILITY INFORMATION				
	Owner: Waste Mana	gement of California, Inc.	<b>Operator:</b> Waste Management of California, Inc.		
		nue "F", Lancaster, CA 93535 County Unincorporated Area)	<b>Operating Days:</b> Monday-Saturday		
	SWFP No.: 19-AA-0050		SWFP Issue Date: 02/19/2013		
	Last 5-year Review Date:	02/19/2018	5-year Review Due Date: 02/19/2023		
2.	REMAINING PERMITTED	CAPACITY (as of December 31	<u>, 2021)</u>		
	Remaining Permitted Cap Estimated Remaining Life In-Place Density:	-	13,120,002 cubic yards on average daily disposal of 4765 tpd; 307 days per year) yard		
3.	MAXIMUM PERMITTED I	DAILY CAPACITY			
	Daily: Yearly Equivalent:	3,000 tons [936,000 tons]	[4,000 cubic yards] [1,248,000 cubic yards]		
4.	2021 AVERAGE WASTE Q	UANTITIES DISPOSED (INCLUI	DING IMPORT QUANTITIES)		
	Daily (based on 6 days):	476 tons	[635 cubic yards]		
5.	LAND USE/CONDITIONAL	USE PERMIT			
	Permit No.: 03-170-(5)	Effective: 12/14	/2012 <b>Expiration:</b> 10/19/2041 or when limit of fill is reached, whichever occurs first.		
6.	WASTE DISCHARGE REQU	JIREMENTS			
	Order No.: R6V-2016-003	7 <b>Effective</b> : 06/14	/2000		
7.	FOC GRANT DATE - 05/1	8/2013			
8.	PERMITTED WASTE TYPE	<u><b>S</b></u> - Solid waste			
9.	FUTURE LAND USE - Oper	n space			

**10.** <u>**RESTRICTIONS**</u> - The Landfill cannot accept more than 10 tpd of biosolids (sewage sludge). There is no wasteshed restriction on origin of waste. Based on the SWFP, the landfill accepts 3,000 tpd of refuse and 2,100 tpd of inert debris and beneficial use.

## Mesquite Regional Landfill

## (Out-of-County Landfill)

#### 1. FACILITY INFORMATION

	Owner:	County of Los Angeles Sa	nitation District 2	Operator:	County of Los Angeles Sanitation District 2 of Los Angeles County
	Address:	6502 E Hwy 78, Brawley 9 13-AA-0026	92227	Operating Days: SWFP Issue Date	Not yet operational
		<b>Review Date:</b> 10/03/2016	5		ue Date: 10/03/2021
2.	<u>REMAININ</u>	G PERMITTED CAPACITY (a	as of December 31, 2021)		
		Permitted Capacity: Remaining Life: ensity:	[660,000,000 tons] 109 years 0.60 tons/cubic yard	[1,100,000,000 c	ubic yards]
3.	3. MAXIMUM PERMITTED CAPACITY				
	Daily:	· · .	20,000 tons	[33,333 cubic yar	-
	Yearly Equ	ivalent:	[7.3 million tons]	[12.2 million cub	ic yardsj
4. 2021 AVERAGE WASTE QUANTITIES DISPOSED					
	Daily: Not	yet operational			
5.	LAND USE	CONDITIONAL USE PERMI	T		
	Permit No.	: NO. 060003	Effective: 04/27/2011	Expiration: To Be	e Determined
6.	WASTE DIS	CHARGE REQUIREMENTS			
	Order No.:	R7-2009-0003	Effective: 06/18/2009		
7.		D WASTE TYPES - Solid Was	ste		
8. 9.		IND USE – Disposal DNS/CURRENT STATUS			
э.	<u>NESTRICIN</u>	JNJ/CONNENT STATUS			

# In February 2007, the Sanitation Districts submitted an application to Imperial County to amend the Mesquite Regional Landfill CUP for the receipt of up to 4,000 tpd of municipal solid waste by truck. Once the waste-by-rail system is operational, the ability to receive waste by truck will provide operational flexibility with the ability to ramp up until enough tonnage is received to make up a unit train.

Imperial County Planning and Development Services issued a Notice of Availability of the Final Subsequent Environmental Impact Report on October 6, 2010. The Board of Supervisors held a public hearing on the project on April 5, 2011, and subsequently approved the CUP. The Sanitation Districts also obtained a revised Solid Waste Facility Permit (SWFP) from CalRecycle/Local Enforcement Agency on October 1, 2011 for truck haul and other entitlements granted by the new CUP.

Note: Calculated or assumed quantities are shown in bracket.

## **Pebbly Beach Landfill**

#### 1. **FACILITY INFORMATION**

	Owner:	City of Avalon	<b>Operator:</b> Avalo	on Environmental Services
	Address:	1 Dump Road, Avalon, CA		Operating Days: Monday-Sunday
		(Los Angeles County Unin 10-AA-0061 r Review Date: 04/30/2020	. ,	SWFP Issue Date: 11/18/1985 5-year Review Due Date: 05/01/2025
2.	<u>REMAININ</u>	G PERMITTED CAPACITY (a	<u>s of December 31, 2021)</u>	
	-	; Permitted Capacity: Remaining Life: ensity:	[26,032 tons] 5 years (based on average 0.75-1.25 tons/cubic yard	26,032 cubic yards e daily disposal of 16.6 tpd, 365 days per year)
3.	MAXIMUN	I PERMITTED DAILY CAPAC	<u>ITY</u>	
	Daily: Yearly Equ	ivalent:	49 tons 17,885 tons	[49 cubic yards] [17,885 cubic yards]
4.	<u>2021 AVE</u>	AGE WASTE QUANTITIES D	DISPOSED (INCLUDING IMP	ORT QUANTITIES)
	Daily (base	ed on 6 days):	11 tons	[11 cubic yards]
5.	LAND USE	CONDITIONAL USE PERMI	I	
	Permit No	.: 96-162-(4)	Effective: 07/29/1998	Expiration: 07/02/2028
6.	WASTE DIS	SCHARGE REQUIREMENTS		
	Order No.:	: R4-2002-0058 : R4-2011-0052 : R4-2011-0165	Effective: 02/28/2002 Effective: 03/03/2011 Effective: 11/07/2011	
7.	FOC GRAN	<b>T DATE</b> - 01/21/1999		
8.	PERMITTE	<b>D WASTE TYPES</b> - Solid was	te	

9. FUTURE LAND USE - Open space

10. RESTRICTIONS - There is no wasteshed restriction on origin of waste. However, due to its location on Santa Catalina Island, only the City of Avalon and adjacent unincorporated County areas have access to this facility. Based on the SWFP, no Haz-Mat, designated waste, medical waste, or liquids accepted at the facility. Sewage must be at least 50 percent solids on sludge.

## San Clemente Island Landfill

#### 1. FACILITY INFORMATION

Owner:	U.S. Department of the Navy	<b>Operator:</b> U.S. Department of the Navy
Address:	San Clemente Island, CA	<b>Operating Days:</b> 2 days/week
	: 19-AA-0063 r Review Date: 04/22/2018	SWFP Issue Date: 06/24/1997 5-year Review Due Date: 04/22/2023

#### 2. REMAINING PERMITTED CAPACITY (as of December 31, 2021)

Remaining Permitted Capacity:	[35,126 tons]	281,008 cubic yards
Estimated Remaining Life:	19 years (based o	n maximum permitted rate of 9.6 tpd, 104 days per year)
In-Place Density:	0.125 tons/cubic	yard

3.	MAXIMUM PERMITTED DAILY CAPACITY					
	Daily:	9.6 tons	[77 cubic yards]			

Yearly Equivalent:991 tons[7,928 cubic yards]

#### 4. 2021 AVERAGE WASTE QUANTITIES DISPOSED (INCLUDING IMPORT QUANTITIES)

Daily (based on 6 days):2. ton[17 cubic yards]

5. LAND USE/CONDITIONAL USE PERMIT – Not Applicable

#### 6. WASTE DISCHARGE REQUIREMENTS

 Order No.: R4-2004-0057
 Effective: 04/01/2004

 Order No.: R4-2010-0045
 Effective: 03/04/2010

#### 7. FOC GRANT DATE – None

- 8. <u>PERMITTED WASTE TYPES</u> Solid waste
- 9. <u>FUTURE LAND USE</u> Open space. None.
- **10.** <u>**RESTRICTIONS**</u> This landfill is used solely by the U.S. Department of the Navy. SWFP is still under review by CalRecycle as they address new Title 27 methane monitoring requirements.

## Scholl Canyon Landfill

#### **FACILITY INFORMATION** 1.

**Owner:** City of Glendale & County of Los Angeles **Operator:** County Sanitation District No. 2 of Los Angeles County Address: 7721 N. Figueroa St, Los Angeles, CA, 90041 **Operating Days:** Monday-Saturday **SWFP No.:** 19-AA-0012 SWFP Issue Date: 12/13/2011 Last 5-year Review Date: 12/13/2021 5-year Review Due Date: 12/13/2021 2. **REMAINING PERMITTED CAPACITY (as of December 31, 2021) Remaining Permitted Capacity:** 3,408,185 tons 5,744,414 cubic yards **Estimated Remaining Life:** 8 years (based on average daily disposal of 1,485 tpd, 307 days per year) In-Place Density: [0.593 tons/cubic yard] MAXIMUM PERMITTED DAILY CAPACITY 3. Daily: 3,400 tons [5,734 cubic yards] Yearly Equivalent: [1,050,600 tons] [1,771,669 cubic yards] 4. 2021 AVERAGE WASTE QUANTITIES DISPOSED (INCLUDING IMPORT QUANTITIES) Daily (based on 6 days): 1,482 tons [2,505 cubic yards] 5. LAND USE/CONDITIONAL USE PERMIT Effective: 10/07/1997 Permit No.: 6668-U (Zoning Variance) WASTE DISCHARGE REQUIREMENTS Effective: 09/19/2001; Order No.: 01-132 Order No.: R4-2011-0052 Effective: 03/03/2011 7. FOC GRANT DATE - None 8. PERMITTED WASTE TYPES - Solid waste

9. FUTURE LAND USE - Open space

6.

10. RESTRICTIONS - The use of the Landfill is restricted by the City of Glendale Ordinance 4780 to the County of Los Angeles Cities of Glendale, La Canada Flintridge, Pasadena, South Pasadena, San Marino, and Sierra Madre; and the Los Angeles County unincorporated areas of Altadena, La Crescenta, Montrose; the unincorporated area bordered by the incorporated 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.

## Southeast Resource Recovery Facility (SERRF)

#### 1. FACILITY INFORMATION

Owner:	Southeast Resource Recovery Facility Authority, a joint powers authority consisting of the City of Long Beach and the Los Angeles County Sanitation District No. 2	<b>Operator:</b> City of Long Beach
Address:	120 Henry Ford Avenue, Long Beach, CA 90802	<b>Operating Days:</b> Monday-Friday (receive) Monday-Sunday (process)
	: 19-AK-0083 <b>r Review Date:</b> 07/16/2019	SWFP Issue Date: 08/19/2015 5-year Review Due Date: 06/26/2024

#### 2. MAXIMUM PERMITTED DAILY CAPACITY

**Daily:** 2,240 tons (SWFP Requirement)

#### 3. 2021 AVERAGE TRANSFORMED WASTE QUANTITIES (INCLUDING IMPORT QUANTITIES)

Daily Received: 1,029 tpd (based on 6 days) Daily Processed: 1,029 tpd

#### 4. LAND USE/CONDITIONAL USE PERMIT

Permit No.: HDP-84174

- 5. WASTE DISCHARGE REQUIREMENTS Not Applicable
- 6. PERMITTED WASTE TYPES Solid waste
- 7. FOC GRANT DATE 09/18/1997
- 8. <u>FUTURE LAND USE</u> Not applicable
- 9. **<u>RESTRICTIONS</u>** There is no wasteshed or restriction on origin of waste. 2,240 tpd per SWFP.
- 10. <u>REMARKS/STATUS</u> SERRF will continue to operate until June 2024 at its current average daily rate during the planning period. The city of Long Beach has announced an amended agreement to provide for the continued operation of SERRF and allow for opportunities to process higher-value waste. The owner and operator of SERRF has indicated that there are no plans to increase the permitted daily capacity.

## Sunshine Canyon City/County Landfill

#### 1. FACILITY INFORMATION

	Owner: Republic Services, Inc. Address: 14747 San Fernando Road, S SWFP No.: 19-AA-2000 Last 5-year Review Date: 12/27/2018		<b>Operator:</b> Republic Services, Inc. <b>Operating Days:</b> Monday-Saturday <b>SWFP Issue Date:</b> 07/07/2008 <b>5-year Review Due Date:</b> 12/27/2023
2.	REMAINING PERMITTED CAPACITY (a	s of December 31, 2021)	
	Remaining Permitted Capacity: Estimated Remaining Life: In-Place Density:	[55,640,543 tons] 16 years (based on averag [0.83 tons/cubic yard]	67,036,799 cubic yards ge daily disposal of 12,100 tpd, 312 days per year)
3.	MAXIMUM PERMITTED DAILY CAPAC	<u>CITY</u>	
	Daily:	12,100 tons	[14,756 cubic yards]
	Yearly Equivalent:	[3,775,200 tons]	[4,603,902 cubic yards]
4.	2021 AVERAGE WASTE QUANTITIES D	DISPOSED (INCLUDING IMP	ORT QUANTITIES)
	Daily (based on 6 days):	8,542 tons	[10,292 cubic yards]
5.	LAND USE/CONDITIONAL USE PERMI	Ţ	
	Permit No.:00-194-(5)	Effective:02/06/2006	<b>Expiration:</b> 01/29/2037 or when landfill capacity is exhausted, whichever is sooner
6.	WASTE DISCHARGE REQUIREMENTS		
	Order No.: 93-062 Order No.: R4-2006-0007 Order No.: R4-2007-0064 Order No.: R4-2008-0088 Order No.: R4-2011-0052	Effective: 09/27/1993 Effective: 01/19/2006 Effective: 12/06/2007 Effective: 10/02/2008 Effective: 03/03/2011	
7. 8.	<u>FOC GRANT DATE</u> – 12/18/2008 <u>PERMITTED WASTE TYPES</u> - Solid was	te	

- 9. FUTURE LAND USE Open space
- **10.** <u>**RESTRICTIONS**</u> The Landfill cannot accept incinerator ash or biosolids (sewage sludge). The Landfill is prohibited from accepting any solid waste generated outside the County.
- **11.** <u>**REMARKS/STATUS**</u> On December 31, 2008, operations in the Sunshine Canyon County Landfill and the Sunshine Canyon City Landfill were combined into one to what is known as the Sunshine Canyon City/County Landfill.

## Whittier (Savage Canyon) Landfill

#### FACILITY INFORMATION 1.

	Owner: City of Whittier Address: 13919 E. Penn St., Whittier, G	CA 90602	<b>Operator:</b> City of Whittier - DPW <b>Operating Days:</b> Monday-Saturday
	SWFP No.: 19-AH-0001 Last 5-year Review Date: 10/30/2018		SWFP Issue Date: 10/30/2018 5-year Review Due Date: 10/30/2023
2.	REMAINING PERMITTED CAPACITY (a	s of December 31, 2021)	
	Remaining Permitted Capacity: Estimated Remaining Life: In-Place Density:	4,261,790 tons 34 years (based on the cu 0.80 tons/cubic yard	[5,327,237 cubic yards] rrent SWPF estimated closure date)
3.	MAXIMUM PERMITTED DAILY CAPAC	<u>CITY</u>	
	Daily: Yearly Equivalent:	350 tons 109,200 tons	[438 cubic yards] [136,500 cubic yards]
4.	2021 AVERAGE WASTE QUANTITIES D	DISPOSED (INCLUDING IMP	ORT QUANTITIES)
	Daily (based on 6 days):	285 tons	[356 cubic yards]
5.	LAND USE/CONDITIONAL USE PERMI	T	
	Permit No.: City Resolution No. 4907	Effective: 08/23,	<b>Expiration:</b> Completion of project
6.	WASTE DISCHARGE REQUIREMENTS		
	Order No. 93-062 Order No.: R4-2006-0007 Order No.: R4-2006-0080 Order No.: R4-2011-0052	Effective: 09/27, Effective: 01/19, Effective: 10/24, Effective: 03/03,	/2006 /2006
7.	FOC GRANT DATE - 11/30/1978		

8. PERMITTED WASTE TYPES - Mixed municipal, Construction/demolition, Industrial, Green Materials, and Inert waste.

#### 9. FUTURE LAND USE - Open space

10. RESTRICTIONS - Hazardous, radioactive, liquid, or medical waste are all prohibited per Chapter 6.1, Division 20 of California Health and Safety Code.

## **APPENDIX E-2: TABLES**

Table 4 - Remaining Permitted Capacity of Existing Solid Waste Disposal Facilities in LosAngeles County

Table 5 – Summary of Existing Inert Debris Disposal Sites in Los Angeles County

Table 6 - Population, Employment, Real Taxable Sales, and Waste Generation in Los AngelesCounty

Table 7 - Los Angeles County Solid Waste Disposal Capacity Need Projection

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## **APPENDIX E-2 TABLE 4**

#### REMAINING PERMITTED DISPOSAL CAPACITY OF EXISTING SOLID WASTE DISPOSAL FACILITIES IN LOS ANGELES COUNTY

Facility	Solid Waste Facility Permit	Location	Permitted Operation	SWFP Maximum Daily Capacity	LUP/CUP Maximum Daily Disposal	2	2021 Annual Dispos (Million Tons)	al	2021	1 Average Daily Dis tpd-6	oosal	Estimated Rema	aining Permitted acember 31, 2021)	Remaining Life	Tipping Fee (\$ per ton)	
Facinity	Number	Unincoporated Area		(See Note 1)	Capacity		(See Note 2)			(See Note 3)		(See Million	Million (a)	(b)		
			days/week	Tons	Tons	In-County	Out-of-County	Total	In-County	Out-of-County	Total	Tons	Cubic Yards	Years		
Antelope Valley	19-AA-5624	Palmdale	6	5,548	3,600	0.805	0.021	0.825	2,579	66	2,645	9.24	12.32	8	\$73.48	
Burbank	19-AA-0040	Burbank	5	240		0.036	0.000	0.036	115	0	115	2.37	4.31	32	\$46.16	Limi
Calabasas	19-AA-0056	Unincorporated Area	6	3,500	3,500	0.264	0.016	0.280	845	52	897	4.51	7.64	8	\$52.32	Limi 91-0
Chiquita Canyon	19-AA-0052	Unincorporated Area	6	12,000	6,616 ('17-'24) 3,411 ('25-'47)	1.920	0.098	2.018	6,153	315	6,468	51.63	52.52	26	\$68.00	
Lancaster	19-AA-0050	Unincorporated Area	6	5,100	3,000	0.119	0.005	0.124	381	16	397	9.84	13.12	20	\$76.96-\$79.61	
Pebbly Beach	19-AA-0061	Unincorporated Area	7	49	49	0.004	0.000	0.004	13	0	13	0.03	0.03	7	\$145.20	LUP
San Clemente	19-AA-0063	San Clemente Island	2	10		0.0003	0.000	0.0003	1	0	1	0.035	0.28	18	Not Available	Land
Scholl Canyon	19-AA-0012	Glendale/ Unincorporated Area	6	3,400		0.423	0.000	0.423	1,355	0	1,355	2.95	4.98	7	\$53.88	Limi 478(
Sunshine Canyon City/County	19-AA-2000	Los Angeles/ Unincorporated Area	6	12,100	11,000	2.443	0.000	2.443	7,830	0	7,830	52.22	63.68	16	\$98.09	
Whittier (Savage Canyon)	19-AH-0001	Whittier	6	3,350		0.091	0.000	0.091	293	0	293	4.26	5.33	34	\$43.85-\$57.32	Limi
TOTAL		·		45,297	27,765	6.104	0.140	6.244	19,564	448	20,013	137.09	164.21			

Permitted Inert Landfills														
Azusa Land Reclamation	19-AA-0013	Azusa	6	8,000	 0.307	0.096	0.403	985	307	1,292	50.77	40.62	24	By Co Board accep
TOTAL				8,000	 0.307	0.096	0.403	985	307	1,292	50.77	40.62		

Transformation Facilities											Available Average Daily Capacity (tpd)		
Southeast Resource Recovery Facility	19-AK-0083	Long Beach	7	2,240	 0.335	0.040	0.375	1,073	128	1,201	1,370 <b>(d)</b>	\$105.00	
TOTAL				2,240	 0.335	0.040	0.375	1,073	128	1,201	1,370 <b>(e)</b>		

ľ	Out-of-County Disposal	Los Angeles County Waste Exported in 2018 to Out-of-County Class III Disposal Facilities = 4,513,262 tons or 14,466 tpd-6	
	NOTEO		<b>.</b>

NOTES: 1. Maximum Daily Capacity includes maximum daily diposal capacities and may include other materials permitted for beneficial use, recycling, etc. 2. Disposal quantities are based on actual tonnages reported by owners/operators of permitted solid waste disposal facilities to the Los Angeles County Department of Public Works' Solid Waste Information Management System (www.LACountySWIMS.org) or to CalRecycle's Recycling and Disposal Reporting System SWFP Solid Waste Facility Permit

3. Average daily disposal quantities are based on 312 days (6 days per week, average)

4. Estimated Remaining Permitted Capacity is based on landfill owner/operator's response in a written survey conducted by Los Angeles County Department of Public Works in July 2021 as well as site-specific permit criteria established by local land use agencies, Local Enforcement Agencies, CalRecycle, Water Quality Control Board, and the South Coast Air Quality Management District.

#### FOOTNOTES:

(a) Conversion factor based on in-place solid waste density is provided by landfill operators, otherwise a conversion factor of 1,200 lb/cy was used for Class III landfills.
 (b) Remaing Life is based on either the 2018 average daily disposal tonnage, maximum permitted capacity, or the facility's permit expiration date.
 (c) Based on the Solid Waste Facility Permit limit of 2,800 tons per week, expressed as a daily average, seven days per week.
 (d) Based on EPA limit of 500,000 tons per year, expressed as a daily average, seven days per week.

(e) Tonnage expressed as a daily average, seven days per week.

Abbreviation: LUP Land Use Permit

Comments
ited to the City of Burbank use only.
ited to the Calabasas Wasteshed as defined by Los Angeles County Ordinance No. 0003.

UP expires July 29, 2028.

andfill owned and operated by the U.S. Navy.

imited to the Scholl Canyon Wasteshed as defined by City of Glendale Ordinance No. 780.

imited to use by City of Whittier and waste haulers contracted with the City of Whittier.

Court Order, on October 2, 1996, the California Regional Water Quality Control bard-Los Angeles region ordered the Azusa Land Reclamation Landfill to stop ecepting Municipal Solid Waste.

CUP Conditional Use Permit

## **APPENDIX E-2 TABLE 5**

#### SUMMARY OF EXISTING INERT DEBRIS DISPOSAL SITES IN LOS ANGELES COUNTY (AS OF DECEMBER 31, 2021)

			Operation	Enforcement Agenc Maximum Da	y Notification (EAN) aily Capacity		e Daily Disposal <sup>1</sup>	2021 Annual Dis	sposal <sup>2</sup>
Facility	SWIS No.	Location	days/week	(cubic yards) <sup>3</sup>	(tpd) <sup>3</sup>	(cubic yards)	(tpd)	(cubic yards)	(tons)
Durbin Landfill	19-AA-1111	Irwindale	5	3,840	4,800	1,510	1,888	471,223	589,029
Hanson Aggregates West, Inc.	19-AA-0044	Irwindale	6	3,205	4,006	676	845	210,897	263,621
Manning Pit <sup>4</sup>	N/A <sup>5</sup>	Irwindale	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Montebello Land & Water Co.	19-AA-0019	Montebello	5	1	1	0.59	1	186	202
North Kincaid Pit <sup>6</sup>	N/A	Irwindale	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nu-Way Arrow Reclamation	19-AA-1074	Irwindale	6	6,923	8,654	1,387	1,734	432,799	540,999
Peck Road Gravel Pit <sup>6</sup>	19-AA-0838	Monrovia	7	3,200	4,000	218	272	67,881	84,851
Sun Valley Landfill	19-AR-1160	Sun Valley	5	1,458	1,823	2,737	3,422	854,013	1,067,516
United Rock Products Pit #2	19-AA-0046	Irwindale	6	3,077	3,846	2,747	3,433	856,933	1,071,166
TOTAL				21,704	27,130	8,599	10,749	2,893,931	3,617,383

#### NOTES:

1. Disposal quantities for 2021 are based on actual tonnages reported by owners/operators through the Solid Waste Management Fee invoice receipt.

2. Conversion factor based on in-place solid waste density if provided by landfill operators, otherwise a conversion factor of 2,500 lb/cy was used.

3. Derived from the permit values noted in the CalRecycle Website as of July 2021.

4. Manning Pit closed in April 2019.

5. N/A means not available.

6. North Kincaid Pit is unclassified as of December 31, 2019.

Source: Los Angeles County Public Works

#### **APPENDIX E-2 TABLE 6**

#### POPULATION, EMPLOYMENT, REAL TAXABLE SALES, AND WASTE GENERATION IN LOS ANGELES COUNTY

YEAR	POPULATION	EMPLOYMENT	REAL TAXABLE SALES	B-YRWG	B-YNWG	RAF	NAF	TOTAL GENERATION (TONS)
2021	10,188,500	4,221,500	\$149,800,000,000	9,387,602	21,904,405			31,292,007
2022	10,209,900	4,449,400	\$152,100,000,000	9,387,602	21,904,405	1.018385042	1.034669678	32,224,017
2023	10,236,200	4,561,200	\$151,900,000,000	9,387,602	21,904,405	1.025962804	1.04724386	32,570,584
2024	10,267,500	4,630,900	\$152,000,000,000	9,387,602	21,904,405	1.031793419	1.055832997	32,813,460
2025	10,297,700	4,679,100	\$152,200,000,000	9,387,602	21,904,405	1.036463696	1.062209425	32,996,974
2026	10,324,600	4,724,400	\$152,500,000,000	9,387,602	21,904,405	1.040967175	1.068576152	33,178,711
2027	10,348,400	4,755,100	\$152,800,000,000	9,387,602	21,904,405	1.0444539	1.073213635	33,313,024
2028	10,369,700	4,786,200	\$153,100,000,000	9,387,602	21,904,405	1.047841626	1.077898495	33,447,446
2029	10,388,500	4,817,600	\$153,400,000,000	9,387,602	21,904,405	1.051124431	1.082618888	33,581,661
2030	10,407,400	4,849,300	\$153,700,000,000	9,387,602	21,904,405	1.05442991	1.087374812	33,716,867
2031	10,426,300	4,881,300	\$154,000,000,000	9,387,602	21,904,405	1.057753155	1.092166269	33,853,018
2032	10,445,300	4,913,600	\$154,300,000,000	9,387,602	21,904,405	1.061099073	1.096993259	33,990,161
2033	10,464,300	4,946,300	\$154,700,000,000	9,387,602	21,904,405	1.064635569	1.102201403	34,137,441
2034	10,483,300	4,979,200	\$155,000,000,000	9,387,602	21,904,405	1.06801702	1.107099458	34,276,474
2035	10,502,300	5,012,500	\$155,300,000,000	9,387,602	21,904,405	1.07142216	1.112044888	34,416,767
2036	10,521,400	5,046,200	\$155,600,000,000	9,387,602	21,904,405	1.074855895	1.117037696	34,558,366

Population: Countywide Population Projection (UCLA, Long Term Forecast of Los Angeles County, July 2021)

Employment: Countywide Employment Projection (UCLA, Long Term Forecast of Los Angeles County, July 2021)

Employment data from UCLA only accounts for non-farm employment.

Real Taxable Sales: Countywide Taxable Sales (Source of information is UCLA, Long Term Forcast of Los Angeles County, July 2021).

Real Taxable Sales data from UCLA considers the real dollar value. (Real Taxable Sales)

**<u>B-Y RWG</u>** = Base Year Residential Waste Generation. Calculation based on California 2008 Statewide Waste Characterization Study. Single-family and multifamily residential waste together account for 30 percent of the state's waste stream.

**<u>B-Y NWG</u>** = Base Year Non-Residential Waste Generation. Calculation based on California 2008 Statewide Waste Characterization Study (All other sources account for 70 percent of the state's total waste stream).

- **RAF** = Residential Adjustment Factor =
  - = {(PR/PB)+[ER/EB+(CB/CR\*TR/TB)]/2}/2
- <u>NAF</u> = Non-Residential Adjustment Factor = [ER/EB+(CB/CR\*TR/TB)]/2

The Adjustment Methodology Formula as adopted by the CIWMB is expressed as follows:

Estimated Reporting Year Solid Waste Generation = {[(B-Y RWG) (RAF)] + [(B-Y NWG)(NAF)]}

PR= Reporting Year Population

- PB= Base Year Population EB= Base Year Employment
- ER= Reporting Year Employment
   EB= Base Year Employment

   CR= Reporting Year Consumer Price Index
   CB= Base Year Consumer Price Index
- CR= Reporting Year Consumer Price Ind TR= Reporting Year Taxable Sales
- TB= Base Year Taxable Sales

Source: Los Angeles County Department of Public Works

## APPENDIX E-2 TABLE 7 LOS ANGELES COUNTY SOLID WASTE DISPOSAL CAPACITY NEED PROJECTION

Α	В	С	D	E	F	G	Н	I	J
	TOTAL GENERATION	PERCENT	TOTAL	PROJECTED TRANSFORMATION &	AVAILABLE TRANSFORMATION CAPACITY		CLASS III DISPOS	AL NEED	
				CLASS III LANDFILL					(YEAR'S END)
YEAR	TONS	(ASSUMED)	TONS	DISPOSAL (TONS)	TONS	TONS	CUBIC YARDS	TONS	CUBIC YARDS
2021	31,292,007	65%	20,339,805	10,952,203	500,000	10,452,203	17,420,338	10,452,203	17,420,338
2022	32,224,017	65%	20,945,611	11,278,406	500,000	10,778,406	17,964,010	21,230,609	35,384,348
2023	32,570,584	65%	21,170,880	11,399,705	500,000	10,899,705	18,166,174	32,130,313	53,550,522
2024	32,813,460	65%	21,328,749	11,484,711	500,000	10,984,711	18,307,852	43,115,024	71,858,373
2025	32,996,974	65%	21,448,033	11,548,941	500,000	11,048,941	18,414,902	54,163,965	90,273,275
2026	33,178,711	65%	21,566,162	11,612,549	250,000	11,362,549	18,937,581	65,526,514	109,210,856
2027	33,313,024	65%	21,653,466	11,659,558	0	11,659,558	19,432,597	77,186,072	128,643,454
2028	33,447,446	65%	21,740,840	11,706,606	0	11,706,606	19,511,010	88,892,678	148,154,463
2029	33,581,661	65%	21,828,079	11,753,581	0	11,753,581	19,589,302	100,646,259	167,743,766
2030	33,716,867	65%	21,915,963	11,800,903	0	11,800,903	19,668,172	112,447,163	187,411,938
2031	33,853,018	65%	22,004,462	11,848,556	0	11,848,556	19,747,594	124,295,719	207,159,532
2032	33,990,161	65%	22,093,604	11,896,556	0	11,896,556	19,827,594	136,192,275	226,987,125
2033	34,137,441	65%	22,189,337	11,948,104	0	11,948,104	19,913,507	148,140,380	246,900,633
2034	34,276,474	65%	22,279,708	11,996,766	0	11,996,766	19,994,610	160,137,146	266,895,243
2035	34,416,767	65%	22,370,898	12,045,868	0	12,045,868	20,076,447	172,183,014	286,971,690
2036	34,558,366	65%	22,462,938	12,095,428	0	12,095,428	20,159,047	184,278,442	307,130,736

#### NOTES:

1. Waste generation (Column B) is calculated using CalRecycle's Adjustment Methodology, utilizing employment, population, and taxable sales projections from UCLA Anderson Long-term Forecast (July 2021).

2. Waste generation for 2021 is based on actual in-County and out-of-County transformation and Class III landfill disposal by jurisdictions in Los Angeles County. These tonnages DO NOT include inert waste disposed at permitted inert landfills or at Class III landfills.

3. The 2021 transformation and Class III landfill disposal quantity (first figure under Column E) is based on tonnages reported by permitted solid waste disposal facility operators in Los Angeles County and export quantities reported by other counties to Los Angeles County Public Works as part of the 2021 Disposal Quantity Reporting data.

4. The available transformation capacity is based on (1) EPA limit of 500,000 tons per year (expressed as a daily average, seven days per week) for Southeast Resource Recovery Facility (SERRF). SERRF is assumed to cease its operation in June 2024.

5. Columns H and J are based on Columns G and I, respectively, using an in-place waste density of 1,200 lb/cy.

Source: Los Angeles County Public Works

## **APPENDIX E-3: DISPOSAL CAPACITY ANALYSIS SCENARIOS**

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#### **APPENDIX E-3**

SCENARIO I - UTILIZATION OF EXISTING IN-COUNTY DISPOSAL CAPACITY ONLY Diversion Rate at 65%

• Existing In-County Class III Landfills and Transformation Facilities

								1	2	3	4	5	6	7	8	9	10	11	
									•			IN-COUNTY C	LASS III LANDF	ILLS <sup>3</sup>		• • •			
Year	Waste Generation Rate <sup>1</sup>	Diversion Rate	Total Daily Disposal Demand	Imports from Other Counties	Daily Available Capacity from Transformation Facilities <sup>2</sup>	Exports to Out-of-County Landfills <sup>3</sup>	Class III Landfill Daily Disposal Demand	Antelope Valley	<b>R</b> Burbank	<b>R</b> Calabasas	M E		Pebbly Beach Si d Daily Disposal Daily Disposal	R an Clemente Capacity (tpd- Fonnage (tpd-	6)	Sunshine City/County ( Combined	<b>R</b> Whittier Savage Canyon)	Capacity <sup>3</sup> (tpd-6) Total In-County Class III Landfill Remaining Disposal	Class III Landfill Daily Disposal Capacity Shortfall (Reserve)
	A	в	C=A(1-B)	D	Е	F	G=C+D-E-F											Capacity (million tons	I=G-H
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	-										(tpd-6)	(tpd-6)
2021	100,295	65%	35,103	577	1,073	14,466	20,141	3,600	240	3,500	6,616	3,000	49	10	3,400	11,000	350	26,837	
								2,579		845	6,153	381	13	1	1,355	7,830	293		
0000	400.000	050/	00.440	<u> </u>	4 000	11.010		9.2		4.5	51.6	9.8	0.03	0.04	3.0	52.2	4.3		l
2022	103,282	65%	36,149	600	1,200	14,649	20,900	3,600 2,676	240 119	3,500 877	<mark>6,616</mark> 6,616	3,000 396	49 13	10 1	3,400 1,406	11,000 8,125	350 304	26,936	
								8.4	2.3	4.2	49.6	9.7	0.02	0.03	2.5	49.7	4.2	131	
2023	104,393	65%	36,538	600	1,200	0	35,938	3,600	240	3,500	6,616	3,000	49	10	3,400	11,000	350		7,217
								3,600		1,508	6,616	680	22	2	2,418	11,000	350		
								7.3		3.8	47.5	9.5	0.02	0.03	1.8	46.3	4.1		
2024	105,171	65%	36,810	600	600	0	36,810	3,600	240	3,500	6,616	3,000	49	10	3,400	11,000	350	28,821	7,989
								3,600 6.2		1,545 3.3	6,616 45.4	697 9.3	23 0.01	2 0.03	2,477 1.0	11,000 42.8	350 3.9	114	1
2025	105,760	65%	37,016	600	0	0	37,616	3,600	240	3,500	6,616	3,000	49	10	3,400	11,000	350		8,701
	,		. ,		-	-	- ,	3,600		1,579	3,411	712	23	2	2,531	11,000	350		., .
								5.0		2.8	44.4	9.1	0.001	0.03	0.2	39.4	3.8		
2026	106,342	65%	37,220	600	0	0	37,820	3,600	240	3,500	6,616	3,000	49	10	3,400	11,000	350		8,882
								3,600		1,587	3,411	716	23	2	2,545	11,000	350		1
2027	106,773	65%	37,370	600	0	0	37,970	3.9 3,600	<u>2.1</u> 240	2.3	43.3 3,411	8.8	CC	0.03	CC	36.0	<u>3.7</u> 350		14,798
2021	100,775	0070	57,570	000	0	0	51,510	3,600		1,593	3,411	719		2		11,000	350		14,730
								2.8		1.8	42.2	8.6		0.03		32.5	3.6		1
2028	107,203	65%	37,521	600	0	0	38,121	3,600	240	3,500	3,411	3,000		10		11,000	350		14,942
								3,600		1,600	3,411	722		1		11,000	350		
2029	107,634	65%	37,672	600	0	0	38,272	1.7 3,600	<u>1.9</u> 240	<u>1.3</u> 3,500	41.2 3,411	8.4	CP	0.04		29.1	3.5 350		15,086
2029	107,034	0370	51,012	000	0	0	30,272	3,600		1,606	3,411	725		10		11,000	350		13,000
								0.5		CP		8.2		0.03		25.7	3.4		1
2030	108,067	65%	37,823	600	0	0	38,423	3,600	240		3,411	3,000		10		11,000	350	21,581	16,843
								3,600			3,411	727		1		11,000	350		1
0004	400 500	050/	07.070	<u> </u>		0	00.570	CC			39.1	7.9		0.03	CP		3.3		00.505
2031	108,503	65%	37,976	600	0	0	38,576		240 219		3,411 3,411	3,000 730		10		11,000 11,000	350 350	17,982	20,595
									1.7		38.0	7.7		0.03		18.8	3.2	69	
2032	108,943	65%	38,130	600	0	0	38,730		240		3,411	3,000		10		11,000	350		20,748
									220		3,411	733		1		11,000	350		1
	400.445	050/							1.7		36.9	7.5		0.03		15.4	3.1	65	
2033	109,415	65%	38,295	600	0	0	38,895		240 221		3,411 3,411	3,000 736		10		11,000 11,000	350 350		20,912
									1.6		35.9	7.3		0.03		11.9	3.0		
2034	109,860	65%	38,451	600	0	0	39,051		240		3,411	3,000		10		11,000	350		21,067
	,						,		222		3,411	739		1		11,000	350		
									1.5		34.8	7.0		0.03		8.5	2.9		L
2035	110,310	65%	38,609	600	0	0	39,209		240		3,411	3,000		10		11,000	350		21,223
									223 1.5		3,411 33.7	742 6.8		1 0.03		11,000 5.1	350 2.7		1
2036	110,764	65%	38,767	600	0	0	39,367		240		3,411	3,000		10		11,000	350		21,381
_000	,				5		00,001		224		3,411	745		10		11,000	350		2.,001
	1								1.4		32.7	6.6		0.03		1.6	2.6		1

#### ASSUMPTIONS:

1. Waste Generation is estimated using CalRecycle's Adjustment Methodology, utilizing population projection, employment and real taxable sales projections from UCLA's Longterm Forecast, July 2021.

2. Daily Available Capacity from Transfomation Facilities assume Southeast Resource Recovery Facility will cease its operation on June 2024.

3. The scenario assumes utilization of in-County disposal capacity only.

4. Total In-County Class III Landfill Available Capacity is calculated based on Maximum Permitted Daily Capacity (in blue text) for facilities without a restricted wasteshed or Expected Average Daily Tonnage for facilities with a restricted wasteshed (R). Chiquita Canyon Landfill's expected average daily tonnage is based on the limits set on the new conditional use permit and therefore used to calculate the Total In-County Class III landfill Available Capacity.

5. This scenario also considers the effect of Assembly Bill 1594 that removes diversion credit from green waste used as alternative daily cover (ADC) at landfills.

#### LEGEND:

CC/CP - Closure due to exhausted capacity (CC) or permit expiration (CP)

E - Expansion may become effective

R - Restricted wasteshed

#### No Utilization of Out-of-County Disposal Capacity

#### **APPENDIX E-3**

SCENARIO II - STATUS QUO

Diversion Rate at 65%

• Existing In-County Class III Landfills and Transformation Facilities

								1	2	3	4	5	6	7	8	9	10	11	
												IN-COUNTY C	LASS III LAND	FILLS					1
Year	Waste Generation Rate <sup>1</sup>	Diversion Rate	Total Daily Disposal Demand	Imports from Other Counties	Daily Available Capacity from Transformation Facilities <sup>2</sup>	Exports to Out-of-County Landfills	Class III Landfill Daily Disposal	Antelope Valley	<b>R</b> Burbank	<b>R</b> Calabasas		Lancaster F Iaximum Permitted	Pebbly Beach S		R Scholl	Sunshine City/County Combined	<b>R</b> Whittier (Savage Canyon)	Total In-County Class III Landfill Available Disposal Capacity <sup>3</sup> (tpd-6)	Class III Landfill Daily Disposal Capacity Shortfall
		в	C=A(1-B)	D	E	F	G=C+D-E-F				E	Expected Average naining Disposal Ca	Daily Disposal	Tonnage (tpd-	6)			Total In-County Class III Landfill Remaining Disposal Capacity (million tons H	(Reserve)
	(tpd-6)		(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)											(tpd-6)	(tpd-6)
2021	100,295	65%	35,103	577	1,073	14,466	20,141	3,600 2,579	240 115	3,500 845	6,616 6,153	3,000 381	49 13	10 1	3,400 1,355	11,000 7,830	350 293	26,837	
2022	103,282	65%	36,149	600	1,200	14,859	20,689	9.2 3,600 2,650	2.4 240 118	4.5 3,500 868	51.6 6,616 6,616	9.8 3,000 392	0.03 49 13	0.04 10 0.92	3.0 3,400 1,392	52.2 11,000 8,043	4.3 350 301	137 26,908	
2023	104,393	65%	36,538	600	1,200	15,022	20,916	8.4 3,600 2,678	2.3 240 119	4.2 3,500 878	49.6 6,616 6,616	9.7 3,000 396	0.02 49 13	0.03 10 0.93	2.5 3,400 1,407	49.7 11,000 8,131	4.2 350 304	<u>131</u> 26,938	(6,022)
2024	105,171	65%	36,810	600	600	15,387	21,423	7.6 3,600	2.3 240	4.0 3,500	47.5 6,616	9.6 3,000	0.02	0.03	2.1 3,400	47.2	<u>4.1</u> 350	124 27,004	(5,581)
2025	105,760	65%	37,016	600	0	15,724	21,892	2,744 6.7 3,600	122 2.3 240	899 3.7 3,500	6,616 45.4 6,616	406 9.5 3,000	13 0.01 49	0.95 0.03 10	1,441 <u>1.6</u> 3,400	8,328 44.6 11,000	311 4.0 350	118 23,860	(1,968)
2026	106,342	65%	37,220	600	0	15,809	22,011	2,804 5.8 3,600	125 2.2 240	919 3.4 3,500	3,411 44.4 6,616	414 9.3 3,000	14 0.01 49	0.97 0.03 10	1,473 1.2 3,400	8,511 41.9 11,000	318 3.9 350	112 23,905	(1,895)
								2,819 5.0	125 2.2	924 3.1	3,411 43.3	417 9.2	14 0.01	0.97 0.03	1,481 0.7	8,557 39.3	350 3.8	107	
2027	106,773	65%	37,370	600	0	15,872	22,099	3,600 2,830 4.1	240 126 2.1	3,500 927 2.8	3,411 3,411 42.2	3,000 418 9.1	49 14 0.00	10 0.98 0.03	3,400 1,487 0.2	11,000 8,591 36.6	350 350 3.7	23,916 101	(1,817)
2028	107,203	65%	37,521	600	0	15,935	22,186	3,600 2,841 3.2	240 126 2.1	3,500 931 2.5	3,411 3,411 41.2	3,000 420 8.9	49 14 CC/CP	10 0.98 0.03	3,400 1,493 CC	11,000 8,625	350 350 3.5	23,926 95	(1,739)
2029	107,634	65%	37,672	600	0	15,998	22,274	3,600 2,852	240 127	3,500 935	3,411 3,411	3,000 422	00/01	10 0.99	0	11,000 8,659	350 350	22,423	(149)
2030	108,067	65%	37,823	600	0	16,061	22,362	2.3 3,600 2,864	2.1 240 127	2.2 3,500 938	40.1 3,411 3,411	8.8 3,000 423		0.03 10 0.99		31.2 11,000 8,693	3.4 350 350	90 22,428	(65)
2031	108,503	65%	37,976	600	0	16,125	22,451	1.4 3,600 2,875	2.0 240 128	1.9 3,500 942	<u>39.1</u> 3,411 3,411	8.7 3,000 425		0.03 10 0.99	CP	11,000 8,728	3.3 350 350	<u>85</u> 22,432	19
2032	108,943	65%	38,130	600	0	16,189	22,541	0.5 3,600 2,887	2.0 240 128	1.6 3,500 946	38.0 3,411 3,411	8.6 3,000 427		0.03 10 1.00		25.7 11,000 8,763	3.2 350 350	80 22,436	105
2033	109,415	65%	38,295	600	0	16,258	22,637	CC	1.9 240 129	1.4 3,500 950	36.9 3,411 3,411	8.4 3,000 429		0.03 10 1.00		23.0 11,000 8,800	3.1 350 350	75 18,841	3,796
2034	109,860	65%	38,451	600	0	16,324	22,728		1.9 240 129	<u>1.1</u> 3,500 954	35.9 3,411 3,411	8.3 3,000 430		0.03 10 1.01		20.3 11,000 8,836	3.0 350 350	70 18,845	3,883
2035	110,310	65%	38,609	600	0	16,389	22,819		1.9 240 130	0.8 3,500 958	34.8 3,411 3,411	8.1 3,000 432		0.03 10 1.01		17.5 11,000 8,871	2.9 350 350	66 18,849	3,970
2036	110,764	65%	38,767	600	0	16,456	22,912		1.8 240 130	0.5 3,500 961	33.7 3,411 3,411	8.0 3,000 434		0.03 10 1.01		14.7 11,000 8,907	2.8 350 350	62 18,854	4,058
ASSUMP								-	1.8	0.2	32.7	7.9		0.03		12.0	2.7	57	

#### ASSUMPTIONS:

1. Waste Generation is estimated using CalRecycle's Adjustment Methodology, utilizing population projection, employment and real taxable sales projections from UCLA's Longterm Forecast, July 2021.

2. Daily Available Capacity from Transfomation Facilities assume Southeast Resource Recovery Facility will cease its operation on June 2024.

3. Total In-County Class III Landfill Available Capacity is calculated based on Maximum Permitted Daily Capacity (in blue text) for facilities without a restricted wasteshed or Expected Average Daily Tonnage for facilities with a restricted wasteshed (R). Chiquita Canyon Landfill's average daily tonnage is based on the limits set on the new conditional use permit and therefore used to calculate the Total In-County Class III landfill Available Capacity.

4. This scenario also considers the effect of Assembly Bill 1594 that removes diversion credit from green waste used as alternative daily cover (ADC) at landfills.

#### LEGEND:

CC/CP - Closure due to exhausted capacity (CC) or permit expiration (CP)

E - Expansion may become effective

R - Restricted wasteshed

#### Exports based on Existing Export Agreements

#### **APPENDIX E-3** SCENARIO III - MEETING SENATE BILL 1383 ORGANIC WASTE DISPSOSAL REDUCTION TARGETS Diversion Rate (up to 76 percent)

#### • Existing In-County Class III Landfills & Transformation Facilities

											1	2	3	4	5	6	7	8	9	10	11	
	Generation		Diversion		Disposal										IN-COUNTY C	LASS III LANDF	FILLS	I				
Year	Total Solid Waste Generation Rate <sup>1</sup>	Total Solid Waste Diversion Rate <sup>2</sup>	Total Solid Waste Diversion Tonnage <sup>3</sup>	Total Solid Waste Daily Disposal Demand <sup>4</sup>	Organic Waste Disposal Tonnage⁵	% of Disposed Organic Waste in Total Solid Waste Disposal Demand	Imports from Other Counties	Daily Available Capacity from Transformation Facilities <sup>6</sup>	Exports to Out-of-County Landfills	Class III Landfill Daily Disposal Demand	Antelope Valley	<b>R</b> Burbank	R Calabasa	s Chiquita	a Lancaster F Maximum Permitted Expected Average Remaining Disposal C	d Daily Disposal Daily Disposal	Fonnage (tpd-6)	_	Sunshine City/County (Sava Combined	R Whittier age Canyon)	Total In-County Class III Landfill Available Disposal Capacity <sup>3</sup> (tpd-6) Total In-County Class III Landfill Remaining Disposal Capacity (million tons)	Class III Landfill Daily Disposal Capacity Shortfall (Reserve)
	A (tpd-6)	В	C=A*B	D=A(1-B)	E (tod 6)	F=E/D	G (tpd-6)	H (tpd-6)	l (tpd-6)	J=D+G-H-I	-									-	K (tod 6)	L=J-K
2014	70,170	60%	(tpd-6) 42,102	(tpd-6) 28,068	(tpd-6) 13,557	48%				(tpd-6) 	-			-					-		(tpd-6) 	(tpd-6) 
2020	99,832	65%	64,891	34,941	6,778 <b>50%</b>	19%	572	1,083	14,567	19,863												
2021	100,295	73%	72,793	27,502	6,101	22%	577	1,073	14,466	12,539	3,600 2,579 9.2	240 115 2.4	845	6,15	3 381	49 13 0.03		3,400 1,355 3.0	11,000 7,830 52.2	350 293 4.3	26,837 137	-
2022	103,282	73%	75,821	27,461	5,423	20%	600	1,200	14,389	12,473	3,600 2,566 8.4	240 114 2.3	84	6,61	6 379	49 12 0.02		3,400 1,348 2.5	11,000 7,788 49.8	350 291 4.2	26,823 131	
2023	104,393	74%	77,373	27,020	4,745	18%	600	1,200	14,153	12,268	3,600 2,523 7.7	240 112 2.3	3,500 821	6,61 6,61	6 3,000 6 373	49 12 0.02		3,400 1,326 2.1	11,000 7,660 47.4	350 286 4.1	26,780 125	(14,512)
2024	105,171	75%	78,663	26,509	4,067	15%	600	600	14,200	12,309	3,600 2,532 6.9	240 112 2.3		6,61	6 374	49 12 0.01		3,400 1,330 1.7	11,000 7,686 45.0	350 287 4.0	26,789 119	(14,480)
2025	105,760	75%	79,803	25,956	3,389 <b>75%</b>	13%	600	0	14,225	12,331	3,600 2,536 6.1	240 113 2.2	83	6,61	6 375	49 12 0.01		3,400 1,333 1.3	11,000 7,700 42.6	350 288 3.9	26,793 112	(14,462)
2026	106,342	75%	80,261	26,081	3,389	13%	600	0	14,292	12,389	3,600 2,548 5.3	240 113 2.2	835	3,41	1 377	49 12 0.01		3,400 1,339 0.9	11,000 7,736 40.2	350 289 3.8	26,806 107	(14,417)
2027	106,773	75%	80,600	26,172	3,389	13%	600	0	14,341	12,431	3,600 2,557 4.5	240 114 2.2		3,41	1 378	49 12 0.00		3,400 1,343 0.5	11,000 7,762 37.8	350 290 3.7	23,609 102	(11,178)
2028	107,203	76%	80,939	26,264	3,389	13%	600	0	14,390	12,474	3,600 2,566 3.7	240 114 2.1		3,41	1 379	49 12 CC	0.9 0.03	3,400 1,348 0.0	11,000 7,789 35.3	350 291 3.6	23,618 97	(11,144)
2029	107,634	76%	81,277	26,356	3,389	13%	600	0	14,440	12,517	3,600 2,575 2.9	240 114 2.1	844 2.4	3,41 39.	1 381 1 8.9		0.9 0.03	3,400 1,353 (0.4)	11,000 7,816 32.9	350 292 3.5	23,615 91	(11,098)
2030	108,067	76%	81,618	26,449	3,389	13%	600	0	14,489	12,560	3,600 2,583 2.1	240 115 2.1	2.2	3,41 38.	1 382 1 8.8		0.9 0.03	3,400 1,357 <b>CC</b>	11,000 7,843 30.5	350 293 3.4	23,624 87	(11,064)
2031	108,503	76%	81,961	26,542	3,389	13%	600	0	14,539	12,603	3,600 2,592 1.3	240 115 2.0	1.9	3,41 37.	1 383 0 8.7		10 0.9 0.03		11,000 7,870 28.0	350 294 3.4	22,271 82	(9,668)
2032	108,943	76%	82,307	26,636	3,389	13%	600	0	14,589	12,646	3,600 2,601 0.4	240 116 2.0	852 1.6	3,41 35.	1 385 9 8.5		10 0.9 0.03		11,000 7,897 25.5	350 295 3.3	22,275 77	(9,629)
2033	109,415	76%	82,679	26,736	3,389	13%	600	0	14,643	12,693	3,600 2,611 CC		850 1.4	3,41 34.	1 386 9 8.4		10 0.9 0.03		11,000 7,926 23.1	350 296 3.2	22,280 73	(9,587)
2034	109,860	76%	83,029	26,831	3,389	13%	600	0	14,694	12,737		240 116 1.9	859 1.1	3,41 33.	1 387 8 8.3		10 0.9 0.03		11,000 7,954 20.6	350 297 3.1	18,684 69	(5,947)
2035	110,310	76%	83,383	26,927	3,389	13%	600	0	14,745	12,782		240 117 1.9	862 0.8	3,41 32.	1 389 7 8.2		10 0.9 0.03		11,000 7,981 18.1	350 298 3.0	18,689 65	(5,907)
2036	110,764	76%	83,740	27,024	3,389	13%	600	0	14,797	12,827		240 117 1.8	865	3,41	1 390		10 0.9 0.03		11,000 8,009 15.6	350 299 2.9	18,693 61	(5,866)

#### ASSUMPTIONS:

1. Waste Generation is estimated using CalRecycle's Adjustment Methodology, utilizing population projection, employment and real taxable sales projections from UCLA's Longterm Forecast, July 2020.

2. Total Solid Waste Diversion Rate for the years 2021-2035 reflects the impact of diverting the amount of additional organics from disposal.

3. Total Soild Waste Diversion Tonnage for the years 2021-2035 is calculated to reflect the amount of additional organics being diverted in order to meet the organic waste disposal reduction target of Senate Bill 1383. (Source: Countywide Organic Waste Management Plan, 2021 Annual Report)

4. Total Solid Waste Daily Disposal Demand for the years 2021-2035 is calculated to reflect the amount of additional organics being diverted in order to meet the organic waste disposal reduction targets of Senate Bill 1383. (Source: Countywide Organic Waste Management Plan, 2021 Annual Report)

5. The amount of Organic Waste Disposal Tonnage is calculated using the organic waste disposal reduction targets of Senate Bill 1383. (Source: Countywide Organic Waste Management Plan, 2019 Annual Report)

6. Daily Available Capacity from Transfomation Facilities assume Southeast Resource Recovery Facility will cease its operation on June 2024.

7. Total In-County Class III Landfill Available Capacity is calculated based on Maximum Permitted Daily Capacity (in blue text) for facilities without a restricted wasteshed or Expected Average Daily Tonnage for facilities with a restricted wasteshed (R).

Chiquita Canyon Landfill's average daily tonnage is based on the limits set on the new conditional use permit and therefore used to calculate the Total In-County Class III landfill Available Capacity.

8. This scenario also considers the effect of Assembly Bill 1594 that removes diversion credit from green waste used as alternative daily cover (ADC) at landfills.

9. Please note that the use of alternative technology (e.g., conversion, transformation) be electrical power, fuel, and sanitized compost will reduce the amount of solid waste disposed at landfills.

LEGEND: CC/CP - Closure due to exhausted capacity (CC) or permit expiration (CP)

E - Expansion may become effective

R - Restricted wasteshed

• Exports based on Existing Export Agreements

• Diversion Rate (75% by 2025)

#### **APPENDIX E-3** SCENARIO IV - ALL SOLID WASTE MANAGEMENT OPTIONS CONSIDERED BECOME AVAILABLE

· Exports based on Existing Export Agreements

<ul> <li>Existing In-County Class III Landfills &amp; Transformation Facilitie</li> </ul>
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• Existing in-County Class III Landfills & Fransformation Facilities • Exports based on Existing Export Agreements • Diversion Rate (75% by 2025) • Utilization of Additional Alternative Technology Capacity • Utilization of Additional Alternative Technology Capacity										у										
								1	2	3	4	5	6	7	8	9	10	11		
												IN-COUNTY (	LASS III LANDFI	LLS						
Year	Waste Generation Rate <sup>1</sup>	Diversion Rate	Total Daily Disposal Demand	Imports from Other Counties	Potential Available Capacity from Alternative Technology	Exports to Out-of-County Landfills	Class III Landfill Daily Disposal	Antelope Valley	<b>R</b> Burbank (	<b>R</b> Calabasas	Chiquita		Pebbly Beach Sa	<b>R</b> n Clemente		Sunshine City/County ( Combined	<b>R</b> Whittier Savage Canyon)	Total In-County Class III Landfill Available Disposal Capacity <sup>3</sup> (tpd-6)	Potential Waste-by-Rail Capacity <sup>4</sup>	Class III Landfill Daily Disposal Capacity Shortfall
					Facilities <sup>2</sup>		Demand				Re	Expected Average emaining Disposal C	e Daily Disposal To	onnage (tpd-6	5)			Total In-County Class III Landfill Remaining Disposal Capacity (million tons)		(Reserve)
	A (tpd-6)	В	C=A(1-B) (tpd-6)	D (tpd-6)	E (tpd-6)	G (tpd-6)	H=C+D-E-F-G (tpd-6)	-										(tpd-6)	J (tpd-6)	K=H-I-J (tpd-6)
2021	100,295	65%	35,103	577	1,073	14,466	20,141	3,600	240	3,500	6,616	3,000	49	10	3,400	11,000	350	26,837	(tpu-0) —	(ipu-0) 
			00,100		.,	,	20,	2,579 9.2	115 2.4	845 4.5	6,153 51.6	381 9.8	13 0.03	0.89 0.04	1,355 3.0	7,830 52.2	293 4.3	137		
2022	103,282	68%	33,567	600	1,200	13,529	19,437	3,600	240	3,500	6,616	3,000	49	10	3,400	11,000	350	26,745	-	
								2,489 8.5	111 2.3	816 4.3	6,616 48.1	368 9.7	12 0.02	0.86 0.03	1,308 2.5	7,556 49.9	282 4.2	130		
2023	104,393	70%	31,318	600	1,600	12,422	17,896	3,600	240	3,500	6,616	3,000	49	10	3,400	11,000	350	26,545	-	(8,649)
								2,292 7.8	102 2.3	751 4.0	6,616 46.0	500 9.6	11 0.02	0.79 0.03	1,204 2.17	6,957 47.7	260 4.1	124		
2024	105,171	73%	28,922	600	1,600	11,421	16,501	3,600	2.3	3,500	6,616	3,000	49	10	3,400	11,000	350	26,363	_	(9,862)
	,		ŗ		,	,	,	2,113	94	692	6,616	600	10	0.73	1,110	6,415	240			
2025	105 760	75%	26,440	600	1,600	10,383	15,057	7.1 3,600	2.3 240	3.8 3,500	44.0	9.4	0.02	0.03	1.8 3,400	45.7	4.0 350	118 26,175	4,000	(15 110)
2025	105,760	75%	20,440	600	1,000	10,383	15,057	1,928 6.5	240 86 2.2	3,500 632 3.6	3,411 42.9	3,000 700 9.2	9 0.01	0.67 0.03	3,400 1,013 1.5	11,000 5,853 43.9	219 3.9	114	4,000	(15,119)
2026	106,342	75%	26,586	600	1,600	10,444	15,141	3,600	240	3,500	6,616	3,000	49	10	3,400	11,000	350	26,186	4,000	(15,045)
								1,939	86	635	3,411	800	9	0.67	1,019	5,886	220	100		
2027	106,773	75%	26,693	600	1,600	10,489	15,204	5.9 3,600	2.2 240	3.4 3,500	41.9 3,411	8.9	0.01 49	0.03	<u>1.2</u> 3,400	42.0	3.9 350	109 22,990	4,000	(11,785)
2021	100,110	1070	20,000	000	1,000	10,100	10,201	1,947	87	638	3,411	900	9	0.67	1,023	5,911	221	22,000	1,000	(11,100)
							12.002	5.3	2.2	3.2	40.8	8.6	0.01	0.03	0.9	40.2	3.8	105		(() = 0 ()
2028	107,203	75%	26,801	600	1,600	10,534	15,267	3,600 1,955	240 87	3,500 641	3,411 3,411	3,000 1,000	49 9	10 0.68	3,400 1,027	11,000 5,935	350 222	22,998	4,000	(11,731)
								4.7	2.2	3.0	39.7	8.3	CP	0.03	0.6	38.3	3.7	101		
2029	107,634	75%	26,908	600	1,600	10,579	15,329	3,600	240	3,500	3,411	3,000		10	3,400	11,000	350	22,996	4,000	(11,667)
								1,963 4.1	87 2.1	643 2.8	3,411 38.7	1,100 8.0		0.68	1,031 0.2	5,959 36.5	223 3.7	96		
2030	108,067	75%	27,017	600	1,600	10,624	15,392	3,600	2.1	3,500	3,411	3,000		0.03	3,400	11,000	350	23,005	4,000	(11,612)
	,		,		.,	,	,	1,971	88	646	3,411	1,200		0.68	1,036	5,984	224		.,	(,)
0004	400 500	750/	07.400		4.000	40.070	45.450	3.4	2.1	2.60	37.6	7.6		0.03	CC/CP	34.6	3.6	92	4.000	(40 547)
2031	108,503	75%	27,126	600	1,600	10,670	15,456	3,600 1,979	240 88	3,500 649	3,411 3,411	3,000 1,300		10 0.68		11,000 6,009	350 225	21,973	4,000	(10,517)
								2.8	2.1	2.40	36.5	7.2		0.03		32.7	3.5	87		
2032	108,943	75%	27,236	600	1,600	10,716	15,520	3,600	240	3,500	3,411	3,000		10		11,000	350	21,977	4,000	(10,457)
								1,988 2,2	88 2.1	651 2.2	3,411 35.5	1,400 6.8		0.69 0.03		6,033 30.8	226 3.5	83		
2033	109,415	75%	27,354	600	1,600	10,765	15,589	3,600	2.1	3,500	3,411	3,000		10		11,000	350	21,981	4,000	(10,393)
								1,996	89	654	3,411	1,500		0.69		6,060	227			·
2034	109,860	75%	27,465	600	1,600	10,812	15,653	1.6 3,600	2.0 240	2.0 3,500	<u>34.4</u> 3,411	<u>6.3</u> 3,000		0.03		29.0	<u>3.4</u> 350	79 21,985	4,000	(10,332)
2004	100,000	1070	21,400	000	1,000	10,012	10,000	2,005	89	3,300 657	3,411	1,600		0.69		6,085	228	21,300	4,000	(10,002)
								1.0	2.0	1.8	33.3	5.8		0.03		27.1	3.3	74		
2035	110,310	75%	27,578	600	1,600	10,859	15,719	3,600 2,013	240 89	3,500 660	3,411 3,411	3,000 1,700		10 0.70		11,000 6,111	350 228	21,989	4,000	(10,270)
								2,013	2.0	1.6	3,411	5.3		0.03		25.2	3.2	70		
2036	110,764	75%	27,691	600	1,600	10,906	15,785	3,600	240	3,500	3,411	3,000		10		11,000	350	21,993	4,000	(10,208)
								2,021	90	662	3,411	1,800		0.70		6,136	229	60		
ACCUMD								CC	1.9	1.4	31.2	4.7		0.03		23.2	3.2	66		

#### ASSUMPTIONS:

1. Waste Generation is estimated using CalRecycle's Adjustment Methodology, utilizing population projection, employment and real taxable sales projections from UCLA's Longterm Forecast, July 2021.

2. Potential Daily Available Capacity from Alternative Technology Facilities assume Southeast Resource Recovery Facility (SERRF) will continue its operation or will get retrofitted to provide additional capacity and additional capacity will be available from potential EMSW facilities or other alternative technologies. This scenario also assumes Potential capacity from anaerobic digestion facility is considered part of diversion since anaerobic digestion process is within the statutory definition of composting which is considered as recycling.

3. Total In-County Class III Landfill Available Capacity is calculated based on Maximum Permitted Daily Capacity (in blue text) for facilities without a restricted wasteshed or Expected Average Daily Tonnage for facilities with a restricted wasteshed (R). Chiquita Canyon Landfill's average daily tonnage is based on the limits set on the new conditional use permit and therefore used to calculate the Total In-County Class III landfill Available Capacity.

4. The operation of the Mesquite Regional Landfill (MRL) and waste by rail system (WBR) is entirely dependent on the availability of in-county and near-county disposal capacity, diversion from landfills and the cost of disposal. When the MRL/WBR disposal capacity is needed and when the tipping fees make MRL/WBR economically viable, then the system may begin operation. However, for the purpose of the analysis, the scenario assumes: (1) an increase in exports to out-of-County landfills and (2) the waste-by-rail system is assumed to begin its operation in 2025.

5. This scenario also considers the effect of Assembly Bill 1594 that removes diversion credit from green waste used as alternative daily cover (ADC) at landfills.

6. Please note that the use of alternative technology (e.g., conversion, transformation) be electrical power, fuel, and sanitized compost will reduce the amount of solid waste disposed at landfills.

#### LEGEND:

CC/CP - Closure due to exhausted capacity (CC) or permit expiration (CP)

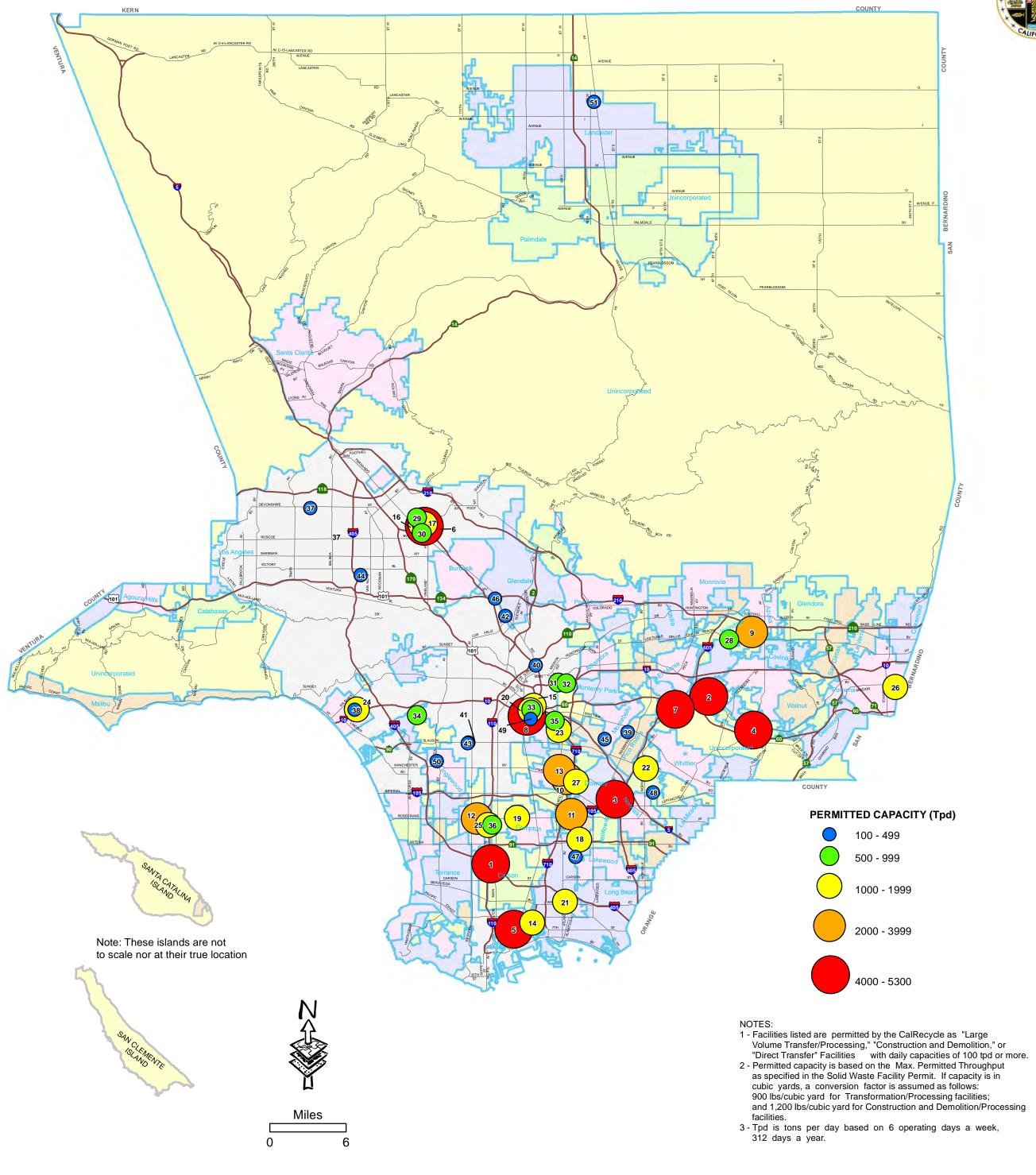
E - Expansion may become effective

R - Restricted wasteshed

#### • Utilization of Additional Alternative Technology Capacity

## APPENDIX E-4: LIST AND MAP OF LARGE VOLUME TRANSFER AND PROCESSING FACILITIES IN LOS ANGELES COUNTY IN 2021

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# Large Volume Solid Waste Transfer and Processing Facilities in Los Angeles County as of 2021



NO		
<u>NO.</u> 1	FACILITY NAME AND ADDRESS Carson Transfer Station & Materials Recovery Facility	5,300
2	321 West Francisco Street, Carson, 90745 Athens Services	5,000
3	14048 East Valley Boulevard, Industry, 91746 Downey Area Recycling & Transfer	5,000
4	9770 Washburn Road, Downey, 90241 Grand Central Recycling & Transfer Station	5,000
5	999 Hatcher Boulevard, Industry, 91748 Potential Industries	5,000
6	922 East E Street, Wilmington, 90744 Crown Recycling Services	4,600
	9147 De Garmo Avenue, Sun Valley, 91352	
7	Puente Hills Materials Recovery Facility 2808 Workman Mill Road, Whittier, 90601	4,400 ♦
8	Central LA Recycling & Transfer Station 2201 East Washington Boulevard, Los Angeles, 90034	4,025
9	Azusa Transfer & Materials Recovery Facility 1501 West Gladstone Street, Azusa, 91701	3,800
10	Construction and Demolition Recycling 9309 Rayo Avenue, South Gate, 90280	3,000 🔺
11	Paramount Resource Recycling Facility 7230 Petterson Lane, Paramount, 90723	2,450
12	American Waste Transfer Station 1449 West Rosecrans Avenue, Gardena, 90249	2,225
13	Waste Management South Gate Transfer Station 4489 Ardine Street, South Gate, 90280	2,000
14	Falcon Refuse Center, Inc. 3031 East "I" Street, Wilmington, 90744	1,850
15	Mission Road Recycling & Transfer Station 840 South Mission Road, Los Angeles, 90023	1,785
16	Bradley East Transfer Station 9227 Tujunga Avenue, Sun Valley, 91352	1,532
17	Athens Sun Valley Materials Recovery Facility 11121 Pendleton Street, Sun Valley, 91352	1,500
18	Bel-Art Waste Transfer Station	1,500
19	2501 East 68th Street, Long Beach, 90805 Compton Recycling & Transfer Station (Allied/BFI Waste Systems)	1,500
20	2509 West Rosecrans Avenue, Compton, 90059 Downtown Diversion (formerly Looney Bins)	1,500
21	2424 East Olympic Boulevard, Los Angeles, 90021 EDCO Recycling and Transfer	1,500 🔺
22	2755 California Avenue, Signal Hill, 90755 Universal Waste Systems	1,500
23	9010 Norwalk Boulevard, Santa Fe Springs, 90670 Innovative Waste Control	1,250
24	4133 Bandini Boulevard, Vernon, 90023 Southern Cal. Disposal Co. Recycling & Transfer Station	1,056
25	1908 Frank Street, Santa Monica, 90404 California Waste Services, LLC	1,000 🔺
26	621 West 152nd Street, Gardena, 90247 Pomona Valley Transfer Station	1,000
27	1371 East 9th Street, Pomona 91766 South Gate Transfer Station	1,000
28	9530 South Garfield Avenue, South Gate, 90280 Allan Company Material Recovery Facility	750
29	14618 Arrow Highway, Baldwin Park, 91706 East Valley Diversion (formerly Looney Bins)	750
30	11616 Sheldon Street, Sun Valley, 91352 Sun Valley Paper Stock Materials Recovery Facility & Transfer Stat	 ion 750
31	8701 North San Fernando Road, Sun Valley, 91352 City Terrace Recycling Transfer Station	700 🔺
32	1511-1533 Fishburn Avenue, City Terrace, 90063 East Los Angeles Recycling and Transfer	700
33	1512 North Bonnie Beach Place, City Terrace, 90063 Angelus Western Paper Fibers, Inc.	650
34	2474 Porter Street, Los Angeles, 90021 Culver City Transfer/Recycling Station	500
35	9255 West Jefferson Boulevard, Culver City, 90232 CWS DTLA Material Recovery Facility and Transfer Station	500
	3720 Noakes Street, Los Angeles, 90023	
36	Waste Resource Recovery 357 West Compton Boulevard, Gardena, 90247 Granada Hills Street Maintenance District Yard	500
37	10210 Etiwanda Avenue, Northridge, 91325	450
38	City of Santa Monica Transfer Facility 2500 Michigan Avenue, Santa Monica, 90404	400
39	Pico Rivera Material Recovery Facility 8405 Loch Lomond Drive, Pico Rivera, 90660	327
40	East Street Maintenance District Yard 452 San Fernando Road, Los Angeles, 90065	315
41	Active Recycling MRF and Transfer Station 2000 W. Slauson Avenue, Los Angeles, 90047	250
42	City of Glendale MRF and Transfer Station 540 West Chevy Chase Drive, Glendale, 91204	250
43	Southwest Street Maintenance District Yard 5860 South Wilton Place, Los Angeles, 90047	225
44	Van Nuys Street Maintenance District Yard 15145 Oxnard Street, Van Nuys, 91411	225
45	Ace Diversion Inc. (formerly Commercial Waste Services, Inc.) 1530 and 1540 Date Street, Montebello, 90640	175 🔺
46	American Reclamation CDI Processing Facility 4560 Doran Street, Los Angeles, 90039	175
47	American Industrial Services, LLC 5626 Cherry Avenue, Long Beach, 90805	175
48	Lakeland Road Direct Transfer Facility 12739 Lakeland Road, Santa Fe Springs, 90670	150
49	Universal Waste Systems Inc. Direct Transfer Facility 2460 East 24th Street, Los Angeles, 90058	150
50	City of Inglewood Transfer Station 222 West Beach Avenue, Inglewood, 90302	100
51	City of Lancaster Maintenance Yard MVTS 46008 North 7th Street West, Lancaster, 93534	100

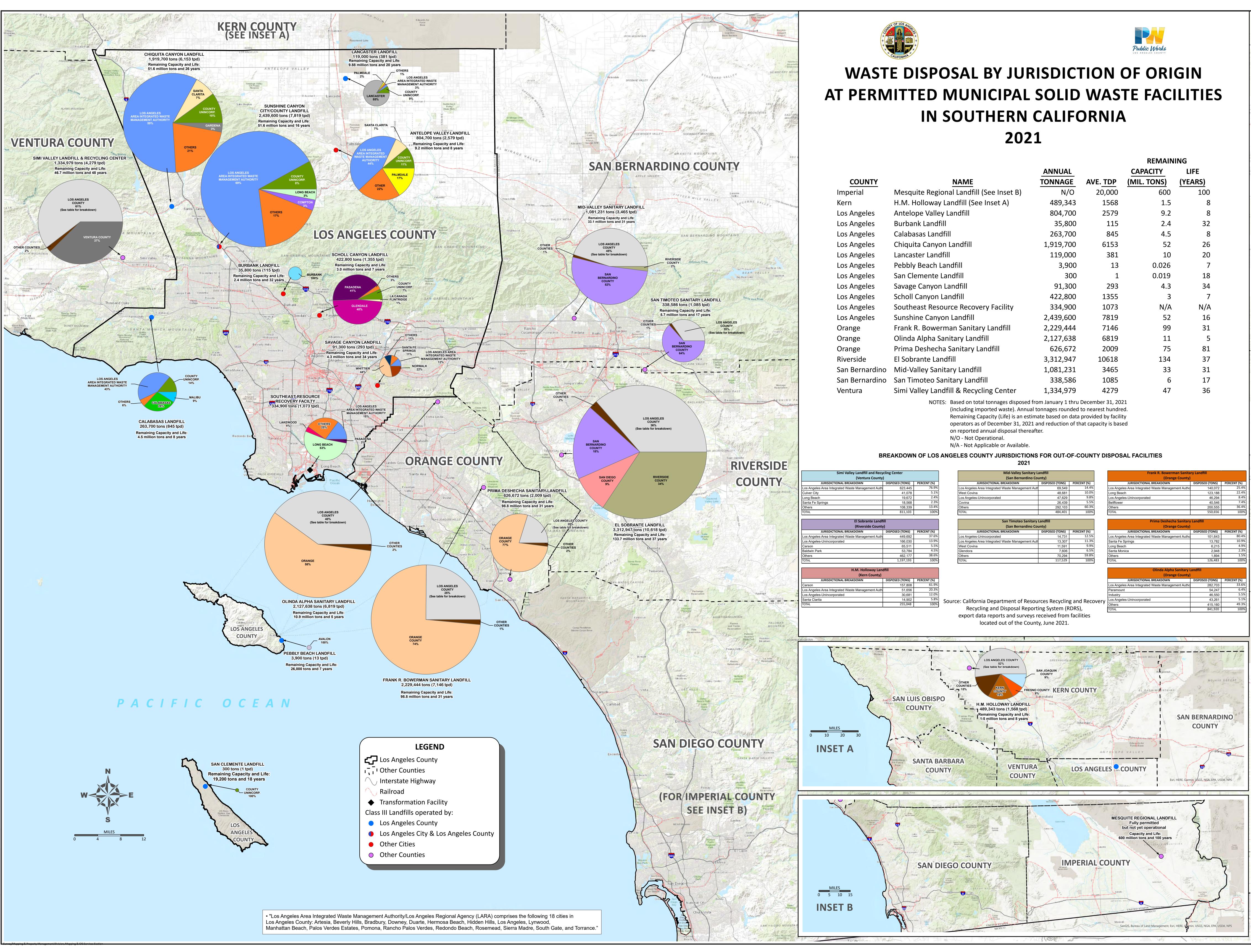
♦ - Facilities located in County unincorporated areas.

▲ - Construction and Demolition/Processing Facilities.

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## APPENDIX E-5: WASTE DISPOSAL BY JURISDICTION OF ORIGIN AT PERMITTED MUNICIPAL SOLID WASTE FACILITIES IN SOUTHERN CALIFORNIA IN 2021 (MAP)

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			REMAIN	ING
	ANNUAL		CAPACITY	LIFE
	TONNAGE	AVE. TDP	(MIL. TONS)	(YEARS)
(See Inset B)	N/O	20,000	600	100
Inset A)	489,343	1568	1.5	8
	804,700	2579	9.2	8
	35,800	115	2.4	32
	263,700	845	4.5	8
	1,919,700	6153	52	26
	119,000	381	10	20
	3,900	13	0.026	7
	300	1	0.019	18
	91,300	293	4.3	34
	422,800	1355	3	7
ry Facility	334,900	1073	N/A	N/A
	2,439,600	7819	52	16
y Landfill	2,229,444	7146	99	31
fill	2,127,638	6819	11	5
Indfill	626,672	2009	75	81
	3,312,947	10618	134	37
	1,081,231	3465	33	31
ill	338,586	1085	6	17
ling Center	1,334,979	4279	47	36
l tonnages disnosed	from January 1 thru	December 31 203	21	

(San Bernardino Cou	inty)	
DICTIONAL BREAKDOWN	DISPOSED (TONS)	PERCENT (%)
a Integrated Waste Management Auth	69,549	14.4%
	48,681	10.0%
ncorporated	47,629	9.8%
	26,439	5.5%
	292,103	60.3%
	484,401	100%
San Timoteo Sanitary L		
(San Bernardino Cou	inty)	DEPCENT (%)
(San Bernardino Cou GDICTIONAL BREAKDOWN	Inty) DISPOSED (TONS)	PERCENT (%)
(San Bernardino Cou	inty)	12.5%
(San Bernardino Cou GDICTIONAL BREAKDOWN	Inty) DISPOSED (TONS)	
(San Bernardino Cou DICTIONAL BREAKDOWN ncorporated	inty) DISPOSED (TONS) 14,731	12.5%
(San Bernardino Cou DICTIONAL BREAKDOWN ncorporated	INTY) DISPOSED (TONS) 14,731 13,307	12.5% 11.3%
(San Bernardino Cou DICTIONAL BREAKDOWN ncorporated	INTY) DISPOSED (TONS) 14,731 13,307 11,591	12.5% 11.3% 9.9%

(Orange County)		
JURISDICTIONAL BREAKDOWN	DISPOSED (TONS)	PERCENT (%)
Los Angeles Area Integrated Waste Management Author	140,072	25.4%
Long Beach	123,188	22.4%
Los Angeles-Unincorporated	46,294	8.4%
Bellflower	40,546	7.4%
Others	200,555	36.4%
TOTAL	550,656	100%
Prima Deshecha Sanitar	/ Landfill	
(Orange County)		
JURISDICTIONAL BREAKDOWN	DISPOSED (TONS)	PERCENT (%)
Los Angeles Area Integrated Waste Management Autho	101,643	80.4%
Santa Fe Springs	13,782	10.9%
Long Beach	6,215	4.9%
Santa Monica	2,948	2.3%
Others	1,894	1.5%
TOTAL	126,483	100%
Olinda Alpha Sanitary	Landfill	
(Orange County)		
JURISDICTIONAL BREAKDOWN	DISPOSED (TONS)	PERCENT (%)
Los Angeles Area Integrated Waste Management Author	282,703	33.6%
Paramount	54,247	6.4%
Industry	46,550	5.5%
Los Angeles-Unincorporated	43,261	5.1%
Others	415,160	49.3%
TOTAL	841,920	100%