

Los Angeles County Countywide Siting Element

A Multi-Faceted Long-Term Solid Waste Management Plan

Countywide Integrated Waste Management Plan

Final Draft
Version 1.0



Executive Summary
August 2022



Given the County's large population and the size of its economy, local landfill capacities are rapidly being consumed, making it imperative that the long-term planning for management of post-recycled residuals be established.



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Los Angeles County is planning its future use of landfill resources, to ensure the health and safety of County residents and businesses.

BACKGROUND & PURPOSE



The California Integrated Waste Management Act of 1989 (AB 939), as amended (Section 40000 et seq. of the California Public Resources Code), 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 15-year planning period. The existing Los Angeles County Countywide Siting Element (CSE) was approved by the majority of the cities within the County of Los Angeles (County) which contain a majority of the population and the Board of Supervisors in January 1998. This revised CSE document, when approved by a majority of the cities containing a majority of the incorporated population in the County, the County of Los Angeles Board of Supervisors, and the California Department of Resources Recycling and Recovery (CalRecycle), will replace the existing CSE and will cover the planning period beginning 2018 through 2033.

While the primary purpose of the CSE is to identify disposal capacities, the document also discusses waste prevention, materials reuse, recycling, and alternatives to landfills since the ability to adequately manage solid waste on a long-term basis Countywide is contingent upon comprehensively analysing all factors.

Solid Waste: Refers to all putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes.

Goals: Refers to the desired results of the CSE that are designed to protect public health and safety by addressing the need for adequate environmentally appropriate solid waste disposal capacity; to conserve natural resources; and to protect the environment.

Policies: Refers to the strategies which will be implemented to achieve the goals of the CSE.

Waste prevention, materials reuse, recycling, and alternatives to landfills.

Given the County’s large population and the size of its economy, local landfill capacities are rapidly being consumed, making it imperative that the long-term planning for management of post-recycled residuals be established in order to ensure adequate disposal capacities continue to exist into the future for the health and safety of County residents and businesses.

Solid waste disposal capacities are provided through existing or planned landfills and transformation facilities, as well as by developing environmentally sustainable alternative technologies to reduce landfill disposal for residual materials that are not reduced, reused, recycled, or composted. AB 939 also mandates that the CSE establish **goals, policies,** and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternatives to landfill technologies such as conversion technologies or transformation, on a Countywide basis. Accordingly, the CSE offers strategies and establishes siting criteria to aid in evaluating the feasibility of potential sites for the development of such solid waste management and disposal facilities.

The CSE describes each of the existing and planned solid waste disposal and management sites available for use by jurisdictions in Los Angeles County, and offers goals and strategies through which current and future solid waste management infrastructure needs can be met in a comprehensive and environmentally sustainable manner. Since the CSE serves mainly as a long-term planning and policy document, rather than a specific infrastructure development program, any other definitive site-specific information should be obtained directly from the sites and projects. It should also be noted that sites and projects are

subject to all requirements of the California Environmental Quality Act (CEQA); Federal, State, regional, and local rules and regulations; environmental justice requirements; and maintain consistency with the jurisdictions’ General Plan.

The California Integrated Waste Management Board (CIWMB), the predecessor of CalRecycle approved the original Los Angeles County CSE on June 1998.



Sunshine Canyon Lanfill

Significant Changes to the Revised Countywide Siting Element

AB 939 recognizes that solid waste disposal facilities (e.g. landfills and transformation facilities) are necessary components of any integrated solid waste management system and essential components of the waste management hierarchy. However, due to significant public opposition, unavailability of suitable sites, environmental concerns, and the current regulatory framework, it has become increasingly difficult to expand and/or site, permit, and operate new landfills and transformation facilities within the County.

In order to ensure that a sustainable **solid waste management** system continues to exist into the future, the hierarchy through which solid waste has been traditionally managed and viewed must be shifted.

The revised CSE embraces a new “inverted” solid waste management paradigm which reverses the traditional hierarchy by resorting to transformation facilities and

landfills, only after all other efforts have been exhausted. In the new paradigm, emphasis is being redirected onto efforts to first reduce, reuse, and recycle. The remaining materials are then processed through **alternative technologies**, such as **conversion technologies**, to further extract beneficial uses from otherwise disposed materials. Finally, the remaining materials which should ideally constitute the least amount of waste are to be taken to **transformation facilities** or disposed of at in-County or out-of-County landfills.

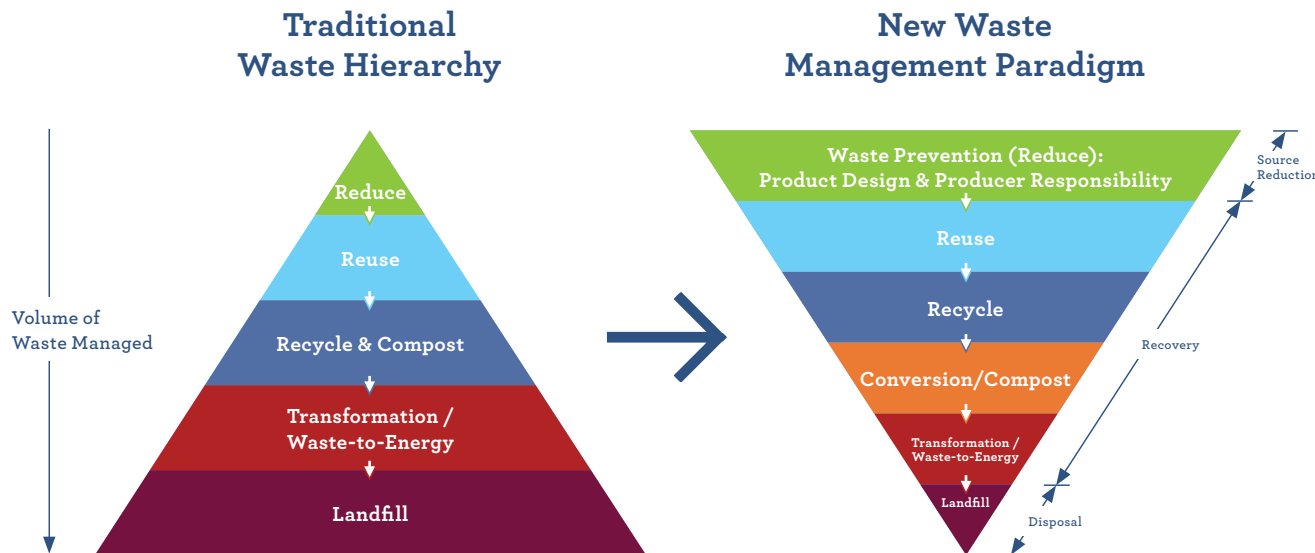
This new waste management paradigm facilitates the County’s goal to protect the health, safety, and economic well-being of residents; and provide an environmentally safe, efficient, and economically viable solid waste disposal system.

Solid Waste Management:
Refers to a planned program for effectively controlling the generation, storage, collection, transportation, processing and reuse, conversion or disposal of solid wastes in a safe, sanitary, aesthetically acceptable, environmentally appropriate and economical manner.

Alternative Technologies:
Refers to a technology capable of processing residual municipal solid waste (MSW), such as conversion technology, transformation, or other emerging technologies, in lieu of land disposal.

Conversion Technologies:
Refers to a wide array of technologies capable of converting post-recycled or residual solid waste into useful products, green fuels, and renewable energy through non-combustion thermal, chemical, or biological processes. Conversion technologies may include mechanical processes when combined with a non-combustion thermal, chemical, or biological conversion process.

Transformation (waste-to-energy) Facility:
Refers to a facility whose principal function is to convert, combust, or otherwise process solid waste by incineration, pyrolysis, destructive distillation, or gasification, or to chemically or biologically process solid wastes, for the purpose of volume reduction, synthetic fuel production, or energy recovery.



Key Terms

Landfill: Defined in CCR, Title 27, Section 20164 as “a waste management unit at which waste is discharged in or on land for disposal. It does not include surface impoundment, waste pile, land treatment unit, injection well, or soil amendments.”

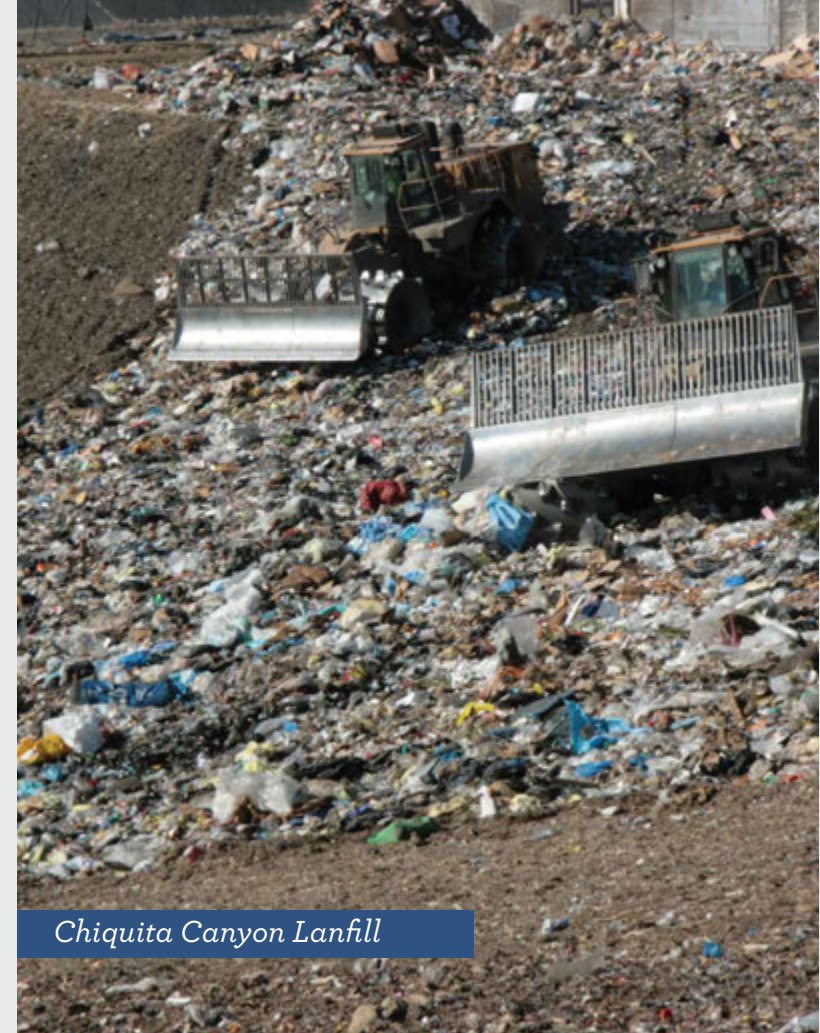
Expansion: Refers to a solid waste facility which has: (1) an increase in the physical dimension of the facility; (2) an increase in the permitted daily disposal rate, throughput, or intake/processing capacity; (3) an extension or renewal of a permit whose expiration date may affect the operation of the facility, whichever is applicable; and/or (4) any permitted activity that results in increase in permitted disposal capacity.

Class III Landfills: Refers to a land disposal site only permitted to accept nonhazardous solid waste materials where site characteristics and containment structures isolate the solid waste from the waters of the State.

Waste-by-Rail or Rail-Haul: Refers to the rail transportation of solid waste between a solid waste station with rail-loading capability and an out-of-County solid waste landfill, transformation facility, conversion technology facility, biomass processing facility, etc.”

This revised CSE, which covers the 15-year planning period beginning 2018 through 2033, contains the following significant changes from its previous version:

- Removal of Elsmere Canyon and Blind Canyon from the CSE in accordance with the County of Los Angeles Board of Supervisors’ decision on September 30, 2003, to remove those sites from the list of potential new **landfill** sites;
- Update of the goals and policies to be consistent with the new solid waste management paradigm, to enhance the comprehensiveness of Los Angeles County’s solid waste management system and incorporate current and upcoming solid waste management processes and technologies;
- Promotes the development of alternatives to landfill technologies, such as conversion technologies, on a Countywide basis; and
- Promotes the development and use of infrastructure to transport solid waste to out-of-County landfills to complement the County’s waste management system, such as the Mesquite Regional Landfill waste-by-rail system.



Chiquita Canyon Lanfill



Puente Hills Intermodal Facility

Preparation, Approval and Revision Process

The CSE has been prepared by Los Angeles County Public Works, Environmental Programs Division, in concert with the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force (Task Force).

The content and format of the CSE was prepared pursuant to the statutory requirements of Public Resources Code (PRC), Sections 41700 through 41721.5. These requirements for the preparation of a siting element are further clarified in regulations adopted by CalRecycle and approved by the California Office of Administrative Law (California Code of Regulations [CCR], Title 14, Division 7, Chapter 7, Article 6.5, Sections 18755 through 18756.7).

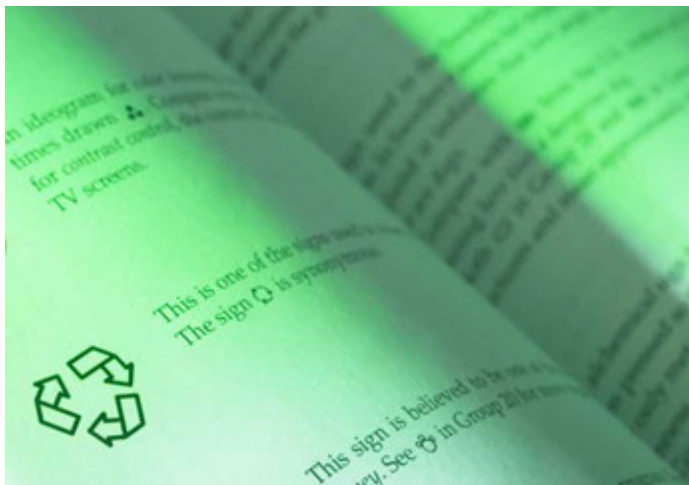
PRC, Section 41721 also requires the CSE to be approved by the County and by a majority of the cities within the County that contain a majority of the population of the incorporated area of the County. In addition, CalRecycle must approve the CSE.

CCR, Title 14, Chapter 9, Section 18776, requires that each county prepare and adopt a Countywide Siting Element and Summary Plan which shall be part of the Countywide Integrated Waste Management Plan (CoIWMP), pursuant to PRC, Sections 41700 through 41822.

CCR, Title 14, Chapter 9, Section 18788, requires that prior to the fifth anniversary of CalRecycle's approval of a CoIWMP, or its most recent revision, the local task force complete a review (the Five-Year Review) of the CoIWMP in accordance with PRC, Sections 40051, 40052, and 41822, to ensure that the county's waste management practices remain consistent with the hierarchy of waste management practices defined in PRC, Section 40051. If a revision is necessary, the county or regional agency shall submit a CoIWMP revision schedule to CalRecycle. The county shall revise the CoIWMP in the areas noted as deficient in the CoIWMP Review Report and/or as identified by CalRecycle, and resubmit its CoIWMP pursuant to the requirements of CCR, Sections 18780 through 18784.

Following submittal of a locally adopted CoIWMP to CalRecycle, CCR, Title 14, Chapter 9, Section 18785, requires CalRecycle to have at least 90 days, but not more than 120 days, with a median of 105 days, to review and act upon the CoIWMP. CalRecycle, at a public hearing, shall determine whether the CoIWMP meets the requirements of AB 939, as amended. After considering public testimony, input from the local task force, and written comments, CalRecycle shall approve, conditionally approve, or disapprove the CoIWMP. CalRecycle shall either adopt a resolution approving or conditionally approving the CoIWMP, or issue a notice identifying deficiencies in the CoIWMP.

ES Table 1 provides a summary of the CSE and **ES Table 2** outlines the CSE preparation, approval, and revision process.



ES TABLE 1: Summary of The Los Angeles County Countywide Siting Element

CHAPTER

DESCRIPTION

Chapter 1: Introduction

Chapter 1 provides an overview of the State requirements and background information on the Los Angeles County solid waste management system. Also included is a summary of the activities that have been instituted by the County Board of Supervisors since 1986 in addressing the solid waste needs of Los Angeles County.

Chapter 2: Goals and Policies

Chapter 2 lists goals and policies developed by the Task Force (as required by State law). This chapter also identifies the agencies responsible for implementing the Countywide Siting Element, the implementation of tasks identified, and funding source for the administration of the document.

Chapter 3: Existing Solid Waste Disposal Facilities

Chapter 3 identifies all existing permitted landfills and transformation facilities in Los Angeles County. The chapter also includes a series of tables and maps providing essential information on each facility.

Chapter 4: Current Disposal Rate and Assessment of Disposal Capacity Needs

Chapter 4 quantifies the current disposal rate, as well as projection of disposal needs during each year of the 15-year planning period. A number of scenarios have been analyzed in identifying when Los Angeles County will experience a need in permitted daily disposal capacity based on status quo, as well as other alternatives identified in the document.

Chapter 5: Alternative Technologies

Chapter 5 describes facilities which provide an alternative to existing solid waste disposal technologies and provides a brief assessment on their current state of development. This chapter also describes a number of benefits, advantages, and environmental constraints, regarding the identified alternative technologies.

CHAPTER

Chapter 6: Facility Siting Criteria

DESCRIPTION

Chapter 6 provides an overview of regulatory requirements for siting of solid waste landfills and alternative technology facilities. As required by State law, and in accordance with CalRecycle’s regulations, this chapter also includes the siting criteria for development of new landfills, alternative technology facilities, conversion/recovery technologies, and expansion of existing facilities.

Chapter 7: Proposed In-County Facility Location & Description

Chapter 7 identifies and provides information on existing landfill expansions and proposed expansions in the County and/or cities during the planning period.

Chapter 8: General Plan Consistency

Chapter 8 provides information on the consistency of each potential new landfill site and potential expansion of an existing site, which was listed in Chapter 7, with the appropriate jurisdiction’s General Plan.

Chapter 9: Out-of-County Disposal Facilities

Chapter 9 identifies existing and proposed landfills in adjacent counties which may be available for use by jurisdictions in Los Angeles County.

Chapter 10: Finding of Conformance

Chapter 10 describes the procedure for obtaining a Finding of Conformance with the Los Angeles County Countywide Siting Element for Class III landfills, inert waste landfills, alternative technology facilities (e.g., conversion technology, transformation), under the auspices of the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force.

ES TABLE 2: Countywide Siting Element Preparation, Approval, and Revision Process**1. Preparation of the Preliminary Draft Los Angeles County Countywide Siting Element (CSE) & Environmental Documents**

The County shall prepare and submit the draft CSE and the necessary environmental documents to the cities, Task Force, appropriate governmental agencies, and public for a 45-day review period and conduct public information meetings to ensure public input is received.

2. Preparation of the Final Draft CSE & Environmental Documents

Based on the comments received on the draft CSE and environmental documents, the County shall prepare the final draft CSE and environmental documents and shall submit the documents to the cities for approval.

3. Local Adoption of the Final Draft CSE & Environmental Documents

- a. Each city in the County, and the County Board of Supervisors, shall conduct a public hearing for the purpose of adopting the final draft CSE and environmental documents. After considering all comments of members of the governing body and the public, each jurisdiction shall, by resolution, either approve or disapprove the final draft CSE and environmental documents within 90 days of receipt of the final draft CSE and environmental documents from the County. Lack of action by a city within this 90-day period would constitute tacit approval by that city.
- b. If a jurisdiction disapproves the final draft CSE and environmental documents, the jurisdiction shall give written notice to the Task Force, the County Board of Supervisors, and the California Department of Resources Recycling and Recovery (CalRecycle) of the deficient areas in the final draft CSE and environmental document within 30 days of disapproval.
- c. If the final draft CSE and environmental documents are not approved by a majority of the cities within the County which contain a majority of the population of the incorporated area, the County shall revise the deficient areas of the final draft CSE and environmental documents and re-circulate it as required by Title 14, CCR, Sections 18779 through 18785.

4. Submittal of the Final Draft CSE and Environmental Documents to CalRecycle

Upon approval of the final draft CSE and environmental documents, which have also been approved by a majority of the cities representing a majority of the County's incorporated population, the County shall, within 30 days of such approval, submit the following to CalRecycle:

- a. Three copies of the locally approved final draft CSE and environmental documents;
- b. A copy of each jurisdiction's resolution approving or disapproving the final draft CSE and environmental documents;
- c. A copy of the public notice for each jurisdiction's public hearing on the final draft CSE and environmental documents;
- d. A copy of the Notice of Determination for the project's California Environmental Quality Act document which has been filed with the State Clearinghouse in the office of Planning and Research; and
- e. A tabulation showing that the final draft CSE and environmental documents were approved by a majority of the cities representing a majority of the population in the incorporated portion of the County.

5. CalRecycle Approval of the Final Draft CSE & Environmental Documents

- a. CalRecycle shall, within a timeframe of 90 to 120 days, review the final draft CSE and environmental documents, and at a public hearing determine whether it meets the requirements of the California Integrated Waste Management Act of 1989, as amended. After considering public testimony and input from the Task Force, CalRecycle shall either adopt a resolution approving the CoIWMP, or issue a Notice of Deficiency to the County.
- b. Within 30 days of approval/disapproval, CalRecycle shall send a copy of the resolution of approval or a Notice of Deficiency to the County.

If issued a Notice of Deficiency by CalRecycle, the County, pursuant to the requirements of PRC Section 41811 and 41812, and with Sections 18780 through 18784 of Title 14 of CCR, shall revise the final draft CSE and environmental documents addressing deficiencies identified by CalRecycle, resubmit the documents to the cities for local adoption, and resubmit the documents to CalRecycle within 120 days.

GOALS & POLICIES

Chapter 2 contains the County's solid waste management goals and policies developed in concert with the Task Force as required by State law (see **ES Table 3**). The **Chapter** also identifies: (1) the agencies responsible for implementing the CSE; (2) the schedule for implementation; and (3) the funding source for the administration of the document.





Crown Recycling Services

The goals are as follows:

1. 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 by promoting the development of alternative technologies that 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 the use of appropriate and environmentally 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 well-being 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 management system.
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 management 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 development of environmentally appropriate and technically feasible solid waste management facilities for solid waste that 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 out-of-County/remote disposal facilities.



Looney Bins/Downtown Diversion C&D

ES TABLE 3: Countywide Siting Element Task Implementation Responsibilities for Year 2018-2033

Summary* of the Goals and Corresponding Policies.

KEY	
Responsible Entity: <i>The major entity responsible for the activity listed.</i>	<div style="display: flex; flex-direction: column; gap: 10px;"> <div style="display: flex; align-items: center;"> L <div style="margin-left: 10px;"> <p>Lead Entity: Primary responsibility for successful implementation of the activity.</p> </div> </div> <div style="display: flex; align-items: center;"> S <div style="margin-left: 10px;"> <p>Support Entity: Providing resources to assist the lead entity or entities.</p> </div> </div> <div style="display: flex; align-items: center;"> A <div style="margin-left: 10px;"> <p>Advisory Entity: Serving in an advisory or consultative capacity.</p> </div> </div> </div>

GOAL NO. 1

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.

	Los Angeles County Solid Waste Mgmt Committee/ Integrated Waste Mgmt Task Force	Los Angeles County Government	Incorporated Cities	County Sanitation Districts	Private Industry
<p>Policy No. 1.1 Establish new and/or expand existing Recycling Market Development Zones to provide economic and other incentives which will encourage the development of markets for the diverted materials and/or the siting of solid waste management facilities within Los Angeles County.</p>	S	L	L	A	A
<p>Policy No. 1.2 Expand the Countywide Household Hazardous Waste Management Program, and support development of permanent Environmental Collection Centers to complement the existing network of permanent collection centers operated by the County and the City of Los Angeles.</p>	A	L	L	L	S

KEY

L Lead Entity

S Support Entity

A Advisory Entity

Los Angeles County Solid Waste Mgmt Committee/ Integrated Waste Mgmt Task Force	Los Angeles County Government	Incorporated Cities	County Sanitation Districts	Private Industry
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Policy No. 1.3 Encourage, where appropriate, businesses using alternative technologies to participate in the Recycling Market Development Zone Program or other programs that may become available.

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Policy No. 1.4 Promote the purchase and use of recycled content and recyclable materials over virgin materials and to recycle, to the maximum extent feasible, materials generated by local government and public agencies within the County while supporting environmental responsibility for materials recycled outside of Los Angeles County.

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Policy No. 1.5 Encourage the State to promote the development of markets for recycled materials, to the greatest extent feasible, and to promote extended producer responsibility for products sold in California.

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GOAL NO. 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.

Policy No. 2.1 Implement and expand commercial, residential, and governmental recycling, composting, public outreach, and other equivalent programs where feasible.

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Lead Entity	Support Entity	Advisory Entity

Los Angeles County Solid Waste Mgmt Committee/ Integrated Waste Mgmt Task Force	Los Angeles County Government	Incorporated Cities	County Sanitation Districts	Private Industry
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Policy No. 2.2 Enhance coordination between the County and cities in Los Angeles County to implement, maintain, and expand cities’ and Countywide solid waste

				
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Policy No. 2.3 Enhance coordination between the County, cities in Los Angeles County, and the private sector to implement and expand cities’ and Countywide public education programs addressing all aspects of an integrated solid waste management system.

				
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Policy No. 2.4 Evaluate efforts to expand resources available for implementing new and existing cities’ and Countywide waste diversion programs and expand programs as appropriate.

				
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GOAL NO. 3

To promote, encourage, and expand waste diversion activities by solid waste facility operators.

Policy No. 3.1 Encourage solid waste facility operators to promote and help develop facilities that divert materials from disposal, and institute we salvage/diversion/conversion operations in compliance with all applicable rules and regulations.

				
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Policy No. 3.2 Coordinate with solid waste facility operators to acquire and provide data necessary for cities in Los Angeles County and the County to comply with State and local waste diversion requirements.

				
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KEY

L Lead Entity

S Support Entity

A Advisory Entity

Los Angeles County Solid Waste Mgmt Committee/ Integrated Waste Mgmt Task Force	Los Angeles County Government	Incorporated Cities	County Sanitation Districts	Private Industry
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GOAL NO. 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, and diversion of compostable and organic materials from the waste stream, 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.

Policy No. 4.1 As a part of the building, demolition, grading, and construction permit process, and through various construction, demolition, and debris recycling ordinances and programs, encourage and/or require inert waste diversion to the maximum extent environmentally and economically feasible.

Policy No. 4.2 Encourage solid waste facility operators to maximize available capacity by requiring, when appropriate, Class III landfill operators to increase density of disposed materials and implement measures minimizing inert waste disposal.

Policy No. 4.3 Collaborate, coordinate, share resources, and encourage inter-jurisdictional cooperation in developing a countywide organic materials management plan.

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A	L	L	S	S

KEY

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Lead Entity

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Support Entity

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Advisory Entity

Los Angeles County
Solid Waste Mgmt
Committee/
Integrated Waste
Mgmt Task Force

Los Angeles
County
Government

Incorporated
Cities

County
Sanitation
Districts

Private
Industry

Policy No. 4.4 Encourage Class III landfill operators to analyze the feasibility of using the balefilling, refuse derived fuel, or other similar space-saving processes, when appropriate, if they result in landfill space savings and are economically feasible.

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Policy No. 4.5 Support Class III landfill operators to use appropriate materials, when technically feasible and environmentally safe, such as tarps, for landfill daily cover, in order to preserve landfill capacity.

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GOAL NO. 5

To protect the health, welfare, safety, and economic well-being 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 management system.

Policy No. 5.1 Promote and encourage inter-jurisdictional cooperation in developing a regional operational area mass debris management plan.

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Policy No. 5.2 Promote and encourage inter-jurisdictional cooperation on solid waste issues.

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Policy No. 5.3 Increase Los Angeles County region's influence at State and Federal levels by collaboratively developing common positions on solid waste management issues.

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KEY

L Lead Entity

S Support Entity

A Advisory Entity

Los Angeles County Solid Waste Mgmt Committee/ Integrated Waste Mgmt Task Force	Los Angeles County Government	Incorporated Cities	County Sanitation Districts	Private Industry
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Policy No. 5.4 Encourage public and private sector participation in finding and implementing solutions to meet countywide solid waste management challenges.

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Policy No. 5.5 Continue to develop partnership toward improving the existing public/private solid waste management system in order to maintain reasonable costs through competitive market forces and appropriate incentives for diverting solid waste for beneficial reuse.

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Policy No. 5.6 Promote and encourage inter jurisdiction cooperation in the use of the Mesquite Regional Landfill waste-by-rail system to serve the waste disposal needs of Los Angeles County residences and businesses as part of an efficient and economical solid waste management system.

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GOAL NO. 6

To foster the development of environmentally appropriate alternative technologies as alternatives to landfill disposal.

Policy No. 6.1 Support and coordinate the development of alternative technologies and other innovative waste management technologies which would reduce dependence on landfills.

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Policy No. 6.2 Introduce, support and promote legislation and regulations which would promote development of alternative technology facilities by providing economic incentives, as well as recognizing alternative technology as a diversion activity.

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Lead Entity

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Support Entity

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Advisory Entity

Los Angeles County
Solid Waste Mgmt
Committee/
Integrated Waste
Mgmt Task Force

Los Angeles
County
Government

Incorporated
Cities

County
Sanitation
Districts

Private
Industry

Policy No. 6.3 Encourage private sector development of alternative technologies.

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Policy No. 6.4 Support and promote awareness of alternative technologies by providing information on alternative technologies to any requesting entity.

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Policy No. 6.5 Work cooperatively to coordinate permitting necessary for the development of facilities which utilize alternative technologies.

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Policy No. 6.6 Encourage solid waste management facility operators through the land use permit process to develop alternative technology facilities onsite or send post materials recovery facility feedstock to facilities that process and convert municipal solid waste into renewable energy, biofuels, and/or other beneficial products.

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GOAL NO. 7

To provide siting criteria that considers and provides for the environmentally appropriate and technically feasible development of solid waste management facilities, including alternative technology facilities (e.g., conversion technology, transformation) and landfills.

Policy No. 7.1 Introduce, support and promote legislation and regulation establishing feasible Statewide standards for all solid waste management facilities.

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KEY

L Lead Entity

S Support Entity

A Advisory Entity

Policy No. 7.2 Encourage the coordination of solid waste management efforts through the Task Force to share

Policy No. 7.3 Ensure maximum public participation in land use permitting decisions, including addressing environmental justice concerns.

Policy No. 7.4 Ensure all new or expansions of existing solid waste disposal facilities conform to the CSE siting criteria through the Finding of Conformance or another approval process.

Policy No. 7.5 Achieve compliance with all Federal, State, and local regulations at all existing solid waste management facilities.

Policy No. 7.6 Provide technical assistance in land use planning and the criteria for siting solid waste management facilities.

Policy No. 7.7 Consider incorporating the Finding of Conformance approval as one of the conditions of their respective Land Use Permit or Conditional Use Permit.

Policy No. 7.8 Consider the Finding of Conformance requirements as part of their jurisdiction’s General Plan requirements.

	Los Angeles County Solid Waste Mgmt Committee/ Integrated Waste Mgmt Task Force	Los Angeles County Government	Incorporated Cities	County Sanitation Districts	Private Industry
Policy No. 7.2	L	L	L	A	A
Policy No. 7.3	L	L	L	A	A
Policy No. 7.4	L	S	S	A	A
Policy No. 7.5	S	L	L	S	S
Policy No. 7.6	L	S	S	A	A
Policy No. 7.7	L	L	L	S	S
Policy No. 7.8	L	L	L	S	S

KEY

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Lead Entity

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Support Entity

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Advisory Entity

Los Angeles County
Solid Waste Mgmt
Committee/
Integrated Waste
Mgmt Task Force

Los Angeles
County
Government

Incorporated
Cities

County
Sanitation
Districts

Private
Industry

GOAL NO. 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 development of environmentally appropriate and technically feasible solid waste management facilities for solid waste which cannot be reduced, recycled, composted, or otherwise put to beneficial use.

Policies to Enhance In-County Landfill Disposal Capacity.

Policy No. 8.1 Assist jurisdictions in developing disposal capacity available for expansion within their boundaries.

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Policy No. 8.2 Facilitate any permitting for the development of in-County solid waste management facility expansions, if feasible.

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Policy No. 8.3 Promote land use policies aimed at discouraging incompatible land uses adjacent to solid waste management facility sites.

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Policies to Facilitate Utilization of Out-of-County/Remote Disposal Facilities.

Policy No. 8.4 Support policies which would facilitate the use of remote and/or out-of-County disposal sites as a supplement to in-County disposal capacities.

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L

KEY



Lead Entity



Support Entity



Advisory Entity

Los Angeles County
Solid Waste Mgmt
Committee/
Integrated Waste
Mgmt Task Force

Los Angeles
County
Government

Incorporated
Cities

County
Sanitation
Districts

Private
Industry

Policy No. 8.5 Actively seek and identify out-of-County disposal opportunities as a supplement to in-County disposal capacities to ensure the disposal needs of Los Angeles County are met.



Policy No. 8.6 Support and coordinate the use and development of Mesquite Regional Landfill and other out-of-County/remote disposal facility projects as a supplement to in-County disposal capacities provided they are environmentally, technically, and economically feasible.



Policy No. 8.7 Support and coordinate the development of infrastructure necessary for solid waste transfer and rail loading to out-of-County/remote disposal facilities provided they are environmentally, technically, and economically feasible.



Policy No. 8.8 Promote and/or sponsor legislation to streamline the permit process in order to facilitate the development of a waste-by-rail system, provided it is environmentally, technically, and economically feasible.



Policy No. 8.9 Facilitate coordination and any permitting necessary for the development of solid waste management facilities with rail-loading capability necessary to provide access to remote and/or out-of-County disposal sites when environmentally, technically, and economically feasible.



L	S	A
Lead Entity	Support Entity	Advisory Entity

Los Angeles County
Solid Waste Mgmt
Committee/
Integrated Waste
Mgmt Task Force

Los Angeles
County
Government

Incorporated
Cities

County
Sanitation
Districts

Private
Industry

Countywide Siting Element Administration

Process Finding of Conformance applications.

L	A	A	A	A
---	---	---	---	---

Update disposal quantity statistics on a quarterly basis.

A	L	A	S	S
---	---	---	---	---

Prepare revisions/upgrades to the Countywide Siting Element annually.

A	L	S	A	A
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EXISTING SOLID WASTE DISPOSAL FACILITIES



Chapter 3 (“Existing Solid Waste Disposal Facilities”)

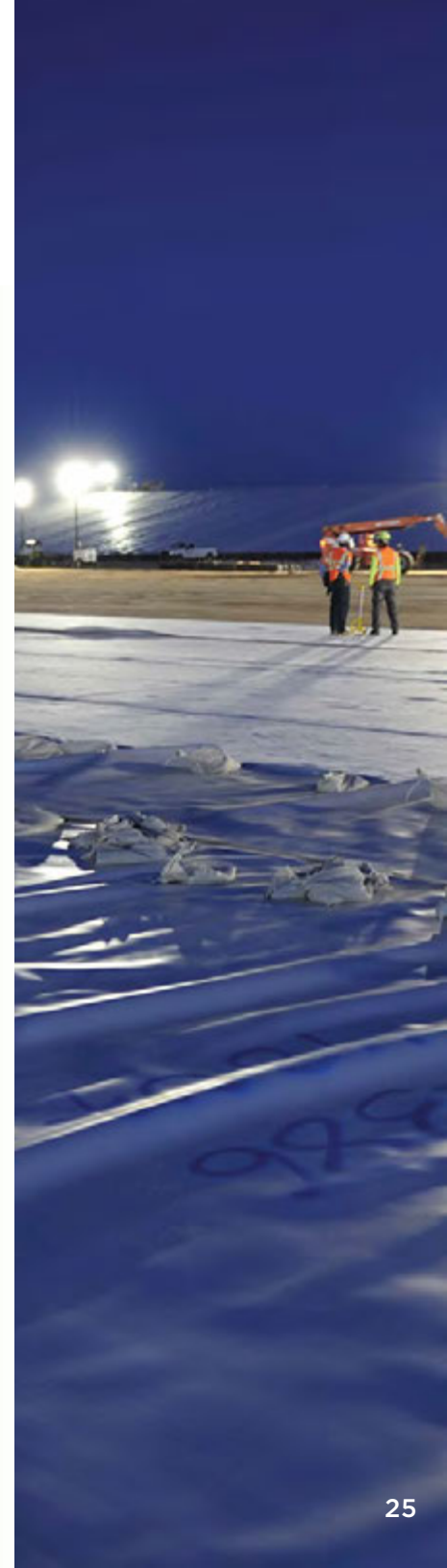
identifies all existing permitted Class III landfills, inert waste landfills/inert debris facilities, and transformation facilities in the County.

ES Map 1 depicts 10 permitted Class III landfills¹ (six major landfills² and four minor landfills); one permitted inert waste landfill; and two transformation facilities operating in the County. Additionally, there were 10 inert debris³ facilities operating in Los Angeles County.

1 As of December 31, 2018, there are 10 permitted Class III landfills; Puente Hills Landfill officially closed on October 31, 2013.

2 As of December 31, 2018, there are 6 major landfills; Puente Hills Landfill officially closed on October 31, 2013.

3 As of December 31, 2018, there are 10 inert debris facilities.





Since the time when the original CSE was approved by the CIWMB on June 24, 1998, several changes in the status of the facilities have occurred. These changes include: (1) removal of Elsmere and Blind Canyons as potential landfill sites in accordance with the County Board of Supervisors' decision; (2) closure of Puente Hills Landfill on October 31, 2013, as required by its land use permit; (3) closure of Bradley Landfill and Recycling Center on April 14, 2007, as required by its land use permit; (4) expansion and operation of Sunshine Canyon Landfill as a combined City/County landfill on December 31, 2008; (5) reclassification of inert waste landfills to inert debris engineered fill operations in 2006; and (6) expansions of Antelope Valley and Lancaster Landfills in 2011 and Chiquita Canyon Landfill in 2017.

ES MAP 1: Existing Permitted Disposal Facilities in Los Angeles County

Legend

- Existing Major Class III
- Existing Minor Class III
- Existing Permitted Inert Waste
- Existing Transformation (Waste-to-Energy) Facilities



10 mi.

This map is for planning or diagramming purposes only. Los Angeles County expressly disclaims any liability for any inaccuracies which may be present in this map.

Source: Los Angeles County Department of Public Works, (Nov. 2005)

Santa Catalina Island

San Clemente Island



Pebble Beach Landfill



San Clemente Island Landfill

**Not to scale nor at true location.*

**Not to scale nor at true location.*



Public Works
LOS ANGELES COUNTY

CURRENT DISPOSAL RATE & ASSESSMENT OF DISPOSAL CAPACITY NEEDS



Key Terms

Disposal: Refers to the management of solid waste through landfilling or transformation at a permitted solid waste facility.

Disposal Capacity: Refers to activities which reduce or eliminate the amount of solid waste from solid waste disposal.

Chapter 4 contains disposal rate calculations and projections of available disposal capacities for each of the years within the 15-year planning period from 2018 through 2033. Several scenarios were analyzed for purposes of illustrating the extents to which implementing certain waste management strategies could impact the County's disposal capacities. Variables such as disposal trends, waste diversion rates, anticipated closures of local landfills, utilization of out-of-County facilities through the waste-by-rail system, and the development of alternatives to landfill technologies were considered in the analyses. For example, the first scenario shows that a disposal capacity shortfall may occur in the event that exports to out-of-County facilities do not occur. **ES Table 4** provides a summary of each disposal capacity need analysis scenario.

ES TABLE 4: Summary of Description of Disposal Capacity Need Analysis Scenarios

Scenario / Assumption	Scenario Table	Existing Permitted In-County Class III Landfill Capacity	Increased Diversion Rate ¹	Exports to Out-of-County Landfills	Utilization of Additional Alternative Technology Capacity	Increase in Exports to Out-of-County Landfills
Scenario I —Utilization of Permitted In-County Disposal Capacity Only	ES Table 6	✓				
Scenario II —Status Quo	ES Table 7	✓		✓		
Scenario III —Meeting CalRecycle's Statewide Disposal Target of 2.7 PPD	ES Table 8	✓	✓	✓		
Scenario IV —Meeting Senate Bill 1383 Organic Waste Disposal Reduction Targets	ES Table 9	✓	✓	✓		
Scenario V —Utilization of Additional Alternative Technology Capacity	ES Table 10	✓		✓	✓	
Scenario VI —Increase in Exports to Out-of-County Landfills (Excluding Potential Waste-by-Rail Capacity)	ES Table 11	✓		✓		✓
Scenario VII —All Solid Waste Management Options Considered Become Available	ES Table 12	✓	✓	✓	✓	✓

1. Scenario III assumes an increase in diversion rate (83 percent by 2020) in order to meet CalRecycle's Statewide Disposal Target of 2.7 pounds per person per day. Scenario IV assumes an increase in diversion rate (74 percent by 2020) in order to meet Senate Bill 1383 Organic Waste Disposal Reduction Targets.

Summary of Description of Disposal Capacity Need Analysis Scenarios

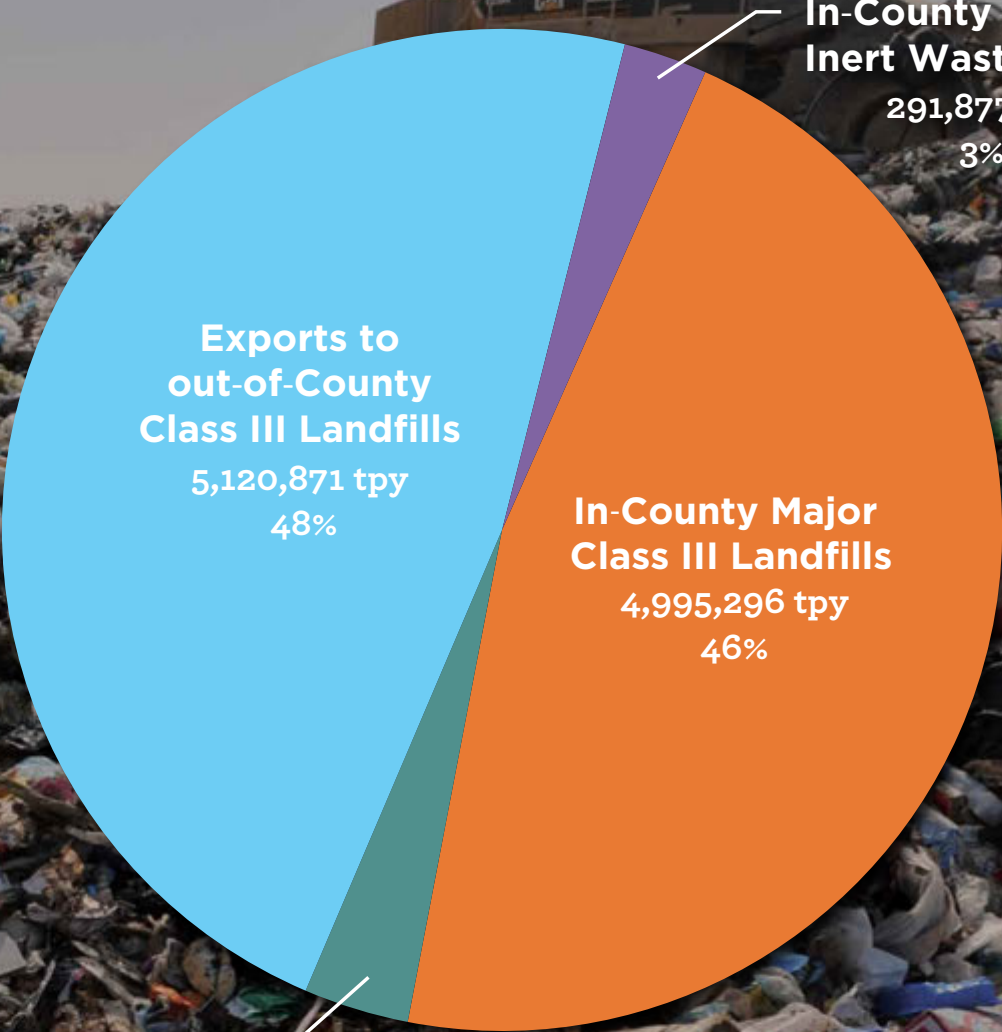
Scenario I —Utilization of Permitted In-County Disposal Capacity Only	<ul style="list-style-type: none"> - Use of existing in-County class III landfills and transformation facilities. - Plus increase in diversion rate (up to 65 percent by 2020).
Scenario II —Status Quo	<ul style="list-style-type: none"> - Use of existing in-County class III landfills and transformation facilities. - Plus increase in diversion rate (up to 65 percent by 2020). - Plus utilization of current exports to out-of-County disposal facilities.
Scenario III —Meeting CalRecycle's Statewide Disposal Target of 2.7 PPD	<ul style="list-style-type: none"> - Use of existing in-County class III landfills and transformation facilities. - Plus increase in diversion rate (up to 83 percent by 2020). - Plus utilization of current exports to out-of-County disposal facilities. - Plus Countywide per capita disposal rate of 2.7 ppd based on CalRecycle's target.
Scenario IV —Meeting Senate Bill 1383 Organic Waste Disposal Reduction Targets	<ul style="list-style-type: none"> - Use of existing in-County class III landfills and transformation facilities. - Plus increase in diversion rate (up to 74 percent by 2020). - Plus utilization of current exports to out-of-County disposal facilities. - Plus compliance with Senate Bill 1383.
Scenario V —Utilization of Additional Alternative Technology Capacity	<ul style="list-style-type: none"> - Use of existing in-County class III landfills and transformation facilities. - Plus increase in diversion rate (up to 65 percent by 2020). - Plus utilization of current exports to out-of-County disposal facilities. - Plus increase in potential available capacity from alternative technology facilities.
Scenario VI —Increase in Exports to Out-of-County Landfills (Excluding Potential Waste-by-Rail Capacity)	<ul style="list-style-type: none"> - Use of existing in-County class III landfills and transformation facilities. - Plus increase in diversion rate (up to 75 percent by 2020). - Plus increase in current exports to out-of-County disposal facilities.
Scenario VII —All Solid Waste Management Options Considered Become Available	<ul style="list-style-type: none"> - Use of existing in-County class III landfills and transformation facilities. - Plus increase in diversion rate (up to 75 percent by 2020). - Plus utilization of current exports to out-of-County disposal facilities. - Plus increase in potential available capacity from alternative technology facilities. - Plus increase in exports to out-of-County disposal facilities through the waste-by-rail system (up to 4,000 tpd by 2021).





HOLLYWOOD

ES FIGURE 1: 2018 Los Angeles County Solid Waste Disposal Distribution



Diversion: Refers to activities which reduce or eliminate the amount of solid waste from solid waste disposal.

2018 Disposal Quantities

In 2018, residents and businesses within Los Angeles County disposed of approximately 10.8 million tons of solid waste at existing permitted land disposal and transformation facilities located in and out of the County. Of this amount, approximately 5.0 million tons were disposed of at in-County Class III landfills; 366,642 tons at transformation facilities; 291,877 tons at the permitted inert waste landfill; and 5.12 million tons at out-of-County Class III landfills (see **ES Figure 1**). In addition, approximately 175,737 tons of solid waste was imported to Los Angeles County Class III landfills and transformation facilities from Orange, Riverside, San Bernardino, Ventura, and other counties in 2018. The average countywide disposal rate in 2018 was 34,534 tons per day (tpd) over a six-day operating week; of which 16,011 tpd were disposed of at Class III landfills; 1,175 tpd at transformation facilities; 936 tpd at the permitted inert waste landfill; and 16,413 tpd exported to out-of-County Class III landfills. Due in large part to (1) increased recycling/**diversion** efforts and (2) reclassification of inert waste landfills as inert debris engineered fill operations, the annual disposal quantity of 11 million tons during 2018 was significantly lower in comparison to the 1990 disposal amount of approximately 16.1 million tons. Additionally, the aggressive waste diversion programs implemented by jurisdictions throughout the County over the years have had a substantial impact on lowering disposal volumes.

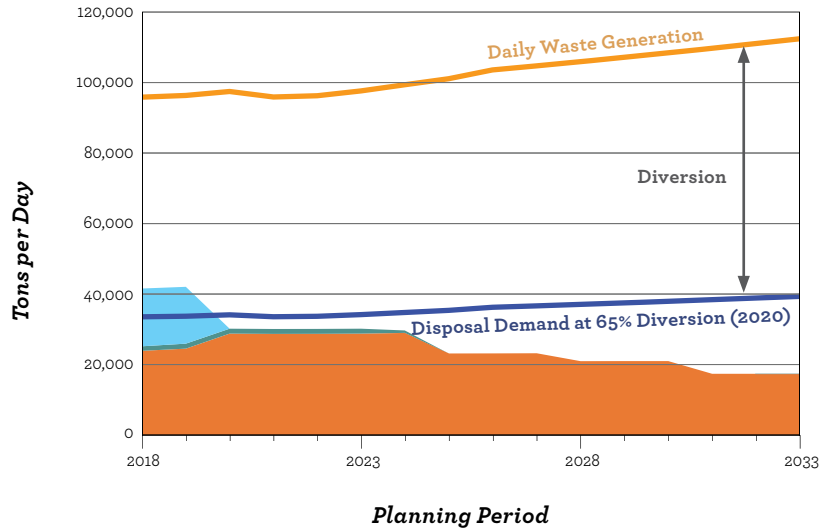
ES Figures 2 and 3 depict the solid waste disposal capacity projections for each disposal capacity analysis scenario.

ES Map 2 depicts the waste disposal by jurisdiction of origin (e.g., city/unincorporated area, County) at permitted municipal solid waste facilities both in and out of the County.

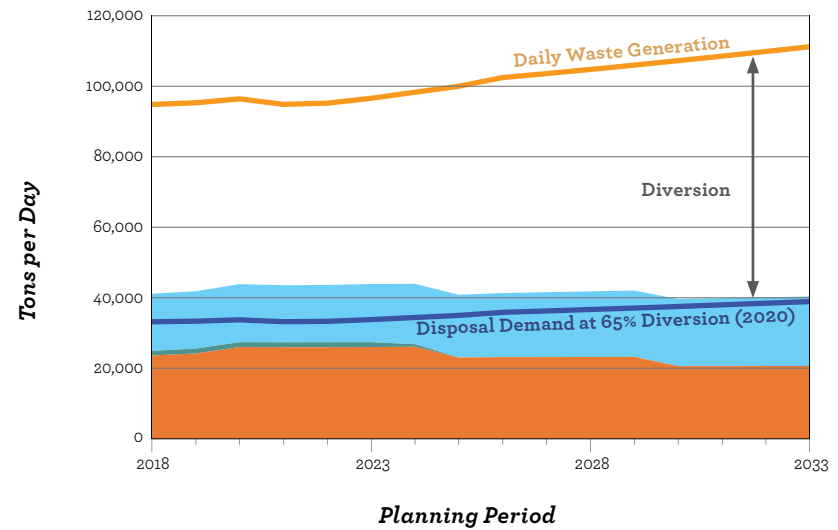


ES FIGURE 2: Graph of Solid Waste Disposal Capacity Projections For Each Scenario¹ for the Planning Period (2018-2033)

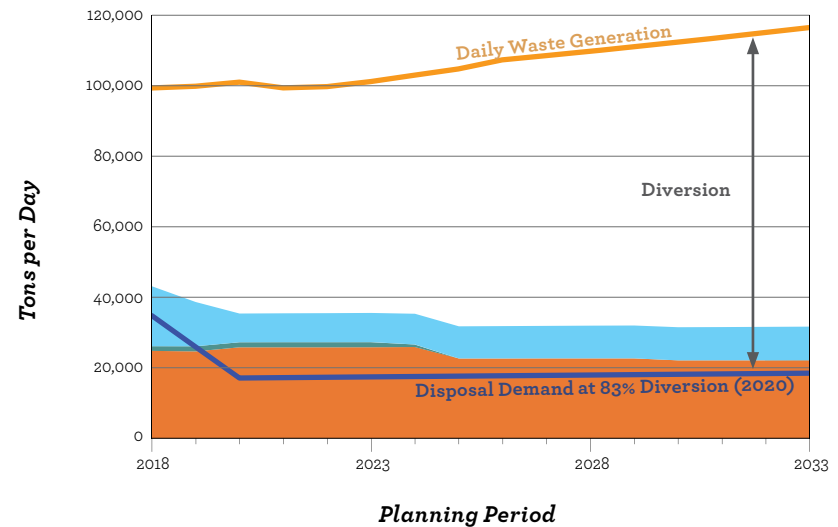
Scenario I – Utilization Of Existing In-County Disposal Capacity Only



Scenario II – Status Quo

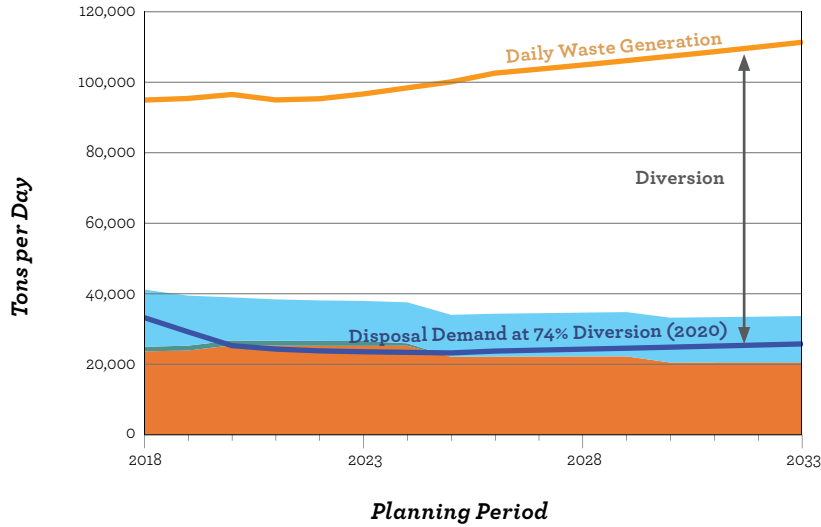


Scenario III – Meeting CalRecycle's Statewide Disposal Target Of 2.7 PPD

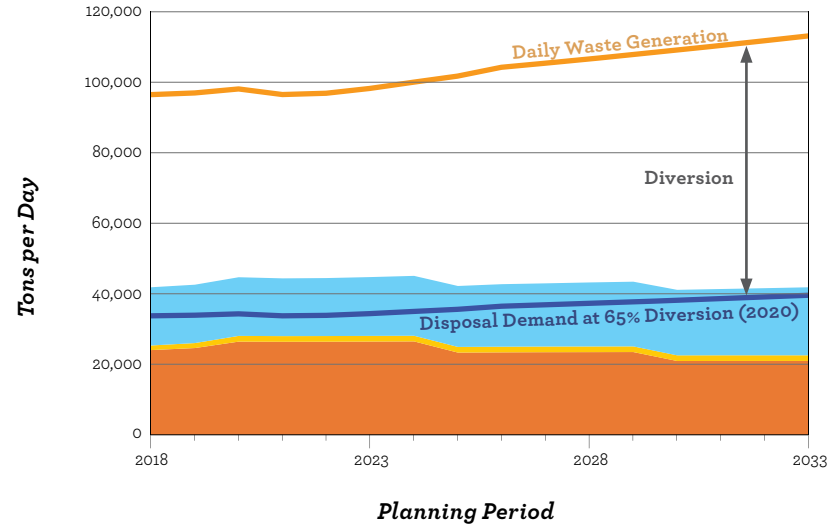


- In-County Class III Landfills Daily Disposal Capacity
- Transformation (Waste-to-Energy) Facility Daily Capacity
- Exports to Out-of-County Landfills
- Alternative Technology Facility Daily Capacity
- Waste-by-Rail Daily Capacity

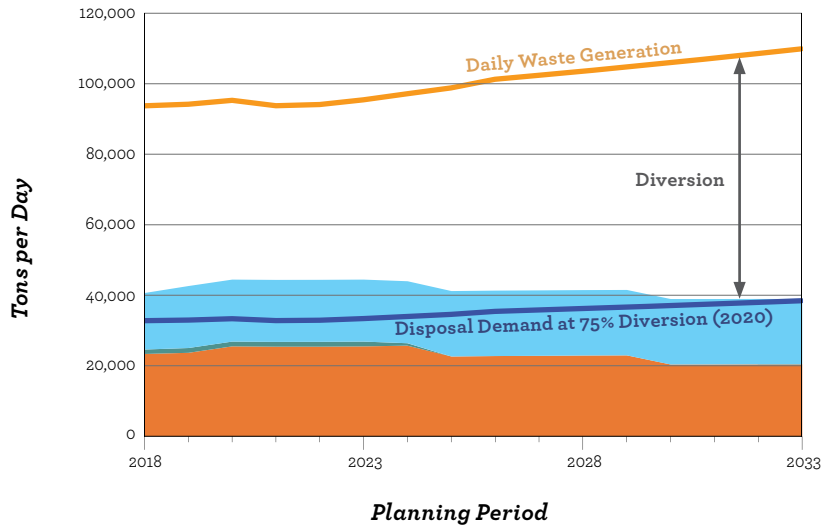
Scenario IV – Meeting Senate Bill 1383 Organic Waste Reduction Targets



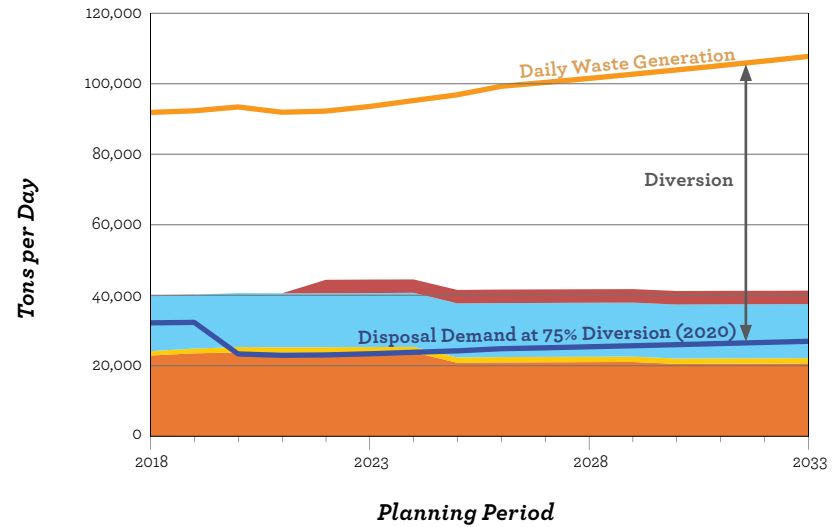
Scenario V – Utilization of Additional Alternative Technology Capacity



Scenario VI – Increase in Exports to Out-of-County Landfills (Excluding Potential Waste-by-Rail Capacity)

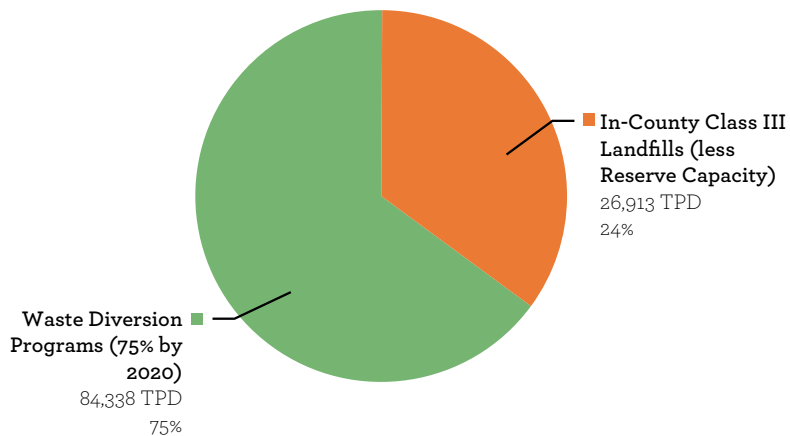


Scenario VII – All Solid Waste Management Options Considered Become Available

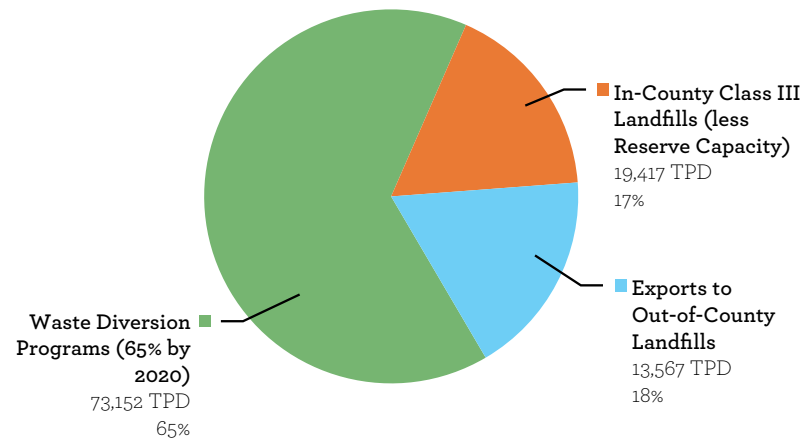


ES FIGURE 3: Los Angeles County Projected Solid Waste Disposal in 2033 for Each Scenario¹ for the Planning Period (2018-2033)

Scenario I – Utilization Of Existing In-County Disposal Capacity Only

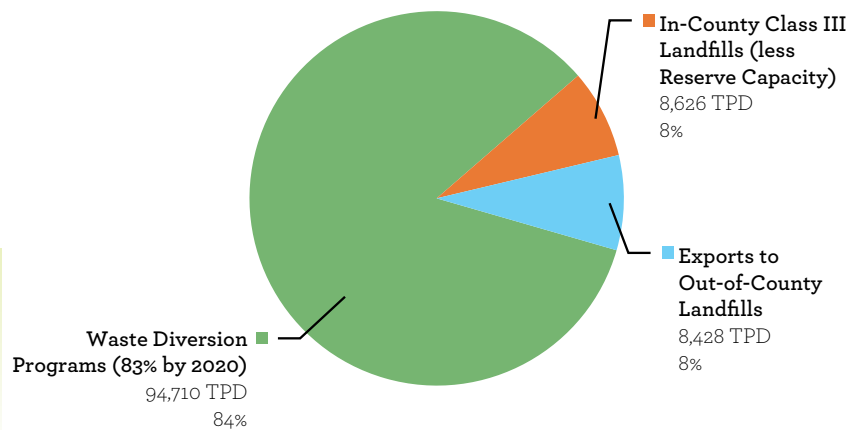


Scenario II – Status Quo



Solid Waste Disposal Capacity Projections For Each Scenario¹ for the Planning Period (2018-2033)

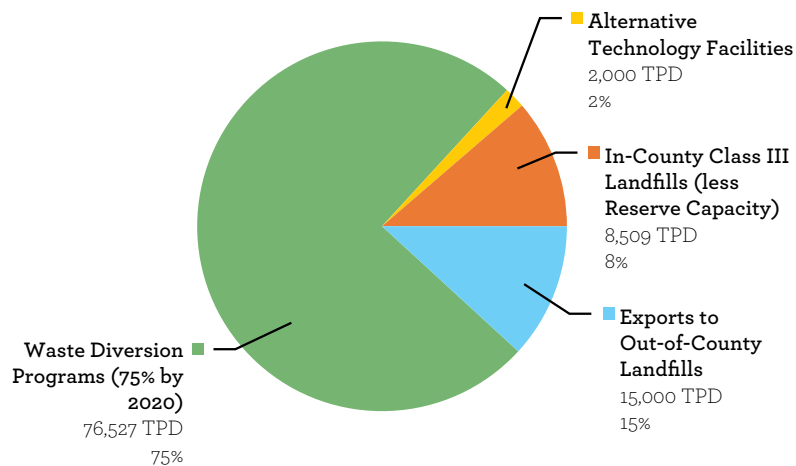
Scenario III – Meeting CalRecycle's Statewide Disposal Target Of 2.7 PPD



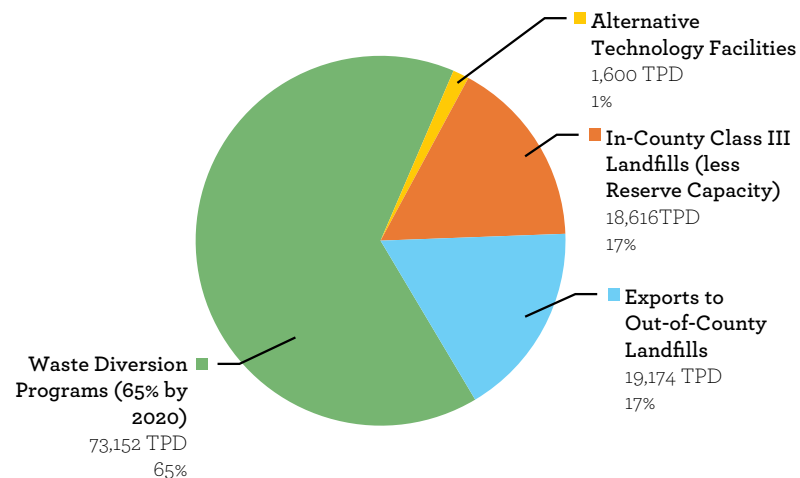
Notes

1. See Chapter 4, Section 4.10 (Disposal Capacity Need Analysis Scenarios) and Table 4-9 (Summary of Description of Disposal Capacity Need Analysis Scenarios) for a detailed description of each scenario and assumptions.

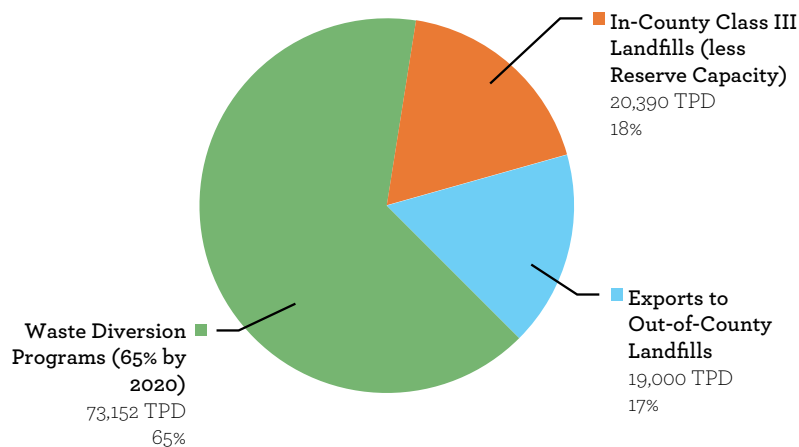
Scenario IV – Meeting Senate Bill 1383 Organic Waste Reduction Targets



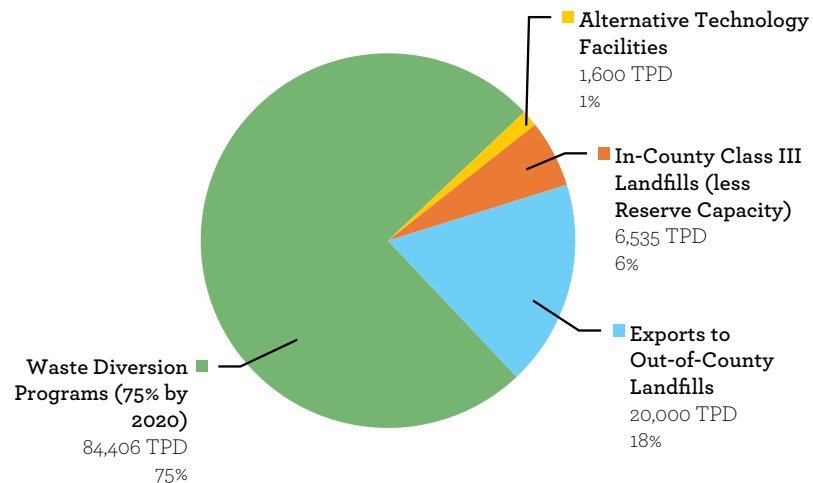
Scenario V – Utilization of Additional Alternative Technology Capacity

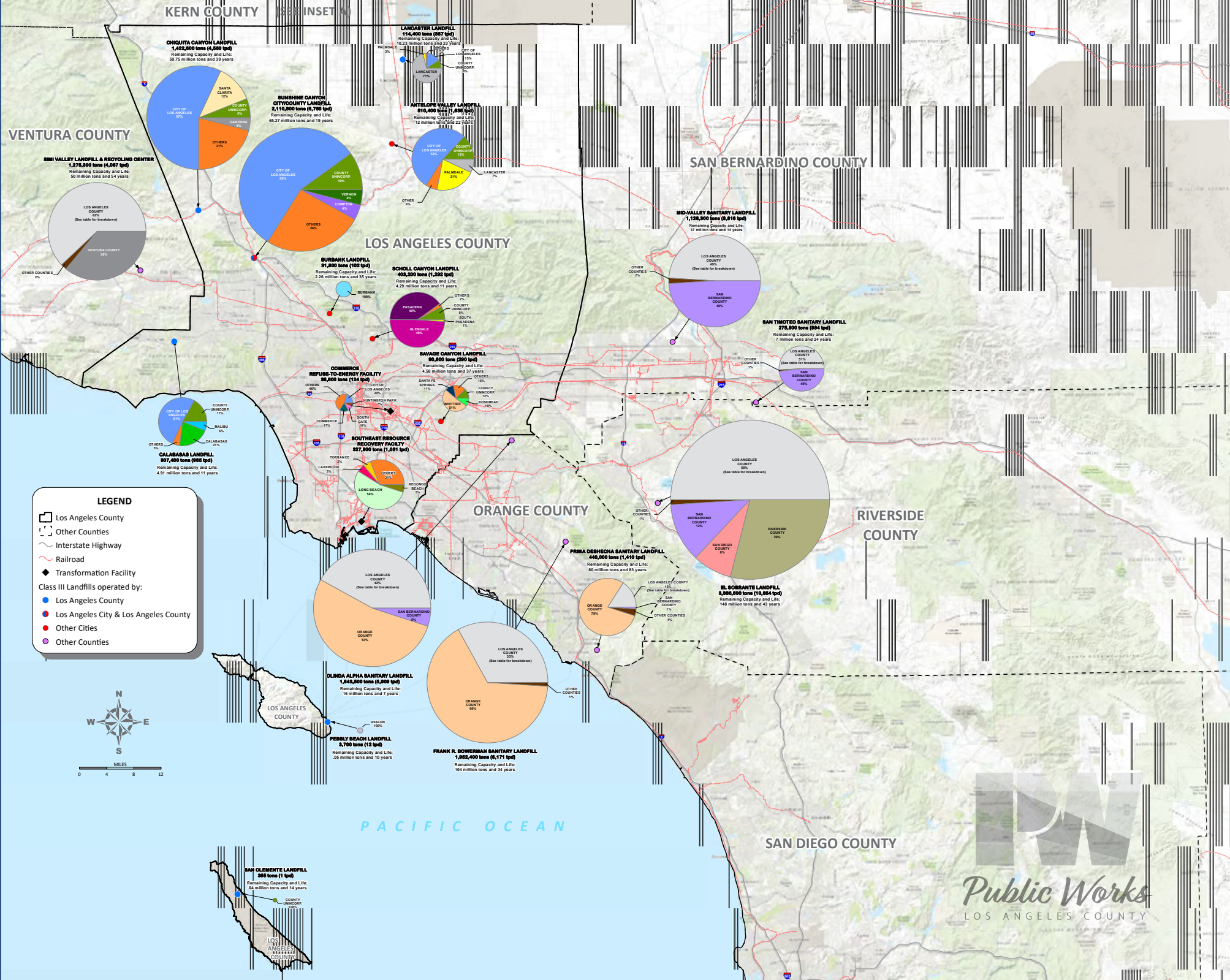


Scenario VI – Increase in Exports to Out-of-County Landfills (Excluding Potential Waste-by-Rail Capacity)

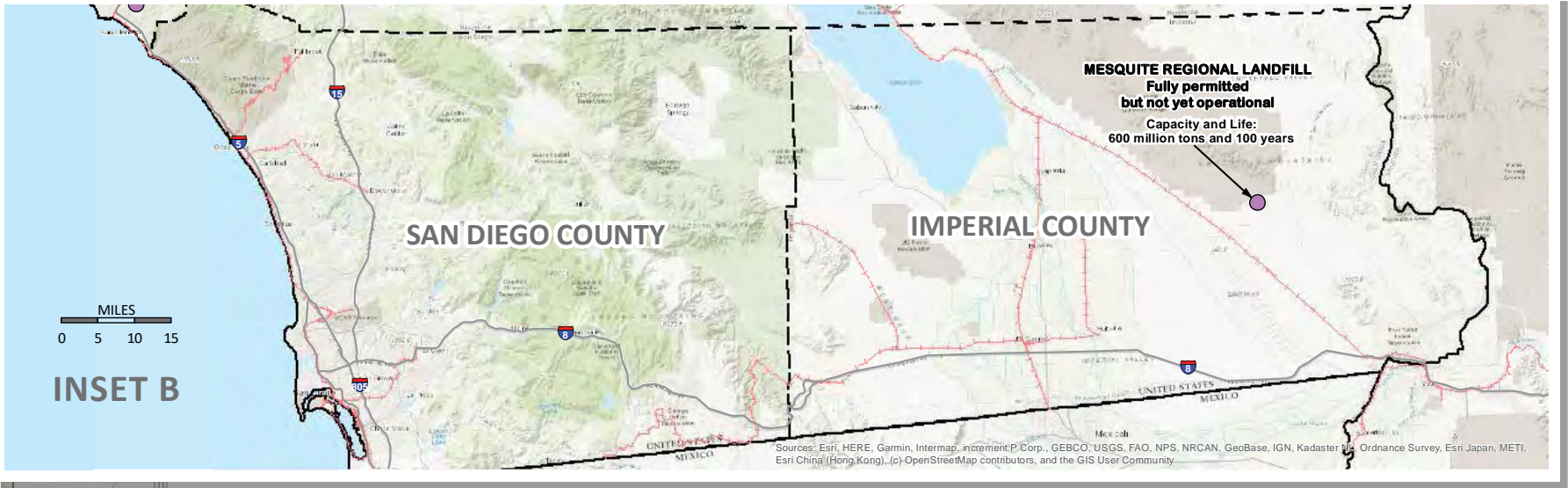
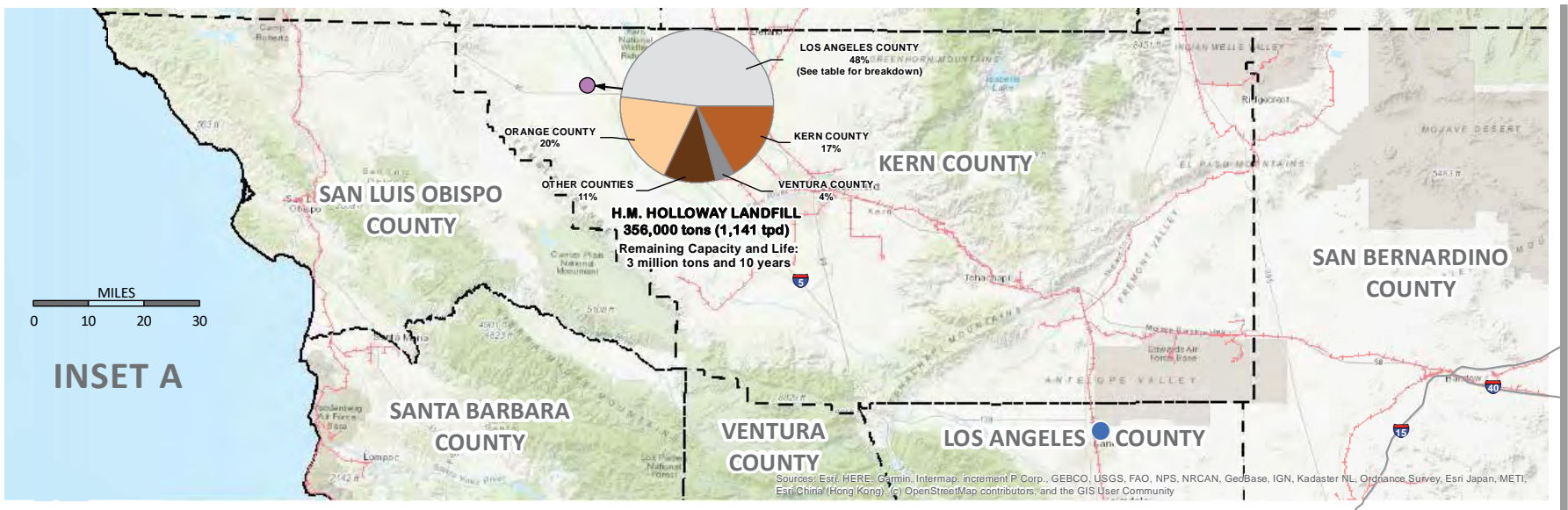


Scenario VII – All Solid Waste Management Options Considered Become Available





ES MAP 2: Waste Disposal By Jurisdiction Of Origin At Permitted Municipal Solid Waste Facilities In Southern California 2018



Source: Los Angeles County Public Works Solid Waste Information Management System (www.LACountySWIMS.org) and export data reports and surveys received from facilities located out of the County, July 2018.

The original map (48" x 36") is available as part of the CSE binder.

IMPERIAL COUNTY

(SEE INSET B)

CSE - EXECUTIVE SUMMARY

Remaining Permitted Capacity: Refers to the most current estimated remaining volumetric capacity (landfills only).

Remaining Permitted In-County Disposal Capacity

As of December 31, 2018, the remaining permitted Class III landfill capacity in the County was estimated at 163.39 million tons (194.35 million cubic yards) (see **ES Table 5**). Based on the 2018 annual disposal rate plus waste imported into the County, reliance on in-County Class III landfills alone will not be sufficient in accommodating the County's disposal needs throughout the 15-year planning period.

Factors that may further jeopardize the availability of Class III landfill disposal capacities include: (1) expiration of Land Use Permits, Waste Discharge Requirements Permits, Solid Waste Facilities Permits, and air quality permits; (2) restrictions on the acceptance of waste generated outside watershed boundaries; (3) permit restrictions on the amount of waste that can be accepted daily and/or weekly; (4) geographic barriers; and/or (5) limitations on the amount of waste that can be handled by a facility due to limited manpower and equipment.

As of December 31, 2018, the total remaining capacity at the permitted inert waste landfill in the County is estimated at approximately 57.72 million tons (46.17 million cubic yards). Based on the 2018 annual disposal rate of 358,254 tons of inert waste per year, this capacity will be sufficient for approximately 28 years. The CSE does not contain any analyses for inert waste landfills due to the increasing trend towards the recycling of construction and demolition waste.

As of December 31, 2018, there is one transformation facility, Southeast Resource Recovery Facility (SERRF), within the County with a permitted daily processing capacity of 2,240 tpd (average over a six-day operating week). The second facility, Commerce Refuse-to-Energy Facility (CREF) closed in June 2018. SERRF facility expected to operate at its current permitted daily capacity throughout the planning period. Transformation technology has been an effective alternative to landfill disposal and is anticipated to continue to serve as an integral component of the County's solid waste management system in the future. This technology has proven to be commercially, technically, and environmentally feasible as demonstrated by their successful operations and meeting air quality standards.



Protecting the economic well-being of Los Angeles County

ES TABLE 5: Remaining Permitted Combined Disposal Capacity of Existing Solid Waste Disposal Facilities in Los Angeles County as of December 31, 2018¹

Facility	Location: City or Unincorporated Area	SWFP Max. Daily Capacity	2018 Annual Disposal (Million Tons)			Estimated Remaining Permitted Capacity (as of 12/31/18)		Remaining Life Years	Tipping Fee (\$ per ton)	
			Tons	In- County	Out-of- County	Total	Million Tons			Million (a) Cubic Yards
MAJOR AND MINOR CLASS III LANDFILLS										
Antelope Valley	Palmdale	3,600	0.510	0.006	0.517	12.00	16.00	22	\$67.57	
Burbank	Burbank	240	0.032	0.000	0.032	2.26	4.12	37	\$45.25	
Calabasas	Unincorporated Area	3,500	0.307	0.011	0.318	4.91	11.07	16	\$52.32	
Chiquita Canyon	Unincorporated Area	12,000	1.423	0.108	1.530	59.75	60.29	35	\$68.00	
Lancaster	Unincorporated Area	5,100	0.114	0.001	0.116	10.23	13.64	23	\$71.18-\$73.72	
Pebble Beach	Unincorporated Area	49	0.004	0.000	0.004	0.05	0.05	10	\$139.58	
San Clemente	San Clemente Island	9.6	0.0004	0	0.0004	0.036	0.29	14	Not Available	
Scholl Canyon	"Glendale/County	3,400	0.403	0.000	0.403	4.29	7.08	11	\$53.83	
Sunshine Canyon City/County	Los Angeles/County	12,100	2.111	0.000	2.111	65.27	74.18	19	\$83.54	
Whittier (Savage Canyon)	Whittier	3,350	0.091	0.000	0.091	4.58	7.63	39	\$47.32	
TOTAL		43,349	4.995	0.126	5.121	163.39	194.35	--	--	
PERMITTED INERT LANDFILLS										
Azusa Land Reclamation	Azusa	8,000	0.292	0.066	0.358	57.72	46.17	28		
TOTAL		8,000	0.292	0.066	0.358	57.72	46.17	--		
TRANSFORMATION FACILITIES						Available Average Daily Capacity (tpd)				
Commerce Refuse-To-Energy Facility (closed as of June 2018)	Commerce	1,000	0.039	0.006	0.045		400 (c)		\$88.00	
Southeast Resource Recovery Facility	Long Beach	2,240	0.328	0.044	0.372		1,370(d)		\$75.00	
TOTAL		3,240	0.367	0.050	0.416		1,770 (e)		--	
Out-of-County Disposal	Los Angeles County Waste Exported in 2013 to Out-of-County Class III Disposal Facilities =						5,120,871 tons or	16,413 tpd-6		

¹ For additional details on disposal capacity and facilities including solid waste facility permit numbers, permitted days of operation, LUP/CUP maximum daily capacity, 2018 average daily disposal, and associated comments see Table 4-4 in Chapter 4 of the CSE



Waste Generation and Projections of Disposal Capacity Needs

Waste generation projections in the CSE were obtained using CalRecycle's Adjustment Methodology which considers the effects of economic and population growth on solid waste generation. Generally, the amount of solid waste generated is proportional to population and/or economics. This relationship was particularly evident during the recent economic recession as a result of which solid waste generation decreased dramatically in comparison to the years prior to 2006.

As part of the Adjustment Methodology, the 2018 waste quantities were selected as the base year data. The Adjustment Methodology also considers population, employment, taxable sales and, if applicable, the Consumer Price Index. The University of California, Los Angeles Anderson Long-Term Forecast (July 2018) projections were used for population, taxable sales, and employment data through the year 2033.





ADEQUACY OF EXISTING REMAINING DISPOSAL CAPACITY

ES Tables 6 through 12 show seven scenarios for purposes of analyzing the adequacy of the Countywide disposal capacity over the 15-year planning period under varying circumstances. For example, the magnitude of the Countywide waste diversion rate would have an impact on the amount of waste that would require disposal, since the greater the amount of materials diverted or extracted from the waste stream through processes such as recycling and source reduction, the lesser the remaining amount that would require disposal. Additionally, factors that would increase the available disposal capacity include landfill expansions, increases in exports to out-of-County facilities by utilizing

the waste-by-rail system, and the development of alternatives to landfill technologies. Accordingly, each of the seven scenarios considers these factors to varying extents and combinations to illustrate the respective impacts on the overall disposal demand and available disposal capacities for the 15-year planning period. The scenario analyses assume the full implementation of AB 939 waste diversion programs and that all jurisdictions in the County will meet or exceed the current 50 percent goal throughout the planning period.

ES TABLE 6: SCENARIO I - Utilization of Existing in-County Disposal Capacity Only

Assuming Utilization of Existing In-County Class III Landfills and Transformation Facilities, Diversion Rate of 65%, No Utilization of Out-of-County Disposal Capacity

Year	Waste Generation Rate ¹ (TPD-6) A	Diversion Rate B	Total Daily Disposal Demand (TPD-6) C=A(1-B)	Imports from other Counties (TPD-6) D	Daily Available Capacity from Transformation Facilities ² (TPD-6) E	Exports to Out-of-County Landfills ³ (TPD-6) F	Class III Landfill Daily Disposal Demand (TPD-6) G=C+D-E-F	Total In-County Class III Landfill Available Capacity ⁴ (tpd-6) <i>Total In-County Class III Landfill Remaining Capacity (million tons)</i> H	Class III Landfill Daily Disposal Capacity Shortfall (Reserve) (TPD-6) I=G-H	
2018	95,996	65%	33,599	563	1,300	16,413	16,449	24,483	163	--
2019	96,457	65%	33,760	600	1,400	16,150	16,810	25,158	158	--
2020	97,589	65%	34,156	600	1,400	0	33,356	29,418	148	3,939
2021	96,017	65%	33,606	600	1,400	0	32,806	29,332	139	3,474
2022	96,362	65%	33,727	600	1,400	0	32,927	29,351	130	3,576
2023	97,739	65%	34,209	600	1,400	0	33,409	29,425	121	3,984
2024	99,491	65%	34,822	600	700	0	34,722	29,616	112	5,106
2025	101,194	65%	35,418	600	0	0	36,018	23,769	104	12,249
2026	103,693	65%	36,293	600	0	0	36,893	23,801	96	13,092
2027	104,844	65%	36,695	600	0	0	37,295	23,827	88	13,468
2028	106,052	65%	37,118	600	0	0	37,718	21,596	82	16,122
2029	107,257	65%	37,540	600	0	0	38,140	21,598	76	16,541
2030	108,540	65%	37,989	600	0	0	38,589	21,601	70	16,988
2031	109,840	65%	38,444	600	0	0	39,044	18,004	65	21,040
2032	111,173	65%	38,911	600	0	0	39,511	18,007	60	21,504
2033	112,542	65%	39,390	600	0	0	39,990	18,010	56	21,980

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 2018.
2. Daily Available Capacity from Transformation Facilities assume: (1) Southeast Resource Recovery Facility will continue at their current permitted daily capacity during the planning period and (2) Commerce Refuse to Energy Facility ceased its operation on June 2018.
3. The scenario assumes utilization of in-County disposal capacity only. A "Clean Hands Waiver (W)" was granted to Chiquita Canyon Landfill on March 17, 2016 to continue its operation while processing the landfill's new conditional use permit. On July 25, 2017, the Board of Supervisors approved a new Conditional Use Permit for the Landfill's Expansion Project.
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 washed or Expected Average Daily Tonnage for facilities with a restricted washed (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 considers the effect of Assembly Bill 1594 that removes diversion credit from green waste used as alternative daily cover (ADC) at landfills.

ES TABLE 7: SCENARIO II - Status Quo

Assuming Utilization of Existing In-County Class III Landfills and Transformation Facilities, Diversion Rate of 65%, Exports based on Existing Export Agreements

Year	Waste Generation Rate ¹ (TPD-6) A	Diversion Rate B	Total Daily Disposal Demand (TPD-6) C=A(1-B)	Imports from other Counties (TPD-6) D	Daily Available Capacity from Transformation Facilities ² (TPD-6) E	Exports to Out-of-County Landfills (TPD-6) F	Class III Landfill Daily Disposal Demand (TPD-6) G=C+D-E-F	Total In-County Class III Landfill Available Capacity ³ (tpd-6) <i>Total In-County Class III Landfill Remaining Capacity (million tons)</i> H	Class III Landfill Daily Disposal Capacity Shortfall (Reserve) (TPD-6) I=G-H	
2018	95,996	65%	33,599	563	1,300	16,413	16,449	24,483	163	--
2019	96,457	65%	33,760	600	1,400	16,462	16,498	25,107	158	--
2020	97,589	65%	34,156	600	1,400	16,660	16,696	26,939	152	(10,243)
2021	96,017	65%	33,606	600	1,400	16,385	16,421	26,894	146	(10,473)
2022	96,362	65%	33,727	600	1,400	16,445	16,481	26,904	141	(10,423)
2023	97,739	65%	34,209	600	1,400	16,686	16,723	26,943	135	(10,221)
2024	99,491	65%	34,822	600	700	17,342	17,380	27,051	129	(9,671)
2025	101,194	65%	35,418	600	0	17,989	18,029	23,951	124	(5,923)
2026	103,693	65%	36,293	600	0	18,426	18,467	24,023	119	(5,556)
2027	104,844	65%	36,695	600	0	18,627	18,668	24,056	114	(5,388)
2028	106,052	65%	37,118	600	0	18,838	18,880	24,090	109	(5,210)
2029	107,257	65%	37,540	600	0	19,049	19,091	24,111	104	(5,020)
2030	108,540	65%	37,989	600	0	19,273	19,316	22,630	99	(3,314)
2031	109,840	65%	38,444	600	0	19,501	19,544	22,649	95	(3,106)
2032	111,173	65%	38,911	600	0	19,733	19,777	22,669	90	(2,892)
2033	112,542	65%	39,390	600	0	19,973	20,017	22,684	85	(2,667)

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 2018.
2. Daily Available Capacity from Transformation Facilities assume: (1) Southeast Resource Recovery Facility will continue at their current permitted daily capacity during the planning period and (2) Commerce Refuse to Energy Facility ceased its operation on June 2018.
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 washed or Expected Average Daily Tonnage for facilities with a restricted washed (R). A "Clean Hands Waiver" was granted to Chiquita Canyon Landfill on March 17, 2016 to continue its operation while processing the landfill's new conditional use permit. On July 25, 2017, the Board of Supervisors approved a new Conditional Use Permit for the Landfill's Expansion Project. 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.
4. This scenario considers the effect of Assembly Bill 1594 that removes diversion credit from green waste used as alternative daily cover (ADC) at landfills.

ES TABLE 8: SCENARIO III - Meeting CalRecycle's Statewide Disposal Target Of 2.7 PPD

Assuming Utilization of Existing In-County Class III Landfills and Transformation Facilities, Increase in Diversion Rate (up to 83% by 2020), Exports based on Existing Export Agreements

Year	Waste Generation Rate ¹ (TPD-6) A	Diversion Rate B	Total Daily Disposal Demand (TPD-6) C=A(1-B)	Per Capita Disposal Rate Based on CalRecycle's Statewide Disposal Target of 2.7 PPD (TPD-6) D	Imports from Other Counties ² (TPD-6) E	Daily Available Capacity from Transformation Facilities (TPD-6) F	Exports to Out-of-County Landfills (TPD-6) G	Class III Landfill Daily Disposal Demand (TPD-6) H=C+E-F-G	Total In-County Class III Landfill Available Capacity ³ (tpd-6) <i>Total In-County Class III Landfill Remaining Capacity (million tons)</i> I	Class III Landfill Daily Disposal Capacity Shortfall (Reserve) (TPD-6) J=H-I
2018	95,996	65%	33,599	--	563	1,300	16,413	16,449	24,483 <i>163</i>	--
2019	96,457	74%	25,038	--	600	1,400	12,106	12,132	24,395 <i>158</i>	--
2020	97,589	83%	16,507	2.70	600	1,400	7,845	7,862	25,498 <i>154</i>	(17,636)
2021	96,017	83%	16,606	2.70	600	1,400	7,894	7,912	25,506 <i>150</i>	(17,595)
2022	96,362	83%	16,706	2.70	600	1,400	7,944	7,962	25,515 <i>147</i>	(17,553)
2023	97,739	83%	16,806	2.70	600	1,400	7,994	8,012	25,523 <i>143</i>	(17,511)
2024	99,491	83%	16,907	2.70	600	700	8,394	8,413	25,588 <i>139</i>	(17,175)
2025	101,194	83%	17,008	2.70	600	0	8,794	8,814	22,449 <i>136</i>	(13,635)
2026	103,693	83%	17,110	2.70	600	0	8,845	8,865	22,457 <i>133</i>	(13,592)
2027	104,844	84%	17,213	2.70	600	0	8,897	8,916	22,465 <i>130</i>	(13,549)
2028	106,052	84%	17,316	2.70	600	0	8,948	8,968	22,474 <i>127</i>	(13,506)
2029	107,257	84%	17,420	2.70	600	0	9,000	9,020	22,476 <i>124</i>	(13,456)
2030	108,540	84%	17,525	2.70	600	0	9,052	9,072	22,484 <i>121</i>	(13,412)
2031	109,840	84%	17,626	2.70	600	0	9,103	9,123	22,492 <i>118</i>	(13,369)
2032	111,173	84%	17,729	2.70	600	0	9,154	9,174	22,501 <i>115</i>	(13,326)
2033	112,542	84%	17,832	2.70	600	0	9,206	9,226	22,508 <i>112</i>	(13,283)

ASSUMPTIONS:

- Waste Generation is estimated using CalRecycle's Adjustment Methodology, utilizing population projection, employment and real taxable sales projections from UCLA's Longterm Forecast, July 2018.
- The Total Daily Disposal Demand for the years 2018 - 2019 (Column C) is determined based on the daily solid waste generation rate and the assumed diversion rates for the scenario. However, for the purposes of this scenario, the total daily disposal demand for the years 2020 - 2033 is adjusted using CalRecycle's statewide disposal target of 2.7 pounds per person per day (PPD). As a result, the diversion rate is assumed to increase from 75% (as shown in other scenarios) to 83% by 2020.
- Daily Available Capacity from Transformation Facilities assume: (1) Southeast Resource Recovery Facility will continue at their current permitted daily capacity during the planning period and (2) Commerce Refuse to Energy Facility ceased its operation on June 2018.
- Total In-County Class III Landfill Available Capacity is calculated based on Maximum Permitted Daily Capacity (in blue text) for facilities without a restricted washed or Expected Average Daily Tonnage for facilities with a restricted washed (R). A "Clean Hands Waiver" was granted to Chiquita Canyon Landfill on March 17, 2016 to continue its operation while processing the landfill's new conditional use permit. On July 25, 2017, the Board of Supervisors approved a new Conditional Use Permit for the Landfill's Expansion Project. 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.
- This scenario considers the effect of Assembly Bill 1594 that removes diversion credit from green waste used as alternative daily cover (ADC) at landfills.

ES TABLE 9: SCENARIO IV - Meeting Senate Bill 1383 Organic Waste Disposal Reduction Targets

Assuming Utilization of Existing In-County Class III Landfills and Transformation Facilities, Increase in Diversion Rate (up to 74% by 2020), Exports based on Existing Export Agreements

Year	Waste Generation Rate ¹ (TPD-6) A	Total Solid Waste Diversion Rate B	Total Solid Waste Diversion Tonnage (TPD-6) C=A*B	Total Solid Waste Daily Disposal Demand (TPD-6) D=A(1-B)	Organic Waste Disposal Tonnage ² (TPD-6) E	% of Disposed Organic Waste in Total Solid Waste Disposal Demand (TPD-6) F=E/D	Imports from Other Counties (TPD-6) G	Daily Available Capacity from Transformation Facilities ³ (TPD-6) H	Exports to Out-of-County Landfills (TPD-6) I	Class III Landfill Daily Disposal Demand (TPD-6) J=D+G-H-I	Total In-County Class III Landfill Available Capacity ⁴ (tpd-6) <i>Total In-County Class III Landfill Remaining Capacity (million tons)</i> K	Class III Landfill Daily Disposal Capacity Shortfall (Reserve) (TPD-6) L=J-K	
2018	95,996	65%	62,398	33,598.75	13,552	40%	563	1,300	16,413	16,449	24,484	163	--
2019	96,457	69%	66,948	29,508.92	9,360	32%	600	1,400	14,339	14,370	24,761	158	--
2020	97,589	74%	72,036	25,553.12	5,656 {50%}	22%	600	1,400	12,363	12,390	26,237	153	(13,847)
2021	96,017	74%	71,459	24,558.02	4,989	23%	600	1,400	11,866	11,892	26,156	148	(14,264)
2022	96,362	75%	72,301	24,060.61	4,420	18%	600	1,400	11,617	11,643	26,116	144	(14,472)
2023	97,739	76%	73,929	23,811	3,882	16%	600	1400	11,493	11,518	26,095	139	(14,577)
2024	99,491	76%	75,858	23,633	3,338	14%	600	700	11,753	11,779	26,138	134	(14,358)
2025	101,194	77%	77,715	23,479	2,828	12%	600	0	12,026	12,053	22,977	131	(10,925)
2026	103,693	77%	79,693	24,001	2,828 {70%}	12%	600	0	12,287	12,314	23,020	127	(10,706)
2027	104,844	77%	80,577	24,267	2,854	12%	600	0	12,420	12,447	23,042	123	(10,594)
2028	106,052	77%	81,505	24,547	2,881	12%	600	0	12,560	12,588	23,065	119	(10,477)
2029	107,257	77%	82,431	24,826	2,908	12%	600	0	12,699	12,727	23,078	115	(10,351)
2030	108,540	77%	83,417	25,123	2,937	12%	600	0	12,847	12,876	22,091	111	(9,215)
2031	109,840	77%	84,416	25,424	2,966	12%	600	0	12,998	13,026	22,104	107	(9,077)
2032	111,173	77%	85,440	25,733	2,996	12%	600	0	13,152	13,181	22,117	104	(8,936)
2033	112,542	77%	86,492	26,050	3,027	12%	600	0	13,310	13,339	22,128	100	(8,789)

ASSUMPTIONS:

- Waste Generation is estimated using CalRecycle's Adjustment Methodology, utilizing population projection, employment and real taxable sales projections from UCLA's Longterm Forecast, July 2018.
- 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, 2018 Annual Report).
- Daily Available Capacity from Transformation Facilities assume: (1) Southeast Resource Recovery Facility will continue at their current permitted daily capacity during the planning period and (2) Commerce Refuse to Energy Facility ceased its operation on June 2018.
- Total In-County Class III Landfill Available Capacity is calculated based on Maximum Permitted Daily Capacity (in blue text) for facilities without a restricted washed or Expected Average Daily Tonnage for facilities with a restricted washed. A "Clean Hands Waiver" was granted to Chiquita Canyon Landfill on March 17, 2016 to continue its operation while processing the landfill's new conditional use permit. On July 25, 2017, the Board of Supervisors approved a new Conditional Use Permit for the Landfill's Expansion Project. 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.
- This scenario considers the effect of Assembly Bill 1594 that removes diversion credit from green waste used as alternative daily cover (ADC) at landfills.
- 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.

ES TABLE 10: SCENARIO V - Utilization of Additional Alternative Technology Capacity

Assuming Utilization of Existing In-County Class III Landfills and Transformation Facilities, Utilization of Additional Alternative Technology Capacity, Diversion Rate of 65%, Exports based on Existing Export Agreements

Year	Waste Generation Rate ¹ (TPD-6) A	Diversion Rate B	Total Daily Disposal Demand ² (TPD-6) C=A(1-B)	Imports from Other Counties D	Potential Available Capacity from Alternative Technology Facilities ³ (TPD-6) E	Exports to Out-of-County Landfills (TPD-6) F	Class III Landfill Daily Disposal Demand (TPD-6) G=C+D-E-F	Total In-County Class III Landfill Available Capacity ⁴ (tpd-6) <i>Total In-County Class III Landfill Remaining Capacity (million tons)</i> H	Class III Landfill Daily Disposal Capacity Shortfall (Reserve) (TPD-6) I=G-H	
2018	95,996	65%	33,599	563	1,300	16,413	16,449	24,483	163	--
2019	96,457	65%	33,760	600	1,400	16,462	16,498	25,107	148	--
2020	97,589	65%	34,156	600	1,600	16,560	16,596	26,923	142	(10,326)
2021	96,017	65%	33,606	600	1,600	16,285	16,321	26,878	137	(10,557)
2022	96,362	65%	33,727	600	1,600	16,345	16,381	26,888	131	(10,506)
2023	97,739	65%	34,209	600	1,600	16,586	16,623	26,927	126	(10,304)
2024	99,491	65%	34,822	600	1,600	16,892	16,930	26,977	120	(10,048)
2025	101,194	65%	35,418	600	1,600	17,190	17,228	23,821	115	(6,593)
2026	103,693	65%	36,293	600	1,600	17,627	17,666	23,892	110	(6,226)
2027	104,844	65%	36,695	600	1,600	17,828	17,867	23,925	105	(6,058)
2028	106,052	65%	37,118	600	1,600	18,039	18,079	23,960	100	(5,881)
2029	107,257	65%	37,540	600	1,600	18,250	18,290	23,981	95	(5,691)
2030	108,540	65%	37,989	600	1,600	18,474	18,515	22,563	91	(4,048)
2031	109,840	65%	38,444	600	1,600	18,701	18,743	22,582	86	(3,839)
2032	111,173	65%	38,911	600	1,600	18,934	18,976	22,602	81	(3,625)
2033	112,542	65%	39,390	600	1,600	19,174	19,216	22,620	77	(3,404)

ASSUMPTIONS:

- Waste Generation is estimated using CalRecycle's Adjustment Methodology, utilizing population projection, employment and real taxable sales projections from UCLA's Longterm Forecast, July 2017.
- Daily Available Capacity from Transformation Facilities assume: (1) Southeast Resource Recovery Facility will continue at their current permitted daily capacity during the planning period and (2) Commerce Refuse to Energy Facility ceased its operation on June 2018. This scenario also assumes additional capacity will be available from potential EMSW facilities or other alternative technologies. 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.
- Total In-County Class III Landfill Available Capacity is calculated based on Maximum Permitted Daily Capacity (in blue text) for facilities without a restricted watershed or Expected Average Daily Tonnage for facilities with a restricted watershed. A "Clean Hands Waiver" was granted to Chiquita Canyon Landfill on March 17, 2016 to continue its operation while processing the landfill's new conditional use permit. On July 25, 2017, the Board of Supervisors approved a new Conditional Use Permit for the Landfill's Expansion Project. 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.
- This scenario considers the effect of Assembly Bill 1594 that removes diversion credit from green waste used as alternative daily cover (ADC) at landfills.
- 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.

ES TABLE 11: SCENARIO VI - Increase in Exports to Out-of-County Landfills (Excluding Waste-by-Rail Capacity)

Assuming Utilization of Existing In-County Class III Landfills and Transformation Facilities, Diversion Rate of 65%, Increase in Exports to Out-of-County Landfills (Including Potential Waste-by-Rail Capacity), Exports based on Existing Export Agreements

Year	Waste Generation Rate ¹ (TPD-6) A	Diversion Rate B	Total Daily Disposal Demand (TPD-6) C=A(1-B)	Imports from other Counties (TPD-6) D	Daily Available Capacity from Transformation Facilities ² (TPD-6) E	Exports to Out-of-County Landfills (TPD-6) F	Class III Landfill Daily Disposal Demand (TPD-6) G=C+D-E-F	Total In-County Class III Landfill Available Capacity ³ (tpd-6) <i>Total In-County Class III Landfill Remaining Capacity (million tons)</i> H	Potential Waste-by-Rail Capacity ⁴ I	Class III Landfill Daily Disposal Capacity Shortfall (Reserve) (TPD-6) J=G-H-I
2018	95,996	65%	33,599	563	1,300	16,413	16,449	24,483 163	--	--
2019	96,457	65%	33,760	600	1,400	18,000	14,960	24,856 149	--	--
2020	97,589	65%	34,156	600	1,400	18,000	15,356	26,721 143	--	(11,364)
2021	96,017	65%	33,606	600	1,400	18,000	14,806	26,631 138	--	(11,825)
2022	96,362	65%	33,727	600	1,400	18,000	14,927	26,651 133	--	(11,724)
2023	97,739	65%	34,209	600	1,400	18,000	15,409	26,729 127	--	(11,320)
2024	99,491	65%	34,822	600	700	18,000	16,722	26,943 121	--	(10,222)
2025	101,194	65%	35,418	600	0	19,000	17,018	23,787 117	--	(6,769)
2026	103,693	65%	36,293	600	0	19,000	17,893	23,929 112	--	(6,037)
2027	104,844	65%	36,695	600	0	19,000	18,295	23,995 107	--	(5,700)
2028	106,052	65%	37,118	600	0	19,000	18,718	24,064 102	--	(5,346)
2029	107,257	65%	37,540	600	0	19,000	19,140	24,119 97	--	(4,979)
2030	108,540	65%	37,989	600	0	19,000	19,589	22,653 92	--	(3,064)
2031	109,840	65%	38,444	600	0	19,000	20,044	22,691 87	--	(2,647)
2032	111,173	65%	38,911	600	0	19,000	20,511	22,730 82	--	(2,220)
2033	112,542	65%	39,390	600	0	19,000	20,990	22,769 77	--	(1,779)

ASSUMPTIONS:

- Waste Generation is estimated using CalRecycle's Adjustment Methodology, utilizing population projection, employment and real taxable sales projections from UCLA's Longterm Forecast, July 2018.
- Daily Available Capacity from Transformation Facilities assume: (1) Southeast Resource Recovery Facility will continue at their current permitted daily capacity during the planning period and (2) Commerce Refuse to Energy Facility ceased its operation on June 2018.
- Total In-County Class III Landfill Available Capacity is calculated based on Maximum Permitted Daily Capacity (in blue text) for facilities without a restricted washed or Expected Average Daily Tonnage for facilities with a restricted washed. A "Clean Hands Waiver" was granted to Chiquita Canyon Landfill on March 17, 2016 to continue its operation while processing the landfill's new conditional use permit. On July 25, 2017, the Board of Supervisors approved a new Conditional Use Permit for the Landfill's Expansion Project. 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.
- 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 additional capacity of the waste-by-rail system is excluded from this scenario.
- This scenario considers the effect of Assembly Bill 1594 that removes diversion credit from green waste used as alternative daily cover (ADC) at landfills.

ES TABLE 12: SCENARIO VII - All Solid Waste Management Options Considered Become Available

Assuming Utilization of Existing In-County Class III Landfills and Transformation Facilities, Increase in Diversion Rate (up to 75% by 2020), Utilization of Additional Alternative Technology Capacity, Increase in Exports to Out-of-County Landfills (Including Potential Waste-by-Rail Capacity), Exports based on Existing Export Agreements

Year	Waste Generation Rate ¹ (TPD-6) A	Diversion Rate B	Total Daily Disposal Demand (TPD-6) C=A(1-B)	Imports from other Counties (TPD-6) D	Potential Available Capacity from Alternative Technology Facilities ² (TPD-6) E	Exports to Out-of-County Landfills (TPD-6) G	Class III Landfill Daily Disposal Demand (TPD-6) H=C+D-E-F-G	Total In-County Class III Landfill Available Capacity ³ (tpd-6) <i>Total In-County Class III Landfill Remaining Capacity (million tons)</i> I	Potential Waste-by-Rail Capacity ⁴ J	Class III Landfill Daily Disposal Capacity Shortfall (Reserve) (TPD-6) K=H-I-J
2018	95,996	65%	33,599	563	1,300	16,413	16,449	24,483 <i>163</i>	--	--
2019	96,457	65%	33,760	600	1,400	16,000	16,960	25,182 <i>148</i>	--	--
2020	97,589	75%	24,397	600	1,600	16,000	7,397	25,422 <i>144</i>	--	(18,025)
2021	96,017	75%	24,004	600	1,600	16,000	7,004	25,358 <i>140</i>	4,000	(22,354)
2022	96,362	75%	24,090	600	1,600	16,000	7,090	25,372 <i>136</i>	4,000	(22,282)
2023	97,739	75%	24,435	600	1,600	16,000	7,435	25,429 <i>132</i>	4,000	(21,994)
2024	99,491	75%	24,873	600	1,600	16,000	7,873	25,500 <i>128</i>	4,000	(21,627)
2025	101,194	75%	25,299	600	1,600	16,000	8,299	22,364 <i>125</i>	4,000	(18,066)
2026	103,693	75%	25,923	600	1,600	16,000	8,923	22,466 <i>122</i>	4,000	(17,543)
2027	104,844	75%	26,211	600	1,600	16,000	9,211	22,513 <i>118</i>	4,000	(17,302)
2028	106,052	75%	26,513	600	1,600	16,000	9,513	22,563 <i>115</i>	4,000	(17,049)
2029	107,257	75%	26,814	600	1,600	16,000	9,814	22,605 <i>111</i>	4,000	(16,790)
2030	108,540	75%	27,135	600	1,600	16,000	10,135	22,657 <i>107</i>	4,000	(16,522)
2031	109,840	75%	27,460	600	1,600	16,000	10,460	22,710 <i>104</i>	4,000	(16,249)
2032	111,173	75%	27,793	600	1,600	16,000	10,793	22,764 <i>100</i>	4,000	(15,970)
2033	112,542	75%	28,135	600	1,600	16,000	11,135	22,818 <i>95</i>	4,000	(15,683)

ASSUMPTIONS:

- Waste Generation is estimated using CalRecycle's Adjustment Methodology, utilizing population projection, employment and real taxable sales projections from UCLA's Longterm Forecast, July 2017.
- Daily Available Capacity from Transformation Facilities assume: (1) Southeast Resource Recovery Facility will continue at their current permitted daily capacity during the planning period and (2) Commerce Refuse to Energy Facility ceased its operation on June 2018. It also assumes that additional capacity will be available from potential EMSW facilities or other alternative technologies. 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.
- Total In-County Class III Landfill Available Capacity is calculated based on Maximum Permitted Daily Capacity (in blue text) for facilities without a restricted watershed or Expected Average Daily Tonnage for facilities with a restricted watershed. A "Clean Hands Waiver" was granted to Chiquita Canyon Landfill on March 17, 2016 to continue its operation while processing the landfill's new conditional use permit. On July 25, 2017, the Board of Supervisors approved a new Conditional Use Permit for the Landfill's Expansion Project. 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.
- 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 2018.
- This scenario considers the effect of Assembly Bill 1594 that removes diversion credit from green waste used as alternative daily cover (ADC) at landfills.
- 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.



Projected Disposal Rate and Assessment of Disposal Capacity Needs

The anticipated disposal needs of the County cannot be met by pursuing a single alternative (i.e., transformation technologies, out-of-County disposal, utilization of the waste-by-rail system, etc.). Jurisdictions in the County must work on all fronts simultaneously in order to avert the disposal capacity shortfall in the short, medium, and long term. For example, Scenario VII demonstrates that with increases in diversion rates up to 75 percent, expansions of in-County landfills, exports to out-of-County facilities, the utilization of alternative technology capacity, the utilization of the waste-by-rail system or combinations thereof, a disposal capacity shortfall could be averted (See **ES Figure 2** and **3**).



Southeast Resource Recovery Facility (SERRF)

Transformation (waste-to-energy) technology is anticipated to continue to serve as an integral component of the County's solid waste management system in the future.

ALTERNATIVE TECHNOLOGIES

Chapter 5 (“Alternative Technologies”) describes efforts to research, promote, and develop alternatives to landfills, such as conversion technologies, as one of the key strategies for managing solid waste in the County. Conversion technologies refer to processes capable of converting post-recycled residual solid waste into useful products, including renewable and environmentally benign fuels, chemicals, marketable products, and other sources of clean energy. This Chapter also describes the benefits and challenges involved in implementing alternative technology facilities, as well as the County’s desire to continue forging pathways for such environmentally sustainable waste management systems.

Fostering the development of alternative technologies as alternatives to landfill disposal.

Chapter 6 (“**Facility Siting Criteria**”) provides an overview of the regulatory requirements associated with the siting of alternative technology facilities (e.g., conversion technology, transformation) and landfills. This chapter also identifies the siting criteria for developing new landfills and alternative technology facilities, as well as expanding existing facilities.

FACILITY SITING CRITERIA

Puente Hills Materials Recovery Facility



Locations of Proposed In-County Facilities

Chapter 7 (“Proposed In-County Facility Location & Description”) identifies the locations and provides information on proposed new landfills, and other alternative technology facilities (e.g., conversion technology, transformation), if any; and proposed expansions of existing Class III landfills, permitted inert waste landfills, and transformation facilities in the County and/or cities during the planning period, if any.

Potential Expansions and/or Developments of Class III Landfills, Permitted Inert Waste Landfills, and Alternative Technology Facilities

Chapter 7 (“Proposed In-County Facility Location & Description”) identifies areas/sites within the cities and the County unincorporated areas where the CSE’s Siting Criteria may be applicable as part of developing new Class III landfills, inert waste landfills, and alternative technology facilities (e.g., conversion technology, transformation), or expanding existing facilities.

The CSE requires that prior to the development of such facilities the facility proponent must: (1) show that the project is consistent with the CSE and the General Plan and/or land use permitting/zoning requirements; (2) undergo a vigorous site-specific assessment and permitting process at the Federal, State, and local levels; and (3) address all environmental concerns as mandated by CEQA. The local task force would determine whether a particular project is consistent with the CSE and its Siting Criteria through a Finding of Conformance process.

ES Table 14 lists proposed potential locations for alternative technology facilities in the County.



ES TABLE 14: Proposed Potential Locations For Alternative Technology Facilities In Los Angeles County

No.	Stakeholders	Site Name [Site Operation]	Site Location	Site Owner	Site Zoning	Site Acreage	Proposed Capacity (TPD-6)
1	Forum Engineering & Construction Inc.	N/A	12605-12615 Lopez Canyon Rd, Sylmar, CA 91342	Forum Engineering & Construction Inc.	Heavy Agriculture	35	N/A
2	City of Santa Monica Public Works	Santa Monica Pier	200 Santa Monica Pier Santa Monica, CA 90401	City of Santa Monica	Industrial	~0.25	N/A
3	City of Santa Monica Public Works	Santa Monica Airport	3223 Donald Douglas Loop S Santa Monica, CA 90405	City of Santa Monica	Industrial	1-3	N/A
4	City of Santa Monica Public Works	City of Santa Monica Public Works Corps Yard	2500 Michigan Avenue Santa Monica, 90404	City of Santa Monica	Industrial	~0.50	N/A
5	City Terrace Recycling LLC	N/A	1525 Fishburn Avenue Los Angeles, CA 90063	Robert M. Arsenian	Industrial	1.1	N/A
6	CR&R	CR&R Catalina	1 Dump Road Avalon, CA 90704	City of Avalon	Landfill	+/- 10	10-20
7	Interior Removal Specialists, Inc.	N/A	8990 Atlantic Avenue South Gate, CA 90280	CARERNCAR LLC	Industrial	1-2	100-500
8	Waste Resources Recovery, Inc.	N/A	357 W. Compton Boulevard Gardena, CA 90248	Waste Resource Recovery, Inc.	Industrial	0.3	50

Notes

1. The proposed potential locations were provided by site owners and their inclusion in the CSE was approved by the cities in which they are located or the County (for locations in unincorporated areas). The fact that a location is identified in this CSE as potentially suitable for siting an alternative technology facility does not automatically mean that an alternative technology facility will be sited at that area or location. If an alternative technology facility is sited at any of the proposed potential locations, no determinations have been made on the type of technology that will be used by the facility. Such technologies may include non-combustion thermal conversion technologies (such as gasification or pyrolysis) and/or anaerobic digestion.

2. "N/A" means information is not available.

GENERAL PLAN CONSISTENCY

Chapter 8 (“General Plan Consistency”) provides information regarding the consistency with the appropriate jurisdiction’s General Plan when siting any new potential Class III landfills, permitted inert waste landfills, and alternative technology facilities (e.g., conversion technology, transformation), and potentially expanding existing facilities as listed in **Chapter 7**.

Consistency with City & County General Plans

In the event it is determined that the solid waste disposal capacity provided by existing facilities within the County will be exhausted within the 15-year planning period, AB 939, as amended, requires the CSE to identify sites and areas for any new potential Class III landfills, inert waste landfills, alternative technology facilities (e.g., conversion technology, transformation), and potential expansions of existing facilities.

The authority for determining the consistency with the General Plan lies with the government of the local jurisdiction in which the project is located or is to be located. As such, the siting and protection of the areas identified for future use as solid waste facilities are subject to the land use regulations (e.g., General Plan, Zoning, and Land Use Permits) of the local jurisdictions. Accordingly, areas identified in the CSE are considered to be “reserved” if the:

- A. Local jurisdiction has made a specific determination that the proposed land use for the solid waste facility is consistent with its General Plan, or
- B. Use of the area as a solid waste facility is listed among the potential uses for the area in the local jurisdiction’s General Plan.

Otherwise, the identified areas are considered “tentatively reserved” and not consistent with the local jurisdiction’s General Plan.

The locations and areas identified as potentially suitable for locating alternative technology facilities are considered “tentatively reserved” for the purpose of the CSE. However, areas are required to be removed from the CSE when they are not brought into consistency with the local jurisdictions’ General Plan by the first five-year revision of the CoIWMP, or subsequent revisions. The local government with jurisdiction over the area may also remove “tentatively reserved” areas from the CSE by requesting the County to do so at the time of the next revision of the CSE.

The preceding CSE (dated June 1997 and approved by the former CIWMB in June 1998), identified the following sites as “reserved”: Antelope Valley Landfill Expansion, Chiquita Canyon Landfill Expansion, Elsmere Canyon Landfill, Lancaster Landfill Expansion, Puente Hills Landfill Expansion, and Sunshine Canyon Landfill Expansion (County unincorporated area). The preceding CSE identified the following sites as “tentatively reserved”: Blind Canyon, Scholl Canyon, and the Sunshine Canyon City/County Landfill Expansion (City of Los Angeles portion).

However, under the September 30, 2003, Board Motion Synopsis 5, the County Board of Supervisors passed a motion to remove Blind and Elsmere Canyon landfill sites from the CSE’s list of potential future landfill sites. Additionally, both landfill sites/ areas were not brought into consistency with the local jurisdiction’s General Plan by the first five-year revision or significant revisions of the CoIWMP. Therefore, both landfill sites are removed from the CSE list of future landfill sites. The previous Sunshine Canyon City/County Landfill Expansion (City of Los Angeles portion) proposed in 1997 was fully permitted and the subsequent proposed expansion of the landfill into a combined City/County Sunshine Canyon Landfill was also fully permitted. The Antelope Valley Landfill Expansion, Chiquita Landfill Expansion, Lancaster Landfill Expansion, and Puente Hills Expansion were also removed from the CSE since the expansions have already been fully permitted.



OUT-OF-COUNTY DISPOSAL

Chapter 9 (“Out-of-County Disposal Facilities”) identifies existing and proposed landfills located in adjacent counties that may be available for use by jurisdictions in the County (see **ES Table 15**).

Furthermore, to complement the County’s solid waste management infrastructure and ensure that solid waste disposal continues to be provided throughout the 15-year planning period as well as further into the future, the

utilization of out-of-County disposal facilities are essential. **Chapter 9** identifies and describes out-of-County Class III landfills, and other facilities (including those with waste-by-rail capabilities), that may be available for the disposal of waste generated in the County. As a part of this analysis, this chapter also describes the need for facilities within the County that have waste-by-rail capabilities.

Scholl Canyon Landfill

ES TABLE 15: Summary Of Existing and Proposed New Out-Of-County Class III Landfills (Located In California) Utilized by Los Angeles County in 2018 Potentially Available For Out-Of-County Disposal¹

Facility Location Owner/Operator	Rail Access	Distance from Los Angeles County	2018 Average Disposal from Los Angeles County (tpd-6)	Remaining Permitted Disposal Capacity (million tons)	Remaining Design Life (years)	Tipping Fees (per ton)	Import Surcharge (per ton)
<u>Mesquite Regional Landfill</u> Imperial County County Sanitation District No. 2 of Los Angeles County	YES	210 miles	—	660	109	\$105-\$125	\$1 (min)
<u>H.M. Holloway Landfill, Inc.</u> Kern County Holloway Environmental, LLC.	YES	156 miles	1,141	3	10	\$20	—
<u>Frank R. Bowerman Sanitary Landfill</u> Orange County O.C. Waste and Recycling	NO	45 miles	7,593	104	34	\$59.05	Varies
<u>Olinda Alpha Sanitary Landfill⁷</u> Orange County O.C. Waste and Recycling	NO	30 miles	6,858	16	7	\$58.18 (Non-Contract) \$34.18 (Contract)	Varies
<u>Prima Deshecha Sanitary Landfill</u> Orange County O.C. Waste and Recycling	NO	60 miles	1,747	80	83	\$58.18	—
<u>El Sobrante Landfill</u> Riverside County USA Waste Services of California, Inc.	NO	60 miles	12,050	148	43	\$35.91	\$3.56
<u>Mid-Valley Sanitary Landfill</u> San Bernardino County San Bernardino County Solid Waste Management Division	NO	53 miles	3,616	37	14	\$31.26 - \$47.94	—
<u>San Timoteo Sanitary Landfill</u> San Bernardino County San Bernardino County Solid Waste Management Division	NO	67 miles	906	7	24	\$31.26 - \$47.94	—
<u>Simi Valley Landfill & Recycling Center</u> Ventura County Waste Management of California, Inc.	NO	50 miles	4,087	50	54	\$68.00 - \$72.00	\$5.00
TOTAL			37,998				

¹ For additional details on out-of-County Class III Landfills including average daily disposal rate, permitted operating days per week, permitted daily disposal, and associated comments see Table 9-1 in Chapter 9 of the CSE.



FINDING OF CONFORMANCE

Chapter 10 (“Finding of Conformance”) describes the procedure through which, Class III landfills, inert waste landfills, and alternative technology facilities (e.g., conversion technology, transformation) may obtain a Finding of Conformance (FOC) with the CSE, from the local task force. Non-disposal facilities are not subject to review and approval by the Task Force.

The Cities and the County formed the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force (Task Force) in July 1990 pursuant to the requirements of AB 939 (Section 40950 of the PRC). The Task Force membership consists of 17 voting members, each of whom is knowledgeable in one or more aspects of solid waste management or in such related fields as environmental quality, resource or energy conservation, and land use. **Table 1-2** of the CSE provides a summary of the Task Force’s roles and responsibilities in the CoIWMP.

The FOC process (1) provides a mechanism for the inclusion of new and/or expansions of the existing facilities into the CSE; (2) ensures that the Siting Criteria contained in the CSE are applied and complied with and that all new and/or expansions of the existing facilities are consistent with the CSE and its Siting Criteria as listed in **Chapter 6** and **Attachment 6A** of the CSE; and (3) provides a forum through which the public, local jurisdictions, public organizations, businesses, and industry may voice their opinions regarding each individual project.

Section 50001 of the PRC requires that after CalRecycle approves a CoIWMP, no person shall establish a new or expand an existing solid waste disposal facility in the County unless the proposed facility is identified in and is consistent with an approved CSE, or amendment thereof. The FOC process is used to accomplish this mandate in the County.



CONCLUSION

The various scenario analyses in the CSE demonstrate that the County could meet its disposal capacity needs by promoting extended producer responsibility, continuing to enhance diversion programs and increasing the Countywide diversion rate, and developing conversion and other alternative technologies. Additionally, by utilizing available or planned out-of-County disposal facilities, and developing infrastructure such as the waste-by-rail system, to facilitate exportation of waste to out-of-County landfills, the County may further ensure adequate disposal capacity is available throughout the planning period.



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