Draft Environmental Impact Report

STATE CLEARINGHOUSE #1995011048



A Multi-Faceted Long-Term Solid Waste Management Plan

Countywide Integrated Waste Management Plan







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Acronyms and Abbreviations



ACRONYMS AND ABBREVIATIONS

ABBREVIATIONS		C&D	Construction and Demolition
°F	Fahrenheit	C/NR	Conservation and Natural Resources
μPa	micropascals	CAA	Clean Air Act
		CAFÉ	Corporate Average Fuel Economy
AADT	average annual daily traffic	Cal-EPA	California Environmental Protection Agency
AAQS	ambient air quality standards	CalGreen	California Green Building Standards
AB	Assembly Bill		Code
ADA	Americans with Disabilities Act	CalRecycle	California Department of Resources Recycling and Recovery
AEP	annual exceedance probability	Caltrans	California Department of Transportation
AIA	Airport Influence Area	CAPs	Climate Action Plans
AIRS	Aerometric Information Retrieval System	СВС	California Building Code
ALUC	Los Angeles County Airport Land Use	CCAP	Community Climate Action Plan
	Commission	CCAR	California Climate Action Registry
APS	Accessible Pedestrian Signals	ССС	California Coastal Commission
AQ	Air Quality	CCR	California Code of Regulations
AQMP	Air Quality Management Plan	CDFW	California Department of Fish and
AST	Aboveground Storage Tank		Wildlife
AT	alternative technology	CDI	construction, demolition, and inert
ATAS	Alternative Technology Advisory Subcommittee	CDL	Clandestine Drug Lab
AWAGMD		CDP	Coastal Development Permit
AVAQMD	Antelope Valley Air Quality Management District	CEC	California Energy Commission
		CEG	Conditionally Exempt Generator
BACMs	Best Available Control Measures	CEQA	California Environmental Quality Act
BACT	best available control technology	CERCLA	Comprehensive Environmental Response, Compensation, and
BAT	best available technology		Liability Act
Basin	South Coast Air Basin	CERCLIS	Comprehensive Environmental Response, Compensation, and
BAU	business-as-usual		Liability Information System
ВСТ	best conventional technology	CESA	California Endangered Species Act
BMPs	Best Management Practices	CF ₄	perfluoromethane
BRT	Bus Rapid Transit	CFCs	Chlorofluorocarbons
		CFR	Code of Federal Regulations

C₂F₆

perfluoroethane

CSE DEIR - LIST OF ACRONYMS jX

CH ₄	methane	DOGGR	Division of Oil, Gas, and Geothermal Resources
CIWMB	California Integrated Waste Management Board	DOMS	DOGGR's Online Mapping System
CIWMP	Countywide Integrated Waste	DOT	Department of Transportation
CMAQ	Management Plan Congestion and Mitigation and Air	DRECP	Desert Renewable Energy Conservation Plan
	Quality Program	DTSC	California Department of Toxic
CMP	Congestion Management Program		Substances
CNDDB	California Natural Diversity Database	DWR	Department of Water Resources
CNEL	Community Noise Equivalent Level		
CNPS	California Native Plant Society	EAN	Enforcement Agency Notification
СО	carbon monoxide	ED	Economic Development
CO ₂	carbon dioxide	EDD	Employment Development Department
County	County of Los Angeles	EEP	Energy and Environmental Program
CPUC	California Public Utilities Commission	EIR	Environmental Impact Report
CRA	Coastal Resource Area	EMSW	Engineered Municipal Solid Waste
CREF	Commerce Refuse-to-Energy Facility	EPA	Environmental Protection Agency
CRHR	California Register of Historical Resources	ERNS	Emergency Response Notification
CRPRs	California Rare Plant Ranks		System
CRT	cathode ray tube	ESAs	Ecologically Sensitive Areas
CSDs	Community Standards Districts	ESCP	Erosion and Sediment Control Plan
CSE	Countywide Siting Element		
CSMD	Consolidated Sewer Maintenance	FAA	Federal Aviation Administration
CUP	District Conditional Use Permit	FC	Federal Candidate for a Proposed Species
CWA	Clean Water Act	FE	Federally Endangered
CWA	Clean Water Act	FEMA	Federal Emergency Management Agency
dB	Decibel	FESA	Federal Endangered Species Act
dBA	A-Weighted Decibel	FHSZs	fire hazard severity zones
DEHP	diethylhexylphthalate	FID	Facility Inventory Database
DEIR	Draft Environmental Impact Report	FINDS	Facility Index Database System
DIPE	Diisopropyl ether	FIRM	Flood Insurance Rate Map
DNL	Day-Night Sound Level	FOC	Finding of Conformance
DOF	Department of Finance		

FPE	Federally Proposed as Endangered	IPCC	Intergovernmental Panel on Climate
FPT	Federally Proposed as Threatened	IQ	Change
FRA	Federal Railroad Administration		intelligence quotient
FRAs	Federal Responsibility Areas		
FT	Federally Threatened	JOS	Joint Outfall System
FTA	Federal Transit Administration		
FUDS	Formally Used Defense Sites	kg	kilograms
GBMP	Groundwater Basin Master Plan	LACFCD	Los Angeles County Flood Control District
GHG	Greenhouse gas	LACoFD	Los Angeles County Fire Department
GIS	geographic information system	LACSD	Los Angeles County Sanitation District
GWH	gigawatt-hours	LACWD	The Los Angeles County Waterworks Districts
H ₂ S	Hydrogen sulfide	LADWP	Los Angeles Department of Water and Power
HCFCs	Hydrochlorofluorocarbons	LASAN	Los Angeles Bureau of Sanitation
HCP HFC	habitat conservation plan Hydrofluorocarbons	LASD	Los Angeles County Sheriff's Department
HHW	household hazardous waste	LAX	Los Angeles International Airport
HHWE	Household Hazardous Waste Element	LCP	Local Coastal Program
HMAs	Hillside Management Areas	Ldn	Day-Night Sound Level
HMIRS	Hazardous Materials Incident Report	LEA	local enforcement agency
	System	Leq	Equivalent Continuous Noise Level
НММР	Habitat Mitigation and Monitoring Plan	Ln	Statistical Sound Level
HOV	High Occupancy Vehicle	LOS	level of service
HRA	health risk assessment	LQG	Large Quantity Generator
HSC	Health & Safety Code	LRAs	Local Responsibility Areas
HVAC	heating, ventilation, air conditioning	LRTP	Long Range Transportation Plan
HWP	Hazardous Waste Permits	LU	Land Use
Hz	Hertz	LUST	Leaking Underground Storage Tank
1	Interstate	МВТА	Migratory Bird Treaty Act
IDEFOs	inert debris engineered fill operations	MDAB	Mojave Desert Air Basin
IOUs	investor-owned utilities	MDAQMD	Mojave Desert Air Quality Management District

CSE DEIR - LIST OF ACRONYMS Xİ

Metro	Los Angeles County Metropolitan Transportation Authority	NOx	nitrogen oxides	
MGD	million gallons per day	NPDES	National Pollutant Discharge Elimination System	
MLD	Most Likely Descendent	NPL	National Priority List	
MMCF	million cubic feet	NRHP	National Register of Historic Places	
MMRP	Mitigation Monitoring and Reporting	INKIIF	National Register of Historie Flaces	
	Program	O ₃	ozone	
MMTCO2e	million metric tons of CO ₂ equivalent	OEHHA	Office of Environmental Health Hazard	
MOU	memorandum of understanding	OLIMA	Assessment	
MPOs	metropolitan planning organizations	OEM	Office of Emergency Management	
MRF	materials recovery facility	ОНР	California Office of Historic	
MRZs	Mineral Resource Zones		Preservation	
MS4	Municipal Separate Storm Sewer	OPR	Office of Planning and Research	
MCI	System mean sea level	OSHA	Occupational Safety and Health Administration	
MSW		OWCMP	Oak Woodlands Conservation	
MSW	municipal solid waste		Management Plan	
MT	metric tons	Pb	lead	
MWD	Metropolitan Water District	PCBs	polychlorinated biphenyls	
N O	Nitrous svids	PCE	perchloroethylene	
N ₂ O	Nitrous oxide	PEC	potential environmental concern	
NAHC	Native American Heritage Commission	PFCs	Perfluorocarbons	
NCCP	natural communities conversation plan		Los Angeles County	
NCCPA	California Natural Community	PM _{2.5}	fine inhalable particulate matter	
	Conservation Planning Act	PM ₁₀	coarse inhalable particulate matter	
NDFE	Non-Disposal Facility Element	POTW	Publicly Owned Treatment Works	
NFIP	National Flood Insurance Program	ppd	pounds per person per day	
NFRAP	No Further Remedial Action Planned	ppb	parts per billion	
NHMLAC	Natural History Museum of Los Angeles County	ppm	parts per million	
NMOC	non-methane organic compounds	PRC	Public Resources Code	
NO	nitric oxide	PW	Public Works, Los Angeles County	
NO ₂	nitrogen dioxide	DCD	Degional Community Disc	
NOD	Notice of Determination	RCP	Regional Comprehensive Plan Resource Conservation and Recovery	
NOI	Notice of Intent		Act	
NOP	Notice of Preparation	RHNA	Regional Housing Needs Allocation	

RHNP	Regional Housing Need Plan	SO ₂	sulfur dioxide
Roadmap	Roadmap to a Sustainable Waste	SO ₄	Sulfates
	Management Future	SO _x	sulfur oxides
ROG	reactive organic gases	SoCAB	South Coast Air Basin
RTP/SCS	Regional Transportation Plan/Sustainable Communities	SQG	Small Quantity Generator
	Strategy	SR	State Route, State Rate
		SRAs	State Responsibility Areas
SAFE	Solvent/ Automotive/ Flammable/ Electronics	SRRE	Source Reduction and Recycling Element
SB	Senate Bill	SSC	California Species of Special Concern
SB X7-7	Senate Bill 7 of Special Extended Session 7	SSMP	Sewer System Management Plan
SCAG	Southern California Association of Governments	SSRE	Source Reduction and Recycling Elements
SCAQMD	South Coast Air Quality Management	ST	State Threatened
	District	STIP	the State Transportation Improvement Program
SCE	Southern California Edison	STLCs	Soluble Threshold Limit
SCE	State Candidate for Endangered		Concentrations
SCGC SCRRA	' '	SUSMP	Standard Urban Stormwater Mitigation Plan
	Authority	SWEEPS	Statewide Environmental Evaluation
SCS	Sustainable Communities Strategy		and Planning System
SCT	State Candidate for Threatened	SWFP	Solid Waste Facilities Permit
SE	State Endangered	SWIRP	Solid Waste Integrated Resource Plan
SEAs	Significant Ecological Areas	SWIS	Solid Waste Information System
SEMS	Superfund Enterprise Management	SWP	State Water Project
	System	SWPPP	Storm Water Pollution Prevention Plan
SERRF	Southeast Resource Recovery Facility	SWQDV	Stormwater Quality Design Volume
SF ₆	Sulfur Hexafluoride	SWRCB	State Water Resources Control Board
SFP	State Fully Protected		
SHRC	State Historical Resources Commission	TACs	toxic air contaminants
SIC	Standard Industrial Classification	TCE	trichloroethylene
SIP	State Implementation Plan	TCRP	Traffic Congestion Relief Program
SLIC	Spills, Leaks, Investigations, and	TMDL	total maximum daily load
	Cleanup	tpd	tons per day
SMARA	Surface Mining and Reclamation Act	tpy	tons per year

CSE DEIR - LIST OF ACRONYMS XIII

TRIS Toxic Chemical Release Inventory $\mu g/m^3$ micrograms per cubic meter

System

TSDF treatment, storage, or disposal of

waste

TTLC Total Threshold Limit Concentrations

UBC Unified Building Code

UFPs ultrafine particulates

US United States

USACE United States Army Corps of

Engineers

USFS United States Forest Service

USFWS United States Fish and Wildlife

Service

USGS United States Geological Survey

UST Underground Storage Tank

UWMP Urban Water Management Plan

VHFHSZs very high fire hazard severity zones

VHT vehicle hours traveled

VMP Vegetation Management Program

VMT vehicle miles traveled

VOCs volatile organic compounds

WBR Waste-by-Rail

WDID Waste Discharge Identification

WDRs Waste Discharge Requirements

WDS Waste Discharge System

WMUDS Waste Management Unit Database

System

WQC Water Quality Certification

WQOs water quality objectives

WSA water supply assessment

WWD40 Waterworks District 40









1.0 EXECUTIVE SUMMARY



1.1 INTRODUCTION

This Environmental Impact Report (EIR) addresses the environmental effects associated with the implementation of the proposed Countywide Siting Element Revision (CSE Revision or Proposed Plan). The California Environmental Quality Act (CEQA) requires that local government agencies, prior to taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. An EIR is a public document designed to provide the public, and local and state governmental-agency decision makers, with an analysis of potential environmental impacts to support informed decision-making.

1.2 ENVIRONMENTAL PROCEDURES

This EIR has been prepared in accordance with CEQA. Because the CSE is a long-term plan that serves as a policy document for future facilities, it was determined that an EIR is the appropriate document to address the CEQA requirements. This EIR has been prepared in accordance with CEQA, Public Resources Code Section 21000 et seq., the CEQA Guidelines (Section 15000 et seq.) as promulgated by the California Resources Agency and the Governor's Office of Planning and Research. Per Section 15367 of the CEQA Guidelines, a Lead Agency is defined as "the public agency which has the principal responsibility for carrying out or approving a project." The Los Angeles County (County) Public Works is the Lead Agency for compliance with CEQA for this EIR. Section 15002 of the CEQA Guidelines states that the basic purposes of CEQA are to:

- 1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
- 2. Identify the ways that environmental damage can be avoided or significantly reduced.
- **3.** Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- **4.** Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

This document was prepared as a programmatic EIR consistent with the CEQA Guidelines (Section 15168).



1.3 EIR ORGANIZATION

The EIR has been organized as described below.

Section 1. Executive Summary: Summarizes the background and description of the Proposed Plan, the format of this EIR, project alternatives, any issues remaining to be resolved, and the potential environmental impacts and mitigation measures.

Section 2. Introduction: Describes the purpose of this EIR, background on the Proposed Plan, the Notice of Preparation (NOP), the use of incorporation by reference, and Final EIR certification.

Section 3. Project Description: A detailed description of the Proposed Plan, the objectives of the Proposed Plan, project location, approvals anticipated to be included as part of the project, and the intended uses of this EIR.

Section 4. Environmental Setting: A description of existing environmental conditions within the County (Plan Area) as they exist at the time the NOP is published (2014), from both a regional and flocal perspective. The environmental setting provides baseline physical conditions from which the lead agency determines the significance of environmental impacts resulting from the Proposed Plan.

Section 5. Environmental Analysis: Provides, for each environmental parameter analyzed, a description of the thresholds used to determine if a significant impact would occur; the methodology to identify and evaluate the potential impacts of the Proposed Plan; the existing environmental setting; the potential significant impacts of the Proposed Plan; the level of significance after mitigation is incorporated and the potential cumulative impacts associated with the Proposed Plan and other existing, approved, and proposed development in the Plan Area.

Section 6. Significant Unavoidable Adverse Impacts: Describes the significant unavoidable adverse impacts of the Proposed Plan.

Section 7. Alternatives: Describes the impacts of the alternatives to the Proposed Plan, including the No Project Alternative, Alternative 1 – Potential In-County Landfill Expansions, and Alternative 2 – Increase in Exports to Out-of-County Landfills.

Section 8. Impacts Found Not to be Significant: Briefly describes the potential impacts of the Proposed Plan that were determined not to be significant and were therefore not discussed in detail in this EIR.

Section 9. Significant Irreversible Changes due to the Proposed Project: Describes the significant irreversible environmental changes associated with the Proposed Plan.

Section 10. Growth Inducing Impacts of the Proposed Project: Describes the ways in which the Proposed Plan would cause increases in population or employment that could result in new physical or environmental impacts.

Section 11. Organizations and Persons Consulted: Lists the people and organizations that were contacted during the preparation of this EIR.

Section 12. Qualifications of Persons Preparing EIR: Lists the people who prepared this EIR.

Section 13. Bibliography: A bibliography of the technical reports and other documentation used in the preparation of this EIR.

Appendices: Presents data supporting the analysis or contents of the EIR including the NOP and NOP comment letters, Initial Study, and Proposed Plan.

1.4 PROJECT LOCATION

The implementation of the Proposed Plan would affect the entire County (Plan Area), which is approximately 4,100 square miles¹. The Plan Area encompasses the unincorporated portions of the County and 88 incorporated cities of the County. The "Plan Area" for the purposes of this environmental document is contiguous with the limits of Los Angeles County. The Plan Area is bounded by Kern County to the north, San Bernardino County to the east and Ventura County to the west. To the south, the Plan Area is bounded by Orange County to the southeast and the Pacific Ocean to the southwest. San Clemente and Santa Catalina islands are both encompassed within the territory of the County; thus, they are considered part of the Plan Area.

To facilitate a consistent discussion for the geographical areas that could be affected with implementation of the Proposed Plan, the following terminologies are used throughout the EIR:

 Plan Area: The Plan Area encompasses the unincorporated portions of the County and 88 incorporated cities of the County, including all existing solid waste management facilities (e.g., landfills); and

EIR Focus Area: The Proposed Plan includes the potential for up to nine new alternative technology (AT) facilities within the Plan Area. These potential future projects would occur at up to nine site locations (herein referred to as EIR Focus Area) within the Plan Area and are located within multiple cities and unincorporated areas of the County as further described in Section 3.4.

1.5 PROJECT SUMMARY

The County is seeking to revise the CSE, a long-term planning and policy document, which identifies the proposed management and disposal of solid waste generated in the County in accordance with the Countywide Integrated Waste Management Plan (CIWMP 1997). The purpose of the revised CSE is to update strategies, policies, and guidelines to address solid waste disposal needs of the County for a 15-year planning period as mandated by a California Integrated Waste Management Act of 1989 (Assembly Bill 939). The existing CSE, dated 1997, was approved in 1998. Similar to the 1997 CSE, the CSE Revision serves as a policy document rather than a specific development program. The CSE Revision contains goals and policies and establishes a Siting Criteria (Appendix 6-A of the CSE) for the development of new solid waste disposal facilities and expansion of existing solid waste disposal facilities over the 15-year planning period (2018 to 2033). The Proposed Plan identifies nine potential alternative technology (AT) facilities.

1.5.1 Subsequent Project-Level CEQA Review

Prior to implementation of any of the solid waste disposal facilities contemplated under the CSE, the facility proponent (or future owner/operator) would be required to obtain appropriate discretionary approvals and permits. The specific discretionary approvals and permit requirements would be determined once project-specific engineering, design and operations plans become available. Those plans should identify, at a minimum, facility type, processes that take place, type of accepted materials, substances used, substances emitted and the environmental impact of substances handled or emitted as well as operational impacts. Although potential locations have been identified for new AT facilities, the types of facilities are not known. In this context, subsequent project-level CEQA review is contemplated in conjunction with the following:

¹ Land area is the size, in square units (metric and nonmetric) of all areas designated as land in the Census Bureau's national geographic (TIGER ®) database.

- Land Use Entitlements. For a proponent carrying out a project, the process by which a land use entitlement is obtained commences with the submission of an application to the local jurisdiction's planning division. The land use entitlements would be identified during a site plan review process and may include land use approvals such as a General Plan Amendment, Conditional Use Permit (CUP), Zone Change, or Variance.
- Technical Operating Permits. The regulations governing Class III landfill activities and potential AT facilities are interrelated and, in some cases, overlapping. Several agencies have permit and enforcement authority over the operation of a solid waste facility. Technical operating permits would include at a minimum Waste Discharge Requirements (WDRs) where applicable, a Solid Waste Facility Permit (SWFP), and Air Quality Permits to Construct and Operate. Other resource agency approvals may also be required depending on the specific site.
- Finding of Conformance (FOC). Solid waste disposal facilities that are not identified in the Siting Element must obtain a Finding of Conformance with the CSE from the County's Solid Waste Management Committee/Integrated Waste Management Task Force (Task Force). The purpose of the FOC process is to: (1) provide a mechanism for the inclusion of new facilities and/or expansion of existing facilities into the CSE; (2) ensure that the Siting Criteria contained in the CSE are applied, and that all new facilities and/or expansion of existing facilities are consistent with the CSE and its Siting Criteria and (3) provide a forum where the public, local jurisdictions, public organizations, businesses, and industry may voice their opinions regarding each individual project.

1.6 SUMMARY OF PROJECT ALTERNATIVE

As described in Section 7 of this EIR, three alternatives were considered but eliminated from further consideration in this EIR:

- Utilization of Existing Landfill Disposal Capacity does not provide sufficient capacity for period.
- Meeting CalRecycle's Statewide Disposal Target of 2.7 Pounds per Person per Day (ppd) – aggressive diversion to meet 2.7 ppd not a reasonable assumption.
- No Utilization of AT Capacity limits options to additional In or Out-of-County disposal capacity to prevent shortfall during planning period.

In addition, three project alternatives were identified and analyzed in detail for relative impacts as compared to the proposed CSE Revision:

- No Project Alternative (Status Quo)
- Alternative 1 Potential In-County Landfill Expansion
- Alternative 2 Increase in Exports to Out-of-County Landfills

The following presents a summary of each of the alternatives analyzed in the EIR. Please refer to Section 7 of this EIR for a complete discussion of how the alternatives were selected and the relative impacts associated with each alternative.

1.6.1 No Project Alternative (Status Quo)

The No Project Alternative assumes a continuation of the status quo under the existing 1997 CSE. Under the No Project Alternative, the County would leverage existing permitted In- and Out-of-County disposal facilities (excluding disposal at inert waste landfills) similar to existing conditions. Similar to the proposed CSE Revision, continued jurisdiction's diversion efforts (increasing countywide diversion rate to 75 percent by 2020 and thereafter) would be necessary to maintain sufficient disposal capacity reserve under this alternative. No In-County landfill expansions or expanded AT facilities would occur under this alternative. Under the No Project Alternative, the County would not experience a disposal capacity shortfall during the planning period.

Over the long term, the No Project Alternative would provide less than half the landfill disposal capacity reserve in 2033 when compared to the proposed CSE Revision. Additionally, the No Project alternative would limit the disposal capacity options available to the County.

1.6.2 Alternative 1 - Potential In-County Class III Landfill Expansion

Alternative 1, Potential In-County Class III Landfill Expansion, includes a solid waste management strategy that places greater emphasis on expanded In-County landfill capacity. Similar to the proposed CSE Revision, this alternative assumes the following during the planning period: (1) use of existing In-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) continued jurisdiction's diversion efforts (increasing countywide diversion rate to 75 percent by 2020 and thereafter); and (3) utilization of current exports to out-of-County landfills. No new AT facilities would be constructed under this alternative. To provide the required In-County landfill capacity, this alternative would include expansion at one or more existing landfills within the County to compensate for the disposal capacity provided by AT facilities under the Proposed Plan. This alternative would provide sufficient disposal capacity during the planning period.

1.6.3 Alternative 2 - Increase in Exports to Out-of-County Landfills

Alternative 2, Increase in Exports to Out-of-County Landfills, includes a solid waste management strategy that places greater emphasis on expanded Out-of-County landfill capacity. Similar to the proposed CSE Revision, this alternative assumes the following during the planning period: (1) use of existing In-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) continued jurisdiction's diversion efforts (increasing countywide diversion rate to 75 percent by 2020 and thereafter); and (3) increase in exports to out-of-County landfills (including additional disposal capacity through the waste-by-rail system). No AT facilities would be constructed as part of this alternative during the planning period. The reduction in AT capacity would be accommodated by an increase in Out-of-County exports to adjacent jurisdictions. This alternative would be capable of providing the required disposal capacity over the planning period.

1.6.4 Environmentally Superior Alternative

CEQA requires a lead agency to identify an "environmentally superior alternative" to the proposed project. In cases where the "No Project" Alternative is environmentally superior, CEQA requires the lead agency to identify environmentally superior amongst the actionable alternatives under consideration. For this EIR, the County considered three alternatives to the Proposed Plan: (1) No Project Alternative (Status Quo); (2) Alternative 1 – Potential In-County Class III Landfill Expansion; and (3) Alternative 2 – Increase in Exports to Out-of-County Landfills.

Following the County's consideration of these alternatives, the County concluded that although the No Project Alternative reduces some of the impacts identified for the Proposed Plan; it also results in greater impacts from GHG emissions, truck emissions, and plan consistency compared to the Proposed Plan. Additionally, the No Project Alternative fails to meet most of the project goals and objectives.

Alternatives 1 and 2 provide slight variations in the way the County achieves its total daily disposal capacity and assume the same level of solid waste diversion through maximizing reuse, recycling and composting programs. These alternatives would essentially replace the increase in daily AT disposal capacity as proposed under the CSE Update with additional In- or Out-of-County landfill capacity. As a result, these alternatives are unlikely to avoid significant air quality impacts and would negate the opportunity for lowering GHG emissions in the future, as proposed under the CSE Update. For these reasons, the County concluded that the Proposed Plan is environmentally superior. Of the alternatives considered, Alternative 2 is considered environmental superior to Alternative 1 given that it avoids significant environmental impacts associated with In-County landfill expansion (e.g. aesthetics, biological resources, etc.).

1.7 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the Proposed Plan, the major issues to be resolved include decisions by the lead agency as to the following:

- Whether this EIR adequately describes the environmental impacts of the Proposed Plan.
- Whether the identified goals, policies, or mitigation measures should be adopted or modified.
- Whether there are any alternatives to the Proposed Plan that would substantially lessen any of the significant impacts of the Proposed Plan and achieve most of the basic project objectives.

1.8 AREAS OF CONTROVERSY

No areas of controversy were identified during the initial scoping process for this EIR and none have been identified during preparation of this document.

1.9 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION

Table 1-1 summarizes the conclusions of the environmental analysis contained in this EIR and are relevant to the Proposed Plan, not individual projects/facilities contemplated in the Plan. Impacts are identified as significant or less than significant and for all significant impacts, mitigation measures are identified. The level of significance after implementation of the mitigation measures is also presented.

Sites and projects contemplated in the Proposed Plan will be subject to all requirements of CEQA; Federal, State, regional, and local rules and regulations (e.g., land use and solid waste facility permitting); environmental justice requirements; and maintain consistency with the jurisdictions' General Plan.

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Table 1-1. Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Aesthetics			
Impact 5.1-1: The development of future facilities contemplated under the Proposed Plan could have a substantial adverse effect on a scenic vista.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE, which requires new facilities to be compatible with the land use and zoning requirements in the area. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facility must be in conformance with local land use and zoning requirements of a county or city planning agency. 			
 Alternative Technology Facilities: These facilities should be located where the zoning and existing land use are compatible with the proposed use. 			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Impact 5.1-2: The development of future facilities contemplated under the Proposed Plan could substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE, which requires new facilities to be compatible with the land use and zoning requirements in the area. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facility must be in conformance with local land use and zoning requirements of a county or city planning agency. 			
 Alternative Technology Facilities: These facilities should be located where the zoning and existing land use are compatible with the proposed use. 			
All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Impact 5.1-3: The development of future facilities contemplated under the Proposed Plan could substantially degrade the existing visual character of the site and its surroundings.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE, which requires new facilities to protect aesthetic resources and to be compatible with the land use and zoning requirements in the area. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facility must be in conformance with local land use and zoning requirements of a county or city planning agency. 			
 Alternative Technology Facilities: These facilities should be located where the zoning and existing land use are compatible with the proposed use. 			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Impact 5.1-4: The development of future facilities contemplated under the Proposed Plan could create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE, which requires new facilities to be compatible with the land use and zoning requirements in the area. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facility must be in conformance with local land use and zoning requirements of a county or city planning agency. 			
 Alternative Technology Facilities: These facilities should be located where the zoning and existing land use are compatible with the proposed use. 			
All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			
Air Quality			
Impact 5.2-1: The development of future facilities contemplated under the Proposed Plan would not conflict with or obstruct implementation of the applicable air quality plan.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE, which requires new facilities to be compatible with the land use and zoning requirements in the area. The following siting criteria would apply to potential future facilities:			
All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			
Air Quality			

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation				
mpact 5.2-2: The development of future facilities contemplated under the roposed Plan could violate an air quality standard or contribute substantially to n existing or projected air quality violation.	Potentially Significant	Potentially Significant	Potentially Significant		Significant and Unmitigable		
		■ Limits construction-related fugitive dust through the following:					
		□ Minimize land disturbance;					
		□ Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes;					
		□ Cover trucks when hauling dirt;					
		☐ Stabilize the surface of dirt piles if not removed immediately;					
		☐ Limit vehicular paths on unpaved surfaces and stabilize any temporary roads; and					
		☐ Use watering trucks to minimize dust (watering should be sufficient to confine dust plumes to the project work areas).					
						Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. Prepare a plan for approval by the applicable air district demonstrating achievement of the applicable percent reduction for a CARB-approved fleet, including coordinated truck routes that will minimize the total number of truck routes and trucks as well as lengths of trips, as appropriate.	
		 Develop a traffic plan to minimize traffic flow interference from construction activities. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites. 					
		As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain CARB Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the CARB or the District to determine registration and permitting requirements prior to equipment operation at the site.					

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		AQ-2 Air Emission Reduction Measures during Operations. Consistent with the provisions of Section 15091 of the State CEQA Guidelines, the County has identified mitigation measures that are within the jurisdiction and authority of the CARB, the County, local AQMDs, and other regulatory agencies (e.g., cities). Where the Lead Agency has identified that operational emissions for a future project has the potential to violate an air quality standard or contribute substantially to an existing air quality violation, the Lead Agency shall consider the integration of the following measures, or other comparable measures, to facilitate consistency with plans for attainment of the NAAQS and CAAQS, as applicable and feasible.	
		During the facility design phase, a review of local AQMD rules shall be conducted to determine site-specific permit requirements for waste processing or handling facilities that may emit or potentially emit VOCs, particulates, CO, NOx or SOx. Emissions of non-conventional pollutants and HAPs (Title V-Major Sources) shall comply with federal and state permitting rules. Compliance with the following rules and regulations, at a minimum, shall be required, as applicable:	
		 Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485) 	
		■ In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)	
		Building Energy Efficiency Standards (Title 24, Part 6)	
		California Green Building Code (Title 24, Part 11)	
		SCAQMD Rule 201: Permit to Construct, Rule 403: Fugitive Dust, Rule 1113: Architectural Coatings, and Rule 1403: Asbestos Emissions from Demolition/Renovation Activities	
		AVAQMD Rule 201: Permit to Construct, Rule 203: Permit to Operate, Rule 403 and 403.2: Fugitive Dust Control, and Regulation XIII, New Source Review	
		□ Control of Hazardous Dust Conditions (County Code Chapter 12.32)	

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
pact 5.2-2: The development of future facilities contemplated under the posed Plan could violate an air quality standard or contribute substantially to existing or projected air quality violation.	Potentially Significant		Significant and Unmitigable

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Impact 5.2-3: The development of future facilities contemplated under the Proposed Plan could expose sensitive receptors to substantial pollutant concentrations.	Potentially Significant	AQ-2 (as identified above)	Less than Significant
Impact 5.2-4: The development of future facilities contemplated under the Proposed Plan could create objectionable odors affecting a substantial number of people.	Potentially Significant	AQ-3 Minimization of Odors. An odor analysis shall be prepared as part of future project-specific air quality analyses, as required by local AQMD. If the odor analysis identifies the potential for a significant impact, the facility shall incorporate odor-reducing design features. Such features may include, but are not limited to: • Provision of exhaust fans to provide multiple air exchanges every hour • Treatment of air leaving the building by an odor neutralizing misting system • Maintaining negative pressure at the building entrances to minimize the amount of untreated air leaving the building	Less than Significant
Biological Resources			
 Impact 5.3-1: The development of future facilities contemplated under the Proposed Plan could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: A facility should not be located in habitats of threatened or endangered species unless the local land use authority makes a determination that a proposed facility is compatible with the surrounding resources and does not pose a substantial threat to the resource. All Facilities: Location of a proposed facility must be in conformance with a local jurisdiction's General Plan and abide by federal and state regulations regarding unique or protected species and their habitat. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Impact 5.3-2: The development of future facilities contemplated under the Proposed Plan could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
All Facilities: A facility should not locate in habitats of threatened or endangered species unless the local land use authority makes a determination that a proposed facility is compatible with the surrounding resources and does not pose a substantial threat to the resource.			
 All Facilities: Location of a proposed facility must be in conformance with a local jurisdiction's General Plan and abide by federal and state regulations regarding unique or protected species and their habitat. 			
All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			
Impact 5.3-3: The development of future facilities contemplated under the Proposed Plan could have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
Alternative Technology Facilities: Facilities should avoid locating in current wetland areas, as defined in adopted general, regional, and State plans, unless: (a) industrial usage is permitted by the local government's land use planning or zoning, and (b) fish, plant, and wildlife resources can be maintained and enhanced in a portion of the site, or preserved elsewhere in the area.			
 Land Disposal Facilities: Facilities should be located outside wetland areas, as defined in adopted general, regional, and State plans. 			
All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
 Impact 5.3-4: The development of future facilities contemplated under the Proposed Plan could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: A facility should not locate in habitats of threatened or endangered species unless the local land use authority makes a determination that a proposed facility is compatible with the surrounding resources and does not pose a substantial threat to the resource. All Facilities: Location of a proposed facility must be in conformance with a local jurisdiction's General Plan and abide by federal and state regulations regarding unique or protected species and their habitat. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant
 Impact 5.3-5: The development of future facilities contemplated under the Proposed Plan could conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: Location of a proposed facility must be in conformance with a local jurisdiction's General Plan and abide by federal and state regulations regarding unique or protected species and their habitat. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant
 Impact 5.3-6: The development of future facilities contemplated under the Proposed Plan could conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: A facility should not locate in habitats of threatened or endangered species unless the local land use authority makes a determination that a proposed facility is compatible with the surrounding resources and does not pose a substantial threat to the resource. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Cultural Resources			·
Impact 5.4-1: The development of future facilities contemplated under the Proposed Plan could cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE to protect the value of land containing natural, recreational, cultural or aesthetic resources. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facilities should avoid locating in these areas unless the applicant can demonstrate that a facility is compatible with the land use in the area. 			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Impact 5.4-2: The development of future facilities contemplated under the Proposed Plan could cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE to protect the value of land containing natural, recreational, cultural or aesthetic resources. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facilities should avoid locating in these areas unless the applicant can demonstrate that a facility is compatible with the land use in the area. 			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Impact 5.4-3: The development of future facilities contemplated under the Proposed Plan could directly or indirectly destroy unique paleontological resource or site or unique geologic feature.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE to protect the value of land containing natural, recreational, cultural or aesthetic resources. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facilities should avoid locating in these areas unless the applicant can demonstrate that a facility is compatible with the land use in the area. 			
All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			
Impact 5.4-4: The development of future facilities contemplated under the Proposed Plan could disturb human remains, including those interred outside of a formal cemetery.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE to protect the value of land containing natural, recreational, cultural or aesthetic resources. The following siting criteria would apply to potential future facilities:			
All facilities: New and expansion of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Geology/Soils			
Impact 5.5-1: The development of future facilities contemplated under the Proposed Plan could expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	Less than Significant	No mitigation measures are required.	Less than Significant
Rupture of a known earthquake fault, as delineated on the most recent Alquist- Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42.)			
 Strong seismic ground shaking. 			
 Seismic-related ground failure, including liquefaction. 			
■ Landslides.			
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 All Facilities: All facilities are to be designed and constructed in accordance with the local building code. 			
 Class III Land Disposal Facilities: Federal and State regulations prohibit the locating of a new Class III landfill or an expansion of an existing Class III landfill on a known Holocene Fault. 			
 All Facilities: Facilities located within these areas should have engineered design features to assure structural stability. 			
 All Facilities: Avoid locating in areas determined to have a high potential for failure due to subsidence or liquefaction unless containment structures are designed, constructed, and maintained to preclude failure as a result of such change. 			
Land Disposal Facilities: For Class III landfills, all containment structures must be capable of withstanding hydraulic pressure gradients to prevent failure due to settlement, compression, or uplift as certified by a registered civil engineer or engineering geologist registered in California.			
All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			
Impact 5.5-2: The development of future facilities contemplated under the Proposed Plan could result in substantial soil erosion or the loss of topsoil.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facilities located within these areas should have engineered design features to assure structural stability. 			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Impact 5.5-3: The development of future facilities contemplated under the Proposed Plan could be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facilities located within these areas should have engineered design features to assure structural stability. 			
All Facilities: Avoid locating in areas determined to have a high potential for failure due to subsidence or liquefaction unless containment structures are designed, constructed, and maintained to preclude failure as a result of such change.			
Land Disposal Facilities: For Class III landfills, all containment structures must be capable of withstanding hydraulic pressure gradients to prevent failure due to settlement, compression, or uplift as certified by a registered civil engineer or engineering geologist registered in California.			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Impact 5.5-4: The development of future facilities contemplated under the Proposed Plan could be located on expansive soil, as defined in Table 18-1 of the Uniform Building Code (1994), creating substantial risks to life or property.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facilities located within these areas should have engineered design features to assure structural stability. 			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Impact 5.5-5: The development of future facilities contemplated under the Proposed Plan would not be located on a site containing project soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Greenhouse Gas Emissions			
Impact 5.6-1: The development of future facilities contemplated under the Proposed Plan could generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
 Impact 5.6-2: The development of future facilities contemplated under the Proposed Plan would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant
Hazards and Hazardous Materials			
Impact 5.7-1: The development of future facilities contemplated under the Proposed Plan would be subject to existing federal, state, and local regulations and would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Less than Significant	No mitigation measures are required.	Less than Significant
Impact 5.7-2: The development of future facilities contemplated under the Proposed Plan would be subject to existing federal, state, and local regulations governing the uses and transport of hazardous materials. For this reason, adoption of the Plan would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Less than Significant	No mitigation measures are required.	Less than Significant
Impact 5.7-3: The development of future facilities contemplated under the Proposed Plan would be subject to the facility siting criteria in Table 6A of the CSE and, therefore, would not emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Less than Significant	No mitigation measures are required.	Less than Significant
Impact 5.7-4: The development of future facilities contemplated under the Proposed Plan would be subject to the facility siting criteria in Table 6A of the CSE. Compliance with the CSE in conjunction with local regulations, the Proposed Plan would not create a significant hazard to the environment, including accidental upset of a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.	Less than Significant	No mitigation measures are required.	Less than Significant
Impact 5.7-5: No new facilities are proposed within the vicinity of an airport, which could otherwise result in a safety hazard for people residing or working in the area. If proposed in the future, the development of future facilities would be required to comply with the facility siting criteria in Table 6A of the CSE.	Less than Significant	No mitigation measures are required.	Less than Significant
Impact 5.7-6: The development of future facilities contemplated under the Proposed Plan would be subject to the facility siting criteria in Table 6A of the CSE and would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than Significant	No mitigation measures are required.	Less than Significant
Impact 5.7-7: The development of future facilities contemplated under the Proposed Plan would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to the urbanized areas or where residences are intermixed with wildlands.	Less than Significant	No mitigation measures are required.	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Hydrology and Water Quality	0190000 2010101 11019011011	11040000111119411011110	0-3
Impact 5.8-1: The development of future facilities contemplated under the Proposed Plan could violate water quality standards or waste discharge requirements.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 All Facilities: Disposal facilities must comply with requirements of the Federal Clean Water Act, as amended, and local Stormwater/ Urban Runoff requirements. 			
 Class III Land Disposal Facilities: Federal and State regulations require new and expansion of existing Class III landfills to be fitted with containment systems that meet specified permeability standards, as well as precipitation and drainage control system. 			
■ Facilities Generating Wastewaters: Facilities should be located in areas with adequate sewer capacity to accommodate the expected wastewater discharge. If sewers are not available, on-site treatment should be considered. Alternately, wastewaters could also be transported in bulk via highways to facilities capable of treating them.			
■ Facilities discharging into streams or into the ocean, directly or via storm drains, will require National Pollutant Discharge Elimination System (NPDES) permits issued by the Regional Water Quality Control Board. The NPDES permit sets limitations on the quantity and quality of the waste discharges, and may specify engineering and technical requirements to ensure compliance.			
Land Disposal Facilities: Facilities must meet the California Regional Water Quality Control Board's minimum water quality protection standards and criteria in order to ensure no impairment of the beneficial uses of groundwater beneath or adjacent to the landfill.			
All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			
Impact 5.8-2: The development of future facilities contemplated under the Proposed Plan could substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 Land Disposal Facilities: Facilities must comply with the California RWQCB permit requirements for groundwater monitoring. 			
 Land Disposal Facilities: Facilities must meet the State of California's minimum requirements for ensuring no impairment of beneficial use of surface water or of groundwater beneath or adjacent to the landfill, which also includes location restrictions. 			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Impact 5.8-3: The development of future facilities contemplated under the Proposed Plan could substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:	Less than Significant	No mitigation measures are required.	Less than Significant
All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			
Impact 5.8-4: The development of future facilities contemplated under the Proposed Plan could substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:	Less than Significant	No mitigation measures are required.	Less than Significant
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Impact 5.8-5: The development of future facilities contemplated under the Proposed Plan could create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			
Impact 5.8-6: The development of future facilities contemplated under the Proposed Plan could otherwise substantially degrade water quality.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: Facilities Generating Wastewaters: Facilities should be located in areas with adequate sewer capacity to accommodate the expected wastewater discharge. If sewers are not available, on-site treatment should be considered. Alternately, wastewaters could also be transported in bulk via highways to facilities capable of treating them. Land Disposal Facilities: Federal and State regulations require			
 new and expansions of existing Class III landfills to be fitted with containment systems that meet specified permeability standards. In addition, the facility must be fitted with a groundwater protection system and a leachate collection and removal system. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
 Impact 5.8-7: The development of future facilities contemplated under the Proposed Plan could impede or redirect flood flows, or expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: Disposal facilities must comply with requirements of the Federal Clean Water Act, as amended, and local Stormwater/Urban Runoff requirements. Land Disposal Facilities: Federal and State regulations require new, existing, and expansions of existing Class III landfills to be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return period. In addition, the landfill must not reduce the flow of a 100-year flood or reduce the temporary storage capacity of the floodplain. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant
 Impact 5.8-8: The development of future facilities contemplated under the Proposed Plan could be subject to inundation by seiche, tsunami, or mudflow. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: Facilities should be located outside dam failure inundation areas. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant
 Land Use and Planning Impact 5.9-1: The development of future facilities contemplated under the Proposed Plan would not physically divide an established community. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE, which requires new facilities to be compatible with the land use and zoning requirements in the area. The following siting criteria would apply to potential future facilities: All Facilities: Facility must be in conformance with local land use and zoning requirements of a county or city planning agency. Alternative Technology Facilities: These facilities should be located where the zoning and existing land use are compatible with the proposed use. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Impact 5.9-2: The development of future facilities contemplated under the Proposed Plan could conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	Significant	Implement Mitigation Measures AQ-2 and AQ-3.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE, which requires new facilities to be compatible with the land use and zoning requirements in the area. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facility must be in conformance with local land use and zoning requirements of a county or city planning agency. 			
 Alternative Technology Facilities: These facilities should be located where the zoning and existing land use are compatible with the proposed use. 			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
All Facilities: The proposed facility must be consistent with the county or city General Plan. However, the applicant may petition for an amendment to the General Plan. In addition, the proposed facility must be found to be in conformance with the Countywide Sitting Element of the County of Los Angeles. This is accomplished by obtaining a valid Finding of Conformance granted by the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force.			
Notwithstanding future projects compliance with the above siting criteria, the potential exists for one or more AT facilities to be located within close proximity of residential uses, which in certain cases may be non-conforming with the current General Plan designation or zoning. As a result, issues related nuisance affects (e.g. odors) or health risk may be a concern. This issue is considered a significant impact requiring mitigation.			
Impact 5.9-3: The development of future facilities contemplated under the Proposed Plan could conflict with an applicable habitat conservation plan or natural community conservation plan.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
All Facilities: A facility should not locate in habitats of threatened or endangered species unless the local land use authority makes a determination that a proposed facility is compatible with the surrounding resources and does not pose a substantial threat to the resource.			
All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.			

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Mineral Resources	organicance before tringation	2 Topobed Pittigation Pictation	organicance rater ratigution
Impact 5.10-1: The development of future facilities contemplated under the Proposed Plan could result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Noise			
Impact 5.11-1: The development of future facilities contemplated under the Proposed Plan could result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facility must be in conformance with local land use and zoning requirements of a county or city planning agency. 			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Impact 5.11-2: The development of future facilities contemplated under the Proposed Plan could result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
Land Disposal Facilities: Los Angeles County prohibits construction of buildings or structures on or within 1,000 feet of a land disposal facility which contains decomposable materials/ waste unless the facility is located by an approved natural or manmade protection system. The Cities within Los Angeles County may have similar restrictions.			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
 Impact 5.11-3: The development of future facilities contemplated under the Proposed Plan could result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: Facility must be in conformance with local land use and zoning requirements of a county or city planning agency. Land Disposal Facilities: Los Angeles County prohibits construction of buildings or structures on or within 1,000 feet of a land disposal facility which contains decomposable materials/ waste unless the facility is located by an approved natural or manmade protection system. The Cities within Los Angeles County may have similar restrictions. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Significance Before Mitigation Less than Significant	No mitigation measures are required.	Significance After Mitigation Less than Significant
 Impact 5.11-4: The development of future facilities contemplated under the Proposed Plan could result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: Land Disposal Facilities: Los Angeles County prohibits construction of buildings or structures on or within 1,000 feet of a land disposal facility which contains decomposable materials/waste unless the facility is located by an approved natural or manmade protection system. The Cities within Los Angeles County may have similar restrictions. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant
Population and Housing			
Impact 5.12-1: The development of future facilities contemplated under the Proposed Plan would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).	Less than Significant	No mitigation measures are required.	Less than Significant
 Impact 5.12-2: The development of future facilities contemplated under the Proposed Plan could displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Impact 5.12-3: The development of future facilities contemplated under the Proposed Plan could displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Public Services and Recreation			
Impact 5.13-1: The development of future facilities contemplated under the Proposed Plan could create staffing or response time problems at the fire station or sheriff's substation serving the project site.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE to protect aesthetic resources. The following siting criteria would apply to potential future facilities:			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Transportation			
Impact 5.14-1: The development of future facilities contemplated under the Proposed Plan could conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 All Facilities: Facilities should be centrally located near wasteshed areas to minimize potential impacts associated with greater travel distances. 			
 Alternate transportation, by rail, may be evaluated in regard to specific sites to be located at distant areas from the wasteshed. 			
 All Facilities: Facilities should be located such that any minor routes from the major route to the facility are primarily by trucks, and the number of nonindustrial structures (homes, hospitals, schools, etc.) is minimal. 			
• All Facilities: The minimum time path from major wasteshed areas to a facility should follow highways with low to moderate average annual daily traffic and accident rates as guided by the research and findings of state, regional, county, and city transportation planners.			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			

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Impact 5.14-2: The development of future facilities contemplated under the Proposed Plan could conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: The minimum time path from major wasteshed areas to a facility should follow highways with low to moderate average annual daily traffic and accident rates as guided by the research and findings of state, regional, county, and city transportation planners. All Facilities: The changes in the ratio capacity to average annual daily traffic (AADT) should be negligible after calculating the number of trucks on the major and minor routes expected to service the facility. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements.	Less than Significant	No mitigation measures are required.	Less than Significant
 Impact 5.14-3: The development of future facilities contemplated under the Proposed Plan could substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Utilities and Service Systems			
Impact 5.15-1: The development of future facilities contemplated under the Proposed Plan could exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
■ Facilities Generating Wastewaters: Facilities should be located in areas with adequate sewer capacity to accommodate the expected wastewater discharge. If sewers are not available, on-site treatment should be considered. Alternately, wastewaters could also be transported in bulk via highways to facilities capable of treating them.			
Facilities discharging into streams or into the ocean, directly or via storm drains, will require National Pollutant Discharge Elimination System (NPDES) permits issued by the Regional Water Quality Control Board. The NPDES permit sets limitations on the quantity and quality of the waste discharges, and may specify engineering and technical requirements to ensure compliance.			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
Impact 5.15-2: The development of future facilities contemplated under the Proposed Plan could require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
■ Facilities Generating Wastewaters: Facilities should be located in areas with adequate sewer capacity to accommodate the expected wastewater discharge. If sewers are not available, on-site treatment should be considered. Alternately, wastewaters could also be transported in bulk via highways to facilities capable of treating them.			
■ Facilities discharging into streams or into the ocean, directly or via storm drains, will require National Pollutant Discharge Elimination System (NPDES) permits issued by the Regional Water Quality Control Board. The NPDES permit sets limitations on the quantity and quality of the waste discharges, and may specify engineering and technical requirements to ensure compliance.			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			

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Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Impact 5.15-3: The development of future facilities contemplated under the Proposed Plan could require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 Facilities discharging into streams or into the ocean, directly or via storm drains, will require National Pollutant Discharge Elimination System (NPDES) permits issued by the Regional Water Quality Control Board. The NPDES permit sets limitations on the quantity and quality of the waste discharges, and may specify engineering and technical requirements to ensure compliance. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			
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Impact 5.15-4: The development of future facilities contemplated under the Proposed Plan could need new or expanded water entitlements.	Less than Significant	No mitigation measures are required.	Less than Significant
Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities:			
 All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 			

Environmental Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
 Impact 5.15-5: The development of future facilities contemplated under the Proposed Plan could result in the determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: Facilities Generating Wastewaters: Facilities should be located in areas with adequate sewer capacity to accommodate the expected wastewater discharge. If sewers are not available, on-site treatment should be considered. Alternately, wastewaters could also be transported in bulk via highways to facilities capable of treating them. Facilities discharging into streams or into the ocean, directly or via storm drains, will require National Pollutant Discharge Elimination System (NPDES) permits issued by the Regional Water Quality Control Board. The NPDES permit sets limitations on the quantity and quality of the waste discharges, and may specify engineering and technical requirements to ensure compliance. All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant
 Impact 5.15-6: The development of future facilities contemplated under the Proposed Plan would have sufficient permitted capacity to accommodate the project's solid waste disposal needs. Future facilities will be required to comply with the Siting Criteria in Appendix 6-A of the CSE. The following siting criteria would apply to potential future facilities: All Facilities: New and expansions of existing disposal facilities shall be required at all times to be in compliance with applicable federal, state and local statutes, permits, minimum operating standards and monitoring requirements. 	Less than Significant	No mitigation measures are required.	Less than Significant

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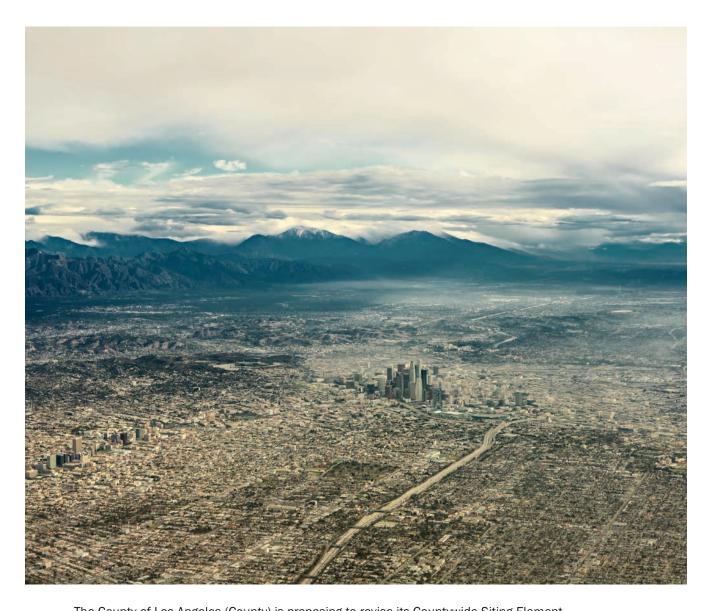








2.0 INTRODUCTION



The County of Los Angeles (County) is proposing to revise its Countywide Siting Element (CSE) pursuant to the statutory requirements in the California Public Resources Code (PRC), Sections 41700 – 41721.5. The California Integrated Waste Management Act of 1989 (AB 939), as amended (PRC Section 40000 et seq.), requires each county to prepare a CSE 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 CSE was approved by the majority of the cities within the County (which contain a majority of the population of the County), the County's Board of Supervisors, and the Department of Resources Recycling and Recovery (CalRecycle) in January 1998. This environmental impact report (EIR) was prepared to evaluate the environmental impacts associated with the revised CSE, which covers the planning period beginning 2018 through 2033.

CSE DEIR - CHAPTER 2 - INTRODUCTION

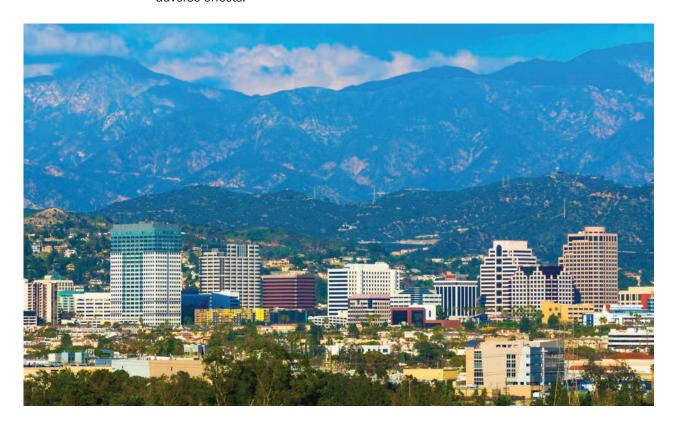
2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The California Environmental Quality Act (CEQA) requires that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority prior to taking action on those projects. This EIR has been prepared to satisfy CEQA, as set forth in PRC Section 21000, et seq., and the State CEQA Guidelines, 14 California Code of Regulations (CCR), Section 15000, et seq. The EIR is a public document designed to provide decision makers and the public with an analysis of the environmental effects of the Proposed Project, to indicate possible ways to reduce or avoid environmental damage and to identify alternatives to the project. The EIR must also disclose significant environmental impacts that cannot be avoided; growth inducing impacts; effects not found to be significant; and significant cumulative impacts of all past, present and reasonably foreseeable future projects.

Pursuant to CEQA Section 21067, the Lead Agency means "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment." The County has the principal responsibility for approval of the CSE Revision (or "Proposed Plan"). For this reason, the County is the CEQA Lead Agency for the Proposed Plan.

The intent of the Draft EIR is to provide sufficient information on the potential environmental impacts of the Proposed Plan to allow the County to make an informed decision regarding approval of the Proposed Plan. Specific discretionary actions to be reviewed by the County are described later in Section 3.4, Intended Uses of the EIR. This EIR is not intended to provide project-level CEQA coverage for any of the solid waste disposal facilities contemplated under the Proposed Plan. Rather, subsequent project-level CEQA review is anticipated for these facilities in the future.

The overall purpose of this Draft EIR is to inform the lead agency, responsible agencies, decision makers and the general public of the environmental effects of implementation of the Proposed Plan. This Draft EIR addresses the potential environmental effects of the Proposed Plan, including effects that may be significant and adverse, evaluates feasible alternatives to the Proposed Plan, and identifies mitigation measures to reduce or avoid adverse effects.



2.2 NOTICE OF PREPARATION

Pursuant to CEQA Guidelines Section 15063, the County prepared an Initial Study to determine if the project may have a significant effect on the environment. The County determined that an EIR would be required for the Proposed Plan and issued a Notice of Preparation (NOP) on June 16, 2014 to the State Clearinghouse, responsible agencies, and interested parties. The Initial Study was also circulated with the NOP. The extended public review period for the NOP ran from June 16, 2014 through Monday, July 28, 2014. The Initial Study, NOP, and NOP comment letters are included as Appendix A.

The NOP process is used to help determine the scope of the environmental issues to be addressed in the Draft EIR. Based on this process, all environmental categories included in the CEQA Guidelines Appendix G checklist were identified as having the potential to result in significant impacts with the exception of agriculture and forestry resources, mineral resources, recreation, population and housing, and public services.

During the NOP review period, the County's Public Works conducted six public scoping meetings to provide information and facilitate dialogue on the Proposed Plan and to solicit information relating to the CEQA analysis for this EIR. These scoping meetings were held at the following locations:

- Bassett Park, Gymnasium in the unincorporated community of Bassett on July 14, 2014
- Altadena Senior Center, Blain Hall on July 15, 2014
- William S. Hart Regional Park, Hart Hall in the unincorporated community of Newhall on July 17, 2014
- Calabasas Community Center, Agoura Room on July 21, 2014
- Watts Senior Citizen Center, Auditorium on July 23, 2014
- The Center at Sycamore Plaza, Council Chambers on July 24, 2014

2.3 SCOPE OF THIS DRAFT EIR

The scope of the Draft EIR was determined based upon review of the Proposed Plan by County staff, comments received in response to the NOP, and comments received at the scoping meetings conducted by the County. Pursuant to Section 15126.2 and 15126.4 of the State CEQA Guidelines, the Draft EIR should identify any potentially significant adverse impacts and recommend mitigation that would reduce or eliminate these impacts to levels of insignificance.

The information contained in **Chapter 3**, **Project Description**, establishes the basis for analyzing future Proposed Plan-related environmental impacts. However, further environmental review by the County will be required as applications for individual discretionary projects are submitted.

2.3.1 Impacts Considered Less than Significant

Agriculture and forestry resources were identified in the Initial Study and NOP as not being significantly affected by, or affecting, the Proposed Plan due to the lack of agriculture and forestry resources within the Plan Area and Focus Area.

2.3.2 Potential Adverse Impacts

Fifteen environmental factors have been identified with the potential to result in impacts if the Proposed Plan is implemented. Therefore these environmental resource topics are analyzed in this Draft EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- **■** Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- **■** Mineral Resources
- Noise
- Population/Housing
- Public Services and Recreation
- **■** Transportation/Traffic
- Utilities/Service Systems

2.3.3 Unavoidable Significant Adverse Impacts

This Draft EIR identifies significant and unavoidable adverse impacts, as defined by CEQA, which would result from implementation of the Proposed Plan. Unavoidable adverse impacts may be considered significant on a project-specific basis, cumulatively significant, and/or potentially significant. If the County, as the Lead Agency, determines that unavoidable significant adverse impacts will result from the Proposed Plan, the County must prepare a "Statement of Overriding Considerations" before it can approve the CSE Revision. A Statement of Overriding Considerations states that the decision-making body has balanced the benefits of the Proposed Plan against its unavoidable significant environmental effects and has determined that the benefits of the Plan outweigh the adverse effects. Therefore, the adverse effects are considered to be acceptable. The impact analysis, as detailed in **Chapter 5.0** of this EIR, concludes that air quality impacts would remain significant, even after the incorporation of mitigation for the proposed project.

2.4 INCORPORATION BY REFERENCE

All documents cited or referenced are incorporated into the Draft EIR in accordance with CEQA Guidelines Sections 15148 and 15150, including but not limited to the following:

- Countywide Integrated Waste Management Plan, Los Angeles County, Public Works (1997)
- 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and EIR, SCAG (2016)
- Antelope Valley Area Plan and EIR, County of Los Angeles, Department of Regional Planning (1986)
- County of Los Angeles General Plan Update EIR, County of Los Angeles,
 Department of Regional Planning (2015)

- Solid Waste Integrated Resources Plan EIR, City of Los Angeles Bureau of Sanitation (LASAN), California (2014)
- County of Los Angeles Source Reduction and Recycling and Household Hazardous Waste Element and Mitigated Negative Declaration, County of Los Angeles, Public Works (1993)
- Countywide Siting Element and EIR, County of Los Angeles, Public Works Environmental Programs Division (1997)
- Los Angeles County Congestion Management Program, Los Angeles Metropolitan Transportation Authority (2010)
- Los Angeles County All Hazard Mitigation Plan, County of Los Angeles, Chief Executive Office, Office of Emergency Management (2013)
- Los Angeles County Oak Woodlands Conservation Management Plan Guide, County of Los Angeles, Department of Regional Planning (2014)
- Santa Catalina Island Local Coastal Program Land Use Plan, County of Los Angeles, Department of Regional Planning (1983)
- Santa Catalina Island Specific Plan, Part 2 of Title 22 Los Angeles County Code (1989)
- Santa Clarita Valley Area Plan Final EIR, County of Los Angeles, Department of Regional Planning (2012)

In each instance where a document is incorporated by reference for purposes of this Draft EIR, the Draft EIR shall briefly summarize the incorporated document, or briefly summarize the incorporated data if the document cannot be summarized. In addition, the Draft EIR shall explain the relationship between the incorporated part of the referenced document and the Draft EIR.

This Draft EIR relies upon previously adopted regional and statewide plans and programs, agency standards, and background studies in its analyses. **Chapter 13**, **Bibliography**, provides a complete list of references utilized in preparing this Draft EIR. All of the documents listed in **Chapter 13**, as well as the aforementioned documents that are incorporated by reference, are available for review at:

Los Angeles County Public Works Environmental Programs Division 900 South Fremont Avenue, 3rd Floor Alhambra, California 91803

2.5 FINAL EIR CERTIFICATION

This Draft EIR is being circulated for public review for a period of 45 days. Interested agencies and members of the public are invited to provide written comments on the Draft EIR to the address shown below. Upon completion of the 45-day review period, the County will review all written comments received and prepare written responses for each comment. A Final EIR will then be prepared addressing all of the comments received, responses to the comments, and any changes to the Draft EIR that result from the comments received. The Final EIR will then be presented to the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force (Task Force) and the County Board of Supervisors at public hearings for potential certification of the environmental document for the Proposed Plan. All persons who commented on the Draft EIR will be notified of the availability of the Final EIR.

All comments received from agencies and individuals on the Draft EIR will be accepted during the 45-day public review period. All comments on the Draft EIR should be sent to:

Mr. Martins Aiyetiwa Los Angeles County Public Works Environmental Programs Division 900 South Fremont Avenue, 3rd Floor, Annex Building Alhambra, California 91803

The Draft EIR will also be posted online on the County's website: http://dpw.lacounty. gov/epd/cse/EnvironmentalDoc/. Copies will be available at the Department's main office at the address listed above; field office locations and at public libraries below]:

- County of Los Angeles Public Works 3rd Floor Annex Building Environmental Programs Division Public Counter, 900 S. Fremont Avenue, Alhambra, CA 91803, 1-888-777-4775
- County of Los Angeles Public Works Field Offices:
 - □ Antelope Valley 335 A East Avenue K-6 Lancaster, CA 93535, (661) 524-2390
 - Baldwin Park 14747 E. Ramona Blvd., Baldwin Park, CA 91706, (626) 338-9515
 - Calabasas 26600 Agoura Road, Suite 110, Calabasas, CA 91302,
 (818) 880-4150
 - Carson 701 E. Carson St., Carson, CA 90745, (310) 952-1766
 - East Los Angeles 4801 E. 3rd St., Los Angeles, CA 90022, (323) 881-7030
 - □ Hollydale 11282 Garfield Ave., Downey, CA 90242, (562) 861-3580
 - □ La Puente 16005 E. Central Ave., LA Puente, CA 91744, (626) 961-9611
 - Lomita/Lennox 24320 S. Narbonne Ave., Lomita, CA 90717, (310) 534-3760
 - Palmdale 38126 Sierra Highway, Palmdale, CA 93550, (661) 947-4151
 - San Gabriel Valley 125 S. Baldwin Ave., Arcadia, CA 91007, (626) 574-0941
 - Santa Clarita Valley 23757 Valencia Blvd., Valencia, CA 91355, (661) 222-2940
 - South Whittier 13523 Telegraph Road, Whittier, CA 90605, (562) 946-1390
 - $\hfill \Box$ Southwest 1320 W. Imperial Highway, Los Angeles, CA 90044, (323) 820-6500
 - Valencia 23757 W. Valencia Blvd., Valencia, CA 91355, (661) 222-2948
 - Westchester 5530 W. 83rd St., Los Angeles, CA 90045,
 (310) 649-6300

Public Libraries:

- Agoura Hills Library 29901 Ladyface Court, Agoura Hills, CA 91301, (818) 889-2278
- Avalon Library 215 Sumner Ave., Avalon, CA 90704, (310) 510-1050
- Claremont Library 208 N. Harvard Ave., Claremont, CA 91711, (909) 621-4902
- Eagle Rock Library 5027 Caspar Ave., Los Angeles, CA 90041, (323) 258-8078
- □ Encino-Tarzana Library 18231 Ventura Blvd., Tarzana, CA 91356 (818) 343-1983
- □ Florence Library 1610 E. Florence Ave., Los Angeles, CA 90001, (323) 581-8028
- La Crescenta Library 2809 Foothill Blvd., La Crescenta, CA 91214, (818) 248-5313
- Lancaster Regional Library 601 W. Lancaster Blvd., Lancaster, CA 93534, (661) 948-5029
- Lennox Library 4359 Lennox Blvd., Lennox, CA 90304, (310) 674-0385
- Littlerock Library 35119 80th Street East, Littlerock, CA 93543, (661) 944-4138
- Lynnwood Library 11320 Bulliss Rd., Lynwood, CA 90262, (310) 635-7121
- Rowland Heights Library 1850 Nogales St., Rowland Heights, CA 91748, (626) 912-5348
- □ South Whittier Library 14433 Leffingwell Rd., Whittier, CA 90604, (562) 946-4415
- Temple City Library 5939 Golden West Ave., Temple City, CA 91780, (626) 285-2136
- Valencia Library 23743 W. Valencia Blvd., Santa Clarita, CA 91355, (661) 259-8942
- View Park Library 3854 W. 54th St., Los Angeles, CA 90043, (323) 293-5371
- West Covina Library 1601 W. Covina Parkway, West Covina, CA 91790, (626) 962-3541
- □ Westwood Library 1246 Glendon Ave., Los Angeles, CA 90024, (310) 474-1739
- □ Wilmington Library 1300 N. Avalon Blvd., Wilmington, CA 90744, (310) 834-1082

2.6 MITIGATION MONITORING

PRC Section 21081.6 requires that agencies adopt a monitoring or reporting program (MMRP) for any project for which it has made findings pursuant to PRC 21081. Such a program is intended to ensure the implementation of all mitigation measures adopted through the preparation of an EIR.

The MMRP for the Proposed Plan will be completed as part of the Final EIR and will be completed prior to consideration of the Proposed Plan by the County's Task Force and County Board of Supervisors.

2.7 REFERENCES

- City of Los Angeles Bureau of Sanitation (LASAN), California. 2014. Solid Waste Integrated Resources Plan EIR.
- County of Los Angeles. 1989. Santa Catalina Island Specific Plan, Part 2 of Title 22 Los Angeles County Code.
- County of Los Angeles, Chief Executive Office, Office of Emergency Management. 2013. Los Angeles County All Hazard Mitigation Plan.
- County of Los Angeles, Public Works. 1997. Countywide Integrated Waste Management Plan.
- County of Los Angeles, Public Works, Environmental Programs Division. 1997. Countywide Siting Element and EIR,
- County of Los Angeles, Public Works. 1993. County of Los Angeles Source Reduction and Recycling and Household Hazardous Waste Element and Mitigated Negative Declaration.
- County of Los Angeles, Department of Regional Planning. 2015. County of Los Angeles General Plan Update EIR,
- County of Los Angeles, Department of Regional Planning. 2014. Los Angeles County Oak Woodlands Conservation Management Plan Guide.
- County of Los Angeles, Department of Regional Planning. 2012. Santa Clarita Valley Area Plan Final EIR.
- County of Los Angeles, Department of Regional Planning. 1986. Antelope Valley Area Plan and EIR.
- County of Los Angeles, Department of Regional Planning. 1983. Santa Catalina Island Local Coastal Program Land Use Plan.
- Los Angeles Metropolitan Transportation Authority. 2010. Los Angeles County Congestion Management Program.
- Southern California Association of Governments. 2012. 2012-2035 Regional Transportation Plan/ Sustainable Communities Strategy and EIR.









3.0 PROJECT DESCRIPTION



The County of Los Angeles (County) is seeking to revise the Countywide Siting Element (CSE Revision or Proposed Plan), a long-term planning and policy document which 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. This section describes the characteristics of the Proposed Plan, the plan objectives, and the intended uses of this Environmental Impact Report (EIR) prepared in support of the Proposed Plan.

3.1 PROJECT LOCATION

The implementation of the Proposed Plan would affect the entire County (Plan Area), which is approximately 4,100 square miles¹. The Plan Area encompasses the unincorporated portions of the County and 88 incorporated cities of the County of Los Angeles, California (see **Figure 3-1**, **Regional Location** and **Table 3-1**). The "Plan Area" for the purposes of this environmental document is contiguous with the limits of Los Angeles County. The Plan Area is bounded by Kern County to the north, San Bernardino County to the east and Ventura County to the west. To the south, the Plan Area is bounded by Orange County to the southeast and the Pacific Ocean to the southwest. San Clemente and Santa Catalina islands are both encompassed within the territory of the County; thus, they are considered part of the Plan Area (see Figure 3-2, CSE Plan Area). Within the five County Supervisorial Districts, there are approximately 140 unincorporated communities.

¹ Land area is the size, in square units (metric and nonmetric) of all areas designated as land in the Census Bureau's national geographic (TIGER®) database.

The Plan Area is divided into eleven unincorporated planning areas based on physical geography, localized planning issues, and inter-relationships with adjacent cities (see Table 3-2). Major roadway transportation routes traverse through the Plan Area and include, but are not limited to: Interstates (I) 5, 10, 110, 210, 405, 605, and 710; and State Routes (SR) 1, 14, 57, 60, 71, 91, 118, 134, and 138 and US Route (US) 101. In addition, the 55-mile Alameda Corridor is a major rail cargo corridor that extends from the Ports of Los Angeles and Long Beach to rail lines east of Pomona.

To facilitate a consistent discussion for the geographical areas that could be affected with implementation of the Proposed Plan, the following terminologies are used throughout the EIR:

- Plan Area: The Plan Area encompasses the unincorporated portions of the County and 88 incorporated cities of the County of Los Angeles, including all existing solid waste management facilities (e.g., landfills and transformation facilities); and
- EIR Focus Area: The Proposed Plan includes the potential for up to nine (9) proposed alternative technology (AT) facilities within the Plan Area. These potential future projects would occur at up to nine site locations (herein referred to as EIR Focus Area) within the Plan Area and are located within multiple cities and unincorporated areas of the County as further described in Section 3.4.



Figure 3-1. Regional Location

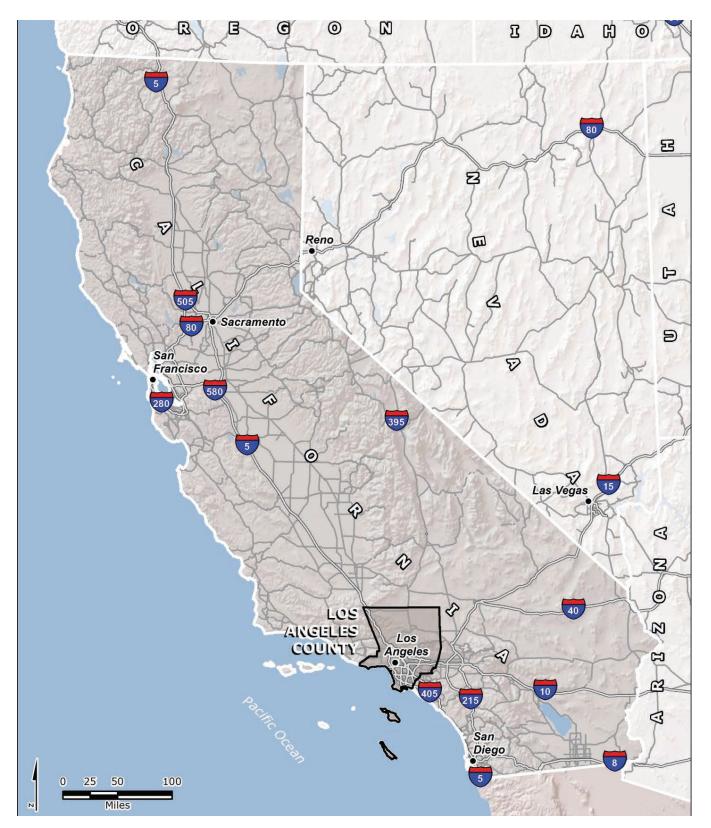


Figure 3-2. CSE Plan Area



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 Table 3-1. List of Incorporated Cities in Los Angeles County

Agoura Hills	Downey	Lomita	San Fernando
Alhambra	Duarte	Long Beach	San Gabriel
Arcadia	El Monte	Los Angeles	San Marino
Artesia	El Segundo	Lynwood	Santa Clarita
Avalon	Gardena	Malibu	Santa Fe Springs
Azusa	Glendale	Manhattan Beach	Santa Monica
Baldwin Park	Glendora	Maywood	Sierra Madre
Bell	Hawaiian Gardens	Monrovia	Signal Hill
Bellflower	Hawthorne	Montebello	South El Monte
Bell Gardens	Hermosa Beach	Monterey Park	South Gate
Beverly Hills	Hidden Hills	Norwalk	South Pasadena
Bradbury	Huntington Park	Palmdale	Temple City
Burbank	Industry	Palos Verdes Estates	Torrance
Calabasas	Inglewood	Paramount	Vernon
Carson	Irwindale	Pasadena	Walnut
Cerritos	La Canada- Flintridge	Pico Rivera	West Covina
Claremont	La Habra Heights	Pomona	West Hollywood
Commerce	La Mirada	Rancho Palos Verdes	Westlake Village
Compton	La Puente	Redondo Beach	Whittier
Covina	La Verne	Rolling Hills	
Cudahy	Lakewood	Rolling Hills Estates	
Culver City	Lancaster	Rosemead	
Diamond Bar	Lawndale	San Dimas	

Table 3-2. Los Angeles County Unincorporated Planning Areas

Antelope Valley	Metro	South Bay
Coastal Islands	San Fernando	West San Gabriel Valley
East San Gabriel Valley	Santa Clarita Valley	Westside
Gateway	Santa Monica Mountains	

3.2 EXISTING SOLID WASTE MANAGEMENT

Los Angeles County is the most populous county in the nation with more than 10.1 million people (US Census Bureau 2016), and is projected to increase by more than 1.2 million between 2018 and 2033. The vigorous growth, if coupled with comparable increases in economic activity, will have a major impact on the solid waste management infrastructure in the County and will require a major concerted effort by all jurisdictions in the County to provide for the solid waste disposal needs of their residents.

In 2018, a daily average of approximately 34,534 tons of Los Angeles County generated solid waste (excluding inert waste disposal at permitted inert waste landfills) were disposed at landfills and AT facilities (transformation facilities) located in and out of the County. Over the duration of 2018, residents and businesses within the County disposed of approximately 10.8 million tons of solid waste at existing permitted land disposal and AT 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 AT facilities; and 5.12 million tons at out-of-County Class III landfills (Figure 3-3, 2018 Los Angeles County Solid Waste Disposal Distribution). Additionally, approximately 175,737 tons of solid waste was imported to Los Angeles County landfills from Orange, Riverside, San Bernardino, San Diego, Ventura, and other counties (not reflected in Figure 3-3).

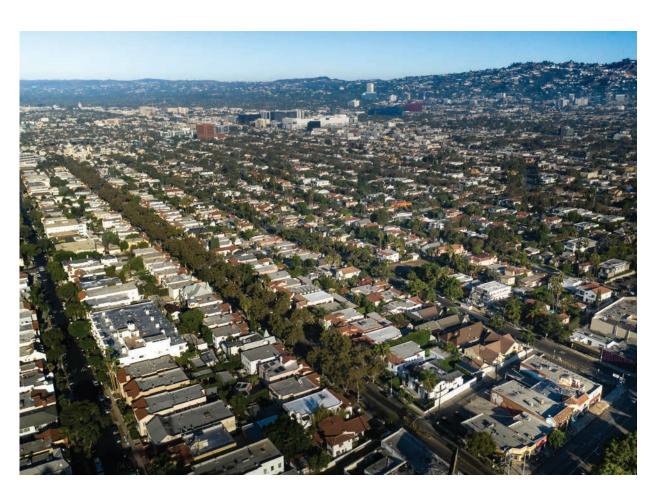
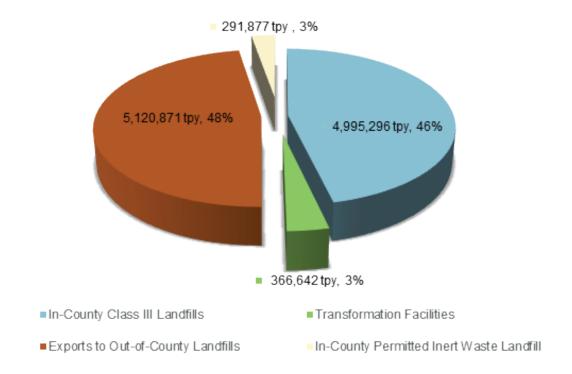


Figure 3-3. 2018 Los Angeles County Solid Waste Disposal Distribution (excluding Import)



Source: County of Los Angeles 2018

Solid Waste Collection, Source Reduction, and Recycling

Solid waste for the 88 cities and the unincorporated communities in Los Angeles County is collected by both residential and commercial waste haulers through a diverse and complex system. Solid waste is generally collected once a week; however, there are some jurisdictions that are served two days each week. Each jurisdiction utilizes various bin systems for the collection of its residential waste. These options include: a one-bin system, two-bin system, and three-bin system; and in rare cases, a four-bin system. The types of materials collected in these bins include municipal solid waste (MSW), recycled materials, green materials and manure (in the case of a four-bin system). In the commercial sector, dumpsters are commonly used as storage bins for the collection of commercial waste.

Solid waste collection rates in the County vary from jurisdiction to jurisdiction, while most jurisdictions have a uniform solid waste collection method. A majority of the jurisdictions use an automatic solid waste collection method; however, a few jurisdictions use manual and a combination of manual and automated solid waste collection methods.

After collection, waste is either hauled directly to the landfills or AT facilities, or indirectly through a transfer station, materials recovery facility (MRF), or construction, demolition, and inert (CDI) debris recycling facility. The County relies on a unique mixture of publicly and privately-owned and operated facilities to maintain a competitive environment for solid waste collection and disposal.

Waste prevention (including source reduction), reuse, recycling, composting, and public education are the principle means for diverting solid waste from landfills and is addressed in the Source Reduction and Recycling Elements (SRREs) for the County (County of Los Angeles 1993) and each of the incorporated cities. The 29 MRFs, 17 transfer stations, 9 CDI processing centers, and 20 composting, chipping, and grinding facilities within the County are the primary mechanisms for separating recyclable

materials from the solid waste stream (see **Figure 3-4 through Figure 3-9**). To assess the effectiveness of a jurisdiction's solid waste diversion program(s) or SRRE, the California Department of Resources Recycling and Recovery (CalRecycle) monitors the programs performance based on set criteria. In 2007, CalRecycle shifted from the historical emphasis on using calculated generation and estimated diversion to using annual disposal as a factor when evaluating jurisdictions' program performance. In unincorporated Los Angeles County, the resident disposal and employee disposal rate targets established by CalRecycle are 7.4 pounds per day (PPD) and 41.5 PPD, respectively. In 2015, the County's actual per resident disposal and per employee disposal rates were 3.8 PPD and 19.6 PPD, respectively (CalRecycle 2017).

For incorporated cities within the County, rates for the Los Angeles Area Integrated Waste Management Authority² (Authority) were reviewed. In 2015, the Authority's per resident disposal and per employee disposal rate targets established by CalRecycle were 7.1 PPD and 17.5 PPD, respectively. For that same year, the Authority's actual per resident disposal and per employee disposal rates were 5.1 PPD and 12.2 PPD, respectively (CalRecycle 2016). Based on these actual per capita disposal rates, for 2015 the County and incorporated cities as a whole is achieving its disposal targets as set by CalRecycle.

Class III Landfills

Class III landfills are land disposal sites that are only permitted to accept non-hazardous solid waste materials where site characteristics and containment structures isolate the solid waste from the waters of the State. There are two types of Class III landfills. A major Class III landfill is permitted to receive 250,000 tons or more of solid waste per year, while a minor Class III landfill is permitted to receive less than 250,000 tons of solid waste per year.

As of December 1, 2018, there were 10 permitted Class III landfills (six major landfills and four minor landfills) in operation in the County. Puente Hills Landfill closed on October 31, 2013, and is no longer operational.

Major Class III Landfills within the County include:

- Antelope Valley Recycling and Disposal Facility
- Calabasas Landfill
- Chiquita Canyon Landfill
- Lancaster Landfill and Recycling Center
- Scholl Canyon Landfill
- Sunshine Canyon City/County Landfill.

Minor Class III Landfills within the County include:

- Burbank Landfill No. 3 (City of Burbank use only)
- Pebbly Beach Landfill, Santa Catalina Island
- San Clemente Landfill, U.S. Navy Facility, San Clemente Island
- Savage Canyon Landfill (primarily for City of Whittier use only)

² The Los Angeles Area Integrated Waste Management Authority is comprised of the Cities of Artesia, Bradbury, Beverly Hills, Duarte, Hermosa Beach, Hidden Hills, Lynwood, Los Angeles, Manhattan Beach, Palos Verdes Estates, Pomona, Rancho Palos Verdes, Redondo Beach, Rosemead, Sierra Madre, South Gate, and Torrance.

As of December 31, 2018, the remaining permitted Class III landfill capacity in the County is estimated at 163.39 million tons (194.35 million cubic yards). Based on the 2018 average disposal rate of 17,186 tons per day (tpd) (excluding inert waste disposal at permitted inert waste landfills and waste imported to the County), the remaining Class III landfill capacity will not be sufficient in accommodating the County's disposal needs throughout the 15-year planning period.

Inert Waste Landfills (Inert Debris Engineered Fill Operations)

Inert waste landfills refer to those landfills permitted to accept only non-water soluble, non-decomposable inert solid wastes such as dirt, concrete, asphalt, sand, and gravel for disposal. As of December 31, 2018, the Azusa Land Reclamation Landfill is the only permitted inert waste landfill in the County. The total remaining permitted disposal capacity for the permitted inert waste landfill in the County is approximately 57.72 million tons (46.17 million cubic yards) as of December 31, 2018. At the current disposal rate of 291,877 tons of inert waste per year, the total remaining permitted capacity will be exhausted in about 28 years. This demonstrates that there is currently sufficient capacity at inert waste landfills.

Although there are an additional 10 inert waste landfills operating in the County, these facilities were reclassified to inert debris engineered fill operations (IDEFOs) in 2006 and are regulated under the Enforcement Agency Notification (EAN) regulatory tier. The total remaining capacity at permitted IDEFOs is unknown. However, these facilities are not considered in the CSE due to their adequate disposal capacity and continued increases towards recycling of construction and demolition waste.

Alternative Technology Facilities

Alternative Technology (AT) refers to a technology, such as conversion technology, transformation, engineered municipal solid waste conversion, or other emerging technologies, capable of processing solid waste in lieu of landfill disposal. There are three classes of conversion technologies: thermal, biological, and chemical. All of these conversion technologies may also be combined with mechanical processes to further improve the processes and reduce the amount of residual material to be landfilled, which ultimately conserve current landfill capacity. AT facilities are an effective alternative to landfill disposal and are anticipated to serve as an integral component of the County's future solid waste management system. AT facilities have proven to be commercially, technically, and environmentally feasible as demonstrated through successful operation and ability to meet air quality standards.

Transformation Facilities

As of December 31, 2018, the Southeast Resource Recovery Facility (SERRF) in Long Beach is the only AT facility (transformation facility) in operation in the County. The Commerce Refuse-to-Energy Facility (CREF) has closed in June 2018. SERRF has a daily capacity of 2,240 TPD (average over a six day operating week), and is assumed to operate at the current permitted daily capacity throughout the planning period.

Conversion Technology Facilities

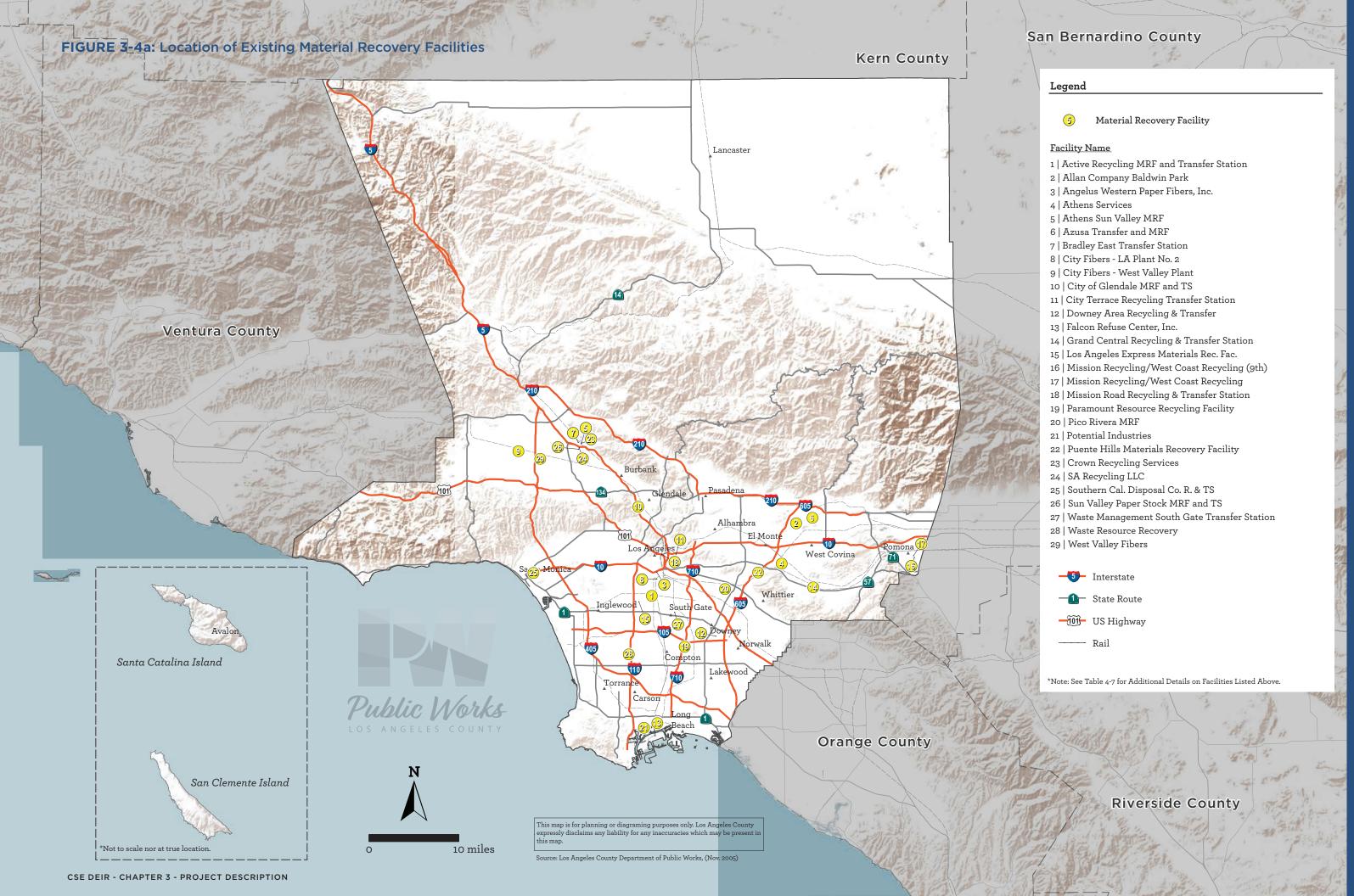
Currently, there are no existing conversion technology facilities in the County.

Engineered Municipal Solid Waste Conversion Facilities

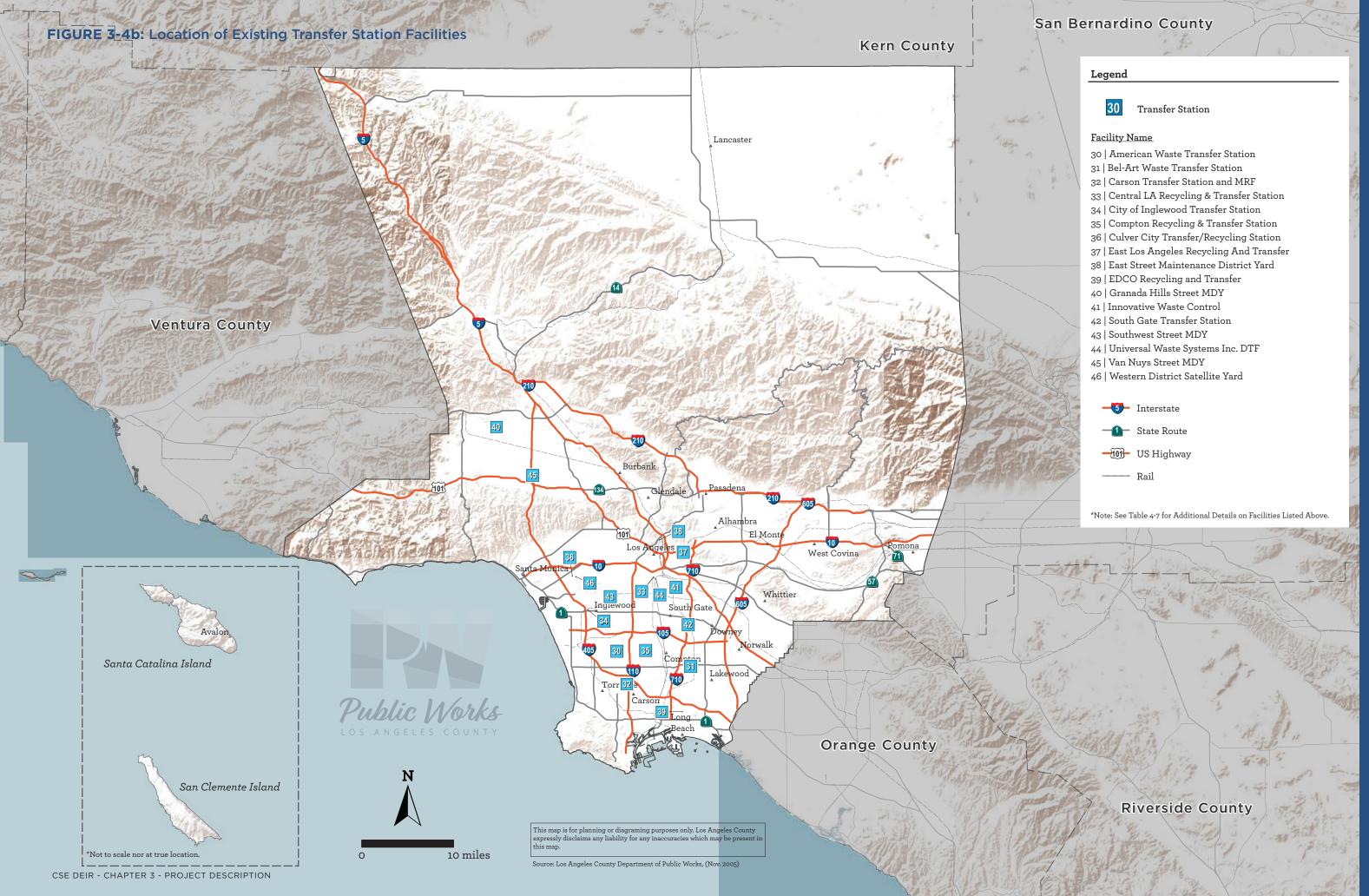
Currently, there are no existing Engineered Municipal Solid Waste (EMSW) conversion technology facilities in the County.

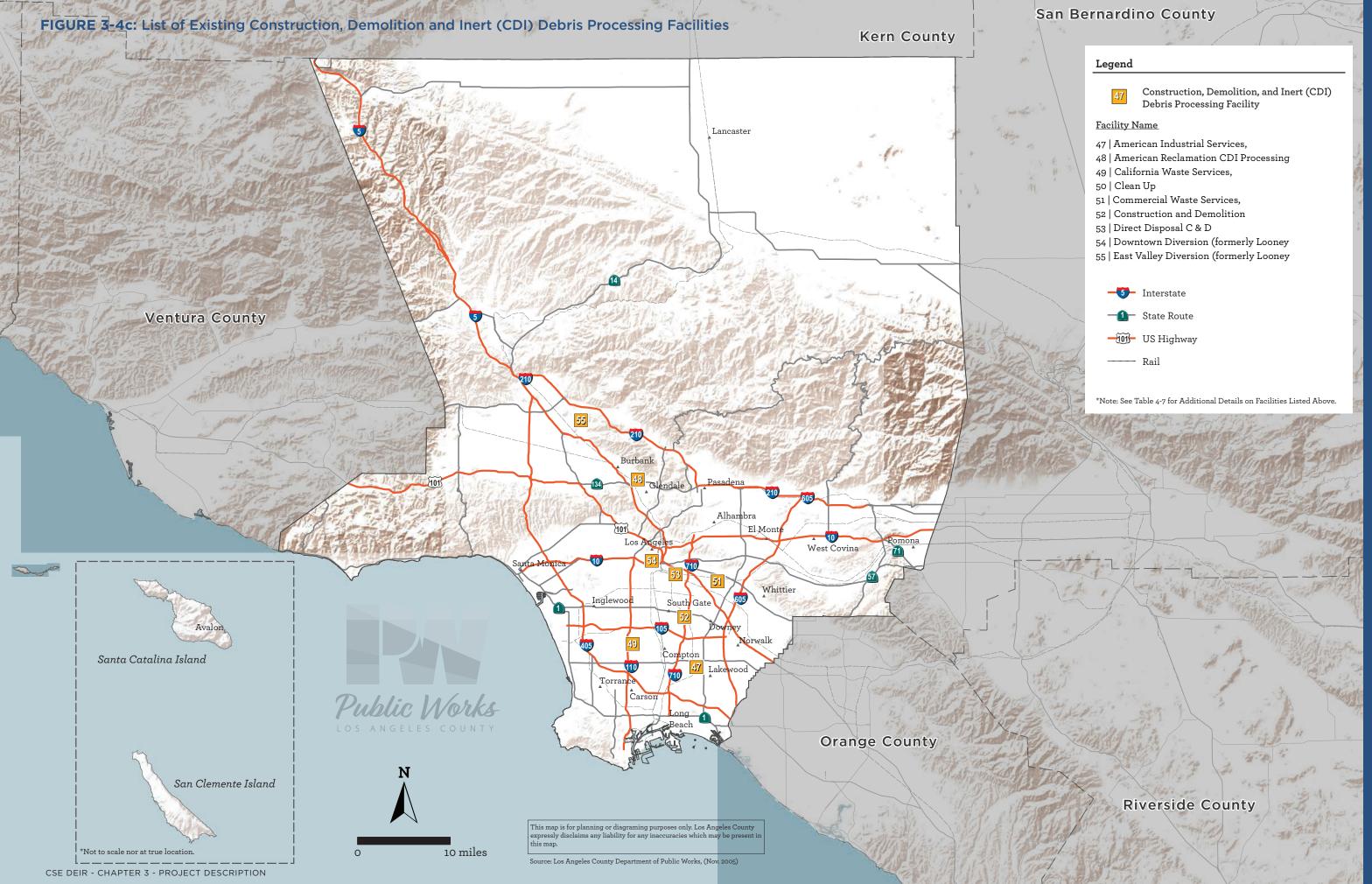
Solid Waste Export

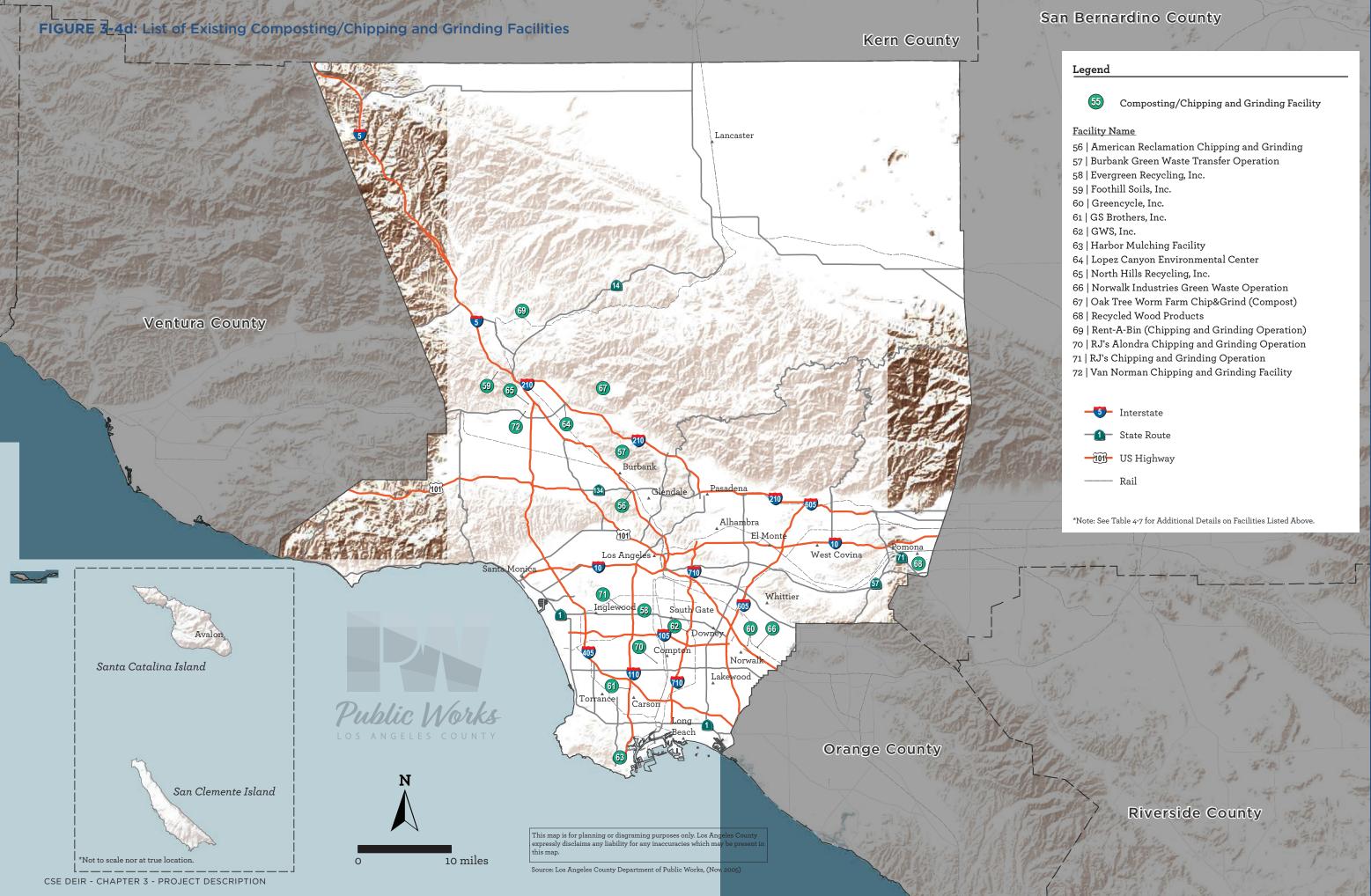
In 2018, approximately 5,120,871 tons of solid waste were exported to currently available out-of-County facilities. Solid waste exports accounted for approximately 48 percent of the residual solid waste generated in Los Angeles County (that is destined

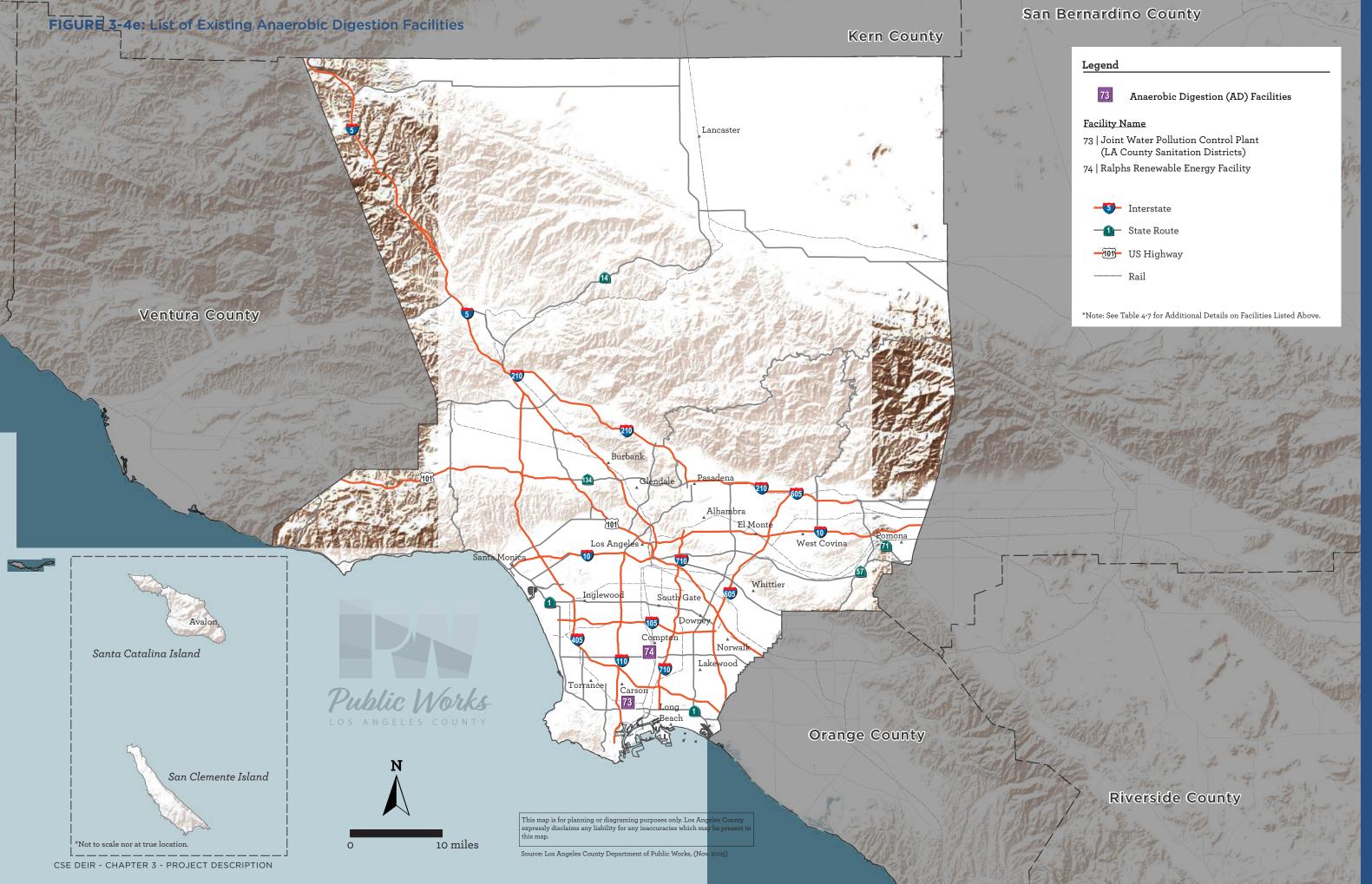


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for disposal). Orange, Riverside, San Bernardino, and Ventura Counties, respectively, received approximately 34, 33, 14 and 15 percent of the waste exports. The remaining four percent of the exports was sent to landfills in Kern, San Diego, Solano, and Stanislaus Counties combined. Similarly in 2018, the majority of the 44 percent average waste export was to surrounding counties. Orange, Riverside, San Bernardino, and Ventura received seventeen, eleven, ten, and five percent of the 44 percent waste exports, respectively. The remaining one percent of the exports was sent to landfills in Fresno, Kern, Kings, San Diego, San Luis Obispo, and Stanislaus Counties.

3.3 STATEMENT OF OBJECTIVES

The main objective of the Proposed Plan is to establish strategies, policies, and guidelines to address the solid waste disposal/AT needs of Los Angeles County for a 15-year planning period (2018-2033), as mandated by the California Integrated Waste Management Act of 1989, as amended (California Public Resources Code [PRC], Section 41700). The following objectives have been established for the Proposed Plan and will aid decision makers in their review of the project and associated environmental impacts.

- To continue to promote extended producer responsibility and development of adequate markets to increase the use of recycled materials and compost products in an environmentally responsible manner.
- 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.
- To promote, encourage, and expand waste diversion activities by solid waste facility operators.
- 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 materials, such as tarps, for alternative landfill daily cover, provided the use of such materials protects the health, welfare, and safety of the citizens in Los Angeles County, as well as the environment.
- To protect the health, welfare, safety, and economic well-being of the County by ensuring that the cities and the County unincorporated communities are served by an efficient and economical public/private solid waste management system.
- To foster the development of alternative technologies as alternatives to landfill disposal.
- To provide siting criteria that considers and provides for the environmentally sound and technically feasible development of solid waste management facilities, including alternative technology facilities (e.g., conversion technology, transformation) and landfills.
- 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 sound 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 polices to:
 - Enhance in-County landfill disposal capacity, and
 - o Facilitate utilization of remote and/or out-of-County disposal facilities.

3.4 PROJECT CHARACTERISTICS

The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939), as amended (Section 4000 et seq. of the California PRC), requires each county to prepare a CSE that details how the county, and the cities within the county, will address the need for 15 years of disposal (landfill and/or transformation) capacity to safely handle solid waste generated in the county which remains after recycling, composting, and other waste diversion activities have taken place. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County will maintain sufficient solid waste disposal capacity over the next 15 years (through 2033). The CSE identifies Public Works (PW) as the responsible agency to develop plans and strategies to manage and coordinate the solid waste generated in the unincorporated areas and to address the disposal needs of the County.

3.4.1 Project Background

The existing CSE (1997) was approved by the cities containing the majority of the incorporated population of the County, the Board of Supervisors, and CalRecycle on January 1998. The Proposed Plan will replace the existing CSE and will cover the planning period beginning 2018 through 2033. Although the primary purpose of the CSE is to identify disposal capacities, the element will also discuss waste prevention, materials, reuse, recycling, and alternatives to landfills since the ability to adequately manage long-term solid waste Countywide is dependent on comprehensive analyses of all factors and alternatives available to handle future solid waste in the most feasible, efficient, and sustainable way.

Given the large size of the County in terms of population and economy, local landfills are reaching capacities at a rapid rate. Therefore, long-term planning for the management of post-recycled residuals (waste that is not be reduced, reused, recycled, or composted) must be established to ensure adequate disposal capacity exists for the future.

AB 939 mandates that the CSE establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, AT facilities, and alternatives to landfill technologies on a Countywide basis. The CSE describes each of the existing and planned solid waste disposal and management sites available for use by jurisdictions within the County.

CSE Revision

AB 939 recognizes landfills and AT facilities as necessary components of an integrated solid waste management system and waste management hierarchy; however, it has become increasingly difficult to expand and/or site, permit, and operate new landfills and AT facilities within the County due to public opposition, lack of suitable sites, environmental concerns, and the current regulatory framework (County of Los Angeles 2018). Therefore, the traditional hierarchy through which solid waste has been managed must be "inverted" (see **Figure 3-5**, **New Waste Management Paradigm**). The CSE proposes a new solid waste management paradigm with the following waste management hierarchy (from most to least preferred): (1) waste prevention (including source reduction, product design, and producer responsibility); (2) reuse; (3) recycling; (4) conversion/compost; (5) transformation/waste-to-energy; and (6) landfilling. In the new paradigm, the least volume of waste would be managed through disposal. The inverted paradigm facilitates the County's goal to protect the health, safety, and economic well-being of residents and to provide a feasible, efficient, and sustainable solid waste disposal system.

The County evaluated multiple scenarios to analyze the adequacy of the countywide disposal capacity over the 15-year planning period. The factors that would increase the available disposal capacity (in County) such as increased diversion rates, landfill expansions, increases in exports to out-of-County facilities, and the development of alternatives to landfill technologies were assessed accordingly in each scenario to varying extents and combinations to illustrate the respective impacts on the overall disposal demand and available disposal capacities. The preferred scenarios assume the full implementation of AB 939 waste diversion programs and that all jurisdictions in the County will meet or exceed the current 75 percent goal through the planning period. Additional background on the other scenarios considered by the County to the Proposed Plan is provided in Chapter 7, Alternatives to the Proposed Project.

3.4.2 Project Description

As previously described, the Proposed Plan consists of preparing the CSE Revision for the County of Los Angeles pursuant to the statutory requirements in PRC, Sections 41700 through 41721.5. These requirements are further clarified in regulations adopted by CalRecycle, and approved by the Office of Administrative Law, for the preparation of a countywide siting element (California Code of Regulations (CCR), Title 14, Division 7, Chapter 7, Article 6.5, Sections 18755 through 18756.7). As mandated by State law, the CSE must include, but is not limited to, the following:

- A statement of goals and policies for the environmentally safe AT and/or disposal of solid waste which cannot be reduced, recycled, or composted during the 15-year period.
- 2. An estimate of the total AT or disposal capacity in cubic yards that will be needed for a 15-year period to safely handle solid wastes generated within the County which cannot be reduced, recycled, or composted.
- **3.** The remaining combined capacity of existing solid waste AT and land disposal facilities existing at the time of the preparation of the CSE, in cubic yards and years.
- **4.** The identification of an area or areas for the location of new solid waste AT or land disposal facilities or the expansion of existing facilities.

The Proposed Plan addresses the above requirements with the intent of providing a means for proper planning and siting of solid waste land disposal and AT facilities on a countywide basis. The Proposed Plan offers new policies and establishes "Siting Criteria" for developing new landfills, AT facilities, including biomass processing facilities, as well as expanding existing facilities. Since the original adoption of the 1997 CSE by the California Integrated Waste Management Board (CIWMB) (now CalRecycle), updated information has been collected and included in the Proposed Plan, which covers the 15-year planning period beginning 2018-2033. The changes include the following:

- 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 the goals and policies to be consistent with the new solid waste management paradigm (see Figure 3-5, New Waste Management Paradigm) to enhance the comprehensiveness of Los Angeles County's solid waste management system and incorporate current and proposed solid waste management processes and technologies;
- Promote the development of alternatives to landfill technologies such as AT on a Countywide basis;
- Promote the development and use of infrastructure to transport solid waste to out-of-County landfills to complement the County's waste management systems, such as the Mesquite Regional Landfill waste-by-rail system;
- Expansion and operation of Sunshine Canyon Landfill as a combined City/ County landfill on December 31, 2008;
- Closure of Puente Hills Landfill on October 13, 2013, as required by its conditional use permit;
- Closure of seven additional landfills (Azusa Land Reclamation Facility [Municipal Solid Waste portion only], Bradley Landfill, Brand Park Landfill, BKK Landfill, Lopez Canyon Landfill, Spadra Landfill, and Two Harbors Landfill) identified in the CSE (1997);
- Reclassification of inert waste landfills to inert debris engineered fill operations in 2006;
- Identification of 29 previously unidentified MRFs;
- Identification of 17 previously unidentified Transfer Stations;
- Identification of nine previously unidentified CDI Debris Processing Facilities;
- Identification of potential future AT sites.
- Six landfills were proposed for expansion in the CSE (1997). However, none of the six landfills planned for expansion remain. Removal of the Antelope Valley, Lancaster Landfill and Recycling Center, Puente Hills, Scholl Canyon Landfill, and Sunshine Canyon Landfill from the list of future landfill expansions;
- Expansion and continued operation of the Chiquita Canyon Landfill was approved by the Los Angeles Board of Supervisors on July 28, 2017;
- Four out-of-County landfills were proposed in the CSE (1997). However, only one new out-of-County landfill, has been operational. The Mesquite Regional Landfill in Imperial County (waste by rail) opened in 2008 and is currently in operation;
- Implementation of CalRecycle's Adjustment Method. CalRecycle updated their calculation methods from calculated generation and estimated diversion calculation to annual disposal rates for landfill capacity needs. This is considered to be one of the major changes from the 1997 CSE because it considers the effects of economic and population growth on solid waste generation; and
- Removal of the Bolo Station Landfill, Campo Landfill, and Eagle Mountain Landfill from the list of potential new out-of-County Class III landfills potentially available for out-of-County disposal.

Figure 3-5. New Waste Management Paradigm



Source: County of Los Angeles 2018

Projected Solid Waste Generation

Projections of solid waste generation for the 15-year planning period were calculated using CalRecycle's Adjustment Methodology. The Adjustment Methodology was adopted for projecting waste generation by utilizing projections of future population, employment, and taxable sales. The use of the Adjustment Methodology to project waste generation requires projections of the above factors through the year 2033. The resulting projections in waste generation, diversion, and disposal for each year of the 15-year planning period are shown in **Table 3-3**, and provide the needed Class III landfill disposal capacity for each year of the planning period.



KERR COURTY VERTURA COURTY LOS ANGELES COUNTY m 5 8 винание county 9 â Santa Catalina Island CRARGE COURTY San Clemente LEGEND Potential Alternative Technology Site City of Carson Public Works Yard 6 CR&R Catalina Santa Monica Pier 7 Interior Removal Specialists Santa Monica Airport 8 Carson Revitalization Project 4 Santa Monica Public Works Corps Yard 9 Waste Resources Recovery, Inc. 0 Miles 5 5 City Terrace MRF

Figure 3-6. Potential Alternative Technology Sites in Los Angeles County

Table 3-3. Solid Waste Generation Projections for the Planning Period (2018-2033)

A	В	С	D	E	F	G H		I	J		
YEAR	TOTAL GENERATION	PERCENT DIVERSION	TOTAL DIVERSION	PROJECTED TRANSFORMATION & CLASS III LANDFILL DISPOSAL	AVAILABLE TRANSFORMATION CAPACITY	ANN	CLASS III LANDFILL DISPOSAL NEED ANNUAL CUMULATIVE (YEAR'S END)				
	2011			(30,10)	movio			. ,			
	TONS	(ASSUMED)	TONS	(TONS)	TONS	TONS	CUBIC YARDS	TONS	CUBIC YARDS		
2018	29,950,883	65%	19,468,074	10,482,809	645,600	9,837,209	16,395,348	9,837,209	16,395,348		
2019	30,094,560	65%	19,561,464	10,533,096	572,800	9,960,296	16,600,493	19,797,505	32,995,842		
2020	30,447,740	65%	19,791,031	10,656,709	500,000	10,156,709	16,927,848	29,954,214	49,923,690		
2021	29,957,369	65%	19,472,290	10,485,079	500,000	9,985,079 16,641,798		39,939,293	66,565,489		
2022	30,064,867	65%	19,542,163	10,522,703	500,000	10,022,703 16,704,506		49,961,997	83,269,994		
2023	30,494,722	65%	19,821,569	10,673,153	500,000	10,173,153	16,955,254	60,135,149	100,225,248		
2024	31,041,134	65%	20,176,737	10,864,397	250,000	10,614,397 17,690,661		70,749,546	117,915,910		
2025	31,572,648	65%	20,522,221	11,050,427	0	11,050,427	18,417,378	81,799,973	136,333,288		
2026	32,352,266	65%	21,028,973	11,323,293	0	11,323,293 18,872,155		93,123,266	155,205,443		
2027	32,711,288	65%	21,262,337	11,448,951	0	11,448,951 19,081,585		104,572,217	174,287,028		
2028	33,088,339	65%	21,507,420	11,580,919	0	11,580,919 19,301,531		116,153,135	193,588,559		
2029	33,464,150	65%	21,751,698	11,712,453	0	11,712,453 19,520,754		127,865,588	213,109,313		
2030	33,864,489	65%	22,011,918	11,852,571	0	11,852,571 19,754,285		139,718,159	232,863,598		
2031	34,270,220	65%	22,275,643	11,994,577	0	11,994,577	19,990,962	151,712,736	252,854,560		
2032	34,685,944	65%	22,545,864	12,140,080	0	12,140,080	20,233,467	163,852,817	273,088,028		
2033	35,112,986	65%	22,823,441	12,289,545	0	12,289,545	20,482,575	176,142,361	293,570,602		

Waste generation is calculated using CalRecycle's Adjustment Methodology, utilizing employment, population, and taxable sales projections from UCLA Anderson Long-Term Forecast (July 2018).

Source: County of Los Angeles 2018

CSE DEIR - CHAPTER 3 - PROJECT DESCRIPTION

Waste generation for 2018 is based on actual in-County and out-of-County transformation and Class III landfill disposal by jurisdictions in Los Angeles County. A 65 percent diversion rate is assumed. These tonnages do not include inert waste disposed at permitted inert landfills

The 2018 transformation and Class III landfill disposal quantity is based on tonnages reported by permitted solid waste disposal facility operators in Los Angeles County and export quantities reported by other counties to Los Angeles County Public Works as part of the 2018 Disposal Quantity Reporting data.

⁴ Values determined using an in-place waste density of 1,200 pounds/cubic yard.

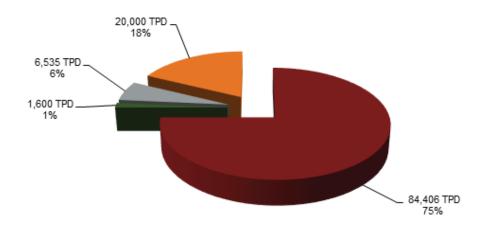
Proposed Plan

Since the anticipated disposal needs of the County cannot be met by pursuing a single disposal alternative (i.e., landfill expansion only, out-of-County disposal only, etc.), the Proposed Plan would entail the potential implementation of all solid waste management options available to the County to avert a disposal capacity shortfall. Implementation of the Proposed Plan assumes that a combination of one or more of the following actions would occur over the 15-year planning period to manage the County's projected solid waste disposal needs through 2033:

- 1. Increase in diversion rate (up to 75 percent by 2020);
- 2. Use of existing in-County permitted disposal facilities for MSW (including AT facilities and excluding disposal at inert waste landfills);
- 3. No new Class III landfills within the County;
- **4.** Increase in utilization of alternative technology (e.g., conversion technology) facility capacity (up to 1,600 tpd by 2033 see Figure 3-6);
- 5. Utilization of current exports to out-of-County landfill disposal facilities; and
- **6.** Continued exports to out-of-County disposal facilities including utilization of the waste-by-rail system to Mesquite Regional Landfill (up to 20,000 tpd by 2033).

Figure 3-7 illustrates how each of these solid waste management options, when combined, would accommodate the County's projected solid waste disposal needs through 2033.

Figure 3-7. Projected Solid Waste Disposal in 2033 for the Planning Period (2018-2033)



- Tons of Waste Diverted (75% by 2020)
- Tons of Waste Handle through Alternative Technology Facilities
- Tons of Waste Disposed In-County Class III Landfills (minus Reserve Capacity)
- Tons of Waste Exported to Out-of-County Landfills

Source: County of Los Angeles 2018

Similar to the adopted CSE (1997), the Revised CSE will serve as a policy manual rather than a specific development program. With this understanding, the intent of the environmental analysis is to provide a programmatic evaluation of potential impacts and mitigation measures for the Proposed Plan based on general types of solid waste disposal/AT facilities contemplated under the CSE Revision. Additional project-level analysis will be completed for individual projects, if ultimately carried forward, as part of future project-level, CEQA documentation.

Increase Solid Waste Diversion

Consistent with the State's goal of increasing the diversion of solid waste from landfills, the Proposed Plan assumes an increase in existing diversion rates in order to minimize the County's disposal needs. By 2033, the diversion rate is assumed to increase up to 75 percent, or the diversion of 84,406 tpd of solid waste (see **Figure 3-7**). An increase in solid waste diversion would be a primary tool for the County in addressing the disposal capacity needs through 2033. The increase in diversion rates represents a general trend of major jurisdictions within the County and State as a whole, but does not reflect any particular jurisdiction's policy at this time. As a result, future programs geared toward diversion are expected to take on greater significance during the planning period. The Proposed Plan assumes that future increases in the diversion of solid waste would occur at existing MRFs and transfer stations distributed throughout the County; although, increases in permitted capacities at one or more facilities may be required. Changes to existing permitted capacities at existing MRFs and transfer stations would be subject to additional environmental review.

Potential Expansions of Existing Class III Landfills

In 2018, the Los Angeles County Public Works conducted a study to determine the existing remaining disposal capacity and the potential for expansion of landfills and AT facilities in the County. Based on this study, there is one existing Class III landfill approved for future expansion with no additional expansions contemplated as part of the revised CSE. Factors that may jeopardize the availability of the projected Class III landfill disposal capacity include:

- Expiration of or changes to land use permits, waste discharge requirements permits, solid waste facilities permits, and air quality permits (i.e., permitted capacities, limits reached).
- Restrictions on the acceptance of waste generated outside jurisdictional and/or wasteshed boundaries.
- Permit restrictions on the amount of waste that can be accepted daily and/or weekly.
- Geographic barriers.
- Limitations on the amount of waste that can be handled by a facility due to limited manpower and equipment.

New Class III Landfill

There are no proposed sites identified for potential development of new Class III landfills in the County within the 2018-2033 planning period.

In **Chapter 6** of the Proposed Plan, the siting criteria used to identify potential new or expansions of existing Class III landfill sites (and other solid waste management facilities) are discussed in detail. **Table 3-4** provides a summary of the siting criteria and factors. The complete siting criteria is provided in Appendix B of the EIR.

Table 3-4. Summary of Siting Criteria and Siting Factors

Siting Criteria Objectives	Siting Factors for each Siting Criteria Objective					
Protect residents	Proximity to populations.					
	■ Proximity to airports.					
Ensure structural stability and safety of	■ Flood hazard areas.					
the facility	Areas subject to tsunamis, seiches, and storm surges.					
	■ Proximity to active or potentially active faults.					
	■ Slope stability.					
	Subsidence/liquefaction.					
	■ Dam failure inundation areas.					
Protect surface water	Aqueducts and reservoirs.					
	Discharge of treated effluent.					
Protect groundwater	■ Proximity to supply wells and well fields.					
	■ Depth to groundwater.					
	■ Groundwater monitoring reliability.					
	■ Major aquifer recharge areas.					
	Permeability of surficial materials.					
	■ Existing groundwater quality.					
Protect air quality	■ Prevention of Significant Deterioration (PSD) areas.					
	■ Nonattainment areas.					
	■ Landfill surface emission.					
Protect environmentally sensitive areas	■ Wetlands.					
	 Proximity to habitats of threatened and endangered species. 					
	Agricultural lands.					
	 Natural, recreational, cultural, and aesthetic resources. 					
	■ Significant ecological areas.					
Ensure safe transportation of solid waste	■ Proximity to areas of waste generation.					
	Distance from major transportation routes.					
	 Structures and properties fronting minor routes. 					
	■ Highway accident rate.					
	Capacity versus Average Annual Daily Traffic of access route.					
Protect social and economic development goals of the community	Consistency with the General Plan.					
Ensure compliance with federal, state and local requirements.	Legal considerations.					

Source: County of Los Angeles 2018

Inert Waste Landfills

There are no proposed expansions of existing inert waste landfills or sites identified for potential development of new inert waste landfills in the County within the 2018-2033 planning period.

Alternative Technology Facilities

The AT facilities considered for the Proposed Plan may include thermal, chemical, or biological conversion technologies, transformation, engineered municipal solid waste (EMSW) conversion, or other emerging technologies. Any one of these conversion technologies may be pursued to assist the County in managing the solid waste disposal needs for the County. The actual technologies pursued remains contingent on several factors including, but not limited to, their effectiveness in processing the anticipated waste stream, by-products of the conversion process, markets for by-products and the associated service area. As a result, prior to the construction and operation of any new conversion technology facilities (regardless of their proposed location or type of conversion technology), the project proponent would be required to complete additional environmental review under CEQA once project-specific details are better known.

Each of the types of AT facilities is discussed further below.

Transformation Facilities

Defined in PRC, Section 40201 as "incineration, pyrolysis, distillation, or biological conversion other than composting. 'Transformation' does not include composting, gasification, EMSW conversion, or biomass conversion." At this time, there are no proposed expansions of existing transformation facilities or sites identified for potential development of new transformation facility capacity in the County within the 2018-2033 planning period.

Conversion Technology Facilities

There are two major types of thermal conversion processes of solid waste, namely, pyrolysis systems³ and gasification systems⁴. Thermal processing involves thermal degrading of solid waste through exothermic or endothermic reactions in an oxygen-free or oxygen-reduced environment. Biological conversion processes (or biomass conversion⁵) are designed for biodegradable organics only and require an extensive amount of pre-processing to enable anaerobic and aerobic digestion. Typically, the major end product is compost. The feedstock includes food waste, agricultural waste, biosolids, and various other organics and biodegradable materials.

Chemical conversion processes are conversion technologies that are designed to change the chemical structure of any organic fuel media. Chemical conversion processes can include acid hydrolysis and anaerobic fermentation.

³ Refers to a chemical decomposition process achieved by heating organic materials in the absence or near absence of

⁴ Defined in PRC, Section 40117 as "a technology that uses a non-combustion thermal process to convert solid waste to a clean burning fuel for the purpose of generating electricity,"

⁵ Defined in California Public Resources Code (PRC), Section 40106 as "the production of heat, fuels, or electricity by the controlled combustion of, or the use of other non-combustion thermal conversion technologies."

Currently, there are only biological conversion technology facilities in the County and there are no proposed expansions of alternative technology facilities identified in the CSE. In order to encourage the development of alternative technology facilities, the County is working with the Alternative Technology Advisory Subcommittee (ATAS) of the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force (Task Force) to investigate and promote conversion and other alternative technologies, including actively pursuing the development of one or more demonstration facilities in Southern California. The Conversion Technology Evaluation (CTE) Report was adopted in 2005 by the Task Force, and recommends co-locating conversion technology facilities at MRFs and transfer stations due to numerous benefits of co-location such as readily available feedstock, pre-processing capacity, appropriate zoning, potential land availability, and transportation avoidance.

Sixteen potential host sites for a conversion or other AT facility were submitted to the County Board of Supervisors in 2010. In 2018, the County updated that list to nine potential sites. **Table 3-5** and **Figure 3-7** identify these potential locations for AT facilities in the County. Under the Proposed Plan, the use of AT facilities could be used to manage as much as one percent (1,600 tpd) of the solid waste generated by 2033. Notwithstanding the preliminary identification of these potential sites in the CSE Revision, no formal applications are currently on file and, therefore, subsequent project-level CEQA review will be required if applications are filed in the future.



Table 3-5. Proposed Potential Locations for Alternative Technology Facilities in Los Angeles County (2018)

AT Site No.1	Site Name	Site Operation	Site Location Site Owner		Site Zoning	Site Acreage	Proposed Capacity (tpd-6)
1	City of Carson Public Works Corps Yard	City of Carson Public Works Corps Yard	2400 E Dominquez Street, Carson, CA 90810	City of Carson	Industrial	N/A	N/A
2	Santa Monica Pier	Santa Monica Pier	200 Santa Monica Pier, Santa Monica, CA 90401	City of Santa Monica	Industrial	0.25	N/A
3	Santa Monica Airport²	Santa Monica Airport	3223 Donald Douglas Loop St., Santa Monica, CA 90405	City of Santa Monica	Industrial	3	N/A
4	Santa Monica Public Works Corps Yard	Santa Monica Public works Corps Yard	2500 Michigan Ave., Santa Monica, CA 90404	City of Santa Monica	Industrial	0.5	N/A
5	City Terrace MRF	Existing MRF	1525 Fishburn Ave. Los Angeles, CA 90063	Southland Disposal	Industrial	1.1	N/A
6	CR&R Catalina	Existing Landfill	5		Landfill	10	10-20
7	Interior Removal Specialist, Inc.	N/A	8990 Atlantic Ave. South Gate, CA 90280	CARERNCAR LLC.	Industrial	1-2	100-500
8	Carson Revitalization Project	Shell Oil Products	20945 S. Wilmington Ave. Carson, CA 90810	City of Carson	Industrial	15	1,300
9	Waste Resources Recovery, Inc.	N/A	357 W. Compton Blvd. Gardena, CA 90248	Waste Resources Recovery, Inc.	Industrial	0.3	50

- See **Figure 3-6** for potential locations for AT facilities.
- 2 Use of the Santa Monica Airport AT site would be restricted until following formal closure of the airport in 2028.

Source: County of Los Angeles 2018

Los Angeles Solid Waste Integrated Resource Plan

The City of Los Angeles has also been evaluating the potential siting of a number of alternative technology facilities capable of processing post-source separated municipal solid waste that may be sited at material recovery facilities. The City Council's RENEW LA plan calls for the development of seven alternative technology facilities; six within the City's boundaries and one in the local region. The City of Los Angeles Municipal Code has been amended to revise its zoning ordinance to allow alternative technology facilities to be sited in the by right in all M-2 (light industrial), and M-3 (heavy industrial), and PF (public facilities) zones by conditional use.

With the RENEW LA Plan as the blueprint, the City of Los Angeles, Bureau of Sanitation embarked upon a stakeholder-driven zero waste master planning effort, known as the Solid Waste Integrated Resource Plan (SWIRP). SWIRP takes a comprehensive long-term look at achieving zero waste in the City through the implementation of various upstream and downstream policies, programs and facilities, including the completion of alternative technology facilities.

SWIRP's Waste Management Hierarchy identifies upstream manufacturer and consumer responsibility first, through producer responsibility and upstream source reduction and reuse. Then, source separation of materials through recycling, composting, or anaerobic digestion through the City's blue, green, and brown bin programs. And thereafter, management of remaining black bin post-source separated MSW through alternative technologies, prior to disposal of residual waste in landfills.

[&]quot;TPD" means tons per day (6-day per week average).

Table 3-6. Existing Out-of-County Class III Landfills Utilized by Los Angeles County in 2018 and Potentially Available for Out-of-County Disposal

Facility Location Owner/Operator	Rail Access	Distance from Los Angeles County²	2018 Average Daily Disposal Rate (tpd-6)	2018 Average Disposal from Los Angeles County ^{3,4} (tpd-6)	Permitted Operating days/week	Permitted Daily Disposal (tpd)	Remaining Permitted Disposal Capacity (million tons) ⁵	Remaining Design Life (years)	Tipping Fees ⁶ (per ton)	Import Surcharge (per ton)
Mesquite Regional Landfill Imperial County County Sanitation District No. 2 of Los Angeles County	Yes	210 miles	-	-	7	20,000	660	109	\$105-\$125	\$1 (min) ⁹
H.M. Holloway Landfill, Inc. Kern County Holloway Environmental, LLC.	Yes	156 miles	1,141	544	6	2,000	3	10	\$20.00	_
Frank R. Bowerman Sanitary Landfill ⁷ Orange County O.C. Waste and Recycling	No	45 miles	7,593	2,470	6	11,500	104	34	\$59.05	Varies
Olinda Alpha Sanitary Landfill ⁷ Orange County O.C. Waste and Recycling	No	30 miles	6,858	2,761	6	8,000	16	7	\$58.18 Non-Contract \$34.18 Contract Rate	Varies
Prima Deshecha Sanitary Landfill ⁷ Orange County O.C. Waste and Recycling	No	60 miles	1,747	295	6	4,000	80	83	\$58.18	_
El Sobrante Landfill Riverside County USA Waste Services of California, Inc.	No	60 miles	12,050	4,857	7	16,054	148	43	\$35.91	\$3.56
Mid-Valley Sanitary Landfill San Bernardino County San Bernardino County Solid Waste Management Division San Timoteo Sanitary Landfill	No	53 miles	3,616	1,752	6	7,500	37	14	\$31.26 - \$47.94	_
San Timoteo Sanitary Landfill San Bernardino County San Bernardino County Solid Waste Management Division Simi Valley Landfill & Recycling Center	No	67 miles	906	457	6	2,000	7	24	\$31.26 - \$47.94	_
Ventura County Waste Management of California, Inc.	No	50 miles	4,087	2,522	7	6,000	50	54	\$68.00 - \$72.00	\$5.00
TOTAL			37,998	15,659		77,054				

Data not provided or available.

Source: County of Los Angeles 2018

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^{2.} Distance is measured from Downtown Los Angeles, California.

^{3.} Estimated quantity based on the data provided by the Counties in the Solid Waste Information Management System (SWIMS) and/or the Disposal Reporting System (DRS).

^{4. 754} tons per day of waste exported to other Out-of-County landfills not included in this table. The actual total waste exported from Los Angeles County to Out-of-County landfills in 2018 is approximately 16,413 tons per day.

^{5.} Estimated quantity provided by landfill operators in tons, otherwise a conversion factor of 1,200 lb/cy was used.

^{6.} Tipping fees are based on current waste disposal fees provided by landfill operators.

^{7.} The County of Orange has import waste agreements with the County to import waste into Orange County with waste hauling companies and County Sanitation Districts which will expire on June 30, 2025.

Amount based on Imperial County host fees per facility operator.

Engineered Municipal Solid Waste Conversion Facilities

EMSW conversion is defined in PRC, Section 40131.2 as "the conversion of solid waste through a process that meets all of the PRC, Section 40131.2(a)." There are no existing or proposed new EMSW conversion facilities in the County; therefore, no EMSW conversion facilities have been identified within the 2018-2033 planning period.

Out-of-County Disposal

Based on the 2018 average disposal rate, reliance on in-County landfills alone will not be sufficient in accommodating the County's disposal needs throughout the 15-year planning period. As the disposal capacity within the County continues to diminish, and the siting of new and/or expansion of existing Class III landfills becomes increasingly difficult, development of out-of-County disposal options become more essential to supplement in-County disposal capacity. Depending on the diversion rates the County is able to achieve, the Proposed Plan would likely have an export need throughout the 15-year planning period. The Proposed Plan assumes up to 20,000 tpd in exports to out-of-County disposal facilities, on average, over the duration of the planning horizon. Exportation of solid waste out of the County involves the following basic elements: (1) out-of-County landfills and other solid waste facilities, located in-State; (2) transportation modes to transport the solid waste from the County to out-of-County and remote landfills; (3) in-County infrastructure necessary to access out-of-County capacities; and (4) the prohibition of solid waste import restrictions or bans by host jurisdictions on solid waste export from the County. Of the total out-of-County Export, up to 4,000 tpd would occur via the existing waste-by-rail infrastructure.

Due to the dynamic nature of the solid waste management industry, it is difficult to predict the pattern of flow of solid waste (generated in the County) that is destined for disposal. Exportation of solid waste to other jurisdictions outside the County is dictated more by market forces rather than government actions. As such, it is difficult to predetermine with consistent accuracy which of the out-of-County landfills or solid waste facilities in California will receive solid waste exported from the County.

The Proposed Plan does not intend to identify every possible out-of-County landfill or solid waste facility that could potentially receive solid waste from the County for disposal, but rather focuses on identifying only the adequate number of out-of-County Class III landfills and in-County infrastructure necessary to provide, at a minimum, the out-of-County disposal capacity needed to offset the in-County disposal capacity shortfall during the 15-year planning period.

Potential Out-of-County Landfills

Based on data from the 2018 Disposal Reporting System and the Solid Waste Information Management System, about 48 percent of the solid waste disposed in Los Angeles County was exported to Class III landfill facilities in Kern, Kings, Orange, Riverside, San Bernardino, San Diego, Stanislaus, Ventura, and other counties in California for disposal.

A number of existing out-of-County solid waste disposal facilities have been identified as potentially viable for exporting solid waste from the County during the 15-year planning period. As provided in Table 3-6, these out-of-County landfills are located in Imperial County, Kern County, Orange County, Riverside County, San Bernardino County, and Ventura County.

Transportation Modes for Exporting Solid Waste to Out-of-County Landfills

The transportation of solid waste to out-of-County landfills may be achieved by truck and rail. Trucks may transport waste directly from the curbside or receive loads from transfer stations, MRFs, or CDI debris processing facilities. Solid waste may also be transported to out-of-County disposal facilities by train through the "Waste-by-Rail" (WBR) system. It is an alternative means of solid waste transportation that could provide jurisdictions in the County access to a greater array of landfills that would otherwise be inaccessible or extremely expensive. Solid waste industry experts have determined that transporting waste by truck is more economical for distances less than 200 miles, whereas transportation by rail is more economical for distances greater than 200 miles. Until the WBR system becomes a feasible and economical alternative for transporting solid waste, truck transport will most likely be the primary mode for transporting waste to out-of-County landfills. In fact, Los Angeles County Sanitation District (LACSD) also plans to keep truck transportation as an option for transporting waste to Mesquite Regional Landfill and to the LACSD's WBR project.

3.5 INTENDED USES OF THIS EIR

This Draft EIR has been prepared in accordance with CEQA PRC Section 21000 et seq., the CEQA Guidelines (Section 15000 et seq.) as promulgated by the California Resources Agency and the Governor's Office of Planning and Research and the County of Los Angeles CEQA Thresholds Guide. This Draft EIR will enable the County, other responsible agencies, and interested parties to evaluate the environmental impacts of the Proposed Plan; thereby enabling each entity to make informed decisions with respect the requested entitlements.

Section 41721 of the PRC requires the CSE be "approved by the county and by a majority of the Cities within the County which contain a majority of the population of the incorporated area of the County." In addition to the local jurisdictions' approvals, the CSE must be reviewed and approved by CalRecycle. The following description provides a summary of the CSE approval process as mandated by State law.

1. Preparation of the draft CSE

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

2. Preparation of the final CSE

Based on the comments received on the draft CSE, the County shall prepare the final CSE and shall submit the document to the cities and the County Board of Supervisors for approval.

3. Local Adoption of the final CSE

- (a) Each city in the County, and the County Board of Supervisors, shall conduct a public hearing for the purpose of adopting the final CSE. After considering all comments of members of the governing body and the public, each jurisdiction shall, by resolution, either approve or disapprove the CSE within 90 days of receipt of the final CSE 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 CSE, the jurisdiction shall give written notice to the Task Force, the County Board of Supervisors, and CalRecycle of the deficient areas in the CSE within 30 days of disapproval.
- (c) If the final CSE is 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 CSE and recirculate it as required by Title 14, CCR, Sections 18779 through 18285.

4. Submittal to CalRecycle

Upon local approval of the final CSE, the County shall within 30 days of such approval, submit to CalRecycle the locally approved final CSE, each jurisdiction's resolution approving or disapproving the CSE, the Notice of Determination (NOD), and Final EIR.

5. CalRecycle Approval of the final CSE

- (a) CalRecycle shall, within a time-frame of 90-120 days, review the CSE, and at a public hearing determine whether it meets the requirements of AB 939, as amended. After considering public testimony and input from the Task Force, CalRecycle shall either adopt a resolution approving the CSE, or issue a Notice of Deficiency to the County. Within 30 days of approval or disapproval, CalRecycle shall send a copy of the resolution of approval or a Notice of Deficiency to the County.
- (b) If disapproved by CalRecycle, the County shall resubmit the CSE in accordance with the requirements of the PRC, Section 41811 and 41812, and with 14 CCR Sections 18780 through 18794.

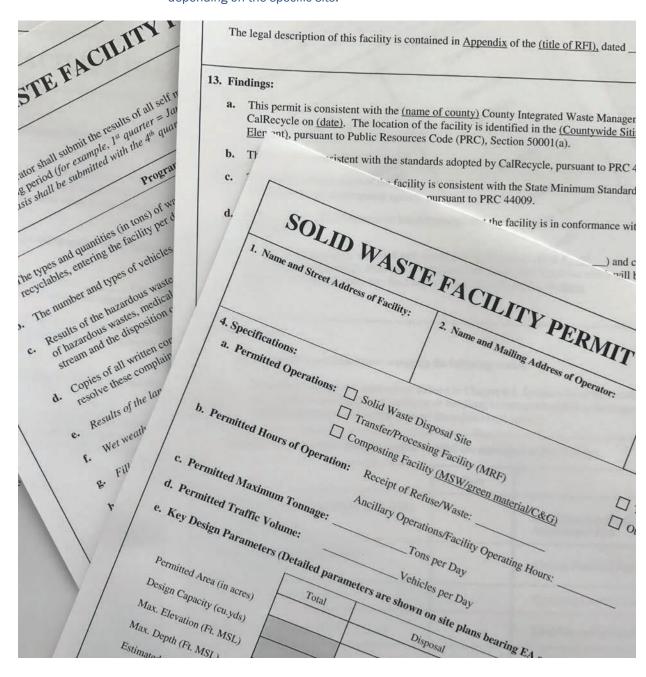
3.5.1 Permitting for Future Projects

A complex set of regulations and standards govern the disposal of solid wastes. These regulations are administered by local, County, State, and Federal agencies. Many of the local and State regulations contain monitoring and reporting requirements for the purpose of assuring compliance with standards. Prior to implementation of any of the potential AT sites, the appropriate permits must be obtained by the owner/operator of the facility. The specific discretionary approvals, environmental justice, and permit requirements would apply to project-specific plans on a case by case basis. It is not intended for this EIR to address the project-level CEQA requirements for these future approvals.

- Land Use Entitlements. Local land use entitlements must be obtained from the local governing bodies for the identified potential AT facilities. For a proponent carrying out a project, the process by which a land use entitlement is obtained commences with the submission of an application which would include the final environmental document as certified by the CEQA lead agency. The land use decision would come in the form of a Land Use Permit, Conditional Use Permit, or Variance from the local planning commission where the potential site is located.
- Finding of Conformance (FOC). The Task Force will ensure that all new or expansions of existing solid waste AT and/or disposal facilities conform to the siting criteria developed and contained in the CSE. To accomplish this, the Task Force will require all new or expansions of existing facilities to obtain a finding of conformance (FOC) with the CSE prior to issuance of the Solid Waste Facility Permit by the appropriate Local Enforcement Agency. In the FOC Notification Process, the Task Force, in coordination with the County, would provide notices and comments to project proponents and lead agencies regarding the FOC Process and the FOC Requirements, early in the project/facility permitting process. The Task Force will also require an FOC with the CSE whenever an existing disposal or AT facility significantly alters or changes its operations.

Solid waste disposal facilities that are not identified in the Siting Element must obtain a Finding of Conformance with the CSE from the Task Force. The purpose of the FOC process is to: (1) provide a mechanism for the inclusion of new facilities and/or expansions of existing facilities into the CSE; (2) ensure that the Siting Criteria contained in the CSE are applied, and that all new facilities and/or expansion of existing facilities are consistent with the CSE and its Siting Criteria and (3) provide a forum where the public, local jurisdictions, public organizations, businesses, and industry may voice their opinions regarding each individual project. The County determined that the FOC process meets the intent of PRC Section 41721.5 which prohibits a solid waste disposal facility not described within the CSE to be established unless an amendment to the CSE has been approved identifying and describing the facility, and the date of its inclusion in the CSE.

Technical Operating Permits. The regulations governing Class III landfill activity are interrelated and, in some cases, overlapping. Several agencies have permit and enforcement authority over the operation of a solid waste facility. Technical operating permits would include at a minimum Waste Discharge Requirements (WDRs) when applicable, a Solid Waste Facilities Permit (SWFP), and Air Permits to Construct and Operate. Other approvals may also be required depending on the specific site.



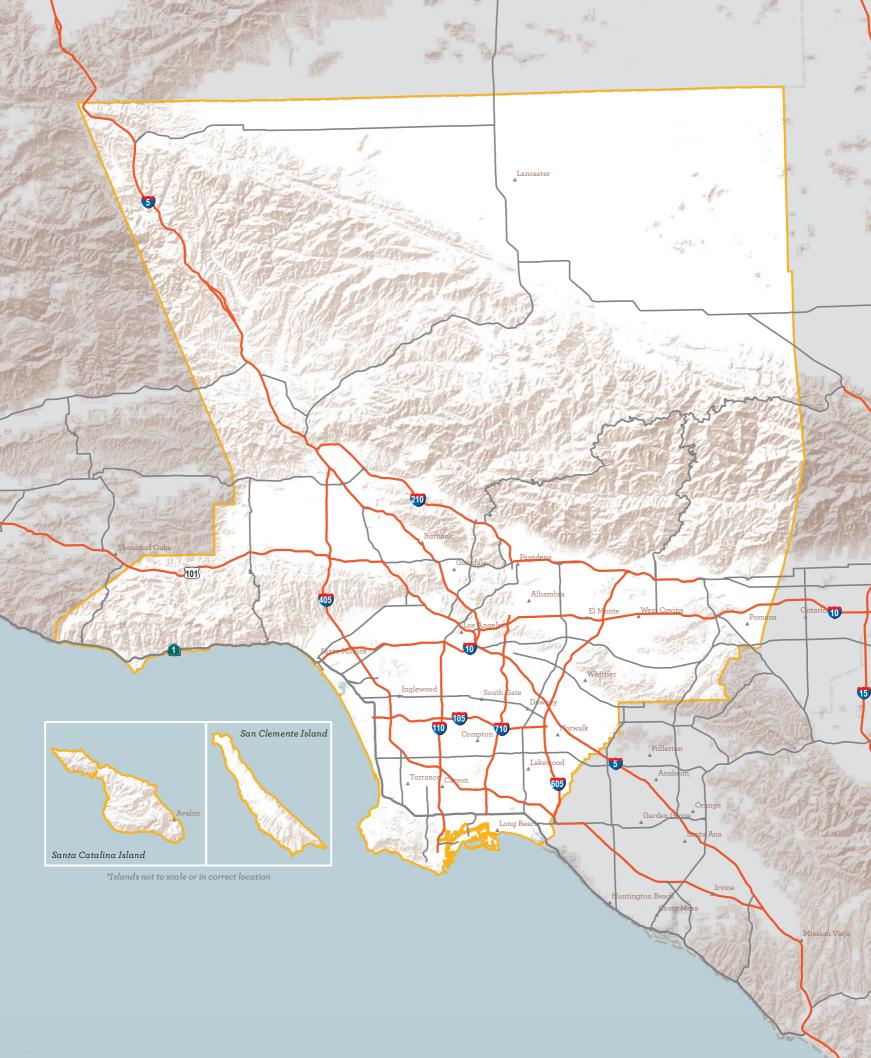
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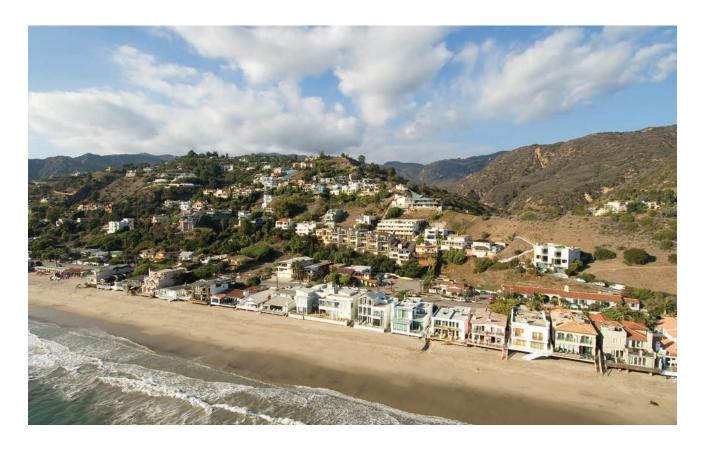


4

Environmental Setting



4.0 ENVIRONMENTAL SETTING



4.1 INTRODUCTION

This section provides a description of existing environmental conditions within the County (or Plan Area) as they exist at the time the Notice of Preparation (NOP) is published (2014), from both a regional and local perspective. The environmental setting provides a set of baseline physical conditions that will serve as a tool from which the lead agency will determine the significance of environmental impacts resulting from the Countywide Siting Element (CSE) Revision (Proposed Plan). To facilitate a consistent discussion for the geographical areas that could be affected with implementation of the Proposed Plan, the following terminologies are used throughout the Environmental Impact Report (EIR):

- Plan Area: The Plan Area encompasses the unincorporated portions of the County and 88 incorporated cities of the County, including all existing solid waste management facilities (e.g., landfills, material recovery facilities, and transfer stations);
- **EIR Focus Area:** The Proposed Plan includes the potential for up to nine new alternative technology (AT) facilities within the Plan Area. These potential future projects would occur at up to nine site locations (herein referred to as EIR Focus Area) within the Plan Area and are located within multiple cities and unincorporated areas of the County as further described in Section 4.3.

4.2 REGIONAL ENVIRONMENTAL SETTING

4.2.1 Regional Location

Los Angeles County (Plan Area) covers an area of approximately 4,100 square miles and consists of 88 cities and more than 150 unincorporated County communities. The County stretches along 75 miles of the Pacific Coast of Southern California, and is bordered to the southeast by Orange County and San Bernardino County, to the north by Kern County, and to the west by Ventura County (see **Figure 4-1**). Los Angeles County also includes two offshore islands, Santa Catalina Island and San Clemente Island. The unincorporated areas of the County (unincorporated areas) are comprised of approximately 2,656 square miles (County of Los Angeles 2015).

4.2.2 Regional Population and Employment Growth

The County had a total population of 9,958,091 in 2013 with approximately 11 percent of the population living in unincorporated areas and the remainder living in one of the 88 incorporated cities (County of Los Angeles 2015). The County has experienced a modest population growth of 3.1 percent since 2000 with much of the growth occurring in unincorporated areas. Based on projections provided in the County's recent General Plan Update (2015), the County's total population is projected to increase to 11,353,000 by 2035; an approximately 14 percent increase.

In 2013, there were a total of approximately 4,506,400 jobs with the vast majority within the incorporated cities; unincorporated areas accounted for 5.6 percent. Employment projections for Los Angeles County anticipate that the number of jobs will increase to 4,827,000 by 2035, which is an increase of approximately 7.1 percent (County of Los Angeles 2015). Of this total employment, approximately 318,100 jobs (or 6.6 percent) will be located in unincorporated areas.





Figure 4-1. Plan Area Overview: Incorporated and Unincorporated Areas

4.2.3 Regional Solid Waste Management

Given the County's large population and physical geography, the County requires a robust and dynamic solid waste management system in order to comply with the State's regulations governing solid waste collection and disposal. Solid waste for the 88 cities and the unincorporated communities in Los Angeles County is collected by both residential and commercial waste haulers through a diverse and complex system. Solid waste is generally collected once a week; however, there are some jurisdictions that are served two days each week. Each jurisdiction utilizes various bin systems for the collection of its residential waste. These options include: a one-bin system, two-bin system, and three-bin system; and in rare cases, a four-bin system. The types of materials collected in these bins include municipal solid waste (MSW), recycled materials, green materials and manure (in the case of a four-bin system). In the commercial sector, dumpsters are commonly used as storage bins for the collection of commercial waste.

After collection, waste is either hauled directly to the landfills or AT facilities, or indirectly through a transfer station, materials recovery facility (MRF), or construction, demolition, and inert (CDI) debris recycling facility. The County relies on a unique mixture of publicly and privately-owned and operated facilities to maintain a competitive environment for solid waste collection and disposal. Currently, there are 10 permitted Class III landfills (six major landfills and four minor landfills) and two AT facilities in operation in the County.

In order to manage this complex system that crosses over multiple jurisdictions and geographical land areas, the County is divided into 24 independent special sanitation districts. The Los Angeles County Sanitation District (LACSD) provides solid waste and waste water management for approximately 5.5 million people across the County, with a service area covering approximately 800 square miles, and encompassing 78 cities and unincorporated areas of the County (County of Los Angeles Chief Executive Office 2012).

The Sanitation Districts were formed in 1923 to construct, operate, and maintain facilities to collect, treat, and dispose of wastewater and industrial wastes. Under a 1949 Act amendment, solid waste management and disposal services including refuse transfer and resource recovery were included. The LACSD operates Scholl Canyon Landfill in the City of Glendale.

Solid waste management in portions of the unincorporated County and incorporated Cities not covered by the LACSD is either handled by a City, such as the City of Los Angeles Bureau of Sanitation (LASAN), or a private entity. County or City owned landfills include Burbank Landfill No. 3, Calabasas Landfill, Pebbly Beach Landfill, Savage Canyon Landfill, and Scholl Canyon Landfill. Other solid waste facilities are included in **Figure 3-4** of **Section 3**.

4.2.4 Regional Environment

This section provides a brief overview of the environmental setting for several of the environmental issue areas. More detailed information is provided in each environmental analysis section (**Chapter 5.0, Sections 5.1** through **5.15**).

Regional Climate and Air Quality

Los Angeles County consists of a large coastal basin with the Pacific Ocean to the west; a bordering mountain range, the San Gabriel Mountain, with a high point of 10,067 feet, on the north; and a large desert basin, the Antelope Valley, on the northern side of the San Gabriel Mountains. Several smaller mountain ranges also trend the east-west border of the Los Angeles Basin and San Fernando Valley. The San Jose Hills border the coastal basin on the east side. The majority of Los Angeles County is in the South Coast Air Basin (SoCAB), with the area north of the San Gabriel Mountains located in the Mojave Desert Air Basin. Frequent sunny days and low rainfall contribute to ozone formation, as well as high levels of fine particles and dust.

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas.

Regional Landscape Ecology

The principal vegetation types present in the Plan Area, beginning at the coast and moving inland, include coastal strand, coastal salt marsh, freshwater marsh, coastal sage scrub, chaparral, valley grassland, southern oak woodland, montane coniferous forest, bristle-cone pine forest, sagebrush scrub, shadscale scrub, pinyon-juniper woodland, Joshua tree woodland, creosote bush scrub, and alkali sink. Other notable vegetation types in the region include riparian woodland, mountain meadow, desert sand dunes, and intermittent washes (City of Los Angeles 2014).

Given the great biodiversity native to Southern California, many federal and/or state-listed Endangered, Threatened, Rare, and Candidate plant and wildlife species have the potential to occur within the overall Plan Area. Wetlands and drainages under United States Army Corps of Engineers (USACE) and/or the California Department of Fish and Wildlife (CDFW) jurisdiction and various special status vegetation types also occur throughout the Plan Area.

The unincorporated areas have six main types of biological resources: regional habitat linkages; forests; coastal zone; riparian habitats, streambeds and wetlands; and woodlands which are protected in one of 21 Significant Ecological Areas (SEAs) and nine Coastal Resources Area throughout the County. Biological resources in the coastal zone, including Santa Catalina Island, Marina del Rey, Ballona Wetlands and part of the Santa Monica Mountains, are identified as SEAs, which contain terrestrial or marine resources that, because of their characteristics and/or vulnerability, require special protection. Land use disturbance in coastal zones is regulated through coastal land use plans and local coastal programs, in conjunction with the California Coastal Commission (CCC) and other entities with management and jurisdictional authority.

Cultural Resources

Due to the large size of the Plan Area, there are numerous cultural resources. Prehistoric cultural resources are the recognizable locations of any prehistoric human activities or "sites," as well as locations or natural features recognized by Native Americans as having sensitive historic or ideological importance. Historical resources are typically discussed in one of three general contexts based on phases of European/Western occupation (Spanish, Mexican, and United States). Types of historical resources expected throughout the Plan Area can relate to European, Mexican, or United States land uses including exploration, settlement, or warfare. Types of historic resources include buildings, structures, or objects consisting of habitation sites (homesteads, farmsteads, ranch houses, private residences, hotels), procurement sites (logging, trading posts, kilns, mills, quarries, wells, cisterns, mines), transportation sites (historic roads, trails, bridges, landings, piers, shipyards, railroad tracks/routes), hydrological sites (dams, weirs, canals, locks, drainages, brow ditches, culverts), ceremonial or religious sites (cemeteries, churches), industrial sites (power plants, commercial buildings, factories, canneries), and municipal sites (town halls, civic centers, department stations, or other government buildings).

Geology and Soils

More than 50 percent of Los Angeles County is comprised of hilly or mountainous terrain. The Los Angeles Basin occurs at the intersection of the north-northwest trending Peninsular Ranges Geomorphic Province and the east-west trending Transverse Ranges Geomorphic Province. The Peninsular Ranges are characterized by a series of mountain ranges and intervening valleys that extend from Orange County to Baja California. The Transverse Ranges extend eastward where they merge with the Mojave and Colorado Deserts.

The seismicity of Southern California is dominated by the intersection of the northnorthwest trending San Andreas Fault system and the east-west trending Transverse Ranges fault system. The Transverse Ranges include a series of east-west trending mountain ranges that extend from Point Conception at the western tip of Santa Barbara County, eastward (and a bit south) to the east end of the San Jacinto Mountains in western Riverside County.

Hydrology and Water Quality

A watershed is the area of land where all of the sub-surface and surface water in the area is directed to the same location. The Plan Area includes part or all of the following six major watersheds: Antelope Valley Watershed, Los Angeles River Watershed, Dominguez Channel and Los Angeles Harbor Watershed, San Gabriel River Watershed, Santa Clara River Watershed, and Santa Monica Bay Watershed (Malibu Creek and Ballona Creek). These six major watershed areas comprise over 900 miles of major river systems, 3,600 miles of smaller streams, and 25 square miles of pond, lake, and reservoir surface. Also located within the Plan Area are a number of regional groundwater recharge areas called spreading grounds, which capture close to 80 percent of the runoff that flows from the mountains. Most spreading grounds are owned by the Los Angeles County Flood Control District. The total area of regional spreading grounds countywide is 3,361 acres. Los Angeles County also contains 21 groundwater basins in the coastal plain and valleys. Except during times of drought, groundwater extraction accounts for nearly 1/3 of the water usage in the unincorporated areas. In rural areas, hundreds of households depend solely on private wells that tap into local groundwater sources (County of Los Angeles 2015).

The County works with other stakeholders, including the Los Angeles County Flood Control District, in various ways to manage the function and health of its watersheds. In 1975, the Los Angeles Regional Water Quality Control Board (Los Angeles Regional Board) adopted two basin plans: one for the Santa Clara Basin and another for the Los Angeles Basin. The Basin Plans designate beneficial uses for inland and coastal surface waters, establish water quality objectives and implementation programs and policies to protect those uses.

The National Pollutant Discharge Elimination System (NPDES) is a permitting program that establishes a framework for regulating municipal, industrial, and construction stormwater discharges into surface water bodies, including stormwater channels. The Los Angeles Regional Water Quality Control Board, Central Valley Regional Water Quality Control Board, and Lahontan Regional Water Quality Control Board are responsible for implementing the federally-mandated NPDES program in Los Angeles County.

Los Angeles County has an adopted Stormwater Ordinance that requires the discharge, deposit, or disposal of any stormwater and/or runoff to storm drains must be covered by an NPDES Stormwater Permit. As part of the County's NPDES Program, the Los Angeles RWQCB adopted a new Municipal Separate Storm Sewer System Permit (MS4 Permit) in 2012 (as amended). The MS4 Permit imposes a number of basic programs in order to maintain a level of acceptable runoff conditions through the implementation of Best Management Practices (BMPs) that mitigate stormwater quality problems.

Scenic Features

Scenic resources in the Plan Area include designated scenic highways and corridors (or routes), hillsides, viewsheds and ridgelines. The Plan Area contains three designated scenic highways (1, 2, and 23) that are protected by the County's General Plan. Scenic hillsides include the San Gabriel Mountains, Verdugo Hills, Santa Susana Mountains, Simi Hills, Santa Monica Mountains and Puente Hills. Hillsides play a major role in physically defining the diverse communities in the unincorporated areas. They not only create dramatic backdrops against densely developed suburbs and communities, but also provide extensive environmental and public benefits to residents. The vast majority of the native plant and animal species reside within the mountainous terrain. Scenic viewsheds vary by location and community and can include ridgelines, unique rock outcroppings, waterfalls, ocean views or various other unusual or scenic landforms. Finally, there are numerous ridgelines that provide dramatic views for the unincorporated areas.

Major issues associated with scenic resources involve: (1) their protection from human activities; and (2) regulation of hillsides and hillside development. The County Hillside Management Area (HMA) Ordinance applies to all unincorporated areas that contain terrain with a natural slope of 25 percent or greater. The goal of the ordinance is to ensure that development preserves the physical integrity and scenic value of HMAs, provides open space, and enhances community character (County of Los Angeles 2015).

Transportation and Traffic

The Southern California transportation system is a complex network of roads and highways, public transit, bus and rail, freight railroads, airports, seaports, and intermodal terminals. According to the Southern California Association of Governments (SCAG), the regional transportation system is currently at capacity operations during peak periods (SCAG 2016). The regional freeway and highway system is the primary means of people and freight movement for the region. This system provides for direct auto, bus, and truck access to employment, services, and goods. The network of freeways and state highways serves as the backbone of the system offering very high capacity, limited-access travel, and serves as the primary heavy-duty truck route system (SCAG 2016).

Local agencies responsible for transportation services in Los Angeles County coordinate their activities to comply with the goals and policies of the SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (2016), and Los Angeles County Metropolitan Transportation Authority (Metro). Metro is the county-level transportation planning agency responsible for the preparation of the Long Range Transportation Plan (LRTP). The County, the 88 cities in Los Angeles County, and other transportation agencies engage in transportation planning activities by participating in the development and implementation of the RTP and LRTP. Metro is also the Congestion Management Agency for Los Angeles County and is responsible for implementing the Congestion Management Program (CMP).

Southern California public transit service is comprised of local and express buses, rapid buses, and urban rail that is principally centered in the core of Los Angeles County, commuter rail that spans all counties, and shuttles/circulators that feed all transportation modes and activity centers. Metro operates fixed route bus service, including the Orange Line and Silver Line, which are part of the Metro Liner system that uses buses within transit ways. The Metro Rail system is made up of the Metro Red and Purple Line subway system, the Metro Blue Line, the Metro Green Line, and the Metro Gold Line. Metrolink also connects with Metro Rail lines at Union Station in downtown Los Angeles, and with the San Diego Coaster and Sprinter lines at Oceanside. It also connects with Amtrak's Pacific Surfliner, Coast Starlight, Southwest Chief, and Sunset Limited trains.

The Plan Area contains 21 major airports, including international airports and commercial/private airports, as well as several military airports. There are also four ports of entry within the Plan Area, including the Port of Los Angeles and the Port of Long Beach, the two largest ports in the United States. Additionally, the City of Los Angeles is a major main line rail hub with Union Pacific operating four terminals, and Burlington Northern Santa Fe operating three terminals. These railroads link Southern California with other U.S. regions, Mexico, and Canada either directly or via their connections with other railroads.

4.2.5 State and Regional Planning

Integrated Waste Management Act (Assembly Bill 939)

The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939), as amended (Section 40000 et seq. of the California Public Resources Code [PRC]), requires each county to prepare a CSE which 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 CSE was approved by the majority of the cities within the County which contains a majority of the population and the Board of Supervisors in January 1998. This Proposed Plan revised CSE document when approved by a majority of the cities within the County, the County Board of Supervisors, and the California Department of Resources Recycling and Recovery (CalRecycle) will replace the existing CSE and covers the planning period beginning 2018 through 2033.

AB 939 established an integrated system of solid waste management in the State with a hierarchy of management practices with the following order of priority: (1) source reduction, (2) recycling and composting and (3) environmentally safe transformation (or AT) and land disposal. Under AB 939, as amended, each County is required to prepare a Countywide Integrated Waste Management Plan (CIWMP) that provides for management of solid waste on a countywide basis. A CIWMP consists of the following components for each city within the County and the County unincorporated area/communities:

- The CSE establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternatives to landfill technologies such as AT facilities 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.
- A Source Reduction and Recycling Element (SRRE) which describes how a jurisdiction will meet waste diversion mandates.
- A Household Hazardous Waste Element (HHWE) which describes the programs and strategies the jurisdiction will implement to reduce the amount of household hazardous waste in the waste stream.
- Non-Disposal Facility Element (NDFE) which describes the facilities the jurisdiction proposes to use to divert materials from the waste stream.
- A Summary Plan which provides an overview of all of the elements.

The primary focus of this EIR is the proposed CSE Revision to the County's CIWMP, which is described in detail in **Chapter 3**.

Senate Bill 1383

This bill requires the California Air Resources Board (CARB) to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40%, hydrofluorocarbon gases by 40%, and anthropogenic black carbon by 50% below 2013 levels by 2030, as specified. The bill also establishes specified targets for reducing organic waste in landfills and requires CalRecycle, in consultation with CARB, to adopt regulations that achieve these targets.

SB 1383 introduces targets to reduce the landfill disposal of organic waste as follows:

- "A 50-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by January 1, 2020."
- "A 75-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by January 1, 2025."

Assembly Bills 1826 and 1594

Two laws were passed in California in September 2015, intended to divert organic waste away from landfill disposal: AB 1826, Mandatory Commercial Organic Recycling (commencing January 1, 2016), and AB 1594, Green Waste Alternative Daily Cover (commencing August 1, 2018). AB 1826 requires businesses to recycle organic waste such as food waste, wood waste, and green waste beginning in April 2016. The law initially targets businesses that generate eight or more cubic yards of organic waste per week and later expands to include businesses that generate four cubic yards per week. AB 1594 defines green waste used as daily cover at landfills no longer qualifying as diversion and instead will be considered disposal starting January 1, 2020.

Solid Waste: Diversion (AB 341)

Under the commercial recycling law (Chapter 476, Statutes of 2011), AB 341 directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. The final regulation was approved by the Office of Administrative Law on May 7, 2012. AB 341 declared a policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020. The County's proposed CSE Revision incorporates this increased diversion goal.



Roadmap to a Sustainable Waste Management Future

In 2014, the Los Angeles County Board of Supervisors adopted the Roadmap to a Sustainable Waste Management Future (Roadmap). The Roadmap identifies three Focus Areas (County Unincorporated Communities, Regional/Countywide, and County Operations) and lays out the general framework for the strategies and initiatives that the County can implement to maximize the recovery of products, materials, and energy from waste that would otherwise be disposed at landfills. Subsequent to the adoption of the Roadmap, the Los Angeles County Public Works in cooperation with an Interdepartmental Working Group established four Implementation Subcommittees, one for each Focus Area and one for the Outreach and Education Priority Issue, to assist in the development of the implementation plans. The Implementation Subcommittees are comprised of various County Departments, the Chief Executive Officer, Board Office, and County Sanitation Districts.

The Roadmap identified 12 priority issues, which are identified below.

- Facilitating Sustainable Practices
- Local Green Business & Market Development
- Waste Prevention and Source Reduction
- Product Stewardship/Extended Producer Responsibility
- Organic Waste Management
- Conversion Technologies
- Household Hazardous and Electronic Waste
- Construction and Demolition (C&D) Debris
- Resource Recovery Centers
- Emergency Management and Regional Debris Management
- Assessment and Evaluation
- Outreach and Education

Global Warming Solutions Act of 2006

In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 (Assembly Bill 32 [AB 32]), which created a comprehensive, multi-year program to reduce greenhouse gas (GHG) emissions in California. AB 32 required the California Air Resources Board (CARB) to develop a Scoping Plan that describes the approach California will take to reduce GHGs to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan must be updated every five years. In December 2008, the Board approved the initial Scoping Plan, which included a suite of measures to sharply cut GHG emissions. In May 2014, CARB approved the First Update to the Climate Change Scoping Plan, which builds upon the initial Scoping Plan with new strategies and recommendations. The Update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals, highlights the latest climate change science and provides direction on how to achieve long-term emission reduction goals described in Executive Order S-3-05 (CARB 2014).

This EIR includes consideration of the Proposed Plan's consistency with AB 32 and locally adopted Climate Action Plans (CAPs). Section 5.6 of this EIR provides additional details, including information relating to CAPs, applying to the EIR Focus Area and for GHG emission estimates for the Proposed Plan.

Regional Transportation Plan/Sustainable Communities Strategy

The Sustainability Planning Grant Program (formally known as Compass Blueprint Grant Program) was established as an innovative vehicle for promoting local jurisdiction efforts to test local planning tools. The 2016-2040 RTP/SCS and its Program EIR was adopted by the SCAG's Regional Council on April 7, 2016. The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The 2016 RTP/SCS charts a course for closely integrating land use and transportation, so that the region can grow smartly and sustainably. Transportation improvements contemplated in the 2016 RTP/SCS would support the County's solid waste collection, recycling, and disposal efforts.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA; Public Law 94–580) establishes minimum standards for siting municipal solid waste landfills. Because California laws and regulations governing the approval of solid waste landfills meet the requirements of Subtitle D, the U.S. Environmental Protection Agency (EPA) delegated the enforcement responsibility to the State of California (via CalRecycle and the Department of Toxic Substances Control [DTSC]).

South Coast Air Quality Management District and Antelope Valley Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) and Antelope Valley Air Quality Management District (AVAQMD) are responsible for monitoring air quality as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards within the Plan Area. The majority of Los Angeles County is in the South Coast Air Basin (Basin), managed by SCAQMD. The SCAQMD jurisdiction is approximately 10,743 square miles and includes the County of Los Angeles except for the Antelope Valley, which is covered by the AVAQMD, and the Mojave Desert Air Quality Management District (MDAQMD)¹. The SCAQMD implements a wide range of programs and regulations that address point source pollution and mobile source emissions, and enforces air quality through inspections, fines, and educational training.

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. These regulated air pollutants are known as criteria air pollutants and are: carbon monoxide, volatile organic compounds (VOCs), nitrogen oxides (NO $_{\rm x}$), sulfur dioxide (SO $_{\rm 2}$), coarse inhalable particulate matter (PM $_{\rm 10}$), fine inhalable particulate matter (PM $_{\rm 2.5}$), and lead (pb). VOC and NO $_{\rm x}$ are criteria pollutant precursors and go on to form secondary criteria pollutants, such as ozone (O $_{\rm 3}$), through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards (AAQS) for that pollutant. The levels of ozone, particulate matter, and carbon monoxide in Los Angeles County continually exceed federal and state ambient air quality standards.

The purpose of the 2012 Air Quality Management Plan (AQMP or Plan) for the Basin is to set forth a comprehensive and integrated program that will lead the Basin into compliance with the federal 24hour $PM_{2.5}$ air quality standard, and to provide an update to the Basin's commitments towards meeting the federal 8-hour ozone standards. It will also serve to satisfy recent USEPA requirements for a new attainment demonstration of the revoked 1-hour ozone standard, as well as vehicle miles traveled (VMT) emissions offset demonstration.

¹ The EIR Focus Area does not include any potential facilities within the jurisdiction of MDAQMD.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities that comply with FEMA regulations that limit development in floodplains. FEMA also issues Flood Insurance Rate Maps (FIRMs) that identify which land areas are subject to flooding and flood hazard zones in the community. The design standard for flood protection covered by the FIRMs is established by FEMA, with the minimum level of flood protection for new development determined to be in the 1-in-100 (0.01) annual exceedance probability [AEP] (i.e., 100-year flood event). In California, these standards are enhanced to consider the 500-year flood event as well.

Executive Order 11988, Floodplain Management

This executive order recognizes floodplains as having "unique and adverse public values" and requires measures to minimize, restore and preserve natural floodplain values. The U.S. Department of Transportation Order 5650.2, titled "Floodplain Management and Protection," prescribes "policies and procedures for ensuring that proper consideration is given to the avoidance and mitigation of adverse floodplain impacts in agency actions, planning programs and budget requests."

Porter-Cologne Water Quality Control Act (California Water Code)

The California Water Code is California's statutory authority for the protection of water quality. Under this Act, the state must adopt water quality policies, plans, and objectives that protect the state's waters. Unlike the federal Clean Water Act (CWA), which regulates only surface water, the Porter-Cologne Act regulates surface water, groundwater, and discharges to land.

California Coastal Commission

There are five unincorporated areas in the state-designated coastal zone: Santa Catalina Island, Marina del Rey, a portion of the Santa Monica Mountains, Ballona Wetlands, and San Clemente Island. In accordance with the California Coastal Act, all development within the coastal zone must first obtain a Coastal Development Permit (CDP), which is issued by the CCC. Local Coastal Programs (LCPs) establish detailed land use policy and development standards within their respective coastal zone segments. The County has certified LCPs for Santa Catalina Island and Marina del Rey.

U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, and/or rare. This is due to the species' declining or limited population sizes, which usually results from habitat loss. Watch lists of such resources are maintained by the CDFW, the United States Fish and Wildlife Service (USFWS), and special groups, such as the California Native Plant Society (CNPS). The County contains multiple habitats, as well as plant and animal species, which have been accorded special recognition. These biological resources are described in more detail in Section 5.3, Biological Resources, of this EIR.

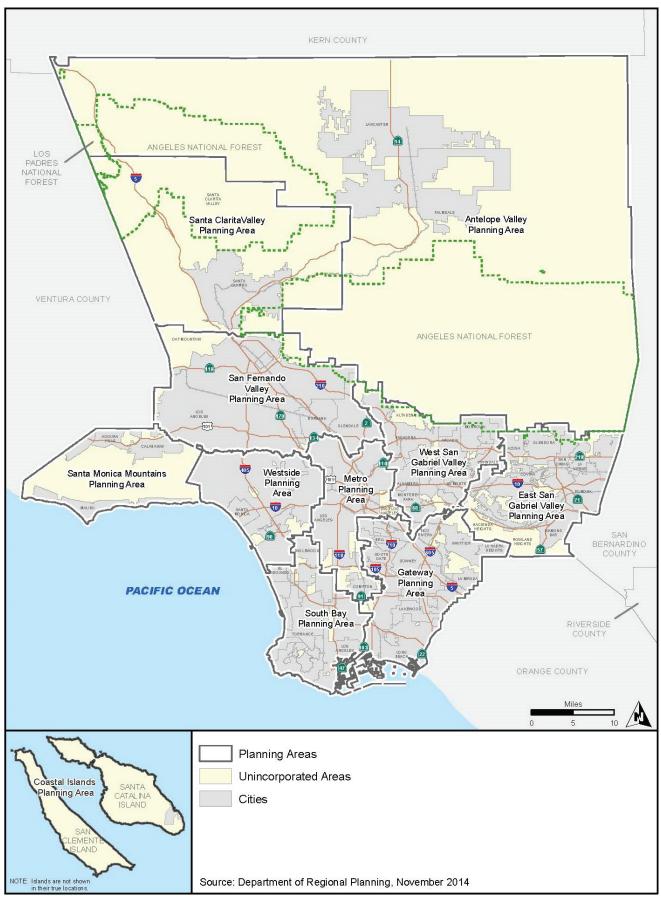
4.3.1 County Planning and Land Use

This EIR incorporates the County's General Plan and associated EIR, which were approved and adopted in 2015, by reference per the CEQA Guidelines. This includes the description of the 11 Planning Areas within the County and the existing land uses by Planning Area (see **Figure 4-2**). Descriptions of the County planning areas for the Westside, South Bay, Metro, Gateway, and Coastal Island Planning Areas are incorporated by reference. Additionally, descriptions of the Santa Catalina Island Specific Plan and LCP and East Los Angeles Community Plan as provided in the General Plan EIR (2015) are incorporated by reference.

The Los Angeles County Code, including Title 21, Subdivisions and Title 22, Planning Zoning, provide the basis for current zoning in the unincorporated areas. For each zone, the County Code provides development standards that govern such things as permitted land uses, height requirements, required parking, and other appropriate standards (e.g., setbacks). These zones and associated development standards are incorporated by reference from Appendix C of the County's General Plan EIR.



Figure 4-2. County Planning Areas



As provided in Section 3.2 of this EIR, the Plan Area includes a network of Class III minor and major Landfills, inert waste landfills, materials recovery facilities (MRF), transfer stations, and AT Facilities that comprise the County's solid waste management system. These include one inert waste landfill, four Class III minor landfills, six Class III major landfills, 29 MRFs, 17 transfer stations, eight CDIs, 19 composting facilities, and two AT facilities. Under the Proposed Plan, these facilities would continue to operate under their permitted capacity in accordance with their approved Solid Waste Facility Permits (SWFP).

Beyond the current permitted operations as described in **Chapter 3** of this EIR, the Proposed Plan includes the potential for up to nine new AT facilities. These potential future projects would occur at up to nine site locations (or the EIR Focus Area) and are located within multiple cities and unincorporated areas of the County. **Table 4-1** presents the three potential facility locations within unincorporated areas, the type of facility, and the associated General Plan land use and zoning. The locations identified in **Table 4-1** are subject to County jurisdictional and associated land use authority.

Table 4-1. CSE Revision - Contemplated Alternative Technology Facilities in Unincorporated Areas

AT Site	Site Name	Land Use Plan	General Plan Land Use	Zoning
AT Site #5	City Terrace Recycling, Inc.	East Los Angeles Community Plan	Industrial	Heavy Manufacturing (M-2)
AT Site #6	CR&R Catalina	Santa Catalina Island Land Use Plan	Public	Utilities and Industrial
AT Site #9	Waste Resources Recovery, Inc.	County General Plan	Heavy Industrial (IH)	Heavy Manufacturing (M-2)

Metro Planning Area (AT Sites #5 and #9)

The Metro Planning Area is located in the geographic center of Los Angeles County. It contains Downtown Los Angeles, industrial areas, and many of the City of Los Angeles' most densely populated neighborhoods. This Planning Area is almost entirely built out and most of it is occupied by the City of Los Angeles. Unincorporated islands in the Planning Area include: East Los Angeles, East Rancho Dominguez, Florence-Firestone, Walnut Park, West Athens-Westmont, West Rancho Dominguez-Victoria, and Willowbrook.

The City Terrace Recycling, Inc. (AT Site #4) is located within the Metro Planning Area. Based on the County Department of Regional Planning's GIS-Net3 application, the site is designated Industrial and is zoned as Heavy Manufacturing.

The Waste Resources Recovery, Inc. (AT Site #8) is located within the unincorporated area of the Metro Planning Area. Based on the County Department of Regional Planning's GIS-Net3 application, the site is designated Heavy Industrial and is zoned as Heavy Manufacturing.

Coastal Islands Planning Area (AT Site #6)

The Coastal Islands Planning Area consists of two islands – San Clemente Island and Santa Catalina Island. San Clemente Island lies approximately 63 miles south of the City of Long Beach and 78 miles west of the City of San Diego. San Clemente Island is approximately 24 miles long and 5 miles across at its widest point. It has a land area of approximately 57 square miles. Since 1934, San Clemente Island has been owned and operated by the U.S. Navy.

Santa Catalina Island is the only significantly inhabited island near the California coast. It is located approximately 22 miles south of the Palos Verdes Peninsula and 27 miles southwest of the Orange County shoreline. Santa Catalina Island is approximately 21 miles long and 8 miles wide. It has a land area of approximately 74 square miles.

The existing Pebbly Beach Landfill (CR&R Catalina - AT Site #6) is located on the southeast end of Santa Catalina Island. Based on the County Department of Regional Planning's GIS-Net3 application, the site is designated Industrial/Transportation/Utilities (I/T/U).

4.3.2 City Planning and Land Use

The CSE Revision contemplates up to six potential site locations within the corporate limits of four cities including Santa Monica, Carson, Gardena, and South Gate. **Table 4-2** presents the 10 potential facility locations within each of the nine cities, the type of facility, and the associated General Plan land use and zoning. The geographic location of these incorporated jurisdictions is provided in **Figure 4-1**.

Further description of the incorporated jurisdictions identified for new or expanded solid waste management facilities is provided below. This includes the location of the city within the Plan Area, the location of the potential facility within the City's corporate limits, and applicable General Plan policies for the jurisdiction.

Table 4-2. CSE Revision - Contemplated Facilities in Incorporated Cities

		Jurisdiction
		General Plan Land Use
AT Site	Site Name	Zoning
AT Site #1	City of Carson Public Works Corps Yard	□ City of Carson
	Corps raid	□ Heavy Industrial
		□ Heavy Manufacturing
AT Site #2	Santa Monica Pier	□ City of Santa Monica
		□ Oceanfront District
		□ Oceanfront District
AT Site #3	Santa Monica Airport	□ City of Santa Monica
		□ Institutional/Public Lands
		□ Not Listed
AT Site #4	Santa Monica Public Works Corps Yard	□ City of Santa Monica
	Corps raid	□ Industrial Conservation
		□ Industrial Conservation
AT Site #7	Internal Removal Specialists,	□ City of South Gate
	IIIC.	□ Industrial
		 Heavy Manufacturing (M2) and Industrial Flex (IF)
AT Site #8	Carson Revitalization Project	□ City of Carson
		□ Heavy Industrial
		□ Heavy Manufacturing

Santa Monica (AT Sites #2, #3, and #4)

The City of Santa Monica is located within the County's Westside Planning Area and is situated on the coast at the western terminus of I-10. Santa Monica adopted an update to the Land Use and Circulation Element of its General Plan in 2015 with a goal of implementing sustainable development and long-term programs to reduce its per capita carbon footprint and its overall impact on the environment. The Land Use and Circulation Element (LUCE) encompasses Santa Monica's vision for the future.

The Santa Monica Public Works Corp Yard Site (AT #3) is designated Industrial Conservation under Santa Monica's General Plan. This designation is intended to preserve space for existing industrial uses that provide a job base, affordable space for small-scale industrial and manufacturing businesses, and a center of economic activity. The designation also provides a place for the adaptive reuse of industrial buildings and a center where research and development offices and businesses that support the City's sustainability objectives may locate.

The Santa Monica Airport (AT #2) site location is designated as Institutional/Public Lands under Santa Monica's General Plan (2015). The Institutional/Public Lands designation is intended to retain land areas for their strong variety of government, educational, cultural, and other facilities that meet the needs of the community. This designation is intended for high-intensity government uses. Commercial, retail, office, affordable workforce and market-rate housing, and community facilities such as early childhood centers are also allowed in this mixed-use area.

The Santa Monica Pier (AT #1) site location is designated Oceanfront District under the Santa Monica General Plan (2015). The Oceanfront District designation is intended to maintain and enhance the Oceanfront District as an important visitor-serving destination with lodging, restaurants, shopping and recreation, as well as to protect the existing residential enclaves in the area. This designation places emphasis on maintaining the unique character and scale of the area focused on the landmark Santa Monica Pier.

South Gate (AT Site #7)

The City of South Gate is located in central Los Angeles County, situated west of I-710 and north of I-105. The South Gate General Plan was adopted in May 2009 and is the primary legal document to guide long-term growth, development and conservation in the city. The General Plan addresses solid waste in the Public Facilities and Services Element. The City of South Gate is a member of the Los Angeles Regional Agency (LARA) also known as Los Angeles Area Integrated Waste Management Authority, a regional agency which is a consortium of 16 cities in Los Angeles County.

The Interior Removal Specialists, Inc. site (AT Site #6) is located in an Industrial land use area and is zoned as heavy Manufacturing and Industrial Flex.

Carson (AT Sites #1 and #8)

The City of Carson is located in southern Los Angeles County and is roughly bounded by I-710 on the east and I-110 on the west. The City of Carson has an adopted General Plan (October 11, 2014) with solid waste reduction being primarily addressed in the Open Space and Conservation Element and Transportation and Infrastructure Element.

The existing public works yard (City of Carson Public Works Yard – AT Site #1) and Shell Oil Products site (Carson Revitalization Project – At Site #8) are located in an industrial corridor in the eastern portion of Carson at 2400 East Dominquez Street and 20945 S. Willington Avenue, respectively. Carson's General Plan designates both the City's Public Works Yard and Carson Revitalization Project sites as Heavy industrial.

4.4 ASSUMPTIONS APPLIED FOR THE PROGRAM LEVEL ANALYSIS

This EIR provides a region-wide assessment of potential significant environmental effects of implementing the CSE Revision and serves as a first-tier document for later CEQA review of individual projects, if carried forward in the future. Due to the broad regional scope of the Proposed Plan, the assumptions used in this EIR analysis are based on applicable adopted local, regional, and statewide plans related to solid waste planning and future growth.

The actions considered in this EIR relate to the revision of the CSE, which is a mandated component of the County's Countywide Integrated Waste Management Plan (1997). Although no specific project is proposed as part of the CSE Revision, the combined actions contemplated in the CSE Revision would result in both physical and operational changes to existing environmental conditions within the County (and incorporated cities). For this reason, this EIR programmatically evaluates the physical and operational changes to existing environmental conditions as a result of new solid waste facilities and siting criteria as contemplated in the CSE Revision (e.g., AT). Since these changes would occur in the vicinity of the EIR Focus Area, emphasis is placed on these specific areas within the overall Plan Area due to the site-specific nature of certain resources, such as biological resources.

In addition to addressing potential physical changes, this EIR programmatically addresses the operational changes to the County's solid waste management program that would result from the Proposed Plan and its consistency with the County's adopted General Plan and compares these changes to existing conditions. Since these operational changes would be distributed throughout the County, they are considered at the Plan Area scale in order to address regional impacts, such as air quality. In order to differentiate between these scales of analysis in the EIR, the programmatic analysis is presented at both the Plan Area and Focus Area scales. Where the effects would be similar, the discussion is grouped and applied for both scales of analysis.

The County expects that this EIR will support future, project-specific development applications through a tiering process by addressing plan consistency at the program level. As applications are filed in the future for the development of potential facilities identified in the CSE Revision, project-level CEQA documentation would be required once detailed, site-specific information becomes available.

4.5 CUMULATIVE LAND USE PROJECTIONS

CEQA Guidelines, Section 15130, requires a cumulative impacts analysis of a project when the project's incremental effect is "cumulatively considerable", as defined in Section 15065(a)(3). Each technical section of this Draft EIR addresses whether the project would have a cumulative effect on an environmental resource.

Section 15355 of the CEQA Guidelines defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts are the change caused by the incremental impact of an individual project compounded with the incremental impacts from closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

The CEQA Guidelines (Section 15130 [b][1]) state that the information utilized in an analysis of cumulative impacts should come from one of two sources:

- A list of past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or
- 2. A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

The cumulative impact analysis contained in this EIR uses method No. 2, as described above. The Proposed Plan consists of the Los Angeles County Siting Element Revision. Consistent with Section 15130(b)(1)(B) of the CEQA Guidelines, this Draft EIR analyzes the environmental impacts of adopting the Plan, which contemplates new solid waste disposal facilities. As a result, this Draft EIR addresses the cumulative impacts of these potential facilities in conjunction with new development within the incorporated jurisdictions, unincorporated areas within Los Angeles County, and adjacent county jurisdictions.

On April 7, 2016, SCAG adopted the 2016 RTP/SCS to help coordinate development of the region's transportation improvements. The RTP/SCS is a long-range transportation plan that is developed and updated by SCAG every four years. The RTP/SCS provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address existing and future mobility needs. Cumulative growth assumptions for the incorporated cities utilize the growth projections contained in SCAG's RTP/SCS. Cumulative growth projections for cities and unincorporated areas are shown on **Table 5.2-12** and reflective of the (2016) RTP/SCS.

To address potential cumulative impacts related to traffic and circulation, air quality, GHGs, and noise, the regional traffic analysis performed as part of the RTP/SCS and Final EIR (2016) and the associated findings are incorporated by reference into this Draft EIR. Future Plan-related trips are considered as a sub-component of the total daily heavyduty trucks trips analyzed in the 2016 RTP/SCS through 2040. The SCAG model covers the six county areas (Los Angeles plus Orange, Ventura, Riverside, San Bernardino and Imperial counties) and, therefore, considers transportation internal to Los Angeles County, both cities and unincorporated areas, along with travel to adjacent counties. Since the Proposed Plan does not contemplate any changes to existing or planned land uses, the SCAG modeling results (through 2040) are representative of cumulative conditions over the duration of the Plan's implementation (2018 to 2033).

In addition to the 2016 RTP/SCS, other planning documents considered as part of the cumulative analysis include the County's General Plan Update (2015) and EIR and the City of Los Angeles's SWIRP and EIR. Resource specific planning documentation, such as Water Quality Control Plans for water resources are considered, where applicable. Please refer to **Chapter 5** of this DEIR for a discussion of the cumulative impacts associated with the Proposed Plan within Los Angeles County and surrounding areas.

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Environmental Analysis















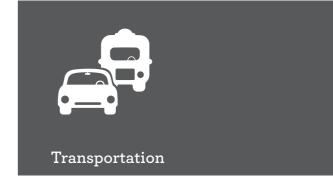




















5.1



Aesthetics



5.1 AESTHETICS

This section analyzes the potential impacts related to aesthetics as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing aesthetic conditions within the Plan Area. Potential aesthetic impacts, including potential cumulative impacts, are considered programmatically in the impact analysis. If applicable this section identifies proposed mitigation measures for any significant impacts.

5.1.1 Environmental Setting

As a region, Los Angeles County (County) is considered a densely populated urban area; however, it does contain a variety of scenic resources. The Los Angeles Basin consists of a large plain with a backdrop of mountainous ridgelines. The public has access to panoramic scenic views or vistas of natural features throughout the County such as: beach coastline views; striking or unusual natural terrain with a variety of vegetation and habitat types; varied topography including mountains, hillsides, and ridgelines, including the San Gabriel Mountains, Santa Monica Mountains, Topatopa Mountains, Santa Susana Mountains, San Jose Hills, Verdugo Hills, Topanga Hills, Chino Hills, Simi Hills, and Puente Hills, in addition to hydrologic features such as streams and rivers. Unique manmade urban features of city landscapes and historic buildings also have aesthetic value that are visible from park lands, private and publicly owned sites, and public right-of-ways. The varying topography shapes the region physically, and provides aesthetic value to the area and benefits local residents.

5.1.2 Existing Plans and Regulations

The following section provides a description of the applicable aesthetic regulatory environment for the proposed project.

State

State Scenic Highway System

The State Scenic Highway System consists of highways that have been designated by the California Department of Transportation (Caltrans) as scenic. The California State Legislature, through Section 263 of the Streets and Highways Code, makes highways eligible for designation as a scenic highway.

For a highway to be declared scenic, the government with jurisdiction over the abutting land must adopt a "Scenic Corridor Protection Program" that limits development, outdoor advertising, and earthmoving. Caltrans designations include; State Scenic Highway, Eligible State Scenic Highway, and Historic Parkways. Figure 5.1-1 and Table 5.1-1 identify the designated (State and local) scenic highways and eligible for state scenic designation highways and historic parkways within the Plan Area.

Table 5.1-1. Identified Scenic Highways Within the Plan Area

Highway	Status	Description
I-5	Eligible State Scenic Highway	I-210 near Tunnel Station to SR-126 near Castaic
	Designated State Scenic Highway	Castaic to the Kern County Line
I-110	Designated Historic Parkway (Arroyo Seco Historic Parkway)	Between mileposts 25.7 and 31.9 in Los Angeles
U.S. Route 101	Eligible State Scenic Highway	SR-27 (Topanga Canyon Boulevard) to the Ventura County line
I-210	Eligible State Scenic Highway	I-5 near Tunnel Station to SR-134
SR-1	Los Angeles County Scenic Highway	Segment along the coast through Santa Monica
	Eligible State Scenic Highway	From the Orange County line to SR-19 (Lakewood Boulevard) in Long Beach
	Eligible State Scenic Highway	From SR-187 near Santa Monica to the Ventura County line
	Los Angeles County Scenic Highway	From SR-1 to Lost Hills Road.
SR-2	Designated State Scenic Highway and Los Angeles County Scenic Highway	Part of the Angeles Crest Scenic Byway, from 2.7 miles north of I-210 to the San Bernardino County line
SR-23	Los Angeles County Designated Scenic Highway	Small segment in Santa Monica
-	Mulholland Drive (two sections)	CA-1 to Kanan Dume Road. From west of Cornell Road to east of Las Virgenes Road
SR-27	Eligible State Scenic Highway	From SR-1 to Mulholland Drive
SR-39	Eligible State Scenic Highway	SR-210 near Azusa to SR-2
SR- 57	Eligible State Scenic Highway	From the Orange County line to SR-60 near the City of Industry
SR-118	Eligible State Scenic Highway	I-5 near Castaic to the Ventura County line
SR-126	Eligible State Scenic Highway	SR-23/Desoto Āvenue, near Browns Canyon

Sources: California Department of Transportation, 2015.

http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm, and Los Angeles County General Plan, Section VII. Scenic Resources.

California Building Code

The California Building Code, Part 2 of Title 24 in the California Code of Regulations (CCR), is based on the International Building Code and combines three types of building standards from three different origins:

- Building standards that have been adopted by State agencies without change from building standards contained in the International Building Code.
- Building standards that have been adopted and adapted from the International Building Code to meet California conditions.
- Building standards, authorized by the California legislature, that constitute extensive additions not covered by the International Building Code that have been adopted to address particular California concerns.

The California Building Code includes standards for outdoor lighting that are intended to improve energy efficiency, and to reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls (County of Los Angeles 2014).

Figure 5.1-1. Identified State Scenic Highways



Source: County of Los Angeles, 2014

Local

County of Los Angeles

Hillside Management Areas Ordinance

Southern California has lost many of its scenic resources due to a variety of human activities. In the absence of adequate land use controls, many scenic resources have been adversely affected by unsightly development and sprawl (County of Los Angeles 2015). Development of steep terrain can be costly and the need to provide public services and safety to these areas are costly to developers and public agencies.

To conserve the natural beauty and public benefit of hillsides, hillside development land use activities that may result in environmental degradation are subject to regulations and design guidelines for impacts affecting, but not limited to, slope, soil erosion, natural drainage channels, and seismic and fire hazards (County of Los Angeles 2015). With related provisions contained in Section 22.56.215 (Hillside Management and Significant Ecological Areas—Additional Regulations) of the Zoning Ordinance, Hillside Management Areas (HMAs) were established to ensure that development preserves the physical character and scenic value of areas of the Plan Area with a natural slope of greater than 25 percent (County of Los Angeles 2014). The HMA Ordinance applies to properties within unincorporated areas and allows clustering development at the base of the slope, limits grading, and ensures that the drainage configuration remains as natural as possible and will not adversely impact offsite property. Hillside design guidelines are referenced during the pre-development and permit processing phases to minimize hillside alteration, conserve ridgeline silhouettes, determine traffic circulation and building placement by topography, and incorporate trails where appropriate. By imposing these design conditions, a more sensitive development will occur in hillsides in a manner that respects the natural topography and biological resources of the area (County of Los Angeles 2015).

Title 22 Chapter 22.52 (General Provisions) Part 10 (Signs) of the Los Angeles County Code

Part 10 of Chapter 22.52 of the Los Angeles County Code regulates the design, siting, and maintenance of signs in the Project Area. These regulations are intended to provide standards for the protection of property values, visual aesthetics, and the public health, safety and general welfare of citizens, while still providing ample opportunities for businesses and the visual advertising industry to operate successfully and effectively (County of Los Angeles 2014).

Conditional Use Permits

Where other portions of the County Code have established standards that would trigger the necessity of a Conditional Use Permit (CUP), Section 22.56 (Conditional Use Permits, Variances, Nonconforming Uses, Temporary Uses and Director's Review), Part 1 (Conditional Use Permits), contains regulations that pertain to the County's review of such permits. This section establishes that the purpose of CUPs is to allow for special consideration where particular project characteristics exist relating to the project's size, technological process or type of equipment, or because of its location with reference to surroundings, street or highway width, traffic generation or other demands on public services (County of Los Angeles 2015). Provisions in Section 22.56 ensure that development projects subject to review associated with a CUP are consistent with applicable development standards (County of Los Angeles 2015).

County of Los Angeles General Plan

This EIR incorporates by reference the General Plan policies from the County's recently adopted General Plan EIR.

Los Angeles County recently adopted an update to its General Plan in 2015. The General Plan's Conservation and Natural Resource Element includes the following policies adopted for the purposes of avoiding or mitigating adverse environmental impacts related to aesthetic characteristics of the existing environment from the implementation of the Proposed Project.

Land Use (LU) Element

- Goal LU 7: Compatible land uses that complement neighborhood character and the natural environment.
 - Policy LU 7.1: Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.
 - Policy LU 7.2: Protect industrial parks and districts from incompatible uses.
 - Policy LU 7.3: Protect public and semi-public facilities, including but not limited to major landfills, natural gas storage facilities, and solid waste disposal sites from incompatible uses.

Conservation and Natural Resources (C/NR) Element

- Policy C/NR 13.1: Protect scenic resources through land use regulations that mitigate development impacts.
- Policy C/NR 13.2: Protect ridgelines from incompatible development that diminishes their scenic value.
- Policy C/NR 13.3: Reduce light trespass, light pollution and other threats to scenic resources.
- Policy C/NR 13.4: Encourage developments to be designed to create a consistent visual relationship with the natural terrain and vegetation.
- Policy C/NR 13.5: Encourage required grading to be compatible with the existing terrain.
- Policy C/NR 13.6: Prohibit outdoor advertising and billboards along scenic routes, corridors, waterways, and other scenic areas.
- Policy C/NR 13.7: Encourage the incorporation of roadside rest stops, vista points, and interpretive displays into projects in scenic areas.
- Policy C/NR 13.8: Manage development in HMAs to protect their natural and scenic character and minimize risks from natural hazards, such as fire, flood, erosion, and landslides.
- Policy C/NR 13.9: Consider the following in the design of a project that is located within an HMA, to the greatest extent feasible:
 - Public safety and the protection of hillside resources through the application of safety and conservation design standards;
 - Maintenance of large contiguous open areas that limit exposure to landslide, liquefaction and fire hazards and protect natural features, such as significant ridgelines, watercourses and Significant Ecological Areas (SEAs).

- Policy C/NR 13.10: To identify significant ridgelines, the following criteria must be considered:
 - Topographic complexity;
 - Uniqueness of character and location;
 - Presence of cultural or historical landmarks;
 - Visual dominance on the skyline or viewshed, such as the height and elevation of a ridgeline; and
 - Environmental significance to natural ecosystems, parks, and trail systems.

Other Jurisdictions

In addition to the County, the Countywide Siting Element (CSE) Revision contemplates up to six potential site locations within cities including Santa Monica, Carson, and South Gate. Three potential site locations are within unincorporated areas of the County. Each of these cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to aesthetics. Depending where future facilities are located, local plans and policies would be applicable to those facilities.

5.1.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to aesthetics would be considered significant if the project was determined to:

- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- Substantially degrade the existing visual character or quality of the site and its surroundings.
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

5.1.4 Environmental Impacts

CSE Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternative technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County plans to maintain sufficient solid waste disposal capacity over a 15-year period (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to aesthetics; however, depending on phasing and implementation, certain policies may result in future project-level impacts through existing facility construction activities or construction of new facilities.

CSE Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste AT or land disposal facilities or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to aesthetics.

Impact 5.1-1: Scenic Vista

Would the Project have a substantial adverse effect on a scenic vista?

Los Angeles County contains a variety of scenic resources, including the beach coastline views, striking or unusual natural terrain with a variety of vegetation and habitat types, and varied topography including mountains, hillsides, and ridgelines. The potential for future facilities to result in the change, removal, or degradation of the nature and quality of scenic highway, corridor, historic parkway, or other recognized or valued views from a length of a public roadway, bike path, or trail is unknown due to the ambiguity of the exact location of a future facility. The potential location at Santa Monica Pier (AT Site #2) is designated as a scenic resource, visible from the Pacific Coast Highway. Adherence to all laws and regulations, including those mentioned in the City of Santa Monica Municipal Code, Article 9 Planning and Zoning, would be required. However, based on zoning requirements, the probability for degradation of visual resources to occur is unlikely. Future facilities would also be required to comply with the Siting Criteria in Appendix 6-A of the CSE that protects aesthetic resources by requiring new facilities be located in areas with compatible land use areas.

Based on these requirements and the need for future project-level environmental review, adoption of the Plan would have a less than significant impact on a scenic vista.

Impact 5.1-2: Scenic Highways

Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Future facilities are expected to be located in commercial, industrial or public facility zones and away from scenic corridors. Additionally, to minimize potential impacts to designated scenic highways (e.g. I-210), future facilities would be required to comply with the Siting Criteria in Appendix 6-A of the CSE, which requires new facilities to be compatible with the land use in the area. Adherence to State and local regulations, including the proposed CSE Siting Criteria, would minimize the potential for direct or indirect impacts to scenic highways and this impact is considered less than significant.

Impact 5.1-3: Visual Character or Quality

Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?

Future facilities proposed within the Focus Area would be subject to project-level environmental review and assessed visually on a case-by-case basis. In general, the proposed Siting Criteria co-locates future facilities at existing solid waste facilities (e.g. MRFs) or compatible industrial uses in developed areas. As a result, new facilities would not detract from the existing style or image of the surrounding area or result in a high degree of contrast with surrounding buildings and uses. The facilities would be expected to be located in commercial, industrial or public facility zones as directed by the Siting Criteria in Appendix 6A of the CSE, stating that facility location must demonstrate that a facility is compatible with the land use in the area. Based on these considerations, impacts to the visual quality and character of the Focus Area would be less than significant.

Impact 5.1-4: Day or Nighttime Views

Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Pursuant to the proposed Siting Criteria in Appendix 6A of the CSE, future facilities would be located in commercial and industrial areas where lighting and glare is more prevalent than residential or open space areas. Building materials for the facilities would be consistent with locally adopted ordnances and, in general, would avoid reflective

materials that could create a source of glare. Future facilities would likely include some type of outdoor lighting for security purposes; however, is common practice, these new sources of light should be oriented downward to avoid spill over onto adjacent properties or light sensitive areas. Since these facilities would be developed in existing urban areas and subject to requirements in applicable general plans, specific plans, zoning ordinances, or other land use plans, including the Siting Criteria in Appendix 6A of the CSE, impacts resulting from light and glare would be less than significant.

5.1.5 Cumulative Impacts

The Proposed Plan would generally co-locate new solid waste facilities with existing solid waste facilities or with compatible industrial uses in developed areas. These facilities, in conjunction with other projects in their immediate vicinity, would be developed consistent with local land use plans, including local urban design guidelines, as applicable. When combined, the facilities contemplated in the Plan would be unlikely to result in cumulative adverse changes to the visual quality and character in the Focus Area. Additionally, project-level environmental review would be required for new facilities as part of the local entitlement process. Based on these circumstances, no cumulatively considerable impact to visual resources and aesthetics would result from the Plan's adoption.

5.1.6 Level of Significance Before Mitigation

Compliance with applicable regulatory requirements, including the proposed CSE Siting Criteria, would minimize the potential for impacts to visual resources and aesthetics resulting in a less than significant impact.

5.1.7 Mitigation Measures

No mitigation measures are required.

5.1.8 Level of Significance After Mitigation

No significant impacts to visual resources or aesthetics are identified that would otherwise require mitigation.

5.1.9 References

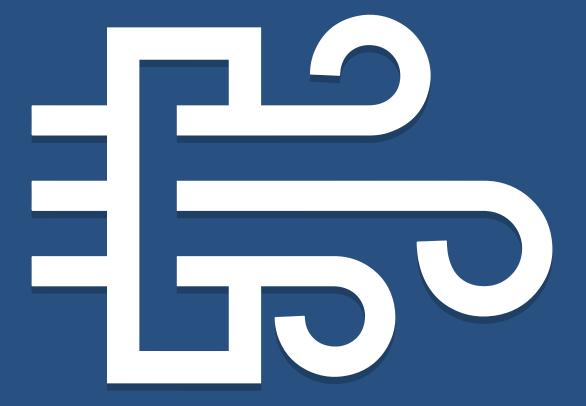
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5.2



Air Quality



5.2 AIR QUALITY

This section analyses the potential impacts related to air quality as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing air quality conditions within the Plan Area. Potential air quality impacts, including potential cumulative impacts, are considered in programmatically in the impact analysis. If applicable, this section identifies proposed mitigation measures for any significant impacts.

5.2.1 Environmental Setting

This EIR incorporates by reference the air quality setting for the Plan Area as identified in Section 5.3, Air Quality, of the County's General Plan EIR, Section 4.3, Air Quality, of the City of Los Angeles' Solid Waste Integrated Resources Plan EIR, and a White Paper on Comparative Greenhouse Gas Emissions Analysis of Alternative Scenarios for Waste Treatment and/or Disposal (White Paper) prepared by the County of Los Angeles (2016).

Based on a combination of factors, and federal standards during certain times of the year. The County has continuously received failing grades for ozone and particulate pollution in the air by the American Lung Association (County of Los Angeles 2015). The County is a large basin characterized by frequent sunny days and low rainfall which also contribute to ozone formation and high levels of fine particulates.

Poor air quality in the region is attributed to emissions from human activities and natural sources, as well as geography, local weather and climate; and is a measurable environmental hazard that impacts public health, welfare and the economy. The California Air Resources Board (CARB) has identified diesel particulate matter as representing 70 percent of the known cancer risk from air toxics in California. Diesel particulate matter is primarily emitted from trucks, trains and ships, which puts those who live near ports and distribution centers at greater risk (County of Los Angeles 2015). The County is home to the largest goods movement hub on the West Coast due to its many diverse industries that operate in the region, which consequently contribute to the particulate emissions (County of Los Angeles 2015).

Federal, state and regional agencies regulate air pollutants and contaminants that harm human health. As shown in Figure 5.2-1, the County is divided into two air basins, which have similar meteorological and geographic conditions. The majority of the County is in the South Coast Air Basin (SoCAB), with the area north of the San Gabriel Mountains (Antelope Valley) located in the Mojave Desert Air Basin (MDAB). The SoCAB is regulated by the South Coast Air Quality Management District (SCAQMD), while the MDAB portion of the Plan Area is regulated by the Antelope Valley Air Quality Management District (AVAQMD).

South Coast Air Quality Management District

The SCAQMD boundary spans approximately 10,743 square miles and includes the whole County excluding the Antelope Valley. SCAQMD is the agency responsible for assuring that the National and California ambient air quality standards (AAQS) are attained and maintained in the SoCAB, and prepares the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). The SCAQMD implements a wide range of programs and regulations that address point source pollution and mobile source emissions, enforcing air quality through inspections, fines, and training.

Figure 5.2-1. Air Basins



Source: County of Los Angeles 2015

South Coast Air Basin

A majority of the Plan Area is within the SoCAB, which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest, with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The Focus Area is contained within the SoCAB.

Antelope Valley Air Quality Management District

AVAQMD is the desert portion of the County that separated from the SCAQMD. The Antelope Valley is within the MDAB and is bounded by Kern County to the north, San Bernardino County to the east, and has a jagged southwest boundary that runs roughly from the Gorman area in the northwest to the San Bernardino County line in the Angeles Forest in the southeast. The AVAQMD portion of the MDAB covers approximately 1,300 square miles and includes the cities of Lancaster and Palmdale. AVAQMD is the agency responsible for assuring that the National and California AAQS are attained and maintained in the Antelope Valley portion of the MDAB.

Mojave Desert Air Basin

The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains that dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Elevations in the Antelope Valley portion of the MDAB range from 2,300 to over 8,000 feet (AVAQMD 2008). Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in Southern California by differential heating are channeled through the MDAB. The MDAB is separated from the Southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet) whose passes form the main channels for these air masses.

Criteria Air Pollutants

Both California and the federal government have established health-based AAQS for seven air pollutants, which are described below and shown in Table 5.2-1, Ambient Air Quality Standards for Criteria Pollutants. These pollutants are ozone (O3), nitrogen dioxide (NO2), carbon monoxide (CO), sulfur dioxide (SO2), coarse inhalable particulate matter (PM10), fine inhalable particulate matter (PM2.5), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

 Table 5.2-1. Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard	Federal Primary Standard	Major Pollutant Sources	
Ozone (O ₃₎	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.	
	8 hours	0.070 ppm	0.070 ppm		
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered movehicles.	
	8 hours	9.0 ppm	9 ppm		
Nitrogen Dioxide	Annual Average	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.	
(NO ₂₎	1 hour	0.18 ppm	0.100 ppm		
Sulfur Dioxide (SO ₂₎	Annual Arithmetic Mean	*	*1	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.	
	1 hour	0.25 ppm	0.075 ppm		
	24 hours	0.04 ppm	* 1		
Respirable Particulate Matter	Annual Arithmetic Mean	20 μ g/m³	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemic reactions, and natural activities (e.g., wind raised dust and ocean	
(PM_{10})	24 hours	50 μ g/m³	150 µ g/m³	sprays).	
Respirable Particulate Matter	Annual Arithmetic Mean	12 µ g/m³	12 μ g/m³	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemics reactions, and natural activities (e.g., wind raised dust and ocean sprays).	
(PM _{2.5})	24 hours	*	35 µ g/m³		
Lead (Pb)	30-Day Average	1.5 µ g/m³		Present source: lead smelters, battery manufacturing and recycling facilities. Past source: combustion of leaded gasoline	
	Calendar Quarterly	*	1.5 µ g/m³		
	Rolling 3-Month Average	*	0.15 μg/m ³		
Sulfates (SO	24 hours	25 µ g/m³	*	Industrial processes.	
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No federal standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.	
Hydrogen Sulfide	1 hour	0.03 ppm	No federal standard	Hydrogen sulfide (H2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfurcontaining organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.	
Vinyl Chloride Source: Co	24 hour	0.01 ppm	No federal standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites due to microbial breakdown of chlorinated solvents.	

Source:

County of Los Angeles 2014 ppm: parts per million; µg/m³: micrograms per cubic meter Notes:

^{*} Standard has not been established for this pollutant/duration by this entity.

¹ On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked

A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

- Carbon Monoxide is a colorless, odorless gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. The highest ambient CO concentrations are generally found near traffic congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation.
- Volatile Organic Compounds are comprised primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources of VOCs include evaporative emissions associated with paints and solvents, asphalt paving, and household consumer products such as aerosols. VOC's are also detected in landfills due to organic waste decomposition releasing VOCs into leachate or landfill gas. VOCs are not classified as a criteria pollutant. There are no state or federal ambient air quality standards established for VOCs; however, they contribute to the formation of O3 by combining with nitrogen oxides in the atmosphere under sunlight.
- Nitrogen Oxides are a by-product of fuel combustion and contribute to the formation of ground-level O3, PM10, and PM2.5. The two major forms of NOx are nitric oxide (NO) and nitrogen dioxide (NO2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO2 produced by combustion is NO, but NO reacts quickly with oxygen to form NO2, creating the mixture of NO and NO2 commonly called NOx. NO2 is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO2 is only potentially irritating. NO2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO2 exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between elevated short-term NO2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma.
- **Sulfur Dioxide** a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO2. When sulfur dioxide forms sulfates (SO4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SOx). Thus, SO2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO2 may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO2, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing.) At lower concentrations and when combined with particulates, SO2 may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics.

- Suspended Particulate Matter consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated: inhalable coarse particles and inhalable fine particulate. Inhalable coarse particles, or PM10, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤10 millionths of a meter or 0.0004 inch). Inhalable fine particles, or PM2.5, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤2.5 millionths of a meter or 0.0001 inch). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM10 and PM2.5 may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The USEPA's scientific review concluded that PM2.5, which penetrates deeply into the lungs, is more likely than PM10 to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing). There has been emerging evidence that even smaller particulates with an aerodynamic diameter of 0.1 microns or less (i.e., ≤0.1 millionths of a meter or ≤0.000004 inch), known as ultrafine particulates (UFPs), have human health implications because UFPs toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lung, and other organs. However, the USEPA or CARB have yet to adopt AAQS to regulate the even smaller fractions of PM. Diesel particulate matter is classified by CARB as a carcinogen. Particulate matter can also cause environmental effects such as visibility impairment, environmental damage, and aesthetic damage.
- Nox, both byproducts of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O3 is a secondary criteria air pollutant. O3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O3 harms sensitive vegetation, including forest trees and plants during the growing season.
- Lead is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered intelligence quotient (IQ). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the USEPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008, the USEPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.

Toxic Air Contaminants

In addition to criteria pollutants, there are hundreds of toxic air contaminants (TACs) that do not currently have federal or state ambient air quality standards. Non-criteria air pollutants or TACs are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic; i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common stationary sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. In addition to stationary/area sources of TACs, industrial operations could generate a substantial amount of diesel particulate matter emissions from off-road equipment use and truck idling. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines and asbestos (CARB 2011).

By the last update to the TAC list in December 1999, CARB had designated 200 compounds as TACs. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines. In 1998, CARB identified diesel particulate matter as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particles are 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs.

Odorous Emissions

Offensive odors from stationary sources rarely cause any physical harm; however, they still remain unpleasant and can lead to considerable distress among the public, generating citizen complaints to local governments. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

Sensitive Receptors

Sensitive population groups include children, the elderly, and those with preexisting health problems. Facilities and structures where sensitive populations reside or spend considerable amounts of time are known as sensitive receptors. Some land uses are considered more sensitive than others to air pollution due to the types of groups or activities involved. These uses include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Residential areas are especially considered sensitive to poor air quality because occupants are often at home for extended periods of time, while recreational land uses are moderately sensitive because of vigorous activity associated with the use. A majority of the Focus Area is located within and surrounded by industrial uses.

5.2.2 Existing Plans and Regulations

Federal

The Clean Air Act

The Clean Air Act (CAA) was passed in 1963 by the U.S. Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the U.S. As part of its enforcement responsibilities, the U.S. EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to achieve future attainment of the applicable National AAQS, using a combination of performance standards and market-based programs.

The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS. The National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Title V and Extreme Designation

As amended in 1990, Title V of the CAA created an operating permits program for certain defined sources. Title V is a federally enforceable state operating permit that is required under 40 Code of Federal Regulations (CFR), Part 70. The Title V programs are developed at the state or local level, as outlined in 40 CFR 70. In general, owner/operators of defined stationary sources that emit more than 25 tons per year (tpy) of NO_x and reactive organic gases (ROG) must possess a Title V permit (County of Kern 2013). Under the extreme definition, the definition of a major source subject to Title V permitting changes from 25 tpy to 10 tpy, which results in more businesses having to comply with Title V permitting requirements under the extreme nonattainment designation (County of Kern 2013). Title V does not impose any new air pollution standards, require installation of any new controls on the affected facilities, or require reductions in emissions. Title V does enhance public and EPA participation in the permitting process and requires additional recordkeeping and reporting by businesses resulting in significant administrative requirements (County of Kern 2013).

State

California Air Resources Board

The CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both state and federal air pollution control programs within California. In this capacity, the CARB conducts research, sets state ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. The CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hair spray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. The CARB has divided California into regional air basins according to topographic drainage features.

California Office of Environmental Health Hazard Assessment

The California Office of Environmental Health Hazard Assessment (OEHHA) is responsible for conducting health risk assessments of chemical contaminants found in air, including those identified as toxic air contaminants or on the list of chemicals under the Air Toxics Hot Spots Information and Assessment Act of 1987. Assessments include development of Cancer Potency Factors to assess the cancer risk from carcinogens in air, and development of Reference Exposure Levels to assess non-cancer health impacts. OEHHA has developed and updates risk assessment guidance for use in site-specific risk assessments under the Air Toxics Hot Spots program. OEHHA also makes health-based recommendations to the CARB for CAAQS. State legislation, the Children's Environmental Health Protection Act (Senate Bill [SB] 25, Escutia; chaptered 1999), requires OEHHA to explicitly consider infants and children in evaluating health risks of air pollutants. OEHHA is evaluating current risk assessment methods for their adequacy in protecting children.

Assembly Bill (AB) 1807 (Tanner Air Toxics Act)

The Tanner Air Toxics Act set up a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit that TAC. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. To date, CARB has established formal control measures for 11 TACs that are identified as having no safe threshold.

Assembly Bill 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987)

As mentioned above, air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, these facilities are required to communicate the results to the public through notices and public meetings.

Proposition 65

Proposition 65 is administered by OEHHA. Proposition 65 regulates substances officially listed by California as having a 1 in 100,000 chance of causing cancer over a 70-year period or birth defects or other reproductive harm in two ways. The first statutory requirement of Proposition 65 prohibits businesses from knowingly discharging listed substances into drinking water sources, or onto land where the substances can pass into drinking water sources. The second prohibits businesses from knowingly exposing individuals to listed substances without providing a clear and reasonable warning. An official list of substances covered by Proposition 65 is maintained and made publicly available.

Lead State Implementation Plan

In 2008, the USEPA designated the County portion of the SoCAB as a nonattainment area under the federal lead classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in the Cities of Vernon and Industry exceeding the new standard in the 2007 to 2009 period. The remainder of the SoCAB, outside the County nonattainment area, remains in attainment of the new standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the USEPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to the USEPA for approval.

Local

This EIR incorporates by reference the General Plan policies from the County's recently adopted General Plan EIR.

County of Los Angeles General Plan

Los Angeles County recently adopted an update to its General Plan in 2015. The General Plan's Air Quality, Land Use, Public Services and Facilities, and Economic Development Elements include policies adopted for the purposes of avoiding or mitigating environmental impacts related to potential risks resulting from natural and man-made hazards. Applicable General Plan polices are identified below.

Air Quality (AQ) Element

- Policy AQ 1.1: Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.
- Policy AQ 1.3: Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.
- Policy AQ 1.4: Work with local air quality management districts to publicize air quality warnings, and to track potential sources of airborne toxics from identified mobile and stationary sources.
- Policy AQ 2.1: Encourage the application of design and other appropriate measures when siting sensitive uses, such as residences, schools, senior centers, daycare centers, medical facilities, or parks with active recreational facilities within proximity to major sources of air pollution, such as freeways.
- Policy AQ 2.3: Support the conservation of natural resources and vegetation to reduce and mitigate air pollution impacts.
- Policy AQ 2.4: Coordinate with different agencies to minimize fugitive dust from different sources, activities, and uses.

Land Use (LU) Element:

 Policy LU 7.3: Protect public and semi-public facilities, including but not limited to major landfills, natural gas storage facilities, and solid waste disposal sites from incompatible uses.

Public Services and Facilities (PS/F) Element

- Policy PS/F 5.4: Encourage solid waste management facilities that utilize conversion and other alternative technologies and waste-to-energy facilities.
- Policy PS/F 5.5: Reduce the County's waste stream by minimizing waste generation and enhancing diversion.
- Policy PS/F 5.6: Encourage the use and procurement of recyclable and biodegradable materials.

Economic Development (ED) Element

 Policy ED 2.2: Utilize adequate buffering and other land use practices to facilitate the compatibility between industrial and non-industrial uses.

SCAQMD - 2012 AQMP

The 2012 AOMP, adopted on December 7, 2012 by SCAOMD, employs the most up-todate science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on- and off-road mobile sources, and area sources. The Plan also addresses several state and federal planning requirements, incorporating new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and new meteorological air quality models. The 2012 AQMP builds upon the approach identified in the 2007 AOMP for attainment of federal PM and ozone standards and highlights the significant amount of reductions needed. It also highlights the urgent need to engage in interagency coordinated planning to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria air pollutant standards within the time frames allowed under the CAA. The 2012 AOMP demonstrates attainment of federal 24-hour PM2.5 standard by 2014 and the federal 8-hour ozone standard by 2023. It includes an update to the revised USEPA 8-hour ozone control plan with new commitments for short-term NOx and VOC reductions. The AQMP also identifies emerging issues—ultrafine particulate matter (PM1.0), near-roadway exposure, and an analysis of energy supply and demand.

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the SIP. Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet the ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme. The attainment status for the SoCAB is shown in Table 5.2-2, Attainment Status of Criteria Pollutants in the South Coast Air Basin. The SoCAB is designated in attainment of the California AAQS for sulfates and is to meet the new federal 8-hour O3 standard by 2023 and the federal 24-hour PM2.5 standards by 2014 (with the possibility of up to a five-year extension to 2019, if needed). The SoCAB is designated a nonattainment area for NO2 (entire basin) and lead (Los Angeles County only) under the California AAQS. However, CARB has proposed to redesignate the SoCAB as attainment for NO2 and lead under the California AAQS.

Table 5.2-2. Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM ₁₀	Serious Nonattainment	Attainment/Maintenance
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO ₂	Nonattainment ²	Attainment/Maintenance ¹
SO ₂	Attainment	Attainment
Lead	Nonattainment (Los Angeles County only)	Nonattainment (Los Angeles County only)³
Sulfates	Attainment	No standard
Hydrogen sulfide	Unclassified	No standard
Visibility Reducing Particles	Unclassified	No standard

Source: County of Los Angeles, 2014

- 1 Annual standard revoked September 2006. CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM10 to attainment for PM10 under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM10 standards from 2004 to 2007. In June 2013, the USEPA approved the State of California's request to redesignate the South Coast PM10 nonattainment area to attainment of the PM10 National AAQS, effective on July 26, 2013.
- 2 CARB has proposed to redesignate the SoCAB as attainment for lead and NO2 under the California AAQS (CARB 2013c).
- 3 In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new federal and existing state.

The SCAQMD regulates, permits, and inspects stationary sources of air pollution, while the state is responsible for emission standards and controlling actual tailpipe emissions from motor vehicles. The relevant rules and regulations are as follows in Table 5.2-3.

Table 5.2-3. Applicable SCAQMD Rules and Regulations

Rule	Requirement
403 – Fugitive Dust	Implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site.
410 - Odors from Transfer Stations and Material Recovery Facilities	Establishes odor management practices and requirements to reduce odors from municipal solid waste transfer stations and material recovery facilities.
461 - Gasoline Transfer and Dispensing	Applies to the transfer of gasoline from any tank truck into any stationary storage tank, and from any stationary storage tank into any motor vehicle fuel tank.
1113 - Architectural Coating	Limits the Reactive Organic Gas/Volatile Organic Compounds (ROG/VOC) content of architectural coatings used in the SCAQMD.
1133 – Composting and Related Operations	Registration requirements for chipping and grinding activities and composting operations.
1193 – Clean On-Road Residential and Commercial Refuse Collection Vehicles	Solid waste collection fleet operators to acquire alternative- fuel refuse collection vehicles when procuring or leasing these vehicles.
1155 – Particulate Matter (PM) Control Devices	Use of best available technologies to reduce the amount of particulate matter (dust) entrained in ambient air as a result of anthropogenic (human-made, for example, construction) activities.

Source: SCAQMD, 2011 (http://www.agmd.gov/rules/rulesreg.html).

SCAQMD Amended Rule 1150.1 - Control of Gaseous Emissions from Municipal Solid Waste Landfills

On April 1, 2011, Rule 1150.1 Control of Gaseous Emissions from Municipal Solid Waste Landfills was amended pursuant to the early action measure under AB 32. The primary purpose of the amendment was to incorporate the state requirements into the rule for controlling methane emissions. The amendment also improved enforceability and streamlined requirements by clarifying operation standards for control devices already installed, and by eliminating duplicate recordkeeping and redundant reporting.

AVAQMD - Ozone Attainment Plan

The AVAQMD's most recent O3 Attainment Plan is the AVAQMD Federal 8-Hour Ozone Attainment Plan, Western Mojave Desert Non-Attainment Area, which was adopted on May 20, 2008 (2008 Ozone Attainment Plan). The Antelope Valley is downwind of the SoCAB, and to a lesser extent, downwind of the San Joaquin Valley. Prevailing winds transport ozone and ozone precursors from both regions into and through the Antelope Valley during the summer ozone season. Local Antelope Valley emissions contribute to exceedances of both the National AAQS and California AAQS for ozone, but the Antelope Valley would be in attainment of both standards without the influence of this transported air pollution from upwind regions. The 2008 Ozone Attainment Plan provides for the implementation, maintenance, and enforcement of the National AAQS, enforceable emission limitations, a monitoring program, a permit program (including a new source review program), contingency measures, and air quality modeling. The 2008 Ozone Attainment Plan demonstrates that the AVAQMD will be in attainment of the 8-hour National AAQS by 2021.

The attainment status for the Antelope Valley portion of the MDAB is shown in Table 5.2-4, Attainment Status of Criteria Pollutants in the Antelope Valley Portion of the Mojave Desert Air Basin. The Antelope Valley portion of the MDAB is designated nonattainment of the National and California AAQS for ozone and $PM_{2.5}$.

Table 5.2-4. Attainment Status of Criteria Pollutants in the Antelope Valley Portion of the Mojave Desert Air Basin

Pollutant	State	Federal
Ozone - 1 - hour	Severe – Nonattainment	No Federal Standard
Ozone – 8 – hour	Severe – Nonattainment	Severe – Nonattainment
PM ₁₀	Attainment	Attainment/Unclassified
PM _{2.5}	Nonattainment	Nonattainment
со	Attainment	Attainment
NO ₂	Attainment	Attainment/Maintenance
SO ₂	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	Attainment	No standard
Hydrogen sulfide	Unclassified	No standard
Visibility Reducing Particles	Unclassified	No standard

Source: County of Los Angeles 2014.

Los Angeles County Congestion Management Program

The Congestion Management Program (CMP) for Los Angeles County was developed to meet the requirements of Section 65089 of the California Government Code and addresses regional congestion by linking transportation, land use, and air quality decisions. The goals of the CMP include the following:

- To link land use, transportation, and air quality decisions
- To develop a partnership among transportation decision-makers on devising appropriate transportation solutions that include all modes of travel
- To propose transportation projects that are eligible for state gas tax funds

Other Jurisdictions

In addition to the County, the CSE Revision contemplates up to six potential site locations within cities including Carson, Santa Monica, and South Gate. Three of the potential site locations are within unincorporated areas in the County. Each of these cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to air quality. Depending where future facilities are located, local plans and policies would be applicable to those facilities.

5.2.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to air quality would be considered significant if the project was determined to:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

SCAQMD Significance Thresholds

Los Angeles County relies on significance thresholds recommended by the SCAQMD in the CEQA Air Quality Handbook to determine whether projects will have significant impacts to air quality. The SCAQMD's emission thresholds as shown in Table 5.2-5 apply to all federally regulated air pollutants.

Table 5.2-5. SCAQMD Air Quality Significance Thresholds

Pollutant	Construction (lbs/day)	Operation (lbs/day)
СО	550	550
NO _x	100	55
VOC (ROG)	75	55
SO _x	150	150
PM ₁₀	150	150
PM _{2.5}	55	55
Lead (Pb)	3	3

Source: South Coast Air Quality Management District, SCAQMD Air Quality Significance Thresholds (www. aqmd.gov/ceqa/handbook/signthres.pdf).

AVAQMD Significance Thresholds

The AVAQMD has adopted regional emissions thresholds to determine a project's cumulative impact on air quality in the Antelope Valley portion of the MDAB. Table 5.2-6 lists AVAQMD's regional significance thresholds. AVAQMD's emission thresholds are given as a daily value and an annual value, so that a multi-phased project (such as a project with a construction phase and a separate operational phase) with phases shorter than one year can be compared to the daily value. Any project is significant per AVAQMD if it:

 Generates total emissions (direct and indirect) in excess of the thresholds given in Table 5.26; and/or

- Generates a violation of any ambient air quality standard when added to the local background; and/or
- Does not conform with the applicable attainment or maintenance plan(s); and/ or
- Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1.

Table 5.2-6. AVAQMD Air Quality Significance Thresholds (Construction and Operations)

Pollutant	Annual Threshold (tons/yr)	Daily Threshold (lbs/day)
СО	100	548
NO _x	25	137
VOC	25	137
SO _x	25	137
PM ₁₀	15	82
PM _{2.5}	12	65
$H_{_2}S$	10	54
Pb	0.6	3

Source: Antelope Valley Air Quality Management District (2016).

5.2.4 Environmental Impacts

CSE Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternative technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County plans to maintain sufficient solid waste disposal capacity over a 15 year period (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to air quality; however, depending on phasing and implementation, certain policies may result in project-level impacts through existing facility construction activities or construction of new facilities.

CSE Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste AT or land disposal facilities or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to the generation of criteria air pollutants and/or air toxics.

Impact 5.2-1: Conflict with Air Quality Plan

Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The Proposed Plan contemplates new solid waste facilities within the defined Focus Area for this EIR and broader Plan Area. The Plan Area extends across two air basins, which are regulated by their respective AQMD; whereas the Focus Area is limited to locations within the SCAB. Each AQMD regulates ambient air quality through its AQMP. The AQMP incorporates local General Plan land use assumptions and regional growth projections developed by SCAG to estimate stationary and mobile source emissions associated with projected population and planned land uses.

If future facilities are proposed on properties containing the appropriate General Plan designation and zoning for the proposed use, then in theory the added emissions would have already been evaluated in the AQMP, which considers adopted General Plan land uses. In this context, the emissions reduction strategies proposed in the AQMP would be effective and the facility would not obstruct implementation of the AQMP. Since new facilities proposed under the Plan would be generally co-located with existing solid waste management facilities (e.g., materials recovery facility [MRF]) or compatible industrial uses in developed areas, major changes to existing General Plan land use and associated zoning are unlikely.

If future facilities are proposed in locations in which the General Plan designation does not support the use, then a General Plan Amendment would be required. If such a scenario were to occur, early consultation would need to occur between the local jurisdiction processing the facility's application (e.g., city or county) and the project proponent, to evaluate whether the proposed facility has the potential to result in localized impacts. When evaluating whether a facility has the potential to result in localized impacts, the local jurisdiction would consider the nature of the air pollutant emissions, the proximity between the emitting facility and sensitive receptors, the direction of prevailing winds, and local topography. Providing an adequate distance, or buffer zone, between the source of emissions and the receptor(s) would be a typical form of mitigation. This emphasizes the importance of addressing these potential land use conflicts as early as possible in the development review process. As future projects reach the application stage for the General Plan Amendment, rezoning, or conditional use permit additional environmental review would be performed, as required by CEQA, to determine the potential for significant environmental impacts. Ultimately, an analysis at the individual project level would be required to demonstrate conformity with the local AOMP.

From an indirect standpoint, by increasing the proposed diversion rate to 75 percent, a corresponding increase in truck trips would result in order to support expanded recycling programs. These policies/programs include expanding multi-family recycling, multi-family green bins and commercial haulers to offer recycling services to customers. At this time, the number of truck trips and potential emissions cannot be quantified, as specific routing and end locations are unknown. Thus, a project-specific air quality analysis cannot be conducted. However, SCAQMD Rule 1193 (Clean On-Road Residential and Commercial Refuse Collection Vehicles) requires solid waste collection fleet operators to acquire alternative-fuel refuse collection vehicles when procuring or leasing these vehicles, which would result in additional reductions of NO_{x} and PM_{10} . Additionally, by increasing the amount of materials diverted from landfills a corresponding decrease in landfill-related transportation and operations emissions would result. Therefore, impacts are considered less than significant.

Impact 5.2-2: Violate Air Quality Standards

Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction-Related Emissions

Construction of new solid waste facilities would require site preparation, earthmoving, and construction of the structural elements and related hardscape. Site preparation includes activities such as general land clearing and grubbing. Earthmoving activities include cut-and-fill operations, soil compaction, and grading. General construction activities include adding improvements such as roadway surfaces, new buildings and structures, and support facilities. The emissions generated from these construction activities include:

- Dust (including PM10 and PM2.5) primarily from fugitive sources (i.e., emissions released through means other than through a stack or tailpipe) such as soil disturbance and subject to the SCAQMD's Rule 403 (fugitive dust).
- Combustion emissions of criteria air pollutants (ROG, NOx, CO, PM10, and

PM2.5) primarily from operation of heavy off-road construction equipment (primarily diesel-operated), portable auxiliary equipment, and construction worker automobile trips (primarily gasoline-operated).

Evaporative emissions (ROG) from asphalt paving and architectural coatings.

The development of the solid waste facilities within the Focus Area as contemplated in the Plan could occur over the 15-year planning period. Over this period, there is a possibility that some facilities could be constructed simultaneously, depending on demand. Under such a scenario, greater quantities of NO $_{\rm x}$ and PM $_{\rm 10}$ would be released over a shorter duration, since emissions would be additive if facilities are located in the same air basin and under construction at the same time.

Fugitive dust emissions are generally associated with demolition, land clearing, exposure, and cut and fill operations. Dust generated daily during construction would vary substantially, depending on the level of activity, the specific operations, and weather conditions. If existing facilities are refitted, less fugitive dust emissions are expected. However, if new facilities are constructed on undeveloped land that requires significant grading, higher fugitive dust emissions would likely occur. Under such conditions, nearby sensitive receptors and on-site workers may be exposed to blowing dust, depending upon prevailing wind conditions. Fugitive dust would also be generated as construction equipment or trucks travel on unpaved roads on the construction site.

Construction-related activities at future facilities are required to comply with regional rules that assist in reducing short-term air pollutant emissions. Several AQMDs require fugitive dust controls so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. For example, SCAQMD's Best Available Control Measures (BACMs) for Rule 403 Fugitive Dust would be applicable to any construction activities proposed within the SCAQMD jurisdiction. AVAQMD also has a relevant fugitive dust rule that applies to construction activities. Similar, the County's General Plan Policy AQ 1.3, requires that particulate inorganic and biological emissions from construction, grading, excavation, and demolition be minimized to the maximum extent feasible.

Because the Proposed Plan documents solid waste management projects in the whole of Los Angeles County, it is more than likely that multiple simultaneous construction projects could occur, resulting in greater cumulative emissions. While construction is transient in nature, short-term emissions from construction have the potential to contribute substantially to localized and daily thresholds (see Tables 5.2-5 and 5.2-6). Therefore, the Plan's implementation would have the potential to result in a significant air quality impact in the short-term as new facilities are constructed or existing facilities re-purposed. Implementation of Mitigation Measure AQ-1 (see Section 5.2.7), on a facility by facility basis would minimize each facility's contribution to an additive construction-related impact.

Long-Term Operational Emissions

Implementation of the Proposed Plan would facilitate a shift to an integrated waste management hierarchy by prioritizing recycling, composting, and conversion technologies, with landfill disposal as a final option. To better understand the implications of this change from an air quality standpoint, the County commissioned a White Paper to compare the greenhouse gas (GHG) emissions resulting from traditional transport and landfill disposal of residuals from a Mixed Waste MRF (existing conditions) with the GHG emissions of an Integrated MRF with Conversion Technologies (Los Angeles County 2016). Analysis of NO_x and SO₂ and limited air toxics were included in the analysis. The material assumed to be processed under both scenarios is 1,000 tons per day (tpd) of post-recycled (after initial recycling efforts) residuals from a mixed waste MRF (Los Angeles County 2016).

The purpose of the Integrated MRF with Conversion Technologies is to maximize diversion through additional recovery of recyclables and materials not recovered by source separation programs or by a mixed waste MRF. A mechanical material separation process would remove additional recyclables and prepare feedstock (or raw materials) for AT and conversion technologies. Additional diversion from landfill disposal is achieved by combining technologies that include anaerobic digestion, composting, and thermal processing with ash recovery/recycling. Based on these operational characteristics, the White Paper concludes that the emissions resulting from an Integrated MRF with Conversion Technologies would be successful in reducing GHGs (and air toxics) on a 1,000 tpd equivalent basis. However, under the hypothetical scenario considered in the White Paper, these general decreases in GHGs come at the expense of corresponding increases in NO_x and SO₂ when compared to existing conditions (Los Angeles County 2016).

The inclusion of advanced air pollution control equipment such as selective catalytic reduction, non-selective catalytic reduction, dry scrubbers, and other best available control equipment may be capable of lowering these emissions. However, at a program level the County is unable to determine if the additional pollutant control technologies available would be capable of reducing the increases in NO_{x} and SO_{2} to below SCAQMD thresholds. For this reason, this increase would be considered a significant impact.

Transfer truck trips associated with the increased transport of organic matter, recyclables, and residual waste could contribute to congestion at intersections and along roadway segments in the Plan Area. These emissions would incrementally add to the facility operational emissions previously discussed and, therefore, would be significant. However, these emission sources would be subject to existing clean fuel programs that would continue to reduce the amount of vehicular and truck emissions associated with solid waste transport and disposal. SCAQMD Rule 1193 (Clean On-Road Residential and Commercial Refuse Collection Vehicles) requires solid waste collection fleet operators to acquire alternative-fuel refuse collection vehicles when procuring or leasing these vehicles, which would result in additional reductions of NO_x and PM_{10} . Implementation of Mitigation Measure AQ-2 (see Section 5.2.7), on a facility by facility basis would minimize each facility's contribution to an additive operational-related impact.

Impact 5.2-3: Sensitive Receptors

Would the Project expose sensitive receptors to substantial pollutant concentrations?

At this time, the stationary source equipment used in the AT facilities is unknown. However, the proposed AT facilities included for consideration are assumed to have advanced emissions control systems based on best available control technology (BACT) and generate nominal air emissions from on-site operating equipment, as is the case in existing MRFs, resource recovery centers, and composting facilities. Specific project-level air quality analysis, including an analysis of all stationary source equipment at each facility would be required as the individual facilities are proposed.

Stationary source emissions are governed by the rules and regulations of the local air quality management district. The general type of emissions sources and expected contaminants of concern (toxic air containment) include emergency diesel-fired equipment, storage tanks (e.g., vapors), natural gas consumption, refuse handling, and point source (or stack) emissions. Point source emissions may include criteria air contaminants (SO2, NO2, CO, PM10, PM2.5), polycyclic aromatic hydrocarbons (PAHs), polycyclic organic matter, VOCs, polycyclic organic hydrocarbons, and metals.

According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. Individual cancer risk is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. The SCAQMD has established the CEQA significance threshold for individuals exposed to TAC sources as the increased incremental cancer risk of 10 in one million or greater. Health risks would be assessed by calculating the cancer risk at a variety of distances from the proposed facility location. The carcinogenic and chronic inhalation health risks would be determined from these concentrations and compared to the chronic inhalation health index.

As future facilities are proposed, they would be subject to additional environmental review pursuant to CEQA. The further review would be required to perform a health risk assessment (HRA) in accordance with technical guidelines developed by the federal and California agencies (i.e., EPA, CalEPA-OEHHA) and the SCAQMD (or AVAQMD). As part of the proposed Siting Criteria, SCAQMD is required to perform a HRA as required under Section 42315 of the Health and Safety Code as part of issuing or renewing a permit to construct or operate. In addition to preparing an HRA, the SCAQMD is also required to make a determination that no significant increase in illness or mortality is anticipated in conjunction with issuing or renewing a permit. Notwithstanding the pre-existing regulatory framework governing air toxics and the corresponding requirements contained in the proposed Siting Criteria, this impact would be considered significant. Implementation of Mitigation Measure AQ2, on a facility by facility basis would minimize each facility's health risk-related impact.

Impact 5.2-4: Odors

Would the Project create objectionable odors affecting a substantial number of people?

Land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. SCAQMD Rule 410 prohibits such emissions. Activities associated with the operation of construction equipment, diesel, the application of asphalt, the application of architectural coatings and other interior and exterior finishes, and roofing may produce discernible odors typical of most construction sites. SCAQMD/AVAQMD Rule 1113, Architectural Coatings, limit the amount of VOCs from architectural coatings and solvents to further reduce the potential for odiferous emissions.

Since the specific facility types and locations have not been identified, and their distance from sensitive receptors is not known, there is a potential for odor impacts. Future project-specific air quality studies would be required and such studies would identify potential odor-control strategies. Typical strategies could include: provision of exhaust fans to provide multiple air exchanges every hour; treatment of air leaving the building by an odor neutralizing misting system; maintaining negative pressure at the building entrances to minimize the amount of untreated air leaving the building; and adding an odor neutralizer in the ceiling mounted misting systems for extra odor mitigation. Additionally, each facility would be required to minimize odors by properly maintaining design features and equipment designed to reduce and eliminate odors and pursuant to provisions of SCAQMD Rule 410. However, in the absence of a project-specific odor analysis and incorporation of odor-controlling features, future solid waste facilities contemplated under the Plan could result in objectionable odors that could impact a significant amount of people. For this reason, this impact is considered significant. Implementation of Mitigation Measure AQ-3 (see Section 5.2.7) on a facility by facility basis would avoid or minimize each facility's odor-related impact, if applicable.

5.2.5 Cumulative Impacts

On a project-level basis, the Proposed Plan has the potential to result in significant and unmitigated air quality impacts related to operational emissions, including the release of criteria pollutants including ozone precursors of NO_{ν} , ROG_{ν} , and SO_{ν} .

The SCAQMD's approach for assessing cumulative operational impacts is based on the SCAQMD's AQMP forecasts of attainment of AAQS in accordance with the requirements of the federal and state CAA. This forecast also takes into account SCAG's forecasted future regional growth. As such, the analysis of cumulative impacts focuses on determining whether the programs and policies contemplated under the Plan are consistent with forecasted future regional growth. If a project is consistent with the regional population, housing and employment growth assumptions upon which the SCAQMD's AQMP is based, then future development would not impede the attainment of AAQS and a significant cumulative air quality impact would not occur.

Implementation of the solid waste management facilities contemplated under the Proposed Plan, when taken into consideration with other development envisioned under the County's General Plan (2015) and infrastructure projects planned by SCAG under the RTP/SCS (2016), would have the potential to cumulatively result in a violation of existing air quality standards or contribute substantially to an existing or projected air quality violation. Both short-term construction and long-term operational emissions could contribute to these violations or exceedances. NO_{x} emissions associated with vehicular and haul truck trips combined with area source emissions would likely cause exceedances over the SCAQMD threshold. Additionally, future stationary source emissions from the facilities would further contribute to exceedances of the SCAQMD thresholds. Based on these circumstances, adoption of the Proposed Plan would result in a cumulatively considerable net increase in NO_{x} for which the SoCAB is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

By co-locating new solid waste facilities with existing solid waste management facilities (e.g., MRFs) or compatible industrial uses in developed areas, the cumulative effects of potential odors on sensitive populations would be minimized. Through the implementation of the proposed mitigation, issues related to odor would be incrementally addressed on a project-by-project basis. As a result, no cumulatively considerable odor impact would result.

5.2.6 Level of Significance Before Mitigation

Compliance with applicable regulatory requirements, including the proposed CSE Siting Criteria, would minimize the potential for impacts to sensitive receptor populations and related health risks. Increases in criteria air pollutants from construction and future operations would most likely be significant and mitigation is proposed. Issues related to odor could impact a substantial number of individuals and, therefore, mitigation is proposed to avoid or lessen this significant air quality impact.

5.2.7 Mitigation Measures

The following mitigation measures are proposed:

AQ-1. Air Emission Reduction Measures during Construction. Consistent with the provisions of Section 15091 of the State CEQA Guidelines, the County has identified mitigation measures that are within the jurisdiction and authority of the CARB, the County, local AQMDs, and other regulatory agencies (e.g., cities). Where the Lead Agency has identified that construction emissions for a future project has the potential to violate an air quality standard or contribute substantially to an existing air quality violation, the Lead Agency shall consider the integration of the following measures, or other comparable measures, to facilitate consistency with plans for attainment of the NAAQS and CAAQS, as applicable and feasible.

- Limits construction-related fugitive dust through the following:
 - Minimize land disturbance;
 - Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes;
 - Cover trucks when hauling dirt;
 - Stabilize the surface of dirt piles if not removed immediately;
 - Limit vehicular paths on unpaved surfaces and stabilize any temporary roads; and
 - Use watering trucks to minimize dust (watering should be sufficient to confine dust plumes to the project work areas).
- Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. Prepare a plan for approval by the applicable air district demonstrating achievement of the applicable percent reduction for a CARB-approved fleet including coordinated truck routes that will minimize the total number of truck routes and trucks as well as lengths of trips, as appropriate.
- Develop a traffic plan to minimize traffic flow interference from construction activities. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.
- As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain CARB Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the CARB or the District to determine registration and permitting requirements prior to equipment operation at the site.

AQ-2. Air Emission Reduction Measures during Operations. Consistent with the provisions of Section 15091 of the State CEQA Guidelines, the County has identified mitigation measures that are within the jurisdiction and authority of the CARB, the County, local AQMDs, and other regulatory agencies (e.g., cities). Where the Lead Agency has identified that operational emissions for a future project has the potential to violate an air quality standard or contribute substantially to an existing air quality violation, the Lead Agency shall consider the integration of the following measures, or other comparable measures, to facilitate consistency with plans for attainment of the NAAQS and CAAQS, as applicable and feasible.

During the facility design phase, a review of local AQMD rules shall be conducted to determine site-specific permit requirements for waste processing or handling facilities that may emit or potentially emit VOCs, particulates, CO, NO_x, or SO_x. Emissions of non-conventional pollutants and HAPs (Title V-Major Sources) shall comply with federal and state permitting rules. Compliance with the following rules and regulations, at a minimum, shall be required and as applicable:

- Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485)
- In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)
- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)
- SCAQMD Rule 201: Permit to Construct, Rule 403: Fugitive Dust, Rule 1113: Architectural Coatings, and Rule 1403: Asbestos Emissions from Demolition/ Renovation Activities
- AVAQMD Rule 201: Permit to Construct, Rule 203: Permit to Operate, Rule 403 and 403.2: Fugitive Dust Control, and Regulation XIII, New Source Review
- Control of Hazardous Dust Conditions (County Code Chapter 12.32)

AQ-3. Minimization of Odors. An odor analysis shall be prepared as part of future project-specific air quality analyses. If the odor analysis identifies the potential for a significant impact, the facility shall incorporate odor-reducing design features. Such features may include, but are not limited to:

- Provision of exhaust fans to provide multiple air exchanges every hour
- Treatment of air leaving the building by an odor neutralizing misting system
- Maintaining negative pressure at the building entrances to minimize the amount of untreated air leaving the building

5.2.8 Level of Significance After Mitigation

Since specific facility-level analysis cannot be conducted at this time, due to the uncertainty of type and location of technologies to be implemented, the County is unable to verify if facility emission impacts will be reduced to below a level of significance through the implementation of the proposed mitigation. Based on the analysis provided, the Plan would likely result in significant construction and operational emissions of criteria air pollutants, including $\mathrm{NO}_{\mathrm{x}}.$ Implementation of BACMs in conjunction with Mitigation Measure AQ-1 would reduce some of the construction related emissions; however, the County is unable to confirm whether these reductions would be sufficient for reducing construction-related impacts to below a level of significance. For this reason, construction-related emissions would remain significant at the Plan level.

From an operational perspective, the proposed shift to an integrated waste management hierarchy would result in a corresponding increase in criteria air pollutants (e.g., NO_x). Although process-specific emissions control technologies would be employed at new facilities, their combined operations would result in an increase in criteria air pollutants when compared to existing solid waste management operations. In addition to stationary and area sources, NO_x emissions associated with vehicular and haul truck trips would further contribute to exceedances of SCAQMD (or AVAQMD) threshold. Adherence to the County's existing clean fuels programs and compliance with Mitigation Measure AQ-2 would reduce some of the NO_x emissions associated with haul trucks and other stationary sources, however, residual operational-related impacts could remain. Therefore, this impact is considered cumulatively considerable at the program level and significant pending a project-specific air quality analysis.

Significant impacts related to potential odors would be reduced to a level less than significant with the implementation of Mitigation Measure AQ-3 at the project level.

5.2.9 References

- Antelope Valley Air Quality Management District, 2016. California Environmental Quality Act (CEQA) and Federal Conformity Guidelines. August 2016. Accessed December 28, 2016.
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5.3



Biological Resources



5.3 BIOLOGICAL RESOURCES

This section analyzes the potential impacts of the Proposed Plan related to biological resources as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing biological resources conditions within the Plan Area. Potential biological resources impacts, including potential cumulative impacts, are considered programmatically in the impact analysis. If applicable, this section identifies proposed mitigation measures for any significant impacts.

5.3.1 Environmental Setting

This Environmental Impact Report (EIR) incorporates by reference the biological resources for the Plan Area as identified in Section 5.4, Biological Resources, of the County General Plan Update and EIR (2015).

Los Angeles County is comprised of a diverse variety of ecosystems that include coastal areas, islands, plains, mountains, and deserts. Los Angeles County possesses an extremely varied topography, and elevations range from sea level to over 10,000 feet. Climates range from mild near the coast to severe in the mountain and high desert regions. In addition, the soils and underlying geology vary according to prehistoric volcanic activity, marine sedimentation, and river deposition. This wide variation in physical environments has produced the unique and diverse collection of biological resources in Los Angeles County.

Vegetation

Los Angeles County has a diversity of geography and habitats, including coastlines, islands, dunes, sea cliffs, hills, mountain ranges, valleys, plains, deserts, marshes, tidal flats, freshwater ponds, rivers, streams, wetlands, woodlands, shrublands, and grasslands. As a consequence, Los Angeles County supports a wide variety of plant communities within its boundaries. Some of the more common plant communities identified include mixed conifer-oak woodland, foothill woodland, coast live oak woodland, pinyon-juniper woodland, Joshua tree woodland, juniper woodland, southern cottonwood-willow riparian forest, southern willow scrub, mule fat scrub, chaparral, coastal sage scrub-chaparral mixed scrub, coastal sage scrub, desert scrub, and nonnative annual grassland. Unique or less common plant communities include big cone spruce-canyon oak woodland, valley oak woodland, coast live oak riparian forest, walnut woodland, southern sycamore-alder woodland, white alder riparian forest, mesquite bosque, mainland cherry forest, California buckeye woodland, alluvial fan sage scrub, redshank chaparral, native grassland, wildflower field, freshwater marsh, alkali marsh, salt marsh, and vernal pool. Santa Catalina Island exhibits a specialized subset of the above communities identified as maritime succulent scrub, southern coastal bluff scrub, island chaparral, island oak woodland, island ironwood forest, and island cherry woodland.

Table 5.4-1, Special-Status Plant Species of the County General Plan EIR identifies the known occurrences of special-status plant species within Los Angeles County, as well as the County Planning Areas and is incorporated by reference into this EIR.

Wildlife

Los Angeles County is a mosaic of open space areas, suburban areas and rural areas, and densely developed urban areas. Wildlife within Los Angeles County is extremely diverse with greater abundance in open space areas that have undeveloped, high quality habitats (e.g., Angeles National Forest, Santa Monica Mountains). While a few wildlife species are entirely dependent upon a single vegetative community, many species utilize a number of habitat types during their life histories. Thus, the entire mosaic of natural areas within Los Angeles County and adjoining areas constitutes a functional regional ecosystem that supports the multifaceted needs of wildlife species.

Amphibian populations are generally restricted to moister areas where water is readily available, such as riparian areas along canyon bottoms and ponding features. Representative amphibian species found within Los Angeles County include northern Pacific tree frog (*Pseudacris regilla*), Baja California tree frog (*Pseudacris hypochondriaca hypochondriaca*), California toad (*Anaxyrus boreas halophilus*), and the non-native American bullfrog (*Lithobates catesbeianus*).

Diverse reptile populations within Los Angeles County are typically found in drier open scrub, chaparral, and alluvial fan habitats. Representative reptile species found within Los Angeles County include California side-blotched lizard (*Uta stansburiana elegans*), Great Basin fence lizard (*Sceloporus occidentalis longipes*), tiger whiptail (*Aspidoscelis tigris*), Blainville's horned lizard (*Phrynosoma blainvillii*), red racer (*Coluber flagellum piceus*), California striped racer (*Coluber lateralis lateralis*), western rattlesnake (*Crotalus oreganus*), Pacific gopher snake (*Pituophis catenifer catenifer*), and California kingsnake (*Lampropeltis californiae*).

Los Angeles County supports a wide variety of avian species. The natural areas within Los Angeles County provide excellent foraging and cover habitat for yearround resident, seasonal resident, and migrating songbirds, as well as foraging, perching, and nesting opportunities for raptors. Additionally, water sources and riparian habitat attract large numbers of resident and migratory birds, including waders and waterfowl. Representative bird species found within Los Angeles County include western scrub jay (Aphelocoma californica), Anna's hummingbird (Calypte anna), California quail (Callipepla californica), California horned lark (Eremophila alpestris actia), greater roadrunner (Geococcyx californianus), Bullock's oriole (Icterus bullockii), northern mockingbird (Mimus polyglottos), savannah sparrow (Passerculus sandwichensis), phainopepla (Phainopepla nitens), black-headed grosbeak (Pheucticus melanocephalus), California towhee (Melozone crissalis), spotted towhee (Pipilo maculatus), western meadowlark (Sturnella neglecta), and California thrasher (Toxostoma redivivum). Some representative raptor species observed within Los Angeles County include Cooper's hawk (Accipiter cooperii), red-tailed hawk (Buteo jamaicensis), red-shouldered hawk (Buteo lineatus), northern harrier (Circus cyaneus), white-tailed kite (Elanus leucurus), American kestrel (Falco sparverius), and barn owl (Tyto alba).

Los Angeles County also supports a wide variety of mammal species. Representative mammal species commonly found within Los Angeles County include species such as the desert woodrat (Neotoma lepida), western gray squirrel (Sciurus griseus), California ground squirrel (Otospermophilus beecheyi), desert cottontail (Sylvilagus audobonii), brush rabbit (Sylvilagus bachmani) black-tailed jackrabbit (Lepus californicus), northern raccoon (Procyon lotor), common gray fox (Urocyon cinereoargenteus), bobcat (Lynx rufus), coyote (Canis latrans), mountain lion (Puma concolor), and mule deer (Odocoileus hemionus).

Table 5.4-2, Special-Status Wildlife Species, from the County General Plan EIR identifies the known occurrences of special-status wildlife species within Los Angeles County, as well as the County Planning Areas and is incorporated by reference into this EIR.

Significant Ecological Areas

A Significant Ecological Area (SEA) designation is given to land in Los Angeles County that contains irreplaceable biological resources. Individual SEAs include undisturbed or lightly disturbed habitat supporting valuable and threatened species, linkages and corridors to promote species movement, and are sized to support sustainable populations of its component species. Some SEAs are located entirely or partially outside of the County's jurisdiction in cities, along the coastline, or within natural forest land. Cumulatively, there are 21 SEAs within the Plan Area. Of these SEAs, 17 are entirely or partially within the jurisdiction of the County, and four are not within County jurisdiction, as noted in Table 5.3-1 and shown in Figure 5.3-1.

Coastal Resource Areas

The designation of Coastal Resource Area (CRA) is given to those SEAs located within the California Coastal Zone. Protection of these areas must defer ultimately to the authority of the California Coastal Commission. Santa Catalina Island is designated as a CRA and biological resource management and regulation on Santa Catalina Island is implemented through the Santa Catalina Island Local Coastal Program (LCP). Cumulatively, there are nine CRAs within the Plan Area. Of these CRAs, five CRAs are entirely or partially within the jurisdiction of the County and four CRAs are not within the County jurisdiction, as noted in Table 5.3-1 and shown in Figure 5.3-1. Based on a review of SEA maps utilizing the County's GIS-NET3 interactive GIS web mapping application, one site location within the Focus Area is located within a CRA. CR&R Catalina (AT Site #6) is located within the Santa Catalina Island CRA.

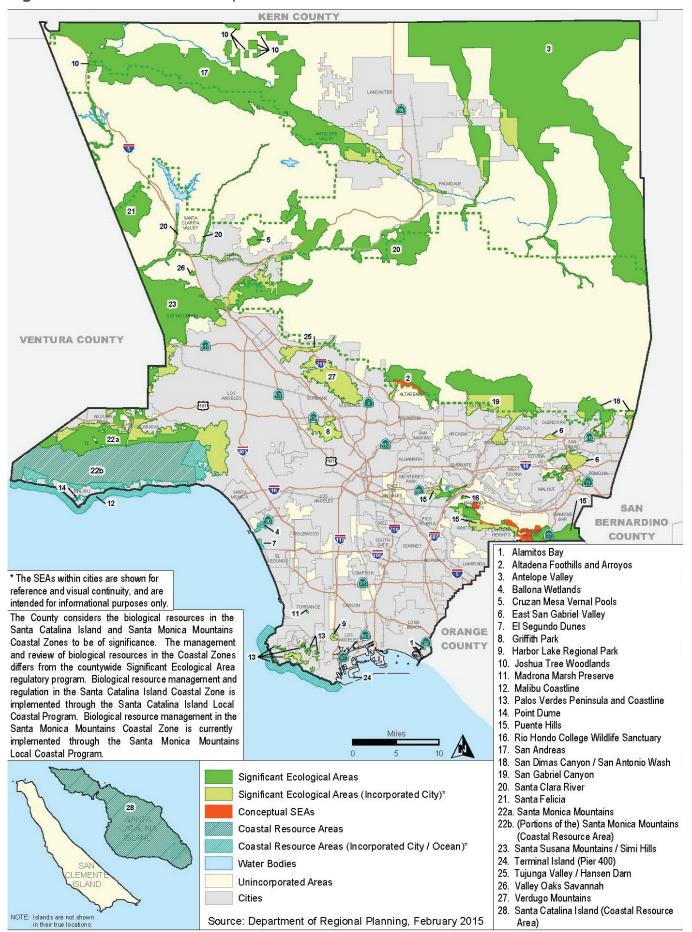
Table 5.3-1. SEAs and CRAs within the Plan Area

SEAs	CRAs
Altadena Foothills and Arroyos*	Alamitos Bay
Antelope Valley*	Ballona Wetlands*
Cruzan Mesa Vernal Pools*	El Segundo Dunes*
East San Gabriel Valley*	Malibu Coastline
Griffith Park	Palos Verdes Peninsula and Coastline*
Harbor Lake Regional Park*	Point Dume
Joshua Tree Woodlands*	Santa Catalina Island*
Madrona Marsh Preserve	Santa Monica Mountains*
Palos Verdes Peninsula and Coastline*	Terminal Island (Pier 400)
Puente Hills*	
Rio Hondo College Wildlife Sanctuary*	
San Andreas*	
San Dimas Canyon and San Antonio Wash*	
San Gabriel Canyon*	
Santa Clara River*	
Santa Felicia*	
Santa Monica Mountains*	
Santa Susana Mountains and Simi Hills*	
Tujunga Valley and Hansen Dam	
Valley Oaks Savannah*	
Verdugo Mountains	

Source: County of Los Angeles 2015

Note: * SEA/CRA is entirely within or partially within the County's jurisdiction.

Figure 5.3-1. SEAs and CRAs Map



Source: County of Los Angeles 2015

Wildlife Movement Corridors

Wildlife corridors are areas of habitat, usually linear in nature, that connect two or more habitat patches that would otherwise be fragmented or isolated from one another (e.g., rugged terrain, changes in vegetation, or human disturbance). Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. A wildlife corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as "habitat or landscape linkages") can provide both transitory and resident habitat for a variety of species. Wildlife corridors and landscape linkages are vital in promoting habitat connectivity and facilitating wildlife movement on a regional scale.

Los Angeles County supports seven regional wildlife linkages: San Gabriel – Castaic Connection, San Gabriel – San Bernardino Connection, Santa Monica – Sierra Madre Connection, Sierra Madre – Castaic Connection, Tehachapi Connection, Antelope Valley Connection, and the Puente Hills Connection. There are other linkages along principal water courses (e.g., San Gabriel River), along ranges of mountains and hills (e.g., Tehachapi Mountains), and an important linkage along the San Andreas Fault from the community of Wrightwood to the Gorman area.

5.3.2 Existing Plans and Regulations

Federal

Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (FESA) defines an "endangered" species as "any species which is in danger of extinction throughout all or a significant portion of its range." A "threatened" species is defined as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to "take" any listed species. "Take" is defined in Section 3(18) of FESA as to: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Furthermore, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant or animal species, the property owner and agency are required to consult with USFWS pursuant to Section 7 of the FESA if there is a federal nexus, or pursuant to Section 10 of the FESA. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants. "Critical habitat" is defined in Section 3(5A) of the FESA as: "the specific areas within the geographic area, occupied by the species at the time it was listed, which contain the physical or biological features that are essential to the conservation of endangered and threatened species and that may need special management or protection. Critical habitat may also include areas that were not occupied by the species at the time of listing but are essential to its conservation." Critical habitat designations affect only federal agency actions or federally funded or permitted activities. Critical habitat designations do not affect activities by private landowners if there is no federal "nexus"—that is, no federal funding or authorization.

The status of federally listed species is assigned by USFWS as one of the following:

- Federally Endangered (FE)
- Federally Threatened (FT)
- Federally Proposed as Endangered (FPE)
- Federally Proposed as Threatened (FPT)
- Federally Proposed for Delisting (FPD)
- Federal Candidate for a Proposed Species (FC)

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects individuals as well as any parts, nests, or eggs of any bird listed as migratory. In practice, federal permits issued for activities that potentially impact migratory birds typically have conditions that require pre-disturbance surveys for nesting birds. In the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest, or it has been determined that the nest has failed. If not otherwise specified in the permit, the size of the buffer area varies with species and local circumstances (e.g., presence of busy roads, intervening topography, etc.), and is based on the professional judgment of a monitoring biologist. A list of migratory bird species protected under the MBTA is published by USFWS.

Federal Clean Water Act, Section 404

Section 404 of the Clean Water Act (CWA) regulates the discharge of dredged or fill material into Waters of the U.S. and authorizes the Secretary of the Army, through the Chief of Engineers, to issue permits for such actions. Implementing regulations for the CWA define Waters of the U.S. as "rivers, creeks, streams, and lakes extending to their headwaters and any associated wetlands." Wetlands are defined as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions." The permit review process entails an assessment of potentially adverse impacts to U.S. Army Corps of Engineers (USACE) jurisdictional Waters of the U.S.

Over the years, the USACE has modified its regulations, typically due to evolving policy or judicial decisions, through the issuance of Regulatory Guidance Letters, memorandums, or more expansive instruction guidebooks. These guidance documents help to update and define how jurisdiction is claimed, and how these Waters of the U.S. will be regulated. The most recent, significant modification occurred on June 5, 2007, subsequently updated in December 2008, when the USACE and the U.S. Environmental Protection Agency (USEPA) issued a series of guidance documents outlining the requirements and procedures, effective immediately, to establish jurisdiction under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act of 1899. These documents are intended to be used for all jurisdictional delineations and provide specific guidance for the jurisdictional determination of potentially jurisdictional features affected by the U.S. Supreme Court rulings in *Rapanos v. the United States* and *Carabell v. the United States* 547 U.S. 715 (2006) (jointly referred to as Rapanos).

The Rapanos case outlines the conditions and criteria used by the USACE to assess and claim jurisdiction over non-isolated, non-navigable, ephemeral tributaries. Under a plurality ruling, the Court noted that certain "not relatively permanent" (i.e., ephemeral), non-navigable tributaries must have a "significant nexus" to downstream traditional navigable waters to be jurisdictional. An ephemeral tributary has a significant nexus to downstream navigable "waters" when it has "more than a speculative or an insubstantial effect on the chemical, physical, and/or biological integrity of a Traditional Navigable Water (TNW)." A significant nexus is established through the consideration of a variety of hydrologic, geologic and ecological factors specific to the particular drainage feature in question. For drainage features that do not meet the significant nexus criteria, a significant nexus determination is provided by the USACE to the USEPA for the final determination of federal jurisdiction. Drainage features that do not meet the significant nexus criteria based on completion of an Approved Jurisdictional Delineation, and/or are determined to be isolated pursuant to the Solid Waste Agency of Northern Cook County (SWANCC) ruling (see below), may still be regulated by CDFW under Fish and Game Code Section 1600 or the Regional Water Quality Control Board (RWQCB) under the Porter-Cologne Water Quality Act.

On January 15, 2003, the USACE and USEPA issued a Joint Memorandum to provide clarifying guidance regarding the United States Supreme Court ruling in the Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, No. 99-1178 (January 9, 2001) ("the SWANCC ruling"), (Federal Register: Vol. 68, No. 10.). This ruling held that the CWA does not give the federal government regulatory authority over non-navigable, isolated, intra-state waters. As a result of this decision, some previously regulated depressional areas such as mudflats, sandflats, wetlands, prairie potholes, wet meadows, playa lakes, natural ponds, and vernal pools, which are not hydrologically connected to other intra- or inter-state "waters of the U.S.," are no longer regulated by the USACE.

Federal Clean Water Act, Section 401

The mission of the RWOCB is to develop and enforce water quality objectives and implement plans that will best protect the beneficial uses of the state's waters, recognizing local differences in climate, topography, geology, and hydrology. The California RWQCB is also responsible for implementing compliance not only with state codes such as the California Water Code, but also some federal acts such as Section 401 of the CWA. Section 401 of the CWA requires that any applicant for a federal permit for activities that involve a discharge to waters of the state shall provide the federal permitting agency with a certification from the state in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal CWA. As such, before the USACE will issue a CWA Section 404 permit, applicants must apply for and receive a Section 401 water quality certification (WQC) from the RWOCB. The RWOCB regulates "discharging waste, or proposing to discharge waste, within any region that could affect "waters of the state" (Water Code §13260 (a)), pursuant to provisions of the Porter-Cologne Water Quality Control Act, which defines RWQCB jurisdictional "waters of the state" as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code § 13050 (e)).

With the exception of isolated waters and wetlands, most discharges of fill to waters of the state are also subject to a CWA Section 404 permit. If a CWA Section 404 permit is not required for the project, the RWQCB may still require issuance of Waste Discharge Requirements (WDR) under the Porter-Cologne Water Quality Control Act. The RWQCB may regulate isolated waters that are not under jurisdiction of the USACE through issuance of WDR's. However, projects that obtain a Section 401 WQC are simultaneously enrolled in a statewide general WDR. Processing of Section 401 WQC's generally requires submittal of: 1) a construction storm water pollution prevention plan (SWPPP), 2) a final water quality technical report that demonstrates that post-construction storm water Best Management Practices (BMPs) comply with the local design standards for municipal storm drain permits (MS4 permits) implemented by the State Water Resources Control Board effective January 1, 2011, and 3) a conceptual Habitat Mitigation and Monitoring Plan (HMMP) to compensate for permanent impacts to RWOCB waters, if any. In addition to submittal of a draft CEOA document, a WOC application typically requires a discussion of avoidance and minimization of impacts to RWQCB jurisdictional resources, and efforts to protect beneficial uses as defined by the local RWQCB basin plan for the project. The RWQCB cannot issue a Section 401 WQC until the project CEQA document is certified by the lead agency.

State

California Endangered Species Act

The California Endangered Species Act (CESA) defines an endangered species as:

...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

The State defines a threatened species as:

...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.

Candidate species are defined as:

...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list.

Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered species by stating:

...no person shall import into this State, export out of this State, or take, possess, purchase, or sell within this State, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided.

Under the CESA, "take" is defined as, "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Additionally, some sensitive mammals and birds are protected by the state as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively.

California Species of Special Concern are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. Informally listed species are not protected per se, but warrant consideration in the preparation of biological assessments. For some species, the California Natural Diversity Database (CNDDB), a resource maintained by CDFW of recorded locations where sensitive species have been documented, is only concerned with specific portions of the life history, such as roosts, rookeries, or nest areas.

For the purposes of this EIR, the following abbreviations are used for state status species, as applicable:

- State Endangered (SE)
- State Threatened (ST)
- State Rare (SR)
- State Candidate for Endangered (SCE)
- State Candidate for Threatened (SCT)
- State Fully Protected (SFP)
- California Species of Special Concern (SSC).

Natural Community Conservation Plans

The Desert Renewable Energy Conservation Plan (DRECP) is a collaborative effort involving the California Natural Community Conservation Planning Act (NCCPA), and the Federal Endangered Species Act (FESA), and the Federal Land Policy and Management Act. The DRECP is intended to conserve and manage plant and wildlife communities in the desert regions of California (i.e. Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino, and San Diego) while facilitating the timely permitting of compatible renewable energy projects. The DRECP includes the Antelope Valley portion of Los Angeles County and broader Plan Area.

State of California Fish and Game Code, Section 3503/3503.5/3513

Section 3503 of the California Fish and Game Code states that "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Activities that result in the abandonment of an active bird of prey nest may also be considered in violation of this code. In addition, California Fish and Game Code, Section 3511 prohibits the taking of any bird listed as fully protected, and California Fish and Game Code, Section 3513 states that is it unlawful to take any non-game migratory bird protected under the MBTA.

State of California Fish and Game Code, Section 4150

Section 4150 of the California Fish and Game Code states that "All mammals occurring naturally in California which are not game mammals, fully protected mammals, or fur-bearing mammals, are nongame mammals. Nongame mammals or parts thereof may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission."

State of California Code of Regulations, Sections 250 and 251.1

Section 250 of the California Fish and Game Code states that "Except as otherwise authorized in these regulations or in the Fish and Game Code, resident game birds, game mammals and furbearing mammals may not be taken at any time." Section 251.1 of the California Fish and Game Code states that "Except as otherwise authorized in these regulations or in the Fish and Game Code, no person shall harass, herd or drive any game or nongame bird or mammal or furbearing mammal. For the purposes of this section, harass is defined as an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering. This section does not apply to a landowner or tenant who drives or herds birds or mammals for the purpose of preventing damage to private or public property, including aquaculture and agriculture crops." Activities that result in the take or harassment of a nongame mammal may also be considered in violation of this code.

California Native Plant Society

The California Native Plant Society (CNPS) is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. CNPS has compiled an inventory comprised of information focusing on geographic distribution and qualitative characterization of rare (uncommon, scarce, or infrequently encountered), threatened, and endangered vascular plant species of California. The list has served as a potential candidate list for listing as Threatened and Endangered by CDFW. CNPS has developed five categories of rarity, referred to as California Rare Plant Ranks (CRPRs), of which CRPRs 1A, 1B, 2A, and 2B are considered particularly sensitive:

- CRPR 1A Presumed Extirpated in California and either Rare or Extinct elsewhere.
- CRPR 1B Plants Rare, Threatened, or Endangered in California and elsewhere.

- CRPR 2A Presumed Extirpated in California, but more common elsewhere.
- CRPR 2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
- CRPR 3 Plants about which we need more information a review list.
- CRPR 4 Plants of limited distribution a watch list.

The CNPS appends CRPR categorizations with "threat ranks" that parallel the ranks used by the CNDDB, and are added as a decimal code after the CRPR (e.g., CRPR 1.B.1). The threat codes are as follows:

- 1 Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat);
- 2 Fairly endangered in California (20-80 percent occurrences threatened);
- 3 Not very endangered in California (less than 20 percent of occurrences threatened or no current threats known).

State of California Fish and Game Code, Section 1602

Streambeds and other drainages that occur within the Plan Area are subject to regulation by the CDFW. Section 1602 of the California Fish and Game Code requires any entity (e.g., person, state or local government agency, or public utility) who proposes a project that will substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake to notify the CDFW of the proposed project. In the course of this notification process, the CDFW will review the proposed project as it affects streambed habitats within the project area. The CDFW may then place conditions in the Section 1602 Streambed Alteration Agreement to avoid, minimize, and mitigate any potentially significant adverse impacts within CDFW jurisdictional limits.

State of California Porter-Cologne Water Quality Control Act

If a CWA Section 404 permit is not required for the project, the RWQCB may still require issuance of WDRs under the Porter-Cologne Water Quality Control Act, which regulates State water rights and water quality. The RWQCB may regulate isolated waters that are not under the jurisdiction of the USACE through issuance of WDRs.

Local

This EIR incorporates by reference the General Plan policies from the County's recently adopted General Plan EIR.

County of Los Angeles General Plan

Los Angeles County recently adopted an update to its General Plan in 2015. The General Plan's Conservation and Natural Resources Element includes policies adopted for the purposes of avoiding or mitigating adverse environmental impacts to biological resources. Applicable General Plan policies are identified below.

Conservation and Natural Resources (C/NR) Element

- Policy C/NR 3.1: Conserve and enhance the ecological function of diverse habitats and biological resources.
- Policy C/NR 3.8: Discourage development in areas with identified significant biological resources, such as SEAs.

- Policy C/NR 3.9: Consider the following in the design of a project that is located within an SEA, to the greatest extent feasible:
 - Preservation of biologically valuable habitats, species, wildlife corridors and linkages;
 - Protection of sensitive resources on the site within an open space;
 - Protection of water sources from hydromodification in order to maintain the ecological function of riparian habitats;
 - Placement of the development in the least biologically sensitive areas on the site (prioritize the preservation or avoidance of the most sensitive biological resources onsite);
 - Design required open spaces to retain contiguous undisturbed open space that preserves the most sensitive biological resources onsite and/or serves to maintain regional connectivity;
 - Maintenance of watershed connectivity by capturing, treating, retaining, and/or infiltrating storm water flows on site; and
 - Consideration of the continuity of onsite open space with adjacent open space in project design.
- Policy C/NR 3.11: Discourage development in riparian habitats, streambeds, wetlands, and other native woodlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.

Significant Ecological Area Program

The County's SEA Program began in 1980 with the adoption of SEAs as Special Management Areas in the Los Angeles County General Plan (Existing General Plan). The SEA program, for those SEAs located in unincorporated areas, is administered through the General Plan goals, policies, and implementation program and the SEA Ordinance (Zoning Code 22.56.215). The objective of the SEA Program is to preserve the genetic and physical ecological diversity of Los Angeles County by designing biological resource areas capable of sustaining themselves into the future. The SEA designation is given to land that contains irreplaceable biological resources, and includes undisturbed or lightly disturbed habitats that support valuable and threatened species and linkages and corridors to promote species movement.

SEAs are not wilderness preserves, and much of the land within SEAs is privately held, used for public recreation or abuts developed areas. The SEA Program is intended to ensure that privately held lands within the SEAs retain the right of reasonable use, while avoiding activities and developments that are incompatible with the long-term survival of the SEAs. Therefore, the SEA Program must balance the overall objective of resource preservation against other critical public needs. The County has regulated development within the SEAs with the SEA Conditional Use Permit.

Santa Catalina Island Local Coastal Program

In 1974, a 50-year Open Space Easement Agreement (terminating in 2024) was signed between the County and the Santa Catalina Island Company. The Agreement calls for preservation of the natural character of Santa Catalina Island and improvement of the Island's access and recreational opportunities. Shortly thereafter, the Santa Catalina Island Conservancy was established to manage the Island's biotic and natural resources in perpetuity.

The California Coastal Act of 1976, which sets forth policies to guide new development and to improve public access to coastal areas, required the submission and approval of an LCP for coastal areas such as Santa Catalina Island. This LCP recognizes and responds to the goals and requirements of the Open Space Easement Agreement, the Santa Catalina Island Conservancy and the California Coastal Act, and ensures that the vast majority of the Island will remain in its present natural state for future generations.

Oak Tree Ordinance

The County Oak Tree Ordinance applies to all unincorporated areas. The Oak Tree Ordinance requires that a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak tree genus that is 25 inches or more in circumference (8 inches in diameter) as measured 4.5 feet above mean natural grade, or in the case of an oak with more than one trunk, whose combined circumference of any two trunks is at least 38 inches (12 inches in diameter) as measured 4.5 feet above mean natural grade (i.e., diameter at breast height [DBH]), or any tree that has been provided as a replacement tree, without first obtaining an oak tree permit.

Oak Woodlands Conservation Management Plan

To further the County's compliance with Public Resources Code Section 21083.4, which provides for the conservation of oak woodlands, the County adopted the Los Angeles County Oak Woodlands Conservation Management Plan (OWCMP) in 2012. The OWCMP develops a consistent policy for the management of oak woodlands by providing a voluntary conservation strategy in order to meet the requirements of the California Oak Woodlands Conservation Act (AB 242). The OWCMP extends CEQA consideration of impacts to oak woodlands comprised of oaks greater than 5 inches at DBH and recognizes that conservation of oak woodland habitat extends beyond the protection of individual trees.

Hillside Management Areas

The County of Los Angeles Hillside Management Area (HMA) Ordinance applies to all unincorporated areas of Los Angeles County that contain terrain with a natural slope of 25 percent or greater. The goal of the ordinance is to ensure that development preserves the physical integrity and scenic value of HMAs, provides open space, and enhances community character. Locating development outside of HMAs to the greatest extent feasible will be the first emphasis of sensitive hillside design. Where avoidance is not feasible, development of HMAs will be located in the lowest and flattest areas of the hillside in order to minimize impacts on steeper hillside areas. Last, development will utilize a variety of sensitive hillside design techniques to ensure compatibility with the hillside and enhance community character.

Other Jurisdictions

In addition to the County, the CSE Revisions contemplate up to six potential site locations within three cities including Carson, Santa Monica, and South Gate. Each of these cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to biological resources. Depending where future facilities are located, local plans and policies would be applicable to those facilities.

5.3.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to biological resources would be considered significant if the project was determined to:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.3.4 Environmental Impacts

CSE Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, AT facilities, and alternatives to landfill technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County will maintain sufficient solid waste disposal capacity over the next 15 years (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to biological resources. However, depending on phasing and implementation, certain policies may result in future project-level impacts through existing facility construction activities or construction of new facilities.

CSE Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste AT or land disposal facilities or the expansion of existing facilities. The following program-level analysis describes the potential impact that future facilities could have related to biological resources. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County or incorporated jurisdictions for review and approval.

Impact 5.3-1: Impacts to Endangered or Threatened Animals

Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

According to the Los Angeles County General Plan EIR (2015), the County supports at least 159 special-status plant species and 133 special-status wildlife species (refer to Table 5.4-1, Special-Status Plant Species. and Table 5.4-2, Special-Status Wildlife Species of the General Plan EIR.). The natural communities, as well as somewhat disturbed semi-natural communities, that are found throughout the Plan Area have the potential to support one or more of these sensitive species. As currently contemplated, the future solid waste disposal facilities comprising the Focus Area would avoid these natural communities and sensitive habitats.

Future facilities would be required to comply with the Siting Criteria in Appendix 6-A of the CSE. More specifically, the proposed Siting Criteria requires all facilities to avoid habitats of threatened or endangered species unless the local land use authority makes a determination that a proposed facility is compatible with the surrounding resources and does not pose a substantial threat to the resource. Additionally, the proposed

Siting Criteria requires that a proposed facility must be in conformance with a local jurisdiction's General Plan and abide by federal and state regulations regarding unique or protected species and their habitat. This includes compliance with Federal, State, and local regulations regarding candidate, sensitive or special status species. Adherence to Federal, State and local regulations, including the CSE Siting Criteria, FESA, CESA, and the County's or incorporated jurisdiction's General Plan, would minimize the potential for impacts to listed species pending project-level environmental review. This impact would be less than significant.

Impact 5.3-2: Riparian Habitat and Other Sensitive Communities

Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Construction of the contemplated solid waste disposal facilities would involve earthdisturbing activities, including grubbing and grading, which could occur near or adjacent to riparian areas or other habitats that are suitable for sensitive plants or wildlife. According to the CNDDB (2015), the Plan Area supports 24 sensitive plant communities and four aquatic communities. These plant communities could occur within or adjacent to the Focus Area. However, as previously indicated, project-level environmental review would be required prior to any approval. As a result and as part of the project-level analysis, a qualified biologist would perform a habitat assessment to evaluate the site's potential to support sensitive habitats and wildlife. As provided in Chapter 3, new solid waste disposal facilities would be located with existing solid waste management facilities (e.g., MRFs) or compatible industrial uses in developed areas. In general, high-quality, natural habitat that supports special status biological resources and other sensitive species would be avoided as directed by the proposed Siting Criteria. Based on these requirements and the fact that future projects would be subject to the necessary permits under FESA, CESA, the California Fish and Game Code, and other applicable regional or local regulations or plans, the impacts would be less than significant.

Impact 5.3-3: Jurisdictional Waters

Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The precise location, design, and functionality of the solid waste management facilities contemplated under the Plan have not yet been determined. However, any proposed facility location that involves earth-disturbing activities, including grubbing and grading, has the potential to impact jurisdictional waters of the U.S. and/or the State, including wetland habitats, if such features are within or in close proximity to the future project. As required by the CWA and State Fish and Game Code, a qualified biologist will be required to conduct a habitat assessment to evaluate the site's potential to support jurisdictional wetlands/waters. If such features are present, the future project would be subject to the necessary permits under Section 404 of the CWA issued by USACE, Section 401 of the CWA (Water Quality Certification) issued by the RWQCB, and Section 1600 of the California Fish and Game Code. Compliance with these regulations combined with the proposed Siting Criteria, which places an emphasis on avoiding and minimizing adverse effects to wetlands, would make this impact less than significant.

Impact 5.3-4: Impacts to Wildlife Migration

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

As previously discussed, wildlife corridors are areas of habitat, usually linear in nature, that connect two or more habitat patches that would otherwise be fragmented or isolated from one another (e.g., rugged terrain, changes in vegetation, or human disturbance). This path allows those more mobile animals to move between habitats while obtaining ample food and water. Since new facilities would be co-located with existing solid waste management facilities (e.g., MRFs) or compatible industrial uses in developed areas, existing migratory corridors would generally be avoided. Depending on the final location of future proposed AT facilities, these facilities would be required to comply with the Siting Criteria, which generally directs these facilities to existing industrial areas and away from sensitive biological resources and wildlife migratory corridors. Adherence to Federal, State and local regulations, including the CSE Siting Criteria, would avoid or minimize the potential impacts associated with wildlife corridors. For this reason, the impact is considered less than significant.

Impact 5.3-5: Local Policies or Ordinances

Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Future projects would be subject to local resource management and conservation policies as adopted by the County or local cities. For example, CR&R Catalina (AT Site #6) is located within the Santa Catalina Island CRA. Any land disturbance that occurs within the coastal zone is regulated through coastal land use plans and LCPs, in compliance with the California Coastal Act. Additionally, the County's Oak Tree Ordinance or Hillside Management Area Ordinance may apply based on local, site-specific conditions. The sites within the Focus Area are not located in a SEA, however, should any future project be located within a SEA, the future project will be subject to compliance with SEA development standards and review by the County Biologist. The proposed Siting Criteria in Appendix 6-A of the CSE reaffirms these requirements by mandating conformance with a local jurisdiction's General Plan and federal and state regulations regarding unique or protected species and their habitat. Based on these considerations, this impact is less significant.

Impact 5.3-6: Habitat Conservation Plans

Would the project conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan?

None of the future solid waste disposal facilities contemplated in the Proposed Plan would conflict with a habitat conservation plan. The proposed Siting Criteria in Appendix 6A, Table 6A-2 requires that new facilities not be placed in habitats of threatened or endangered species unless the local land use authority determines that the future project does not pose a substantial threat to the resource. Further, the proposed Siting Criteria requires the avoidance of County-designated ESAs unless the applicant is able to demonstrate project-compatibility. Based on the existing regulatory framework in place, combined with the co-locating of new facilities at existing solid waste management facilities or compatible industrial uses in developed areas, potential conflicts with adopted HCP and NCCP would be avoided and less than significant.

5.3.5 Cumulative Impacts

Implementation of the Plan would not result in any immediate direct or indirect effects to sensitive habitats or suitable habitat for listed species. Future projects will be subject to additional environmental review once project-specific details are defined. In response to the potential for cumulative effects to listed species or those of special concern, CDFW and USFWS have promulgated a regulatory scheme that limits impacts on these species. The effects of the Project would be minimized through compliance with all applicable regulations that protect special status plant wildlife species. Based on these considerations, no cumulatively considerable impact would result in conjunction with the Plan's adoption.

5.3.6 Level of Significance Before Mitigation

Compliance with applicable regulatory requirements, including the proposed CSE Siting Criteria, would minimize any impact to biological resources as a result of future projects and the impact would be less than significant.

5.3.7 Mitigation Measures

No mitigation measures are required.

5.3.8 Level of Significance After Mitigation

No significant impacts to biological resources are identified that would otherwise require mitigation.

5.3.9 References

- Bureau of Land Management. 2005. Final Environmental Impact Report and Statement for the West Mojave Plan. Available at http://www.blm.gov/ca/pdfs/cdd_pdfs/wemo_pdfs/plan/wemo/Vol-1-Chapter1_Bookmarks.pdf. Accessed May 6, 2016.
- California Department of Fish and Wildlife (CDFW) 2015. Natural Diversity Database. Rare Find Version. Viewed January 6, 2015.
- County of Los Angeles, Department of Regional Planning. 2015. General Plan 2035. Chapter 9 Conservation and Natural Resources Element. Accessed April 20, 2016.

5.4



Cultural Resources



5.4 CULTURAL RESOURCES

This section analyzes the potential impacts related to cultural resources as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing cultural resources conditions within the Plan Area. Potential cultural resources impacts, including potential cumulative impacts, are considered programmatically in the impact analysis. If applicable, this section identifies proposed mitigation measures for any significant impacts.

5.4.1 Environmental Setting

This Environmental Impact Report (EIR) incorporates by reference the cultural resources setting for the Plan Area as identified in Section 5.5, Cultural Resources, of the County General Plan Update and EIR (2015).

Cultural Setting

Prehistoric Cultural Setting

The archaeological record of Southern California is traditionally divided chronologically based on changes in artifact types and styles. The following chronology for Native American habitation in prehistoric Southern California is based on archaeological data and correlations with ethnographic data.

Native American occupation of Los Angeles County and neighboring regions can be divided into five cultural periods: Early or Proto-Archaic period (variously dated between ca. 9000-6000 and 6000-3000 B.C.); Middle Archaic Period (between ca. 6000-3000 and 4000-500 B.C.); the Late Archaic (between ca. 4000-500 B.C. and 2000 B.C.-A.D. 1100), which ended in the ethnographic period, and includes two subsets referred to as the Pacific and Late Prehistoric Periods.

The earliest historical records of human settlements in Los Angeles County date back to the Proto-Archaic period (8,000-6,000 B.C.) with the settlements of the Chumash people. A hunter-gatherer and fisher tribe, the Chumash occupied the coastal regions of Southern California from present-day areas of San Luis Obispo to Santa Barbara, Ventura, and Los Angeles County.

During the Middle Archaic period (6,000-4,000 B.C.), the Chumash became known for their technological and craftsman advances in basketry, inventing the plank canoe, fishing and whaling, creating an early form of currency through olive snail (*Olivella biplicata*) bead manufacturing and trading, and developing a form of tar used for waterproofing.

By the Pacific Period, beginning around 2,000 B.C., large Chumash villages appeared along the Pacific coast. Trading alliances, warfare, and the division of labor and manufacturing further enhanced the Chumash's presence in the region.

The Late Prehistoric period, around 200 to 500 A.D., ushered in the arrival of the Tongva tribe, who migrated west from the Mojave Desert area. Slowly, the Tongva began to displace the Chumash in Southern California. By 1500, an estimated 25 Tongva villages were in the area that would become Los Angeles County. Similar to the Chumash, the Tongva were hunters and gatherers and traded goods extensively throughout the Southern California and Nevada region. Both the Chumash and the Tongva remained largely isolated until Spanish explorers arrived in Southern California under Portuguese explorer Juan Rodríguez Cabrillo in 1542. The Chumash and Tongva populations dwindled from the 1500s to the 1900s due to the arrival of Old World diseases, such as smallpox and influenza, introduced by the Spanish. Research estimates that the Chumash population was approximately 2,000 in 2010, but many artifacts, cave paintings, and cultural elements remain extant today.

Ethnographic Setting

Following Cabrillo's arrival in 1542, the Spanish continued to settle throughout the Southern California region. The first mention of Los Angeles is documented on August 2, 1769, by Father Crespi, a Franciscan monk and party member to a land expedition led by Fernando Rivera y Moncado. That same year, another expedition led by Gaspar de Portola settled along the Los Angeles River in the area that would become Los Angeles County.

In 1771, the San Gabriel Mission was founded as the fourth of 21 missions across California (called "Alta California" at the time). Ten years later, El Pueblo de la Reyna de Los Angeles (The Pueblo of the Queen of the Angels) was founded near the present-day Los Angeles City Hall and County Headquarters. By 1797, Franciscan monks extended their presence north into the San Fernando Valley with the Mission Rey de España.

The Spanish remained the primary settlers in the Los Angeles area until the early 1800s when the first American and British vessels arrived along the coast. Southern California remained under Spanish control until 1822, after which Mexican independence took jurisdictional control of California. Over the next two decades, trade relations with the United States increased, and by the 1840s, the Los Angeles County area was a regional economic leader. California remained under Mexican control until 1846, when the United States obtained the land, following the Mexican-American war and the subsequent signing of the Treaty of Cahuenga in 1847.

During the 1840s, significant gold deposits were discovered throughout the Southern California area. The first discovery occurred in 1842 by Francisco Lopez in the Antelope Valley, followed by more famous discoveries such as Sutter's Mill in northern California in 1848, starting California's Gold Rush. Coinciding with this newfound wealth, the American Civil War depended heavily on gold, oil, and agriculture from California, bringing vast amounts of wealth and immigration into the Los Angeles County region throughout the 1850s and 1860s.

Historical Setting

The County was officially founded on February 18, 1850. The County was one of 27 original counties within the State of California. Later that year, the City of Los Angeles was founded as the first city in Los Angeles County.

Soon after, the Los Angeles County population grew to include original descendants of California's native tribes, Spanish-speaking Californios, Anglo-Americans, and former slaves of African descent. The late 1800s also welcomed greater immigration from Europe, Asia, and South America, especially the English, French, Spanish, Mexican, German, and Chinese. By the 1930s, Los Angeles County was home to distinct ethic communities of Japanese, Chinese, Russians, and Jews from Eastern Europe.

Population growth in Los Angeles County remained steady through the 1950s and was further expanded by the U.S. Immigration Act of 1965. According to the U.S. Census, Los Angeles County's population of foreign-born residents more than tripled, from 11.3 percent in 1970 to 36.2 percent in 2000. A 2000 survey by the Los Angeles Unified School District found that over 130 languages were spoken by its students. That year, Los Angeles replaced New York City as the nation's primary immigration port of entry. Today, these cultural and historical influences shape Los Angeles County into one of the most dynamic and ethnically diverse counties in the United States.

Cultural Resources

Historical Resources

The County has many historical landmarks and points of historical interest in its jurisdiction, including the remnants of vast ranchos, routes of early explorers, historic railroad lines, and the homes of prominent people who shaped local history. Searches for historical resources in Los Angeles County were conducted through the National Register of Historic Places (NRHP), California Historical Resources (Office of Historic Preservation), California Historical Landmarks, and California Points of Historic Interest. Many of the resources listed in the California Register of Historical Resources (CRHR) are also of national significance and listed in the NRHP.

Archaeological Resources

Archaeological resources are prehistoric or historic materials that reflect human activities and may be buried or surface objects or structural remains. The NRHP defines an "archaeological site" (or property) as "the place or places where the remnants of a past culture survive in a physical context that allows for the interpretation of these remains. Archaeological remains usually take the form of artifacts (e.g., fragments of tools, vestiges of utilitarian or non-utilitarian objects), features (e.g., remnants of walls, cooking hearths, or midden deposits), and ecological evidence (e.g., pollen remaining from plants that were in the area when the activities occurred)."

"Prehistoric archaeological sites" represent the material remains of Native American groups and their activities. These sites are generally thought to date to the period before European contact, but in some cases may contain evidence of trade contact with Europeans. "Historic archaeological sites" reflect the activities of nonnative populations during the historic period. Under the California Environmental Quality Act (CEQA), archaeological sites may be treated as historical resources, unique archaeological resources, isolates, or non-unique archaeological resources.

A "unique archaeological resource" is defined by CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated, without merely adding to the current body of knowledge, that there is a high probability that it meets any of the following criteria:

- 1. It contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.
- 2. It has a special and particular quality such as being the oldest of its type or the best available example of its type.
- **3.** It is directly associated with a scientifically recognized important prehistoric or historic event or person.

An "isolate" is defined as an isolated artifact or small group of artifacts that appear to reflect a single event, loci, or activity and may lack identifiable context, but has the potential to add important information about a region, culture, or person. Isolates are considered categorically ineligible for inclusion in the CRHR or the NRHP because their information potential has been exhausted by accurate recording or, when appropriate, by collecting. Isolates do not require avoidance or mitigation under CEQA.

A "Native American sacred site" is defined as an area that has been and often continues to be of religious significance to Native American peoples, such as an area where religious ceremonies are practiced or an area that is central to their origins as a people. There are 85 Native American sacred sites considered under CEQA in association with archaeological resources or, in the case of burial locations, human remains.

Over 3,979 archaeological sites have been recorded in Los Angeles County. Due to the sensitive nature of archaeological sites and as required under state law, locations are not published. Archaeological materials have been found throughout the county, both in urbanized and undeveloped locations. Record searches through the California Information Center are typically performed at the project-level to determine what known resources existing within the vicinity of a given project location.

Paleontological Resources

Paleontological resources are fossils, or recognizable remains or evidence of past life on earth, including bones, shells, leaves, tracks, burrows, and impressions. Fossils are predominantly found in sedimentary rock deposits, and most of the Los Angeles Basin is composed of these sedimentary deposits.

Over 1,000 fossil localities have been recorded, and in excess of a million specimens have been collected in Los Angeles County. Numerous places countywide have yielded fossils, especially in the hills and in the vicinity of Rancho La Brea. Other localities where significant general fossil localities have been identified include La Brea Tar Pits, Palos Verdes Peninsula, Santa Monica Mountains (Topanga Canyon), Mint Canyon, and Puente Hills.

The formation of fossils typically involves the rapid burial of plant or animal remains and the formation of casts, molds, or impressions in the associated sediment (which subsequently becomes sedimentary rock). As a result of this process, the potential for fossil remains in a given geologic formation can be predicted based on known fossil occurrences from similar (or correlated) geologic formations in other locations.

The bedrock units comprising the Plan Area are divided into two groups: 1) basement rocks–early Cretaceous and older, crystalline metamorphic and igneous rocks; and 2) the overlying sequence of late Cretaceous and Tertiary strata. The basement rocks of the San Gabriel Mountains are comprised of Precambrian, Paleozoic, and pre-middle-Cretaceous Mesozoic metamorphic and igneous rocks. These are the oldest rocks in the Plan Area, and they appear to represent an old continental crust at the west edge of the North American continent. Table 5.4-1 provides the type of geologic substrate present at each of the site locations within the Focus Area and the associated sensitivity for paleontological resources.

Table 5.4-1. Focus Area Geological Formations and Sensitivity for Paleontological Resources

			Sensitive	
AT Site	Site Name	Symbol	Description	for Fossils
AT Site #1	City of Carson Public Works Yard	Q	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated	No
AT Site #2	Santa Monica Pier	Q	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated	No
AT Site #3	Santa Monica Airport	Q	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated	No
AT Site #4	City of Santa Monica Public Works Corps Yard	Q	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated	No
ATT City and	City Terrace Recycling	Q	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated	No
AT Site #5 LLC		Р	Sandstone, siltstone, shale, and conglomerate (Pliocene)	Yes
AT Site #6	CR&R Catalina	M+KJf	Franciscan Compliance: Cretaceous and Jurassic sandstone (includes mélange)	Yes
AT Site #7	Interior Removal Specialists, Inc.	Q	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated	No
AT Site #8	Carson Revitalization Project	Q	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated	No
AT Site #9	Waste Resources Recovery, Inc.	Q	Alluvium, lake, playa, and terrace deposits; unconsolidated and semi-consolidated	No

 $\textbf{Legend:} \qquad \text{Q - Quaternary, P - Permian, Pc - Precambrian, M - Mississippian, K - Cretaceous, J - Jurassic, and M - Mississippian, M - Missis$

AT - Alternative Technology

Source: California Geological Survey 2010

5.4.2 Existing Plans and Regulations

Federal

National Historic Preservation Act

Cultural resources are considered during federal undertakings chiefly under Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) through one of its implementing regulations (36 Code of Federal Regulations [CFR] 800, Protection of Historic Properties) and under the National Environmental Policy Act (NEPA). Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of the NHPA. Other federal laws include the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act (AIRFA) of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1989, among others.

Section 106 of the NHPA (16 United States Code [USC] 470f) requires federal agencies to: (1) take into account the effects of their undertakings on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP; and (2) afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings (36 CFR 800.1). Under Section 106 of the NHPA, the significance of any adverse effect on cultural resource is assessed, and mitigation measures are proposed to reduce the impacts to an acceptable level. Significant cultural resources are those resources that are listed in or are eligible for listing in the NRHP per the criteria listed at 36 CFR 60.4 below.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and that:

- (a) Are associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) Are associated with the lives of persons significant in our past; or
- (c) Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) Have yielded, or may be likely to yield, information important in prehistory or history.

State

California Environmental Quality Act

CEQA requires a lead agency to determine whether a project may have a significant effect on one or more historical resources. A "historical resource" is defined as: a resource listed in, or determined to be eligible for listing in, the CRHR (*California Public Resources Code* [PRC] §21084.1); a resource included in a local register of historical resources (14 *California Code of Regulations* [CCR] §15064.5[a][2]); or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (14 CCR §15064.5[a][3]).

Section 5024.1 of the PRC, Section 15064.5 of the CEQA Guidelines (14 CCR), and Sections 21083.2 and 21084.1 of the CEQA Statutes (PRC) were used as the basic guidelines for the cultural resources study for the Proposed Plan. PRC 5024.1 requires evaluation of historical resources to determine their eligibility for listing on the CRHR. The purposes of the CRHR are to maintain listings of the state's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing on the NRHP.

Section 15064.5(a)(3) of the *CEQA Guidelines* states that "generally, a resource shall be considered by the Lead Agency to be 'historically significant' if the resource meets the criteria for listing on the CRHR" (PRC §5024.1; 14 CCR §4852), including if the resource:

- (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (B) Is associated with lives of persons important in our past;
- **(C)** Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (D) Has yielded, or may be likely to yield, information important in prehistory or history.

The lead agency shall concurrently determine whether a project will cause damage to a unique archaeological resource (as defined in PRC §21083.2[b]) and, if so, must make reasonable efforts to permit the resources to be preserved in place or left undisturbed. Section 21083.2(g) of the California PRC defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be demonstrated that, without merely adding to the existing body of archaeological knowledge, there is a high probability that it meets any of the following criteria:

- **1.** Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- **2.** Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- **3.** Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Using the information outlined above, the first level of evaluation is to determine whether a resource on a site is a historical resource and/or a unique archaeological resource that would be considered eligible for the CRHR and, therefore, significant. Impacts to significant cultural resources that affect those characteristics of the resource that qualify it for the CRHR or adversely alter the significance of a resource listed on or eligible for listing on the CRHR are considered to have a significant effect on the environment. Impacts to cultural resources are considered significant if a project: (1) physically destroys or damages all or part of a resource; (2) changes the character of the use of the resource or physical feature within the setting of the resource that contributes to its significance; and/or (3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

To the extent that unique archaeological resources are not preserved in place, mitigation measures that are consistent with Section 15126.4(b) of the CEQA Guidelines (14 CCR) shall be required (PRC §21083.2[c]).

California Register of Historical Resources

The California Office of Historic Preservation (OHP) administers the CRHR, established in 1992 through PRC Sections 5020 et seq. to be "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change".

The CRHR listing criteria focus on resources of the state, rather than national, significance. The CRHR includes the following types of resources, either as an individual property or a contributor to a historic district: (1) properties listed in or determined eligible for listing in the NRHP (automatically included); (2) California Historical Landmarks numbered 770 and higher (automatically included); (3) California Points of Historical Interest recommended for listing by the OHP; and (4) resources nominated for listing and determined eligible by meeting one or more of the CRHR criteria.

The minimum age criterion for the CRHR is 50 years. Properties less than 50 years old may be eligible for listing if "it can be demonstrated that sufficient time has passed to understand its historical importance." Once listed, the historical resource is protected from any detrimental changes, and any alterations, repairs and additions must be reviewed and approved by the State Historical Resources Commission (SHRC) under the State Historical Building Code to ensure that the quality of the resource remains intact.

California Health and Safety Code

Section 7050.5 of the California Health and Safety Code provides for the disposition of accidentally discovered human remains. Section 7050.5 states that if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains.

Section 5097.98 of the PRC states that if remains are determined by the Coroner to be of Native American origin, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours, which in turn must identify the person or persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

Loca

This EIR incorporates by reference the General Plan policies from the County's recently adopted General Plan EIR.

County of Los Angeles General Plan

Los Angeles County recently adopted an update to its General Plan in 2015. The General Plan's Conservation and Natural Resources Element includes goals and policies for the management and preservation of historic, cultural, and paleontological resources in the unincorporated areas. Applicable General Plan policies are identified below for the reader's benefit.

Conservation and Natural Resources (C/NR) Element

- Policy C/NR 14.1: Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.
- Policy C/NR 14.2: Support an inter-jurisdictional collaborative system that protects and enhances historic, cultural, and paleontological resources.
- Policy C/NR 14.3: Support the preservation and rehabilitation of historic buildings.
- Policy C/NR 14.4: Ensure proper notification procedures to Native American tribes in accordance with Senate Bill 18 (2004).
- Policy C/NR 14.5: Promote public awareness of historic, cultural, and paleontological resources.
- Policy C/NR 14.6: Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

Other Jurisdictions

In addition to the County, the Countywide Siting Element (CSE) Revisions contemplate up to six potential site locations within cities including, Carson, Santa Monica, and South Gate. Three of the potential site locations are within unincorporated areas in the Los Angeles County. Each of these cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to cultural resources. Depending on where future facilities are located, local plans and policies would be applicable to those facilities.

5.4.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to cultural resources would be considered significant if the project was determined to:

- Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- Disturb any human remains, including those interred outside of formal cemeteries.

5.4.4 Environmental Impacts

Countywide Siting Element Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, alternative technology (AT) facilities, and alternatives to landfill technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County will maintain sufficient solid waste disposal capacity over the next 15 years (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the County's adoption of the proposed CSE Revision would not result in direct impacts related to cultural resources. However, depending on phasing and implementation, certain policies may result in future, project-level impacts through existing facility construction activities or construction of new facilities.

Countywide Siting Element Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste AT or land disposal facilities or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to cultural resources. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County or incorporated jurisdiction in which they are located for review and approval.

Impact 5.4-1: Historical Resources

Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

Any potential facility that involves earth-disturbing activities, such as grading and excavation, or alterations to existing infrastructure such as objects, buildings, or structures has the potential to impact significant historic resources and/or has the potential to cause adverse change to historic objects, buildings, or structures listed in or eligible for listing in the NRHP, CRHR and Local Registers. Future development of

potential facilities could be located near historical resources or resources considered to be potentially historic; although, the co-locating of new facilities with existing solid waste management facilities or compatible industrial uses in developed areas would minimize this potential. In addition, there is the potential for indirect impacts to buildings or structures of historic age (45 years old or older) as a result of construction-related vibration, if these buildings or structures are in close proximity to construction. Notwithstanding these concerns, future facilities would be required to comply with the Siting Criteria in Appendix 6-A of the CSE to protect environmentally sensitive areas and avoid the siting of incompatible uses.

Furthermore, prior to the development of any potential future facility, a site-specific cultural resources survey, including investigation of potential historic architectural structures, would be required. This investigation would identify the presence of historic resources through a combination of field investigation and literature review. If required, mitigation measures would be proposed following subsequent environmental review. For example, Santa Monica Pier, in the vicinity of AT Site #2, has been designated as a Landmark by both the County and City of Santa Monica and protection of the pier and its contributing features would be important after determination of the exact site of the future AT facility. Adherence to Federal, State and local regulations, including the proposed CSE Siting Criteria, would minimize the potential for the Proposed Plan to impact historic resources. For this reason, the impact would be less than significant.

Impact 5.4-2: Archaeological Resources

Would the project cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5?

Archaeological materials have been found throughout the County, both in urbanized and undeveloped locations. New projects developed under the Proposed Plan could impact known and unknown archaeological sites. Locations of archaeological sites and types of resources in each site are kept confidential due to their sensitive nature. The Plan Area contains areas considered potentially sensitive for the discovery of archaeological resources. Thus, ground disturbance in these locations has a high potential for uncovering archaeological resources.

Future implementation projects proposed in conformance with the Proposed Plan would be subject to existing federal, state, and local regulations, including subsequent project review under CEQA. At the time project-specific details are known, a site-specific survey and literature review would be required. At that time, the proponent would be required to assess the localized archaeological sensitivity and the potential for the project to affect the associated resource. Project-level conditions of approval and mitigation measures could include avoidance and the inclusion of protocols for unanticipated archaeological discoveries. Adherence to Federal, State and local regulations, including the adoption of the proposed CSE Siting Criteria, combined with subsequent project-level environmental review would minimize the potential for the Proposed Plan to impact archaeological resources. For this reason, the impact would be less than significant.

Impact 5.4-3: Paleontological Resources

Would the project directly or indirectly destroy unique paleontological resource or site or unique geologic feature?

As shown in Table 5.4-1, three potential facility locations are underlain with geologic formations that are sensitive for fossils. Therefore, earth-disturbing activities related to the construction of AT facilities could directly or indirectly destroy unique paleontological resources or site or unique geologic features. However, prior to commencement of any earth-disturbing activities, an archival records search would need to be undertaken at the Natural History Museum of Los Angeles County (NHMLAC), or other appropriate institution to determine the depositional environment within the project area and to evaluate the likelihood of fossils being present.

Existing federal, state, and local regulations address: the provision of studies to identify paleontological resources; application review for projects that would potentially involve land disturbance; and project-level standard conditions of approval that address

unanticipated paleontological discoveries. Additionally, subsequent project-level environmental review may include requirements to develop specific mitigation measures if resources are encountered during any development activity. Adherence to Federal, State and local regulations, including the proposed CSE Siting Criteria, would minimize the potential for the Proposed Plan to impact significant paleontological resources. For this reason, this impact is less than significant.

Impact 5.4-4: Human Remains

Would the project disturb any human remains, including those interred outside of a formal cemetery?

Future facilities that would result in earth-disturbing activities within native sediments could have the potential to disturb Native American buried human remains that were on or near burial sites, and outside of formal cemeteries. It would be impossible to predict where such remains may be located since individuals were buried in a wide variety of locales.

California law recognizes the need to protect historic-era and Native American human burials, skeletal remains, and items associated with Native American interments from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Section 7050.5 and 7052 and California PRC Section 5097. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the contractor and/or the project proponent are required to immediately halt potentially damaging excavation in the area of the burial and notify the Los Angeles County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting on notification of a discovery of Native American human remains are identified in California PRC Section 5097.9. Therefore, the Proposed Plan would result in a less than significant impact.

5.4.5 Cumulative Impacts

Direct impacts to cultural resources are generally site specific. As defined in Section 15130 of the CEQA Guidelines, a cumulative impact consists of an impact that is created as a result of the incremental effects of a proposed project together with the effects of other projects, causing related impacts. Although the Plan, in conjunction with the effects of past projects, other current projects, and probable future projects, could potentially result in the disturbance of prehistoric archaeological resource sites, paleontological resources, and human remains throughout the region, future projects would be required to prepare a site-specific cultural resources study to determine if the project would impact cultural resources and, if necessary, require mitigation measures. Additionally, other projects would be subject to similar requirements. As a result, the adoption of the Proposed Plan would not contribute to a significant cumulative impact.

5.4.6 Level of Significance Before Mitigation

Compliance with applicable regulatory requirements, including the proposed CSE Siting Criteria, would minimize any impact to cultural resources as a result of the Proposed Plan and the impact would be less than significant.

5.4.7 Mitigation Measures

No mitigation measures are required.

5.4.8 Level of Significance After Mitigation

No significant impacts to cultural resources are identified that would otherwise require mitigation.

5.4.9 References

County of Los Angeles, Department of Regional Planning. 2015. General Plan 2035. Available at http://planning.lacounty.gov/generalplan/generalplan. Accessed April 20, 2016.

5.5





5.5 GEOLOGY AND SOILS

This section analyzes the potential impacts related to geology and soils as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing geology and soil conditions within the Plan Area. Potential geology and soils impacts, including potential cumulative impacts, are considered in programmatically in the impact analysis. If applicable this section identifies proposed mitigation measures for any significant impacts.

5.5.1 Environmental Setting

Regional Geology

The Plan Area is geographically expansive and is typified by diverse landforms and topography. The Plan Area includes landforms ranging from coastal plains, flat-lying large valleys, and mountainous areas. The County is situated at the intersection of the north-northwest trending Peninsular Ranges Geomorphic Province and the east-west trending Transverse Ranges Geomorphic Province. The Peninsular Ranges are characterized by a series of mountain ranges and intervening valleys that extend from Orange County to Baja California. The Transverse Ranges extend eastward from the Santa Monica Mountains to the Mojave and Colorado Deserts.

The bedrock units comprising the Plan Area are divided into two groups: (1) basement rocks—early Cretaceous and older, crystalline metamorphic and igneous rocks; and (2) the overlying sequence of late Cretaceous and Tertiary strata. The basement rocks of the San Gabriel Mountains are comprised of Precambrian, Paleozoic, and pre-middle-Cretaceous Mesozoic metamorphic and igneous rocks. These are the oldest rocks in the Plan Area, and they appear to represent old continental crust at the west edge of the North American continent. Table 5.5-1 provides the type of geologic substrate present at each of the site locations within the Focus Areas.

Topography

The Plan Area varies topographically with the San Gabriel Mountains to the northeast, the Santa Monica Mountains to the northwest, the Orange County coastal plain to the southeast, and the Pacific Ocean to the west and southwest, including Santa Catalina Island. Topography ranges from sea level at the coast and rises to elevations of greater than 10,000 feet above mean sea level (MSL) in the San Gabriel Mountains. Multiple Focus Areas are located at elevations ranging between 15 to 1,900 feet MSL in the greater Los Angeles Basin, and approximately 700 feet in the Lancaster area (or Antelope Valley).

Soils

The Plan Area contains diverse soil types and conditions with as many as 17 different soil types in the region (County of Los Angeles 2015). The prevailing soil types within each Focus Area are summarized in Table 5.5-2. Common soils-related hazards include soil expansion (or shrink-swell), erosion, settlement, and corrosion. Typically, these issues are investigated at a site-specific level and addressed through standardized engineering practices.

Table 5.5-1. Focus Area Geology

			Geology	Landslide	Sensitive for
AT Site	Site Name/ Address	Symbol ¹	Description	Potential	Fossils
AT Site #1	City of Carson Public Works Corps Yard 2400 E Dominguez Street Carson, CA 90810	Q	Alluvium, Holocene valley and flood deposits; unconsolidated and semi-consolidated	Low	No
AT Site #2	Santa Monica Pier 200 Santa Monica Pier Santa Monica, CA 90401	Q	Alluvium, Holocene valley and flood deposits; unconsolidated and semi-consolidated	Low	No
AT Site #3	Santa Monica Airport 3223 Donald Douglas Loop S Santa Monica, CA 90405	Q	Alluvium, Holocene valley and flood deposits; unconsolidated and semi-consolidated	Low	No
AT Site #4	City of Santa Monica Public Works Corps Yard 2500 Michigan Avenue Santa Monica, CA 90404	Q	Alluvium, Holocene valley and flood deposits; unconsolidated and semi-consolidated	Low	No
AT Site City Terrace Recycling LLC #5		Q	Alluvium, Holocene valley and flood deposits; unconsolidated and semi-consolidated	Low	No
		Р	Sandstone, siltstone, shale, and conglomerate (Miocene)		Yes
AT Site #6	CR&R Catalina 1 Dump Road Avalon, CA 90704	M+KJf	Franciscan Compliance: Cretaceous and Jurassic sandstone (Includes melange)	High	Yes
AT Site #7	Interior Removal Specialists, Inc. 8990 Atlantic Avenue South Gate, CA 90280	Q	Alluvium, Holocene valley and flood deposits; unconsolidated and semi-consolidated	Low	No
AT Site #8	Carson Revitalization Project 20945 S Wilmington Avenue Carson, CA 90810	Q	Alluvium, Holocene valley and flood deposits; unconsolidated and semi-consolidated	Low	No
AT Site #9	Waste Resources Recovery, Inc. 357 W. Compton Blvd Gardena, CA 90248	Q	Alluvium, Holocene valley and flood deposits; unconsolidated and semi-consolidated	Low	No

Source: California Geological Survey 2010

¹ Geological materials identified are based on a geographic overlay of the potential site locations with geologic mapping produced by the California Geologic Survey (2010). Additional site-specific investigation would be required to confirm the geologic materials present if one or more of the potential site locations are pursued in the future.

Table 5.5-2. Predominant Soil Types within the Focus Area

AT Site	Site Name(Potential)	Soil Type
AT Site #1	City of Carson Public Works Corps Yard	Built environment, no soil data available
AT City wo	Santa Monica Pier	Abaft-beaches complex, 0 to 5 percent slopes (north of site)
AT Site #2		Built environment, no soil data available
AT Site #3	Santa Monica Airport	Built environment, no soil data available
AT Site #4	City of Santa Monica Public Works Corps Yard	Built environment, no soil data available
AT Site #5	City of Terrace Recycling LLC	Built environment, no soil data available
TET OL O	CR&R Catalina	Oboship-Nauti-Bosun complex, 50 to 75 percent slopes
AT Site #6		Urban land-Xerorthents, landscaped, 0 to 8 percent slopes
AT Site #7	Interior Removal Specialists, Inc.	Built environment, no soil data available
AT Site #8	Carson Revitalization Project	Built environment, no soil data available
AT Site #9	Waste Resources Recovery, Inc	Built environment, no soil data available

Source: NRCS, Soil Surveys for Los Angeles County (2015)

Regional Faulting and Seismic Setting

Los Angeles County is located within a very seismically active area as the Pacific Plate moves northward relative to the North American Plate at the boundary of the San Andreas (horizontal strike-slip) and the Transverse Range fault (horizontal strike-slip) systems. For purposes of zoning the State of California defines active faults as those that show evidence of movement in the last 11,000 years. The United States Geological Survey (USGS) maintains a database of faults. The faults are classified by the seismic activity based on recurrence interval classes: Class I (\leq 2,000 years); Class II (2,000 - \leq 3,500 years); Class III (>3,500 - \leq 5,000 years); Class IV (<5,000 - \leq 10,000); Class V (>10,000 - \leq 20,000 years); and Class VI (20,000 - \leq 125,000). Potentially active faults are those that have no known movement in the past 11,000 years, however, show evidence of movement during Quaternary time (in the past 1.6 million years).

The Unified Building Code (UBC) classification system uses a six class system based on soil properties: Class A and B correspond to hard rock and rock; Class C corresponds to soft rock and very stiff/very dense soil; Classes D and E correspond to stiff soil and soft soil; and Class F is used for site-specific evaluations.

Faults are defined as having geologic evidence that demonstrates the existence of a Quaternary fault of tectonic origin, whether the fault is exposed by mapping or inferred from liquefaction or other deformational features. Class B faults are defined as having geologic evidence that demonstrates the existence of Quaternary deformation, but either: (1) the fault might not extend deeply enough to be a potential source of significant earthquakes; or (2) the currently available geologic evidence is too strong to confidently assign the feature to Class C but not strong enough to assign it to Class A. Class C faults are defined as having geologic evidence that is insufficient to demonstrate (1) the existence of tectonic fault, or (2) Quaternary slip or deformation associated with the feature.

According to data compiled from the USGS, there are 3,706 named faults and fault zones located within the project buffer zone, with 832 named faults and fault zones identified as quaternary aged. Figure 5.5-1 illustrates the seismic and geotechnical hazard zones and Table 5.5-3 presents 22 Class A and B faults located within the Plan Area.

According to the Los Angeles County General Plan Update Environmental Impact Report (EIR), the probability of a large earthquake will occur in the next 30 years is estimated to be 40 percent or greater. The magnitude of an earthquake is based on the Richter Magnitude Scale, which equates to the amplitude of the earthquake waves. In general, the higher the earthquake magnitude the greater the potential for damage and loss of life. Table 5.5-4, Description of Richter Scale Damage provides correlation of the damage related to the magnitude scale. Regional historical earthquake events (over a magnitude of 4.0) are presented in Table 5.5-5, Regional Earthquake Events (over magnitude 4.0).

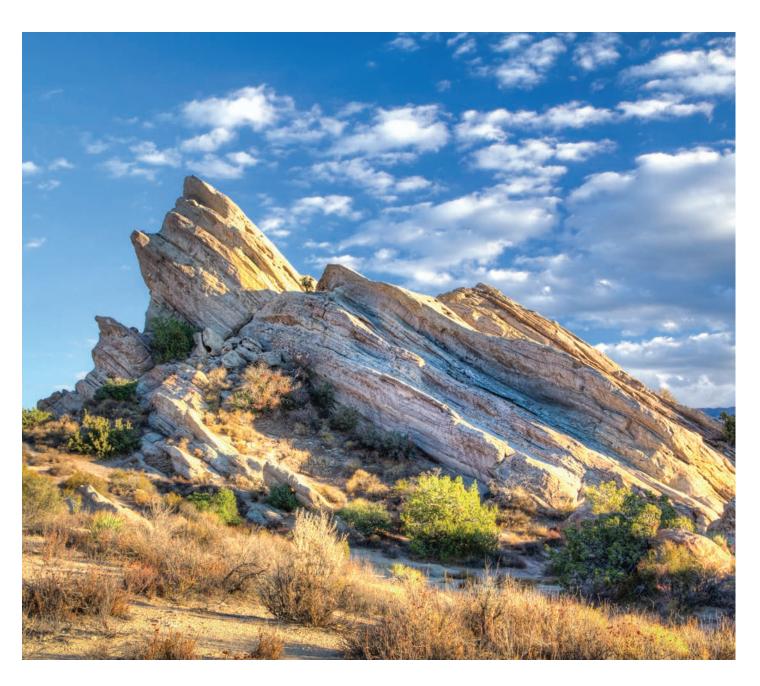
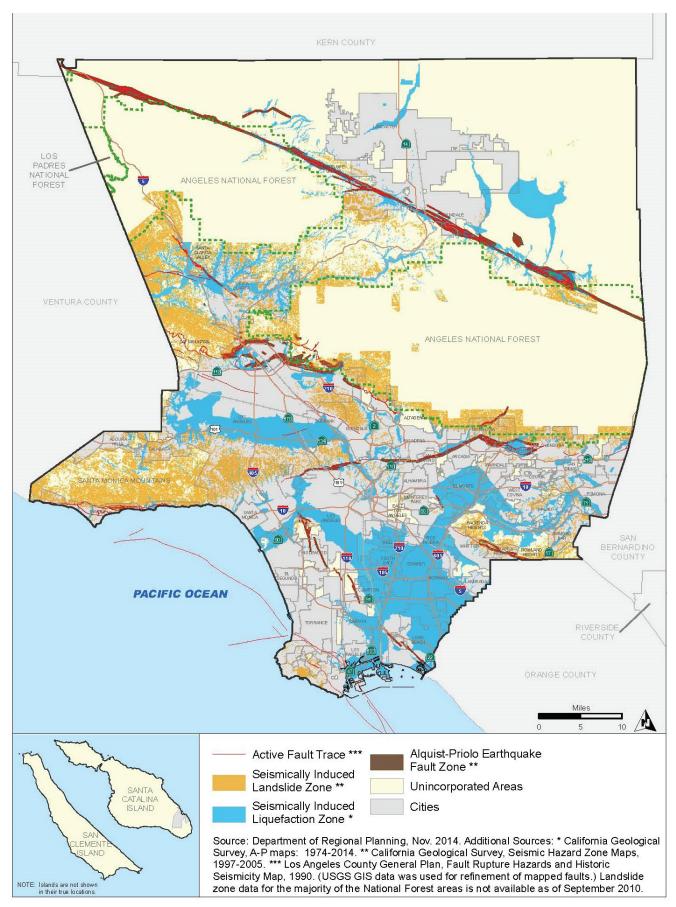


Figure 5.5-1. Seismic and Geotechnical Hazard Zones



Source: County of Los Angeles General Plan EIR 2014

Table 5.5-3. Faults Located within the Plan Area

Fault Zone Name	General Location	Counties in Project Plan Area
Cabrillo	Trends northeasterly across Palos Verdes Hills.	Los Angeles
Cleghorn	Trends east/west, located west of San Bernardino.	San Bernardino
Elsinore	Trends north/south from Orange to San Diego County.	Orange and San Diego
Garlock	Trends southwest to northeast, located east of Bakersfield.	Los Angeles
Helendale-South Lockhart	Trends northwest to southeast, north of the San Bernardino Mountains.	San Bernardino
Hollywood	Extends through Beverly Hills, West Hollywood, to the L.A. River and I-5.	Los Angeles
Johnson Valley	Located in the central Mojave Desert.	San Bernardino
Lenwood-Lockhart	Located in the central Mojave Desert.	San Bernardino
Malibu Coast	Located adjacent to the coast in Malibu.	Los Angeles and Ventura
Newport-Inglewood- Rose Canyon	East of Ladera Heights and Dana point to Newport Beach north/south.	Los Angeles
North Frontal Thrust System	Major east-west trending fault zone between the Transverse Ranges and the Mojave Desert.	San Bernardino
Palos Verdes	Follows the northeastern range front of the Palos Verdes Hills between Redondo Beach and San Pedro, extending across Los Angeles harbor.	Los Angeles
Pleito	Along the border of the Transverse Ranges and the Great Valley. Located west of Bakersfield.	Kern
Pinto Mountain	Trends east/west, along boundary between the Transverse Ranges and the Mojave Desert in the area of Twenty-nine Palms.	San Bernardino and Riverside
Raymond	Trends east/west, extends from the Los Angeles River east of Griffith Park through Pasadena to the foot of San Gabriel Mountains.	Los Angeles
San Andreas	Trends northwesterly through the Coastal Mountains south through Frazier Mountain on the eastern side of the San Gabriel Mountains to the Mojave Desert.	San Bernardino
San Gabriel	Extends northeasterly from Frazier Mountain to Lukens Mountain through the Angeles National Forest.	Los Angeles and San Bernardino
San Jacinto	Branches off from the San Andreas near Cajon Pass and extends southeastward through the Peninsular Ranges to the Imperial Valley.	Riverside and San Bernardino
Santa Monica	Extends east from the coastline in Pacific Palisades through Santa Monica and West Los Angeles and merges with the Hollywood fault at West Beverly Hills.	Los Angeles
Santa Ynez	Alegria Canyon, Rancho San Marcos.	Ventura
Sierra Madre, Clamshell-Sawpit Section	Lies at or south of the San Gabriel Mountains.	Los Angeles, Ventura, and San Bernardino
Simi-Santa Rosa, Simi Santa Rosa Section	Base of the San Gabriel Mountains. From San Fernando Pass to the eastern San Gabriel Mountains.	Los Angeles

Source: USGS Quaternary Fault and Fold Database for the United States - http://earthquake.usgs.gov/hazards/qfaults/ca/lax.html. Site Accessed 2016.

Table 5.5-4. Description of Mercalli Scale vs. Richter Scale

Modified Mercalli	Richter Scale ¹	Damage
I. Instrumental	2 and under	"Micro Quake" – Recorded on local seismographs, but generally not felt.
II. Just Perceptible	3	Felt by a few people, especially on upper floors of tall buildings.
III. Slight	3.5	Felt by people lying down or in the upper floors of tall buildings. Vibration similar to the passing of a truck.
IV. Perceptible	4	Felt indoors by many people outdoors by a few people during the day. Some people are awakened at night.
V. Rather strong	4.5	Generally felt, with sleeping people awakened, but damage is rare.
VI. Strong	5	Trees sway, chandeliers swing with some damage from falling objects. Damage is usually slight. Widely felt, and normally only slight damage.
VII. Very Strong	5.5	General alarm; walls and plaster crack.
VIII. Destructive	6	Poorly constructed buildings are damaged.
IX. Violent	6.5	Damage is considerable in poorly designed structures, well designed frame structures thrown out of plume or shifted off foundations.
X. Intense	7	Some well built wooden structures destroyed. Most masonry and frame structures destroyed with foundation.
XI. Extreme	7.5	Few if any masonry structures remain standing, bridges destroyed and rails greatly bent.
XII. Cataclysmic	8	"Great Quake" – Tremendous destruction and loss of life.

Source: Los Angeles Almanac, http://www.laalmanac.com/disaster/dio2b.htm; SMS Tsunami Warning, n.d. http://www.sms-tsunami-warning.com/pages/mercalli-scale#.V5KIB_krKM9

Based on a standard seismograph at a distance of approximately 62 miles from the earthquake center.

 Table 5.5-5. Regional Earthquake Events (over Magnitude 4.0)

Date	Location	Time	Richter	Modified Mercalli	Deaths & Property Damage
12/8/1812	L.A. Area	3:00 pm	7.0	X	Forty deaths; Mission San Juan Capistrano moderately to severely damaged; Mission San Gabriel moderately damaged
9/24/1827	L.A. Area	4:00 am	5.5	VII	No information
7/11/1855	L.A. Area	4:15 am	6.0	VIII	Bells of Mission San Gabriel collapsed; 26 buildings damaged in L.A.
1/9/1857	Fort Tejon	4:24 pm	7.9	XII	Two deaths; significant property damage and loss
10/23/1916	Tejon Pass Region	2:44 pm	5.3	VII	No information
3/10/1933	Long Beach	5:54 pm	6.4	IX	120 deaths; \$50 million
10/21/1941	Torrance– Gardena	10:57 pm	4.8	VI	No deaths; \$100,000 in property damage
11/14/1941	Torrance– Gardena	12:42 am	4.8	VI	No deaths; \$1 million in property damage
12/25/1951	San Clemente Island	4:46 pm	5.9	VIII	No deaths; no appreciable damage
2/9/1971	San Fernando	6:01 am	6.6	IX	Sixty-five deaths; \$505 million in property damage
1/1/1979	Malibu	3:15 pm	5.2	VI	No deaths; minor damage
10/1/1987	Whittier Narrows	7:42 am	5.9	VIII	Eight deaths; \$358 million in property damage
12/3/1988	Pasadena	11:38 pm	5.0	VI	No deaths; no appreciable damage
1/19/1989	Malibu	10:38 pm	5.0	VI	No deaths; slight damage
6/12/1989	Montebello	9:57 am	4.6	V	No deaths; no appreciable damage
6/28/1991	Sierra Madre	7:44 am	5.8	VIII	Two deaths; \$40 million in property damage
1/17/1994	Northridge	4:31 am	6.7	IX	61 deaths; est. \$20 billion in property damage
9/9/2001	SE of West Hollywood	4:59 pm	4.2	IV	No deaths; moderate property damage
7/29/2008	Chino Hills	11:42 am	5.4	VII	No deaths; moderate property damage
3/16/2010	Pico Rivera	4:04 am	4.4	V	No deaths; moderate property damage
3/17/2014	Encino	6:25 am	4.4	V	No deaths; moderate property damage

Source: Los Angeles Almanac, Earthquakes & Disaster Preparation, Significant Earthquakes in L.A. County

Surface Fault Rupture

Surface fault rupture can occur during significant seismic events. The process generally involves the sudden failure and displacement of the earth's surface along a fault trace or fault zone. The magnitude and geometry of such ground displacement is highly variable. In general, strike-slip faults such as the San Andreas Fault are more likely to produce lateral offsets in the ground surface, with one side of the fault plane or zone "sliding" past the opposing side. Similarly, faults that generally fail under compressional stress, such as thrust or reverse faults, or extensional faults, are more prone to vertical offsets in the ground surface. In either case, buildings or other man-made structures that lie atop the fault can experience serious damage or catastrophic failure during a strong earthquake. Multiple locations within the EIR Focus Area are located within a half mile from a delineated fault rupture zone (see Section 5.5.2).

Strong Seismic Ground Shaking

An earthquake of moderate to large magnitude generated within the Plan Area could cause significant ground shaking. The exact degree of shaking experienced at a given location would depend on several site-specific factors, such as: the magnitude of the seismic event, the duration of the seismic event, the distance from a given site to the zone of rupture (i.e., hypocenter), local site-specific geologic conditions (i.e., nature, thickness, and extent of underlying soil and/or bedrock), and broader, often regional geologic factors such as basin geometry. In general, the severity of seismic ground shaking tends to abate with increasing distance from the event hypocenter. Seismic ground shaking, if sufficiently intense and sustained, can result in significant damage to, or catastrophic failure of buildings or other man-made structures (County of Los Angeles 2015).

Liquefaction

Liquefaction is the process by which water-saturated granular soils lose strength and transform from a solid to a liquid state during strong ground shaking. This process can lead to near-surface or surface ground failure that may result in extensive damage to or catastrophic failure of buildings, roads, utility lines, and other man-made structures. Liquefaction can manifest as lateral ground spreading or flow, localized sand boils (e.g., eruptions of fluidized sediment), or rapid subsidence and an accompanying loss of bearing strength.

Liquefaction occurs when there are low-density sandy soils, shallow groundwater, and intense ground motion. According to the Los Angeles County General Plan EIR (2015), liquefaction is typically a very site-specific issue of concern and would need to be addressed on a site-by-site basis for each of the potential site locations within the Focus Area. This would include comprehensive evaluations, which may require site-specific invasive sampling, testing and analysis.

Landslides/Mudflows/Debris Flows

Landslides, mudflows and debris flows include the falling, sliding, or flowing masses of soil, rocks, water-laden earth materials and debris. Landslides can occur as a result of moderate to high magnitude earthquakes. The Focus Area includes areas comprised of hilly or mountainous terrain and the potential for slides is a problem throughout much of Los Angeles County. Mudflows and debris flows, active deep-seated landslides, hillside erosion and man-induced slope instability comprise the vast majority of hillside hazards, in addition to areas that have experienced post-fire conditions which can exacerbate the potential for landslides. Table 5.5-1 includes an indication of landslide hazards that may exist in the site vicinity.

5.5.2 Existing Plans and Regulations

The following section provides a description of the applicable geology and soils regulatory environment for the proposed project.

State

Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code \$2621 et seq.)

The Alquist-Priolo Earthquake Fault Zoning Act works to avoid the hazard of surface fault rupture by regulating the development and construction of buildings intended for human occupancy. The act helps to define areas where fault rupture is likely to occur.

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 was created to prohibit the location of most structures for human occupancy across the traces of active faults, thus lessening the hazard of fault rupture. Los Angeles County development complies with all aspects of the Alquist-Priolo Act. The three main provisions are to:

- Require the California Geological Survey to develop maps delineating the surface trace or projected trace of known active faults, and designate a buffer zone on either side of the known trace(s);
- Require property owners (or their real estate agents) to disclose if their property lies within identified hazard zones; and
- Prohibit new construction of projects as defined by the Alquist-Priolo Act within these identified hazard zones until a comprehensive geological study has been completed.

California Building Code (California Code of Regulations Title 24)

The California Building Code (CBC) (California Code of Regulations (CCR) Title 24) has its base in the federal UBC, although the CBC includes more extensive provisions relating to seismic hazards. The code also defines procedures to calculate seismic forces on structures.

The California Building Standards Commission is responsible for coordinating, managing, adopting, and approving building codes in California. In January 2013, the Commission adopted and published the International Building Code, which updated all the subsequent codes under the CCR Title 24. The CBC applies to building design and construction in the state and is based on the Federal UBC used widely throughout the country (generally adopted on a state-by-state or district-by-district basis). The State of California provides minimum standards for building design through the 20013 CBC Part 2, Vol. 2. (CCR, Title 24) and Chapter 21 of the 2013 CBC regulates excavation, foundations, and retaining walls, where no other building codes apply.

The 2007 CBC replaced the previous "seismic zones" descriptions (a number assigned from 1 to 4, where 4 required the most earthquake-resistant design) with new Seismic Design Category description (Class descriptions previously described), A through F, where F requires the most earthquake-resistant design for proposed project structures. With the shift from seismic zones to seismic design, the CBC philosophy has shifted from "life safety design" to "collapse prevention", meaning structures are designed for collapse prevention at the maximum ground shaking level that is reasonably expected to occur onsite. Chapter 16 of the CBC specifies exactly how each seismic design category is site-specific based on soil characteristics and proximity to potential seismic hazards.

Seismic Hazards Mapping Act (Public Resources Code §2690-2699.6)

The goal of the 1990 Seismic Hazards Mapping Act is to reduce the threat of seismic hazard to public health and safety by identifying and delineating areas prone to liquefaction, earthquake-induced landslides and seismic shaking. Through the act, the California Geological Survey (formerly California Department of Conservation, Division of Mines and Geology), is directed to map seismic hazard zone areas. State, County, and City agencies are directed to utilize such maps in land use and permitting processes. The act also requires site specific geotechnical investigations to be conducted before permitting occurs for sites within seismic hazard zones.

The California Geologic Survey has published Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California (California Geologic Survey, 1997). These guidelines are to: (1) assist in the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations; and (2) to promote uniform and effective statewide implementation of the evaluation and mitigation elements of the Seismic Hazards Mapping Act.

State Water Regional Control Board Title 27

Title 27 for Class III. Landfills for Non-hazardous Solid Waste, Section 20260(b) requires the following regarding general and geologic settings requirements.

(a) General. Class III landfills shall be located where site characteristics provide adequate separation between non-hazardous solid waste and waters of the state. The classification criteria in this section shall be used for reclassification of existing landfills at disposal sites approved as Class II-1 or II-2 (under previous versions of these SWRCB regulations) and any expansions of such landfills.

(b) Geologic Setting

- (1) MSW landfills are subject to the SWRCB-promulgated waste containment requirements of this subdivision and of SWRCB Resolution No. 93-62. Siting Criteria for new Class III and existing Class II-2 landfills shall be sited where soil characteristics, distance from waste to ground water, and of water beneath or adjacent to the landfill. Factors that shall be evaluated include:
 - (d) Size of the landfill;
 - (e) Hydraulic conductivity and transmissivity of underlying soils;
 - (f) Depth to ground water and variations in depth to ground water;
 - (g) Background quality of ground water;
 - (h) Current and anticipated use of the ground water; and
 - (i) Annual precipitation.
- (2) Where consideration of the factors in (b)(1) indicates that site characteristics alone do not ensure protection of the quality of ground water or surface water, Class III landfills shall be required to have a single clay liner with hydraulic conductivity of 1x10-6 cm/sec or less.
- (c) Ground Rupture. New Class III and expansions of existing Class II-2 landfills shall not be located on a known Holocene fault. However, existing landfills assigned a Class II-2 designation under previous versions of the SWRCB regulations may be located on a known Holocene fault, provided that the Unit's containment structures are capable of withstanding ground accelerations associated with the maximum probable earthquake (see Section 20370).
- (d) Rapid Geologic Change. New Class III and existing Class II-2 landfills can be located within areas of potential rapid geologic change only if the RWQCB finds that the Unit's containment structures are designed, constructed, and maintained to preclude failure. MSW landfills are also subject to any morestringent unstable area siting requirements referenced in SWRCB Resolution No. 93-62 (see Section 258.15 and Section 258.16 of 40CFR258).

Local

This EIR incorporates by reference the General Plan policies from the County's recently adopted General Plan EIR (2015).

County of Los Angeles General Plan

Los Angeles County recently adopted an update to its General Plan in 2015. The General Plan's Conservation and Natural Resources and Safety Elements include policies adopted for the purposes of avoiding or mitigating adverse environmental impacts related to potential risks resulting from natural and man-made hazards. Additionally, the Safety Element works in conjunction with the Operational Area Emergency Response Plan, prepared by the County's Chief Executive Office – Office of Emergency Management (OES), which is described further in Section 5.7 of this EIR. Applicable General Plan policies are identified below for the reader's benefit.

Conservation and Natural Resources (C/NR) Element

- Policy C/NR 13.5: Encourage required grading to be compatible with the existing terrain.
- Policy C/NR 13.8: Manage development in Hillside Management Areas (HMAs) to protect their natural and scenic character and minimize risks from natural hazards, such as fire, flood, erosion, and landslides.

Safety Element

- Policy S 1.1: Discourage development in Seismic Hazard and Alquist-Priolo Earthquake Fault Zones.
- Policy S 1.2: Prohibit the construction of most structures for human occupancy adjacent to active faults until a comprehensive fault study that addresses the potential for fault rupture has been completed.
- Policy S 1.3: Require developments to mitigate geotechnical hazards, such as soil instability, mudflow, debris flows and landslides in HMAs through siting and development standards.
- Policy S 1.4: Support the retrofitting of unreinforced masonry structures to help reduce the risk of structural damage and human loss due to seismic hazards.

Los Angeles County Code

The following sections of the County's Code (1987, updated July 19, 2016) include regulations related to geology and soils.

- Title 26, Chapters 2 through 35, and Appendices C, I, and J (Adoption of California Building Code)
- Title 26, Appendix J, Section J110 (Construction-related erosion control, preparation of cut-and-fill slopes, and the implementation of erosion control measures)
- Title 26, Chapters 95 and 96 (Seismic safety requirements for older concrete tilt-up buildings and unreinforced masonry bearing wall buildings)

Other Jurisdictions

In addition to the County, the Countywide Siting Element (CSE) Revisions contemplates up to six potential site locations within three cities including Carson, Santa Monica, and South Gate. Each of these cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to geology and soils. Depending where future facilities are located, local plans and policies would be applicable to those facilities.

5.5.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to geology and soils would be considered significant if the project was determined to:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42.)
 - Strong seismic ground shaking.
 - Seismic-related ground failure, including liquefaction.
 - o Landslides.
- Result in substantial soil erosion or the loss of topsoil.
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
- Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial risks to life or property.
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

5.5.4 Environmental Impacts

Countywide Siting Element Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternative technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County plans to maintain sufficient solid waste disposal capacity over a 15-year period (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to geology and soils; however, depending on phasing and implementation, indirect, project-level impacts could result from existing facility construction activities and operation in the future. A programmatic analysis of these potential future facilities is provided below.

Countywide Siting Element Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste AT or land disposal facilities or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to geology and soils. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County for review and approval.

Impact 5.5-1: Exposure to Potential Substantial Adverse Effects

Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

Rupture of a Known Earthquake Fault

As presented in Table 5.5-3, there are numerous faults within the Plan Area and multiple locations within the EIR Focus Area are located within a half mile from a delineated fault rupture zone (see Section 5.5.2). Future facilities would be required to comply with the Siting Criteria in Appendix 6-A of the CSE by ensuring the structural stability and safety of facilities by minimizing or avoiding the impacts of fault rupture through design and construction in accordance with state and local building codes.

Federal and State regulations prohibit locating a new Class III landfill or a lateral expansion of an existing Class III landfill on a known Holocene Fault. Adherence to existing state and local regulations, including the CBC as amended, and the proposed CSE Siting Criteria, combined with future, site-specific geotechnical investigations would avoid or minimize the geologic hazards associated with earthquake fault rupture and related seismic ground motion. For this reason, the impact is considered less than significant.

Strong Seismic Ground Shaking

Future facilities would be subject to ground shaking should an earthquake occur in the area. These facilities would be required to comply with the Siting Criteria in Appendix 6-A of the CSE by ensuring the structural stability and safety of facilities thereby minimizing the effects of strong seismic ground shaking. Adherence to existing state and local regulations, including the CBC as amended, and the proposed CSE Siting Criteria, combined with future, site-specific geotechnical investigations and analyses would avoid or minimize the geologic hazards associated with seismic ground motion. For this reason, the impact is considered less than significant.

Seismic-related Ground Failure, including Liquefaction

The potential for subsidence, high groundwater levels, liquefaction, and hydrocompaction are site-specific issues that would need to be addressed on a case by case basis for each of the potential site locations within the Focus Area. Future facilities would be required to comply with the Siting Criteria in Appendix 6-A of the CSE by ensuring the structural stability and safety of facilities and the protection of groundwater. The following siting criteria would apply to potential future facilities:

- All Facilities: Avoid locations in areas determined to have a high potential for failure due to subsidence or liquefaction unless containment structures are designed, constructed, and maintained to preclude failure as a result of such change.
- Land Disposal Facilities: For Class III landfills, all containment structures must be capable of withstanding hydraulic pressure gradients to prevent failure due to settlement, compression, or uplift as certified by a registered civil engineer or engineering geologist registered in California.

Furthermore, a site-specific geotechnical investigation would be required once specific sites and conceptual facility layouts are identified. Site-specific geotechnical investigations would evaluate the potential for liquefaction and other geotechnical hazards such as subsidence, high groundwater levels, and hydrocompaction. Geotechnical investigation reports would provide recommendations for grading and for foundation design to reduce hazards to people and structures arising from liquefaction and other geotechnical hazards such as subsidence, high groundwater levels, and hydrocompaction. For example, the presence of shallow groundwater and loose, granular soils, at AT Site #2 is identified as having a high liquefaction risk (City of Santa Monica 2007). As a consequence, future facility, design at this location will be required to adhere to applicable seismic safety standards of the CBC, as amended by Santa Monica Building Code.

This will include preparation and submittal of site-specific grading plans and geotechnical reports and approval by the applicable local jurisdiction prior to implementation. Based upon mandated compliance with requirements of state and local agencies and regulations, including the CBC (as applicable) and the CSE Siting Criteria, the impact of these hazards is less than significant.

Landslides and Slope Instability

The Focus Area includes areas comprised of hilly or mountainous terrain and the potential for landslides is well-documented throughout Los Angeles County. Table 5.5-1 identifies areas within the Focus Area that have a high potential for landslides. However, future facilities would be required to comply with the Siting Criteria in Appendix 6-A of the CSE, which requires structural stability and safety of new and expanded facilities in order to minimize or avoid the impact of landslides. Specifically, facilities located within areas susceptible to slope instability will be subject to site-specific geotechnical investigation and project-specific engineering to ensure their safe operation.

Through the preparation of a site-specific geotechnical investigation, potential landslide and other related geotechnical hazards would be identified and evaluated. Site-specific geotechnical investigation reports would provide recommendations for filling, grading and for foundation design to reduce hazards to people and structures arising from landslides and other geotechnical hazards. The development of future facilities on proposed site locations pursuant to the Proposed Plan would be required to adhere to existing building and grading codes (e.g. maintain 2:1 or flatter slope gradients), including the pre-construction preparation and submittal of site-specific grading plans and geotechnical design reports for approval by the local jurisdiction. Each future development project would be required to comply with the recommendations in the geotechnical investigation report and comply with existing state and local regulations, including the proposed CSE Siting Criteria, thereby reducing hazards related to landslide. This impact would be less than significant.

Impact 5.5-2: Soil Erosion or Loss of Topsoil

Would the project result in substantial soil erosion or the loss of topsoil?

Future proposals in the Focus Area include the construction of new facilities. During grading and excavation construction activities, there is the potential for increased soil erosion or loss of topsoil and contaminated runoff. Current regulations pertaining to water quality require that site erosion be minimized. Construction would be required to comply with the applicable NPDES Permits as discussed in Section 5.8, Hydrology and Water Quality (Table 5.4-4). Future facilities would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) and comply with local and state stormwater runoff control requirements.

The proposed CSE Revision does not involve physical development or construction activity that would otherwise result in substantial soil erosion or the loss of topsoil. In this context, along with adherence to federal, local, and state regulations, including the CSE Siting Criteria, this impact would be less than significant.

Impact 5.5-3: Geologic Unit or Soil Instability

Would the project site be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Potential landslide, subsidence, lateral spreading, liquefaction, and/or soil collapse hazards are generally site-specific and related to local soil and or bedrock conditions. An assessment of these hazards would be addressed on a case-by-case basis for each of the potential site locations within the Focus Area. Future facilities would have to comply with all applicable federal, state, and local requirements and the Siting Criteria in Appendix 6-A of the CSE. These requirements identify the engineering design

standards to maintain safety and structural stability during a seismic or geologic event. By addressing the pre-existing geologic and soil hazards during the project-level design phase, the impact of these hazards would be less than significant.

Impact 5.5-4: Expansive Soils

Would the project be located on expansive soil, as defined in Table 18-1 of the Uniform Building Code (1994), creating substantial risks to life or property?

Depending on where future facilities are sited, they may be located in areas that contain soils with expansive properties. A site-specific geotechnical investigation would be required once specific sites for facilities are selected. Further design requirements (e.g., structural enhancements/reinforcements or other measures) may be identified during those investigations to minimize or mitigate the adverse effects to expansive properties. Each future project would be required to comply with the recommendations of a site specific geotechnical investigation, which would include standardized engineering practices to mitigate for expansive soils, therefore, the impact would be less than significant.

Impact 5.5-5: Alternative Wastewater Disposal System

Would the project soils be incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?

Future facilities will have a high probability of being located in areas where connections to a municipal sewer system would be available. In situations where sanitary sewer connections do not exist, portable toilets would be used. For this reason, new septic systems would not be required and the corresponding impact is considered less than significant.

5.5.5 Cumulative Impacts

Geology and soils impacts are very site-specific and are generally mitigated on a project-by-project basis and, thus, do not typically contribute to a cumulative impact. Upon determination of the facility location, a project-level CEQA analysis would be conducted to determine if the construction of such facilities would have a project-level and cumulative impact. The future cumulative analysis will utilize a list of projects and/or use projections to determine the project-level impacts to geology and soils within the County and incorporated jurisdictions.

5.5.6 Level of Significance Before Mitigation

Compliance with applicable regulatory requirements, including the proposed CSE Siting Criteria, would minimize any hazards related to geology and soils and the impact would be less than significant.

5.5.7 Mitigation Measures

No mitigation measures are required.

5.5.8 Level of Significance After Mitigation

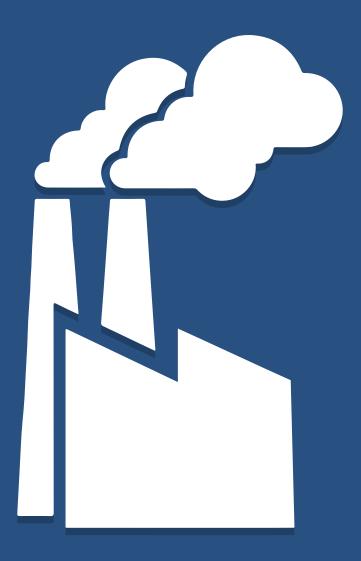
No significant geology and soils impacts are identified that would otherwise require mitigation.

5.5.9 References

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5.6



Greenhouse Gas Emissions



Comparative Greenhouse Gas Emissions Analysis:

Briefing Report

An Integrated Materials Recovery Facility (MRF) with Conversion Technologies will achieve a net reduction in cumulative greenhouse gas emissions as compared to landfilling post-recycled residuals from a mixed-waste MRF.

BASELINE SCENARIO - LANDFILL





ALTERNATIVE SCENARIO - INTEGRATED MRF WITH CONVERSION TECHNOLOGIES









5.6 GREENHOUSE GAS EMISSIONS

This section analyzes the potential impacts related to greenhouse gas (GHG) emissions as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing GHG emission conditions within the Plan Area. Potential GHG emissions impacts, including potential cumulative impacts, are considered in programmatically in the impact analysis. If applicable, this section identifies proposed mitigation measures for any significant impacts.

5.6.1 Environmental Setting

This EIR incorporates by reference the setting description for the Plan Area as identified in Section 5.7, Greenhouse Gas Emissions, of the County's General Plan EIR, Section 4.3, Air Quality, of the City of Los Angeles' Solid Waste Integrated Resources Plan (SWIRP) EIR, and the White Paper prepared by Los Angeles County (2016).

Climate Change

Any changes in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period of time (decades or longer) is referred to as climate change (County of Los Angeles 2015). While climate change is not caused by poor air quality alone, the two have common causes and effects.

Scientist have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHGs, to the atmosphere. According to the U.S. Environmental Protection Agency (USEPA), the principal GHGs that enter the atmosphere because of human activities are carbon dioxide, methane, nitrous oxide, and fluorinated gases (County of Los Angeles 2015). GHGs contribute to the destruction of the Earth's naturally-occurring ozone, which provides protection from the damaging effects of solar ultraviolet radiation (County of Los Angeles 2015).

GHG emissions in the U.S. are mostly derived from energy use. Economic growth, fuel used for electricity generation, and weather patterns are what drive energy consumption and GHG emissions. Energy-related carbon dioxide $({\rm CO_2})$ emissions from fossil fuel explorations and use account for approximately three-quarters of the human-generated GHG emissions in the U.S. (County of Kern 2013). More than half the energy-related emissions come from large stationary sources, such as power plants; roughly one-third come from transportation; and industrial processes, agriculture, forestry, other land uses, and waste management make up most of the other sources (County of Kern 2013).

The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, ${\rm CO_2}$, methane (${\rm CH_4}$), and ozone (${\rm O_3}$)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHGs identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (${\rm N_2O}$), sulfur hexafluoride (SF $_6$), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2007). The major GHGs are briefly described below:

- Carbon dioxide (CO₂) enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products; respiration; and as a result of other chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- Methane (CH₄) is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in landfills and water treatment facilities.
- Nitrous oxide (N₂O) is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste.

- Fluorinated gases are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.
- Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.
- Perfluorocarbons (PFCs) are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF₄] and perfluoroethane [C₂F₆]) were introduced as alternatives, along with hydrofluorocarbons (HFCs), to the ozone-depleting substances. In addition, PFCs are emitted as byproducts of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high GWP.
- Sulfur Hexafluoride (SF₆) is a colorless gas soluble in alcohol and ether, and slightly soluble in water. SF6 is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.
- Hydrochlorofluorocarbons (HCFCs) contain hydrogen, fluorine, chlorine, and carbon atoms. Although they are ozone-depleting substances, they are less potent than CFCs. They have been introduced as temporary replacements for CFCs.
- Hydrofluorocarbons (HFCs) contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs.

California's Greenhouse Gas Sources and Relative Contribution

As of 2005, California was the second largest emitter of GHG emissions in the U.S. and is the tenth largest GHG emitter in the world. However, because of more stringent air emission regulations, in 2001, California ranked fourth lowest in carbon emissions per capita and fifth lowest among states in $\rm CO_2$ emissions from fossil fuel consumption per unit of Gross State Product (total economic output of goods and services).

The California Air Resources Board's (CARB's) last update to the statewide GHG emissions inventory was conducted in 2012 for year 2009 emissions. California's transportation sector was the single largest generator of GHG emissions, producing 37.9 percent of the state's total emissions. Electricity consumption was the second largest source, comprising 22.7 percent. Industrial activities are California's third largest source of GHG emissions, comprising 17.8 percent of the state's total emissions. Other major sectors of GHG emissions include commercial and residential uses, recycling and waste management, high global warming potential GHGs, agriculture, and forestry.

In 2013, the statewide GHG emissions inventory was updated for 2009 to 2012 emissions that utilized the GWPs in IPCC's Fourth Assessment Report. Based on the Fourth Assessment Report GWPs, in 2012 California produced 459 million metric tons of carbon dioxide ($\rm CO_2$) equivalent (MMTCO2e) GHG emissions. California's transportation sector remains the single largest generator of GHG emissions, producing 36.5 percent of the state's total emissions. Electricity consumption is the second largest source, comprising 20.7 percent. Industrial activities are California's third largest source of GHG emissions, comprising 19.4 percent of the state's total emissions. Other major sectors of GHG emissions include commercial and residential uses, recycling and waste management, high global warming potential GHGs, agriculture, and forestry.

Potential Climate Change Impacts

Climate change will have numerous adverse impacts on ecosystems and the economy. Various scenarios predict intense flooding or prolonged droughts, higher temperatures that can lead to frequent wildfires, and rising sea levels that will affect low-lying coastal areas (County of Los Angeles 2015). The environmental consequences of gradual changes in the Earth's temperature are hard to predict. In California and western North America, observations of the climate have shown: (1) a trend toward warmer winter and spring temperatures; (2) a smaller fraction of precipitation falling as snow; (3) a decrease in the amount of spring snow accumulation in the lower and middle elevation mountain zones; (4) an advance snowmelt of 5 to 30 days earlier in the springs; and (5) a similar shift (5 to 30 days earlier) in the timing of spring flower blooms. According to the California Climate Action Team, even if actions could be taken to immediately curtail climate change emissions, the potency of emissions that have already built up, their long atmospheric lifetimes, and the inertia of the Earth's climate system could produce as much as 0.6° Celsius (1.1° Fahrenheit) of additional warming. Consequently, some impacts from climate change are now considered unavoidable. Global climate change risks to California include public health impacts, water resources impacts, agricultural impacts, coastal sea level impacts, forest and biological resource impacts, and energy impacts.

5.6.2 Existing Plans and Regulations

Federal

The Clean Air Act

On April 2, 2007, the Supreme Court found that GHGs are air pollutants that are covered by the Clean Air Act (CAA). It was determined that GHGs threaten the public health and welfare of the American people and that on-road vehicles contribute to these emissions; and the findings were included in Section 202(a) of the CAA. The findings do not in and of themselves impose any emission reduction requirements, but allow the USEPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

The USEPA's endangerment finding covers emissions of six key GHGs— ${\rm CO_2}$, ${\rm CH_4}$, ${\rm N_2O}$, HFCs, PFCs, and ${\rm SF_6}$ —that have been the subject of scrutiny and intense analysis for decades by scientists in the U.S. and around the world.

40 CFR Part 98, Mandatory Reporting of Greenhouse Gases Rule

In response to the endangerment finding, the USEPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 metric tons (MT) or more of CO₂ per year are required to submit an annual report.

Update to Corporate Average Fuel Economy Standards (2010/2012)

The current Corporate Average Fuel Economy (CAFE) standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon [mpg] by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in 2012 for model years 2017–2025, which will require a fleet average of 54.5 mpg in 2025.

USEPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the CAA, the USEPA has been developing regulations for new stationary sources such as power plants, refineries, and other large sources of emissions. Pursuant to the President's 2013 Climate Action Plan, the USEPA has been directed to also develop regulations for existing stationary sources.

Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills

Atmospheric methane concentrations have been increasing as a result of human activities related to agriculture, fossil fuel extraction and distribution, and waste generation and processing (CARB 2014). Methane is generated in landfills during the natural process of bacterial decomposition of organic material. Many factors influence the quantity and composition of the gas generated, including the types and age of waste buried in the landfill, the quantity and types of organic compounds in the waste, and the moisture content and temperature of the waste (CARB 2014). California has adopted several measures focused on controlling methane emissions from landfills, one of which includes the Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills. The EPA determined that it was appropriate to review the landfills Emission Guidelines based on changes in the landfill industry since the Emission Guidelines were promulgated in 1996. The EPA's review of the Emission Guidelines for municipal solid waste (MSW) landfills applies to landfills that accepted waste after November 8, 1987, and commenced construction, reconstruction, or modification on or before July 17, 2014 (USEPA 2015).

This action proposes to achieve additional reductions of landfill gas and its components, including methane, by lowering the emissions threshold at which a landfill must install controls (USEPA 2015). This action also incorporates new data and information received in response to an advanced notice of proposed rulemaking and addresses other regulatory issues including surface emissions monitoring, wellhead monitoring, and the definition of a landfill gas treatment system (USEPA 2015).

State

Executive Order S-03-05

Executive Order S-03-05, signed June 1, 2005, establishes statewide emissions reduction targets through 2050:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

This executive order does not include any specific requirements that pertain to the proposed project. However, actions taken by the State to implement these goals could affect the project, depending on the specific implementation measures that are developed.

Executive Orders S-01-07 and B-30-15

In January 2007, former Governor Schwarzenegger asserted California's leadership in clean energy and environmental policy by establishing a Low-Carbon Fuel Standard by Executive Order S-01-07. The executive order calls for a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020. It instructed the Secretary of the California EPA to coordinate activities between the University of California, the California Energy Commission (CEC), and other state agencies to develop and propose a draft compliance schedule to meet the 2020 target. Executive Order B-30-15 goes beyond S-01-07 and sets a GHG emissions target for 2030 at 40 percent below 1990 levels.

Assembly Bill 32 (The California Global Warming Solutions Act of 2006)

Assembly Bill (AB) 32 was passed by the California state legislature on August 31, 2006 to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-03-05.

AB 32 directed the California Air Resources Board (CARB) to adopt discrete early action measures to reduce GHG emissions and outline additional reduction measures to meet the 2020 target. Based on the GHG emissions inventory conducted for the Scoping Plan by CARB, GHG emissions in California are anticipated to be approximately 596 MMTCO₂e by 2020. In December 2007, CARB approved a 2020 emissions limit of 427 MMTCO₂e for the state. The 2020 target requires a total emissions reduction of 169 MMTCO₂e or 28.5 percent from the projected emissions of the business-as-usual (BAU) scenario for the year 2020 (i.e., 28.5 percent of 596 MMTCO₂e is 427 MMTCO₂e).

In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than 25,000 MT of CO₂e per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012.

CARB Scoping Plan

AB32 required the CARB to develop an implementation program and adopt GHG control measures "to achieve the maximum technologically feasible and cost-effective GHG emission reductions from sources or categories of sources." The Scoping Plan released by CARB in 2008 outlined the State's strategy to achieve the AB32 goals. This Scoping Plan, developed by CARB in coordination with the Climate Action Team (CAT), proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify energy sources, save energy, create new jobs, and enhance public health. It was adopted by CARB in December 2008. According to the Scoping Plan, the 2020 target of 427 million MT of CO₂e requires the reduction of 169 million MT of CO₂e, or approximately 28.3 percent, from the State's projected 2020 Business as Usual (BAU) emissions level of 596 million MT of CO₂e.

In August 2011, the Scoping Plan was re-approved by CARB and included the Final Supplement to the Scoping Plan Functional Equivalent Document. This document included expanded analysis of project alternatives as well as updates to the 2020 emission projections in light of updated economic forecasts. Considering the updated 2020 BAU estimate of 507 million MT of ${\rm CO_2}{\rm e}$, only a 16 percent reduction below the estimated new BAU levels would be necessary to return to 1990 levels by 2020. The 2011 Scoping Plan expands the list of nine Early Action Measures into a list of 39 Recommended Actions.

However, in May 2014, CARB developed; in collaboration with the CAT, the First Update to California's Climate Change Scoping Plan (Update), which shows that California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB32. In accordance with the United Nations Framework Convention on Climate Change (UNFCCC), CARB is beginning to transition to the use of the AR4's 100-year global warming potential (GWPs) in its climate change programs. CARB has recalculated the 1990 GHG emissions level with the AR4 GWPs to be 431 million MT of CO₂e, therefore, the 2020 GHG emissions target established in response to AB32 is now slightly higher than the 427 million MT of CO₂e in the initial Scoping Plan.

The majority of the Scoping Plan's GHG reduction strategies are directed at the two sectors with the largest GHG emissions contributions: transportation and electricity generation. The GHG reduction strategies for these sectors involve statutory mandates affecting vehicle or fuel manufacture, public transit, and public utilities.

The reduction strategies employed by CARB are designed to reduce emissions from existing sources as well as future sources. The most relevant to the Proposed Plan are outlined in the following sections.

CARB Short Lived Climate Pollutant Reduction Strategy

This final proposed Short-Lived Climate Pollutant (SLCP) Reduction Strategy (SLCP Strategy) was developed pursuant to SB 605 and SB 1383 and lays out a range of options to accelerate SLCP emission reductions in California, including regulations, incentives, and other market-supporting activities. The SLCP Strategy informed and was integrated into the 2017 Climate Change Scoping Plan Update, which incorporated input from a wide range of stakeholders to develop a comprehensive plan for achieving the SB 32 statewide 2030 GHG limit of 40 percent below 1990 levels. The process for updating the Scoping Plan began in fall 2015 and was completed in November 2017.

Achievable reductions through implementation of the SLCP Strategy would include the following by 2030 (from 2013 levels):

- 50 percent for anthropogenic Black Carbon;
- 40 percent for methane; and
- 40 percent for hydrofluorocarbons, or HFCs.
- Convert manure and organic wastes into valuable energy and soil amendment products;
- Reduce disposal of edible foods by diverting them to food banks and other outlets:
- Reduce harmful emissions from residential wood stoves; and
- Accelerate the reduction of the fastest growing source of GHG emissions by building on global HFC phasedown agreements.

Landfill Methane Control Measure

In 2009, CARB adopted a regulation to reduce methane from MSW landfills. The regulation, effective June 17, 2010, is a discrete early action GHG emission reduction measure, as described in AB 32. The regulation requires owners and operators of certain uncontrolled MSW landfills to install gas collection and control systems and requires existing and newly installed gas and control systems to operate in an optimal manner (CARB 2014). The regulation allows local air districts to voluntarily enter into a memorandum of understanding (MOU) with CARB to implement and enforce the regulation and to assess fees to cover costs (CARB 2014).

Assembly Bill 341

California disposes about 30 million tons of solid waste in landfills each year (CARB 2014). Complementary to the control of methane emissions from landfills themselves, the Mandatory Commercial Recycling Regulation (AB 341; Chesbro, Chapter 476, Statutes of 2011) was adopted in 2012 to further reduce landfill methane emissions via upstream organic material diversion from landfill disposal and to recognize the role waste management can play in GHG emission reductions (CARB 2014). The Mandatory Commercial Recycling Measure focuses on increased commercial waste diversion as a method to reduce GHG emissions. It is designed to achieve a reduction in GHG emissions of 5 MMTCO₂e. To achieve the measure's objective, an additional 2 to 3 million tons of waste materials annually will need to be recycled from the commercial sector by the year 2020 and beyond (CalRecycle 2016).

According to the 2008 Statewide Waste Characterization data, the commercial sector generates approximate three-fourths of the solid waste in California most of which is readily recyclable (CalRecycle 2016). Increasing the recovery of these recyclable materials will directly reduce GHG emissions due to multiple phases of product production, including extraction of raw materials, preprocessing and manufacturing (CalRecycle 2016). A co-benefit of increased recycling is avoided methane emissions at landfills from the decomposition of organic materials. Use of composted organic materials also provides environmental benefits such as carbon storage in soils and reduced use of fertilizers, pesticides, and water (CalRecycle 2016).

Assembly Bill 1493

AB 1493, also known as the Pavley Regulations or the Clean Car Standards, was adopted on July 22, 2002. AB 1493 required the state to develop and adopt regulations to achieve the maximum feasible and cost-effective reduction in GHG emissions emitted by passenger vehicles and light-duty trucks (County of Kern 2013). In 2004, subsequent regulations that were adopted by the CARB were threatened by automaker lawsuits and stalled by the EPA's initial denial to allow California to implement GHG standards for passenger vehicles. On June 30, 2009, the EPA finally granted California the authority to implement GHG emissions reductions standards for new passenger cars, pickup trucks, and sport utility vehicles. On September 24, 2009, CARB adopted amendments to the Pavley Regulations that would reduce GHG emissions in new passenger vehicles between 2009 and 2016 (County of Kern 2013).

Senate Bill 1771

Senate Bill (SB) 1771, required the Secretary of the Resources Agency to establish a nonprofit benefit corporation known as the California Climate Action Registry (CCAR). The CCAR is responsible for administering a voluntary GHG emissions registry to record and register voluntary GHG reductions that have been achieved since 1990 in California (County of Kern 2013). SB 1771 required the Energy Commission to develop metrics for use by the CCAR and to update the state's inventory of GHG emissions by January 1, 2002, and to qualify third-party organizations to provide assistance for purposes of monitoring and reducing GHG emissions. Additionally, the bill required the adoption of standards to verify emissions reductions and the establishment of GHG emissions reduction goals along with efficiency improvement plans (County of Kern 2013).

Senate Bill 32

Senate Bill 32 (SB 32) was signed into law on September 8, 2016 and expands upon AB-32 to reduce greenhouse gas (GHG) emissions. SB-32 sets into law the mandated GHG emissions target of 40 percent below 1990 levels by 2030 written into Executive Order B-30-15.

Senate Bill 350

Senate Bill 350 was signed into law in September 2015. SB 350 establishes tiered increases to the RPS of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Senate Bill 375

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reduction targets established in the 2008 CARB Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light duty trucks and automobiles (excluding emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled (VMT) and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPOs). Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010).

The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's existing transportation

network. The proposed targets would result in 3 $\rm MMTCO_2e$ of reductions by 2020 and 15 $\rm MMTCO_2e$ of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

Senate Bill 97

Senate Bill 97, enacted in August 2007, requires the Office of Planning and Research (OPR) to develop guidelines for the mitigation of GHG emissions, or the effects related to releases of GHG emissions. The OPR submitted proposed amendments to the Natural Resources Agency in accordance with SB 97 including analysis and mitigation of GHG emissions on April 13, 2009. The amendments to the CEQA guidelines for GHG emissions were adopted by Natural Resources Agency on December 30, 2009 and subsequently approved by the Office of Administration Law to be filed with the Secretary of State for inclusion in the California Code of Regulations on February 16, 2010. The amendments became effective on March 18, 2010.

Assembly Bill 1826

In October 2014, Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, non-hazardous wood waste, and food-soiled paper waste that is mixed in with food waste.

Senate Bill 1383

Senate Bill 1383 will codify emission reduction targets for short-lived climate pollutants and require the California Air Resources Board to approve and implement a strategy to decrease emissions of these pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030.

Local

County of Los Angeles General Plan

Los Angeles County recently adopted an update to its General Plan in 2015. The General Plan's Air Quality and Public Services and Facilities sections include policies adopted for the purposes of avoiding or mitigating environmental impacts related to potential risks resulting from natural and man-made hazards. Applicable General Plan polices are identified below.

Air Quality (AQ) Element

- Policy AQ 1.1: Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors.
- Policy AQ 1.3: Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.
- Policy AQ 1.4: Work with local air quality management districts to publicize air quality warnings and track potential sources of airborne toxics from identified mobile and stationary sources.

Public Services and Facilities Element

- Policy PS/F 5.3: Discourage incompatible land uses near or adjacent to solid waste disposal facilities identified in the Countywide Integrated Waste Management Plan.
- Policy PS/F 5.4: Encourage solid waste management facilities that utilize conversion and other alternative technologies and waste to energy facilities.

• Policy PS/F 5.5: Reduce the County's waste stream by minimizing waste generation and enhancing diversion.

County Energy and Environmental Program

In 2006, the Board of Supervisors adopted an Energy and Environmental Program (EEP) for the development and enhancement of energy conservation and environmental programs for County departments (County of Los Angeles 2015). These programs contribute to the County's efforts to reduce communitywide GHGs and GHGs from County operations. The EEP consists of the following programs:

- Energy and Water Efficiency. The EEP establishes a reduction target of 20 percent by 2015 and implements conservation monitoring practices and water and energy shortage awareness programs for County buildings and departments (County of Los Angeles 2015).
- Green Building Construction and Operations. The County's Green Building Program consists of the Green Building, Low-Impact Development, and Drought Tolerant Ordinances. For more information on the County's environmental and sustainability programs, please visit http://green.lacounty.gov (County of Los Angeles 2015).
- Environmental Stewardship. The Environmental Stewardship Program measures and reduces the County's environmental footprint, including the amount of GHG produced through direct and indirect County operations, and develops climate change-related policies (County of Los Angeles 2015).
- Public Outreach and Education. The Public Outreach and Education Program utilizes the County's communication and outreach channels to share utility industry information, facilitate implementation of subsidy and assistance programs, and spread energy conservation practices throughout the region (County of Los Angeles 2015).

Los Angeles County Community Climate Action Plan

The Los Angeles County Community Climate Action Plan (CCAP) provides policy guidance for reducing GHG emissions generated within the unincorporated areas by ensuring that the County will be able to reduce emissions to 1990 levels by 2020. The CCAP includes an emissions inventory for the unincorporated areas and an analysis of the reduction needed to achieve County goals (County of Los Angeles 2015). The CCAP analyzes specific actions that result in reduced emissions, lays out a plan for their use and implementation, and provides a mechanism for tracking and evaluating the County's progress in achieving its climate change goals. The CCAP also supports sustainable design and energy efficiency, as well as active and multi-modal transportation strategies to reduce VMT (County of Los Angeles 2015).

The purpose of the CCAP is to:

- (1) Establish a baseline emissions inventory and reduction needed to meet County goals;
- (2) Identify specific actions that will measurably reduce GHG emissions;
- (3) Implement state and local level measures; and
- (4) Provide a mechanism for ongoing tracking and updates to the CCAP. (For more information, visit http://planning.lacounty.gov/ccap.)

South Coast Air Quality Management District

Rule 1150.1 (Amended April 1, 2011) was adopted to reduce non-methane organic compounds (NMOC), volatile organic compound (VOC) and toxic air contaminant (TAC) emissions from MSW landfills to prevent public nuisance and possible detriment to public health caused by exposure to such emissions. This rule also reduces methane emissions. To provide interim guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has recommended a threshold of 3,000 metric tons (MT) of CO2e for residential, commercial, and mixed-use

projects and a 10,000 MT of CO2e threshold for industrial projects.

Antelope Valley Air Quality Management District

Rule 3011 (Adopted Jan 18, 2011) was adopted to provide the provisions necessary for the AVAQMD to incorporate requirements for the regulation of GHGs into Federal Operating Permits. In practice, the AVAQMD follows the same interim guidance as SCAQMD for GHG emission.

Other Jurisdictions

In addition to the County, the CSE Revision contemplates up to six potential site locations within three cities including Carson, Santa Monica, and South Gate. Each of these cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to GHG. Depending where future facilities are located, local plans and policies would be applicable to those facilities.

5.6.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to greenhouse gas emissions would be considered significant if the project was determined to:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

5.6.4 Environmental Impacts

CSE Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternative technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County plans to maintain sufficient solid waste disposal capacity over a 15-year period (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to climate change or greenhouse gas emissions. However, depending on phasing, technologies, and implementation, certain policies may result in project-level impacts through existing facility construction activities or construction of new facilities.

CSE Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste AT or land disposal facilities or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to climate change and the generation of GHGs. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County for review and approval.

Impact 5.6-1: GHG Emissions

Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Landfills are one of the largest sources of methane, a powerful greenhouse gas which is 21 times more potent than carbon dioxide. As described in the White Paper discussed in Section 5.2, the County can significantly reduce its GHG emissions levels through an integrated solid waste management hierarchy as described in Chapter 3. Recycling can reduce GHGs both by reducing methane generation at landfills and by saving

energy through recycling. Estimates of the White Paper GHG emissions reductions were developed using the U.S. EPA Waste Reduction Model (WARM) based on material types and amounts diverted.

In analyzing the estimated emissions of an Integrated Material Recovery Facility (MRF) with Conversion Technologies including anaerobic digestion, thermal conversion, and composting, the results of the WARM modeling indicate an overall net reduction in GHG emissions measured in terms of MTCO₂e. The White Paper baseline transport and landfill disposal scenario (or No Project) based on 1,000 tons per day (tpd) of post MRF residuals resulted in net GHG emissions for non-biogenic sources of approximately 1.64 million MTCO₂e over a period of 125 years taking into account continued GHG emissions from waste decomposition in existing landfills. The proposed integrated solid waste management scenario for a 1,000 tpd Integrated MRF with Conversion Technologies resulted in net avoided GHG emissions of (666,022) MTCO₂e (equivalent to removing 140,000 cars off the road). The net Non-Biogenic Emissions are similar for both scenarios (representing fugitive methane emissions from landfills and carbon dioxide from a thermal gasification process).

Based on the White Paper, components of the Proposed Plan similar to the Integrated MRF with Conversion Technologies analyzed should result in desirable reductions in GHGs and the resulting impact would be less than significant.

Impact 5.6-2: Conflicts with GHG Reduction Plans

Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

The Proposed Plan envisions a new solid waste management paradigm which reverses the traditional hierarchy by resorting to transformation facilities and landfills, only after all other efforts have been exhausted. Emphasis would be redirected onto efforts to first reduce, reuse, and recycle. The remaining materials would be processed through alternative technologies, such as conversion technologies, and composting as feasible, prior to being disposed at a landfill. The new waste management paradigm would increase waste diversion throughout the entire County of Los Angeles. The Plan proposes an emphasis on the environmentally sound and technically feasible development of alternative technology facilities and operation of transformation (waste-to-energy) facilities. These facilities would assist in the diversion of solid waste from landfills.

The Proposed Plan does not propose the construction of new landfills or further expansion of existing landfills within the County. In this context, the Proposed Plan would be consistent with the intent of AB 32 by reducing GHG emissions related to the construction of new facilities. Additionally, the expansion of existing solid waste management facilities would facilitate the continued use of the existing transportation network thereby minimizing the need for an expanded network which could result in greater haul distances. Additionally, pursuant to AB 32, owners and operators of existing landfills currently without a methane control system would be required to install a gas collection and control system to capture methane emissions.

SCAG is responsible for developing a Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan (RTP) to help meet California's GHG emission reduction targets established by AB 32 and CARB. The RTP/SCS (2016) recognizes that goods movements and freight transportation are essential to support the SCAG region. As the disposal capacity within the County continues to diminish, and the siting of new and/or expansion of existing Class III landfills becomes increasingly difficult, development of and transport to out-of-County landfills becomes more essential to supplement in-County disposal capacity.

The Proposed Plan promotes the development and use of infrastructure to transport solid waste to out-of-County landfills to complement the County's waste management systems, such as the Mesquite Regional Landfill's waste-by-rail system. Continued

emphasis on waste-by-rail would reduce the number of heavy-duty trucks hauling solid waste on the road, thereby reducing vehicle miles traveled and GHG emissions. This would be consistent with Goal LUT-10 (Efficient Goods Movement) of the County's CCAP (2015). Likewise, the solid waste management paradigm envisioned under the Proposed Plan would be consistent with Goals BE-7 (Landfill Biogas) and SW1 (Waste Diversion Goal) by facilitating their implementation via the Proposed Plan. Based on these circumstances, the Proposed Plan would not conflict with plans or policies adopted for reducing GHG emissions, including the County's CCAP, and the impact is considered less than significant.

5.6.5 Cumulative Impacts

The incremental GHG emissions from the future facilities would have a cumulative contribution to global climate change. However, with the Plan's implementation of any Integrated MRFs with conversion technologies, GHG emission reductions could be achieved over traditional landfilling (or existing conditions). These emission reductions would be achieved over the long term and no residual operational-related GHG impacts would remain. Therefore, no cumulatively considerable impact is identified.

5.6.6 Level of Significance Before Mitigation

No significant GHG impacts have been identified.

5.6.7 Mitigation Measures

No mitigation measures are required.

5.6.8 Level of Significance After Mitigation

No significant transportation impacts have been identified.

5.6.9 References

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- County of Los Angeles, Department of Regional Planning. 2015. General Plan 2035. Available at http://planning.lacounty.gov/generalplan/generalplan. Accessed April 20, 2016.
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- Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007. New York: Cambridge University Press.
- U.S. Environmental Protection Agency. 2015. Proposed Updates to Emission Guidelines. Available at https://www3.epa.gov/airtoxics/landfill/landflpg.html. Accessed June 10, 2016.

5.7



Hazards and Hazardous Materials



5.7 HAZARDS AND HAZARDOUS MATERIALS

This section analyzes the potential impacts related to hazards and hazardous materials as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing hazards and hazardous materials conditions within the Plan Area. Potential hazard and hazardous materials impacts, including potential cumulative impacts, are considered programmatically in the impact analysis. If applicable, this section identifies proposed mitigation measures for any significant impacts.

5.7.1 Environmental Setting

The regional and overall Plan Area environmental setting is discussed in detail in Section 4.0. The following sections focus on specific environmental setting elements as they pertain to discussion of hazards and hazardous materials.

Airports

According to the Los Angeles County General Plan Environmental Impact Report (EIR), 15 public use airports (five county-owned, nine public entity owned, and one privately owned), 11 private-use airstrips, one private-use seaplane base, and 138 heliports registered with the Federal Aviation Administration (FAA) are located within the Los Angeles County Airport Land Use Commission's (ALUC) jurisdiction. In general, the Focus Area avoids the placement of new sites within the vicinity of airports and the adopted Airport Influence Areas (AIA).

The ALUC has established provisions for safety, noise insulation, and the regulation of building height in the areas adjacent to each of the County public airports. The Santa Monica Airport (AT Site #3) is located in the City of Santa Monica at 3223 Donald Douglas Loop Street.

Emergency Response or Evacuation Plan

Emergency response plans include elements to maintain continuity of government, emergency functions of governmental agencies, mobilization and application of resources, mutual aid, and public information. Emergency response plans are maintained at the federal, state and local level for all types of disasters, including human-made and natural. It is the responsibility of government to undertake an ongoing comprehensive approach to emergency management in order to avoid or minimize the effects of hazardous events. Local governments have the primary responsibility for preparedness and response activities.

The Los Angeles County Office of Emergency Management (OEM) maintains the Los Angeles County Operational Area Emergency Response Plan and the County of Los Angeles All-Hazard Mitigation Plan. OEM leads and coordinates disaster plans and disaster preparedness exercises for all cities and 288 special districts in Los Angeles County (County of Los Angeles 2015).

Fire Hazards

California in general is subject to some degree of wildfire hazard. Los Angeles County contains urbanized development adjacent to the Santa Monica Mountain Range, which increases the potential for wildfire. The California Department of Forestry and Fire Protection (CALFIRE) maps fire hazard areas based on fuels, terrain, weather, and other factors that increase an area's susceptibility to fire (vegetation type, slope, and atmospheric conditions). Over half of the County is located within a Very High to Moderate Fire Hazard Zone due to the fuel and slopes associated with the Angeles National Forest and the Santa Monica Mountain areas. Santa Catalina Island and San Clemente Island are also located within a Very High Fire Hazard Zone. According to the Los Angeles County General Plan, fire hazard severity zones are designated into

the following three types of areas based on the jurisdiction financially responsible for preventing and suppressing wildfires:

- Federal Responsibility Areas (FRAs): The federal government is financially responsible for wildfire suppression. Within the CALFIRE Los Angeles District, which covers the Los Angeles County, the Angeles National Forest and federal land in the Santa Monica Mountains National Recreation Area are FRAs.
- State Responsibility Areas (SRAs): The state is financially responsible for wildfire suppression. Within the CALFIRE Los Angeles District, which covers the Los Angeles County, SRAs are in outlying areas such as the Santa Susana Mountains, foothills of the San Gabriel Mountains, and parts of the Santa Monica Mountains.
- Local Responsibility Areas (LRAs): Cities or the County are financially responsible for wildfire suppression. LRAs in Los Angeles County include foothills of the Santa Susana and San Gabriel Mountains, and in the Verdugo Mountains, Santa Monica Mountains, Hollywood Hills, San Rafael Hills, Puente Hills, and in other hills in the central Los Angeles area.

Given the scope of the Plan Area, all three responsibility areas are located within Los Angeles County. As provided in Table 5.7-1, three of the site locations within the Focus Area are located within a fire hazard zone delineated by the State.

Table 5.7-1. Focus Area within Wildfire Hazard Zones

AT Site	Site Name	Responsibility	Hazard Zone
AT Site #6	CR&R Catalina	SRA	Very High

Source: CalFire 2006

Hazardous Materials

There are five classes of waste that are considered hazardous or potentially hazardous. These are: (1) hazardous waste; (2) universal waste; (3) special waste; (4) recyclable materials; and (5) major appliances (i.e., bulky items). Facilities that handle and dispose of such hazardous waste within the 100-mile buffer of the Plan Area are shown in Table 5.7-2.

In addition to the facilities listed in Table 5.7-2, the County and cities operate permanent Solvent/Automotive/Flammable/Electronics (SAFE) centers throughout the Plan Area to collect household hazardous waste. SAFE centers also take some business waste from conditionally-exempt small quantity generators.

The GeoTracker database, maintained by the California State Water Resources Control Board (SWRCB), includes sites with known or potential contamination, as identified by state and local agencies. Table 5.7-3 Hazards Regulatory Database List provides a description of databases maintained by various federal, state and local agencies, which include information on use and handling of hazardous materials and/or waste, permitting, releases and accidents. A GeoTracker database search was conducted to identify potential environmental concern (PEC) sites in the vicinity of the EIR Focus Area locations. As provided in Table 5.7-4, nine open case sites are documented within the Focus Area.

McKittrick	Lancaster Landfill and Recycling Center	DeMenno Kerdoon	Crosby & Overton, Inc.	Clean Harbors Wilmington	Facility Name	
Class II, Non-Haz Landfill	Class III, Non-Haz Landfill	Oil, Wastewater, Antifreeze Recycler	Water Treatment/ Recycler	Class I	Type	
(559) 834-9151 x240	(661) 726-3468	(310) 537-7100	(562) 532-5445	(310) 233-3486	Phone	
56533 Highway 58 West	600 East Avenue F	2000 N. Alameda Street	1630 W. 17th Street	1737 E. Denni Street	Address	
McKittrick	Lancaster	Compton	Long Beach	Wilmington	City	Location
CA	CA	CA	CA	CA	State	ion
93251	93535	90222	90813	90744	Zip	
Kern	Los Angeles	Los Angeles	Los Angeles	Los Angeles	County	
ı	1	×	×	×	Haz	
×	×	ŀ	×	×	Non- Haz	Wa
×	ı	×	×	X	Liquid	Waste Accepted
×	×	×	×	:	Solid	ted
×	×	×	I.	1	Soil	
E&P Waste ² , Non-Haz Soil, Wastewater, Car Wash Grit, Contaminated Soil, Asbestos Non-friable, Auto Shredder Fluff, Industrial, Solidification, drum management (solids/ liquid).	Agricultural, Construction/ demolition, Industrial, Mixed municipal, Tires, Inert, Green Materials, Asbestos Non-friable, Sludge (Bio-Solids),	Used oil, oily water, waste antifreeze and glycol, waste RCRA fuels, soil transfer only	Wastewater treatment (hydrocarbons/oily waters): Non-haz, Non RCRA (oily waters, clarifier waste), RCRA Doo1/ Do18(oil waters w/ gasoline only)	Haz. Waste, High BTU Liquid & Sludge, Wastewater	Accepted	Contaminants
Hazardous, solids	Hazardous	All other hazardous waste	Water w/ high concentration of soluble contaminants, RCRA codes other than Doo1/Do18; waste with cyanides, sulfides, high metals. Bulk solids, drummed liquids and solids.	All other waste	Prohibited	nants

				Location	ion				Wast	Waste Accepted	ted		Contaminants	nants
Facility Name	Type	Phone	Address	City	State	Zip	County	Haz	Non- Haz	Liquid	Solid	Soil	Accepted	Prohibited
Siemens	Water Treatment/ Recycler	(323) 277- 1495	5375 S. Boyle Avenue	Vernon	CA	90058	Los Angeles	×	×	ïX	×	×	Liquids (inorganic and trace organic), RCRA and Cal Haz solids, cyanides, metal bearing solutions, off specification chemicals, copper or nickel bearing wastes for recycling	Ignitable, water reactive wastes, infectious, radioactive, air reactive, and biological wastes; compressed gas, pesticides, dioxins
Veolia	Solvent Recycling	(626) 334-5117 x350	1704 W. First Street	Azusa	CA	92273	Los Angeles	I	×	×	1	1	Waste in bulk and drums (solvents)	Dioxins, PCBs, radioactive, reactive wastes, biological wastes and infectious materials
Clean Harbors Buttonwillow LLC	Class I	(661) 762-6200	2500 West Lokern Road	Buttonwillow	CA	93206	Kem	×	×	X	×	×	California and non-hazardous soil, hazardous and non- hazardous liquid	All other waste
Mercury Disposal Systems, Inc	Universal Waste	(714) 505- 6100	2650 Walnut Avenue, Unit D	Tustin	CA	92780	Orange	I	1	1	×	1	Fluorescent lamps, batteries	All other waste
Lighting Resources, LLC	Universal Waste	(888)	805 East Francis Street	Ontario	CA	91761	San Bernardino	ı	×	1	×	×	Lamp/bulbs, ballasts, mercury, battery, waste electrical	All other waste
Recyclers of Therr CA Non-l	Kiln (HT Thermal) Non-Haz Recycler	(800)	12328 Hibiscus Road	Adelanto	CA	92301	San Bernardino	1	×	1	×	×	Non-Haz Soil Sandblast Grit, hydrocarbon impacted soil	Hazardous wastes and liquids; P-listed wastes, and acutely hazardous wastes

Source: CalRecycle,2010.

¹ For solidification (e.g., liquids are mixed with other materials to form a solid before being disposed)

² E&P Waste = Commercial Exploration and Production waste

³ Max treatment capacity per day

⁴ Drum management

^{- =} not accepted

Table 5.7-3. Hazards Regulatory Database List

Database	Description
Federal	•
CERCLIS -NFRĀP	The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database (now retired) is a compilation of facilities that the USEPA has investigated or is currently investigating for a release or threatened release of hazardous substances pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). No Further Remedial Action Planned (NFRAP) refers to facilities that have been removed and archived from its inventory of CERCLA sites.
CORRACTS	A list of handlers with Resource Conservation and Recovery Information System (RCRA) with nationally-defined corrective action core events.
ERNS	Emergency Response Notification System (ERNS) is a national database used to store information on unauthorized releases of oil and hazardous substances that have been reported to the National Response Center (NRC) since 2001. The NRC is the sole federal point of contact for reporting oil and chemical spills. Prior to 2001 this information was maintained by EPA.
FINDS	The Facility Index Database System (FINDS) is an EPA/National Technical Information Service database that contains both facility information and "pointers" to other sources of information that contain more detail.
FUDS	Includes locations of Formally Used Defense Sites Properties, where the U.S. Army Corps of Engineers is actively working or will take cleanup actions.
HMIRS	The Hazardous Materials Incident Report System (HMIRS) contains hazardous material spill incidents reported to the Department of Transportation.
NPL/PNPL	National Priority List/Proposed NPL is a subset of CERCLIS. This database identifies over 12,200 sites for priority cleanup under the Superfund Program.
RCRA - TSDF	The EPA maintains a database RCRA facilities associated with treatment, storage, or disposal of waste (TSDF). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste.
RCRA Generators	The EPA regulates all Hazardous Waste Generators subject to the RCRA. They are classified by the quantity of hazardous waste generated. A Small Quantity Generator (SQG) generates between 100 kilograms (kg) and 1,000 kg of waste per month. A Large Quantity Generator (LQG) generates over 1,000 kg of waste per month. A Conditionally Exempt Generator (CEG) SQG generates less than 100 kg of waste per month.
RCRA-NonGen/NLR	RCRA enacted by Congress in 1976; Amended in 1984 with the Hazardous and Solid Waste Amendments. Database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste. Non-generators (NonGen) do not presently generate hazardous waste, or no-longer reported.
SSTS	Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, to submit a report to the EPA of the types and amounts of pesticides being produced, sold or distributed.
TRIS	The Toxic Chemical Release Inventory System (TRIS), U.S. EPA database that identifies facilities that release toxic chemicals into the air, water and land.
U.S. AIRS	A sub-system database of the Aerometric Information Retrieval System (AIRS), which contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies.

Table 5.7-3. Hazards Regulatory Database List (Cont.)

Database	Description
State, Local, and Tribal	*
AST	Aboveground Storage Tank (AST) – State Water Resources Control Board (SWRCB) provides listing of ASTs Waste Management Unit Database System (WMUDS) – SWRCB maintains a list of waste management systems, including active and inactive, permitted and non-permitted solid waste disposal facilities, transfer stations and waste haulers.
CA FID UST	Facility Inventory Database (FID) contains a historical listing of active and inactive UST locations from the SWRCB.
Cal-Sites	Referred to as the Abandoned Sites Program Information System previously. This list identifies hazardous waste sites, screened by the Department of Toxic Substances Control (DTSC) for further action.
CDL	A listing of Clandestine Drug Lab (CDL) locations.
CHMIRS	California Hazardous Material Incident Report System contains information on the reporting of accidental releases or spills from the California Office of Emergency Services.
Cortese	Hazardous Wastes & Substances Site List. Historical complication of sites listed in the LUST, SWF/LF and CALSITES databases. No longer an active database.
EMI	Toxics and criteria pollutant emissions data collected by the Air Resources Board and local air pollution agencies.
ENVIROSTOR	Department of Toxic Substance Control (DTSC) Site Mitigation and Brownfields Reuse Program's EnviroStor database identifies sites that have known contamination or sites that may require further investigation. The database includes the following site types: Federal Superfund sites NPL), State Response, including Military Facilities and State Superfund, Voluntary Cleanup, and School sites. EnviroStor provides information including, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.
Dry Cleaners	A list of drycleaner related facilities that have EPA ID numbers.
HAULERS	A listing of registered waste tire haulers
HAZNET	Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments.
HIST UST	The Hazardous Substance Storage Container Database is a historical listing of UST sites previously maintained by SWRCB. Current data can be found in the State or local UST database.
HIST CORTESE	Cortese Hazardous Waste & Substances Sites – The Cal/EPA Office of Emergency Information previously maintained a list of sites designated as LUST, solid waste facilities/landfill or Cal-Sites. The list is no longer updated and cases are maintained by the SWRCB, CalRecycle and DTSC.
HWP	Hazardous Waste Permits (HWP), Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in the California database "EnviroStor".
LUST	Leaking Underground Storage Tanks (LUST) Incident Report –SWRCB LUST records contain an inventory of reported leaking UST incidents.
Notify 65	Proposition 65 Records, maintained by the State Water Resources Control Board. SWRCB issues notification's about releases that could impact drinking water and present a potential health risk.
NPDES	Listing of all National Pollutant Discharge Elimination System (NPDES) permits including stormwater.
PEST LIC	A listing of licenses and certificates issued by the Department of Pesticide Regulation.

Table 5.7-3. Hazards Regulatory Database List (Cont.)

Database	Description
Response	Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.
RCRIS-TSDF	Resource Conservation and Recovery Information System - Treatment, Storage or Disposal Facilities
SCH	Proposed and existing schools that are being evaluated by the Department of Toxic Substances Control (DTSC) for possible hazardous materials contamination.
SEMS	Superfund Enterprise Management System (SEMS) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPAs Superfund Program across the United States.
SEMS Archive	SEMS Archive tracks sites that have no further interest under the federal Superfund Program based on available information. This list was formerly known as the Comprehensive Environmental Response, Compensation, and Liability Information System No Further Action Planned, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived status indicates that, to the best of EPSs knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priority List (NPL).
SLIC	The SLIC (Spills, Leaks, Investigations, and Cleanup) program is designated to protect and restore water quality from spills, leaks and similar discharges. Statewide SLIC cases are maintained by the SWRCB.
SWEEPS UST	Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contracted by the SWRCB in the early 1980's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.
SWF/LF	The Solid Waste Facilities/Landfill Sites comes from CalRecycle's Solid Waste Information System (SWIS) that contains inventory of solid waste disposal facilities and landfills
SWRCY	A listing of recycling facilities in the state of California, provided by the Department of Conservation.
Toxic Pits	Toxic Pits Cleanup Act Sites, maintained by SWRCB. A list of sites suspected of containing hazardous substances
UST	Underground Storage Tank (UST) as regulated under Subtitle I of the RCRA, data source from the SWRCB Hazardous Substance Storage Container Database.
WDS	Waste Discharge System (WDS) from the California Water Resource Control Board.
WMUDS/ SWAT	Water Management Unit Database System (WMUDS) is used by the SWRCB

Source: Environmental Data Resources (EDR) 2014.

Table 5.7-4. Potential Environmental Concern (PEC) Sites (within Focus Area)

REC Listing Name	REC Address	REC Listing	REC Listing Description	Location Relative to Potential AT Site
Yellow Freight Systems, Inc.	2350 Dominguez St. Carson, CA 90810	SLIC (open) LUST (closed)	Motor freight terminal since 1967. Northern portion of the facility is contaminated by TCE, DCE, and disopropyl ether (DIPE). Groundwater, soil, and soil vapor affected. Diesel LUST leak was detected in 1990 and case was closed in December 1996.	Located adjacent to the City of Carson Public Works Yard and Carson Revitalization Project sites (AT Site #1 and #8).
Beach Maintenance Facility	1540 Appian Way, Santa Monica, CA 90401	LUST (Closed)	Minor spill in 1996. Case closed in 1996 follow remedial action.	Located at Santa Monica Pier - AT Site #2
Corporate Yards (T0603799303)	2500 Michigan Avenue, Santa Monica, CA 90404	LUST (Closed)	The City of Santa Monica Corporation Yard Geotracker Global ID is To603799303. Through a Settlement Agreement the City of Santa Monica has legal responsibility for control and remediation of all contamination, originating from the Gillette site.	Located at Santa Monica Public Works Corps Yard - AT Site #4
Santa Monica Municipal Airport (80000473)	3223 Donald Douglas Loop, Santa Monica, CA 90405	FUDS (Needs Evaluation) LUST (closed)	The site was used by the army air force as a factory school giving 30 day course of advanced instructions in 1st and 2nd echelon maintenance and field emergency repairs on c-54 type aircraft. No evidence of any UST on the site.	Located at Santa Monica Airport - AT Site #3
Jervis Webb Company	9301 Rayo Ave. South Gate, CA 90280	Federal Superfund Site	The Webb-Firestone property was used for the manufacture of aluminum and stainless-steel aircraft rivets from the 1950's until approximately 1980. A 3-stage wastewater clarifier was used at the site to discharge wastewater from sulfuric acid anodizing, tumbling, and deburring operations to the sanitary sewer. Raw materials included alkaline caustic, and chromic acid.	Located east and adjacent to the Interior Removal Specialist, Inc. site (AT Site #7)
Associated Spring	15001 S. Broadway Ave. Gardena, CA 90248	SLIC	Cleanup status listed in June 1965. No additional information was given.	Located east and adjacent to the Waste Recovery and Recycling MRF/TS site (AT Site #9)

Hazardous Waste

A waste can be solid, semi-solid, liquid, or gaseous, and is considered hazardous if it exhibits at least one of the four characteristics (ignitability, corrosivity, reactivity, or toxicity), or is a "listed waste." Acutely hazardous and extremely hazardous wastes are included in the definition of hazardous waste. Laboratory samples, animal carcasses, radioactive materials, scrap metal, and excluded recyclable materials are not considered hazardous waste. In California, the term "solid waste" refers to waste that is not hazardous.

A facility is likely to generate hazardous wastes if it handles the following types of materials where these materials are not entirely consumed by the operation.

- Dyes, paints, printing inks, thinners, solvents, and cleaning fluids
- Pesticides
- Acids and bases that dissolve metal, wood, paper, or clothing
- Flammable materials
- Materials that burn or corrode surfaces or cause injury upon contact with skin, or bubble or fume upon contact with water
- Products accompanied by shipping, labeling, or Safety Data Sheets (SDS) indicating that the product is hazardous
- Impacted soil and other wastes from site remediation and cleanup
- Many industrial facilities treat hazardous liquid wastes on-site under the California tiered permitting program (Health & Safety Code [HSC] §25200 et seq.) and discharge treated fluid wastes to the sanitary sewer under a permit issued by a Publicly Owned Treatment Works (POTW). In these instances, the facility may generate a residual industrial sludge that may be managed as a "Special Waste" (see below). On-site treatment at industrial facilities reduces the volume of hazardous waste that must be transported off-site.
- Medical and infectious wastes generated by California-registered hospitals, laboratories, biotechnology facilities, nursing centers and clinics that use, store or dispose of medical materials are not included in the definition of hazardous waste, but are regulated separately under the 1990 California Medical Waste Management Act (as amended). However, minor amounts of sharps (such as needles and broken glass items), pharmaceuticals, and biohazardous wastes (such as contaminated blood) may inadvertently enter the municipal solid waste stream through disposal from households or at other non-registered public and private facilities (e.g., materials placed in trash bins in public restroom). For this reason, biohazardous and sharps waste generated by non-registered sources is included under the hazardous waste category for the purpose of this EIR.

Universal Waste

Universal wastes are hazardous wastes that are widely produced by households and many different types of businesses. California hazardous waste regulations (22 §CCR 66261.9) identify seven categories of hazardous wastes that can be managed as universal wastes, as shown in Table 5.7-5.

Table 5.7-5. Potential Sources of Universal Waste

Universal Waste	Potential Sources
Electronic devices	Any electronic device that is a hazardous waste (with or without a cathode ray tube [CRT]), including televisions, computer monitors, cell phones, videocassette recorders (VCRs), computer central processing units (CPUs), and portable digital versatile disc (DVD) players.
Batteries	Most household-type batteries, including rechargeable nickel-cadmium batteries, silver button batteries, mercury batteries, alkaline batteries, and other batteries that exhibit a characteristic of a hazardous waste.
Electric lamps	Fluorescent tubes and bulbs, high-intensity discharge lamps, sodium vapor lamps, and electric lamps that contain added mercury, as well as any other lamp that exhibits a characteristic of a hazardous waste (i.e., lead).
Mercury-containing equipment	Thermostats, mercury switches, mercury thermometers, pressure or vacuum gauges, dilators and weighted tubing, mercury rubber flooring, mercury gas flow regulators, dental amalgams, counterweights, dampers, and mercury added novelties such as jewelry, ornaments, and footwear.
Cathode ray tubes	The glass picture tubes removed from devices such as televisions and computer monitors.
Cathode ray tubes glass	A CRT that has been accidently broken or processed for recycling.
Non-empty aerosol cans	Suspended fine solid or liquid particles in a gaseous medium.

Source: DTSC 2010.

Special Waste

- According to DTSC classification of hazardous waste, special waste is a subset category of non-RCRA hazardous wastes. Wastes that qualify for as a special waste are typically generated in larger volumes and pose fewer hazards. A special waste classification is not an automatic determination and a generator must apply to DTSC to request a special waste classification. Special wastes are eligible to be managed to less stringent standards, but the management is subject to other agency's approval and is not automatic.
 - Criteria special wastes must only be hazardous for inorganic chemicals. The
 constituent concentrations may exceed their respective Soluble Threshold Limit
 Concentrations (STLCs) or Total Threshold Limit Concentrations (TTLCs). The
 wet-soluble concentration (when expressed in mg/kg) cannot exceed its TTLC
 value.
 - Management Special waste can go into Class III landfills, but the landfill must have Waste Discharge Requirements (WDRs) for special waste and the landfill operator must have a variance from DTSC.

Special wastes are specifically identified waste or hazardous wastes that satisfy certain criteria (see 22 CCR §66261.120). Some examples of special wastes are listed below in Table 5.7-6.

Table 5.7-6. Potential Sources of Special Waste

Special Waste	Potential Sources
Ash	Residue from burning of fossil fuels, biomass, and other combustible materials: refractory residues from industrial furnaces, kilns and ovens, slag from coal gasification, and sulfur dioxide scrubber waste from flue gas emission control in combustion of fossil fuels.
Industrial sludge	Dewatered sludge from treatment of industrial process water; dewatered tannery sludge, drilling mud from drilling of gas and oil wells, catalyst from petroleum refining and chemical plant processing, and tailings from processing ores and minerals.
Sewage sludge	Semi-liquid material consisting of suspended, colloidal, and dissolved organic and inorganic matter derived from human waste treatment.
Other	Baghouse and scrubber wastes for air pollution control, cement kiln dust, sand from sand blasting, sand from foundry casting, extraction tailings from ore and mineral processing, and auto shredder waste.

Source: http://ecarcenter.org/ca/ca-hazwaste.htm (Section F)

Recyclable Materials

Recyclable materials are excluded as hazardous wastes if used or reused as an ingredient or feedstock in an industrial process to make a commercial product. However, recyclable materials, classified as household hazardous waste (HHW) are considered hazardous until effectively recycled. Certain recyclable materials have special management requirements. These materials and management requirements are listed below in Table 5.7-7.



Table 5.7-7. Materials and Management Requirements

Material	Special Management Requirements
Used Industrial and Vehicle Oil	Recycling facilities are exempt from hazardous waste facility permits, transporters may use milk run manifest, and generator must have EPA ID number.
Used Dry Cell Batteries	Employees must be trained in proper handling and response to leaks, shipping papers must meet Department of Transportation (DOT) requirements, shipments must be sent to approved treatment facilities, and disposal/dilution of batteries is prohibited.
Spent Lead-Acid Storage Batteries	Shipments of spent batteries to a recycling or reclamation¹ facility must be shipped with bill of lading, and records maintained for three years.
Agricultural Recyclable Materials	DTSC may specify provisions governing use of pesticides, fertilizers, animal drugs, and feed additives that are licensed by the California Department of Food and Agriculture for processing for agricultural use.
Waste Elemental Mercury ²	Must be transferred as hazardous waste if over 10 pounds and recovery facilities must comply with requirements for operation of a hazardous waste facility.
Contaminated Containers ³	Containers must be empty so that the contents cannot pour out in any orientation. Solid residue must be scraped out to the extent practical. Containers greater than five gallons must be returned to vendor, transferred to drum recycler, or reused on-site.
Waste Oil Filters	Used, metal canister oil filters can be managed as non-hazardous waste if thoroughly drained, and the filters are accumulated, stored and transferred in closed, rainproof containers, and transferred for the purpose of metal recycling or energy recovery by burning.

Source: Dufour 1997. Hazardous Waste Management Manual: California Chamber of Commerce, Sacramento, CA, pp. 38 to 42.

Major Appliances

A major appliance (i.e., bulky item) is referred to as a "domestic or commercial device" (PRC §42166), and includes: washer or dryer, refrigerator or freezer, water and space heaters, furnace or boiler, air-conditioner or dehumidifier, trash compactor, stove, oven, and microwave oven. Materials that require special handling are materials that, when removed from a discarded appliance, may not be disposed of in the garbage or at a solid waste facility (HSC §25212).

The following materials must be removed from an appliance prior to the appliance being crushed, baled, shredded, sawed or sheared apart, disposed of, or otherwise processed in a manner that could result in the release of a hazardous material (PRC §42167):

- Mercury, found in switches and temperature control devices
- Used oil, from compressors and transmissions
- Chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and other non-CFC replacement refrigerants injected in air-conditioning/refrigerant units
- All metal-encased capacitors
- Any parts that contain encapsulated polychlorinated biphenyls (PCBs) or diethylhexylphthalate (DEHP)
- Any other material that is a regulated hazardous waste

The person or entity that removes these materials is considered a hazardous waste generator and must comply with applicable laws for generators of hazardous waste. Materials removed from appliances are managed as hazardous waste, universal waste or special waste (DTSC, December 2007).

Reclamation means any form of physical separation or reprocessing.

² Typically contained in fluorescent tubes and mercury vapor lamps.

³ Does not include empty containers of five gallons or less, or containers composed of wood, paper, cardboard, fabric or other absorptive materials. However, empty aerosol cans are included.

Transportation

Currently, generators may transport up to 50 pounds of solid or five gallons of liquid hazardous waste in separate one-gallon containers in a private vehicle to a permitted facility or state-authorized collection facility. All other hazardous wastes that are not reused on-site must be shipped off-site to a licensed recycling, treatment, or disposal facility by a DTSC-registered hazardous waste transporter. These wastes are subject to documentation, packaging, labeling, and vehicle placarding requirements.

In addition, hazardous waste transporters must comply with DTSC, EPA, and DOT regulations that protect human health and the environment, and require: (1) vehicle and container specifications; (2) hazardous materials incident (spills) and handling (cleanup) reporting; (3) segregation of hazardous materials; and (4) safe loading and unloading practices.

5.7.2 Existing Plans and Regulations

Federal

The Resource Conservation and Recovery Act

The goal of the Federal Resource Conservation and Recovery Act (RCRA), a federal statute passed in 1976, is the protection of human health and the environment, the reduction of waste, the conservation of energy and natural resources, and the elimination of the generation of hazardous waste as expeditiously as possible. The Hazardous and Solid Waste Amendments (HSWA) of 1984 significantly expanded the scope of RCRA by adding new corrective action requirements, land disposal restrictions, and technical requirements. The corresponding regulations in 40 CFR 260-299 provide the general framework for managing hazardous waste, including requirements for entities that generate, store, transport, treat, and dispose of hazardous waste. The California Department of Toxic Substances Control (DTSC) is responsible for implementing.

The Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. CERCLA was reauthorized by Superfund Amendments and Reauthorization Act (SARA) in 1986. CERCLA created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over 5 years, \$1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified.

Emergency Planning Community Right-to-Know Act of 1986 (42 USC 11001 et seq.)

The Emergency Planning Community Right-to-Know Act (EPCRA) was included under the SARA law and is commonly referred to as SARA Title III. EPCRA was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. These concerns were triggered by the disaster in Bhopal, India, in which more than 2,000 people suffered death or serious injury from the accidental release of methyl isocyanate. To reduce the likelihood of such a disaster in the U.S., Congress imposed requirements on both states and regulated facilities. EPCRA establishes requirements for federal, state, and local governments, Indian Tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting

on hazardous and toxic chemicals. SARA Title III requires states and local emergency planning groups to develop community emergency response plans for protection from a list of Extremely Hazardous Substances (40 CFR 355). The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. In California, SARA Title III is implemented through the California Accidental Release Prevention (CalARP).

Hazardous Materials Transport Act - Code of Federal Regulations

The Hazardous Materials Transportation Act (HMTA) was published in 1975. Its primary objective is to provide adequate protection against the risks to life and property inherent in the transportation of hazardous material in commerce by improving the regulatory and enforcement authority of the Secretary of Transportation. A hazardous material, as defined by the Secretary of Transportation is, any "particular quantity or form" of a material that "may pose an unreasonable risk to health and safety or property." Title 39 CFR reflects laws passed by Congress as of January 2, 2006.

Federal Response Plan

The Federal Response Plan of 1999 is a partnership of federal, public, and volunteer agencies to coordinate government response to disasters or emergency situations (natural, radiological, or hazardous materials). The plan provides a mechanism to coordinate federal assistance and resources to supplement state and local governments. The Plan is implements in anticipation of a significant event that is likely to result in the need for federal assistance as a result of a major emergency or disaster.

Occupational Safety and Health Administration

Occupational Safety and Health Administration's (OSHA) mission is to ensure the safety and health of America's workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. OSHA standards are listed in 29 CFR Part 1910.

The OHSA Process Safety Management of Highly Hazardous Chemicals (29 CFR Part 110.119) is intended to prevent or minimize the consequences of a catastrophic release of toxic, reactive, flammable, or explosive highly hazardous chemicals by regulating their use, storage, manufacturing, and handling. The standard intends to accomplish its goal by requiring a comprehensive management program integrating technologies, procedures, and management practices.

Federal Water Pollution Control Act (Clean Water Act)

The objective of the Federal Water Pollution Control Act, commonly referred to as the Clean Water Act (CWA), is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands. The Oil Spill Prevention, Control, and Countermeasures (SPCC) Program of the CWA specifically seeks to prevent oil discharges from reaching waters of the United States or adjoining shorelines. Further, facilities are subject to the SPCC rule if they:

- Store, transfer, use, or consume oil or oil products, and
- Could reasonably be expected to discharge oil to waters of the United States or adjoining shorelines. Farms that meet these criteria are subject to the SPCC rule if they meet at least one of the following capacity thresholds:
 - Aboveground oil storage capacity greater than 1,320 gallons, or
 - Completely buried oil storage capacity greater than 42,000 gallons.

However, the following are exemptions to the SPCC rule:

- Completely buried storage tanks subject to all the technical requirements of the underground storage tank regulations.
- Containers with a storage capacity less than 55 gallons of oil.
- Wastewater treatment facilities.
- Permanently closed containers.
- Motive power containers (e.g., automotive or truck fuel tanks).

Federal Insecticide, Fungicide and Rodenticide Act

The objective of Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is to provide federal control of pesticide distribution, sale, and use. All pesticides used in the United States must be registered (licensed) by EPA. Registration assures that pesticides will be properly labeled and that, if used in accordance with specifications, they will not cause unreasonable harm to the environment. Use of each registered pesticide must be consistent with use directions contained on the label or labeling.

State

Air Quality Management Districts

Air Quality Management Districts (AQMDs) are responsible for protecting the air quality within the Plan Area and preventing further degradation. The AQMDs issue permits related to construction and operation of landfill gas recovery projects, landfill gas flare stations, landfill gas-to-energy facilities, and alternative technology facilities, such as waste-to-energy plants.

Department of Conservation, Division of Oil, Gas, and Geothermal Resources

The Division of Oil, Gas, and Geothermal Resources (DOGGR) was formed in 1915 to address the needs of the state, local governments, and industry by regulating statewide oil and gas activities with uniform laws and regulations. The Division supervises the drilling, operation, maintenance, and plugging and abandonment of onshore and offshore oil, gas, and geothermal wells, preventing damage to: 1) life, health, property, and natural resources; 2) underground and surface waters suitable for irrigation or domestic use; and 3) oil, gas, and geothermal reservoirs. The Division's programs include: well permitting and testing; safety inspections; oversight of production and injection projects; environmental lease inspections; idle-well testing; inspecting oilfield tanks, pipelines, and sumps; hazardous and orphan well plugging and abandonment contracts; and subsidence monitoring.

Department of Toxic Substances Control

Each year, Californians generate two million tons of hazardous waste. One hundred thousand privately- and publicly-owned facilities generate one or more of the 800-plus wastes considered hazardous under California law. Properly handling these wastes avoids threats to public health and degradation of the environment.

The DTSC regulates hazardous waste under the jurisdiction of the California Environmental Protection Agency (Cal-EPA), cleans-up existing contamination, and looks for ways to reduce the hazardous waste produced in California. Approximately 1,000 scientists, engineers, and specialized support staff make sure that companies and individuals handle, transport, store, treat, dispose of, and clean-up hazardous wastes appropriately. Through these measures, DTSC contributes to greater safety for all Californians, and less hazardous waste reaches the environment.

Division of Occupational Safety and Health

The California Division of Occupational Safety and Health (Cal-OSHA) protects workers

and the public from safety hazards through its Cal/OSHA programs and provides consultative assistance to employers. Cal-OSHA issues permits, provides employee training workshops, conducts inspections of facilities, investigates health and safety complaints, and develops and enforces employer health and safety policies and procedures.

Department of Resources Recycling and Recovery

The Department of Resources Recycling and Recovery (CalRecycle) is responsible for assigning county health departments or local agencies the responsibility to develop and implement local plans, oversees Local Enforcement Agencies (LEAs) for the permitting of solid waste facilities, and conducts inspections of compliance with state minimum standards for solid waste handling and disposal.

State Water Resources Control Board

The SWRCB is responsible for maintaining the quality of surface water and groundwater in the state and delegates local authority for permitting landfills and surface water discharges to RWQCBs. Solid waste facilities are permitted by RWQCBs through Waste Discharge Requirements (WDRs), which specify protection and monitoring programs to protect water quality.

Emergency Response Plan

California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government and private agencies. Response to hazardous materials incidents is one part of this plan. The plan is managed by the State Office of Emergency Services (OES), which coordinates the responses of other agencies including Cal-EPA, the California Highway Patrol (CHP), the California Department of Fish and Game (CDFG), the RWQCB, and the local fire and police departments.

Environmental Protection Agency

The Cal-EPA, including the DTSC and the SWRCB, establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable state and local laws include the following:

- Public Safety/Fire Regulations/Building Codes
- Hazardous Waste Control Law
- Hazardous Substances Information and Training Act
- Underground Storage of Hazardous Substances Act
- Safe Drinking Water & Toxic Enforcement Act
- Aboveground Petroleum Storage Tank Act
- Asbestos-Containing Material Regulations
- Toxic Substances Control Act
- Medical Waste Management Act
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs
- California Accidental Release Prevention (CalARP) Program

Within Cal-EPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law. The SWRCB manages a database system (GeoTracker), that contains sites that require groundwater cleanup (e.g. from leaking underground storage tanks), as well as permitted facilities (e.g. land disposal sites), that could impact groundwater.

Local

County of Los Angeles General Plan 2035

The updated Los Angeles County General Plan 2035 was approved on October 6, 2015. The Plan provides a policy framework for the unincorporated areas of approximately 2,650 square miles and over one million people. The Safety Element identifies goals and policies that minimize potential risks associated natural and human-made hazards, and specifies land use planning procedures that should be implemented to avoid hazardous situations. The policies listed in the Safety Element are not applicable to the proposed project, as they address human occupancy development.

Los Angeles Hazard Mitigation Plan

Los Angeles County, in conjunction with several emergency service partners, have prepared a Local All-Hazards Mitigation Plan that sets strategies for coping with natural and man-made hazards faced by residents. The plan has a five step risk and vulnerability assessment; 1) hazard identification; 2) profiling hazard events; 3) vulnerability assessment/inventory of existing assets; 4) risk analysis; and 5) assessing vulnerability/analyzing development trends for earthquake hazards, flood hazards, wildfire, tsunami, and non-significant hazards (i.e. water/wastewater emergency, hazardous materials). The intent of the Plan is to develop a sustained source of action to reduce or eliminate long-term risk to people and property for both natural and technological hazards and their effects.

Department of Health Services

The Los Angeles County Department of Public Health, Environmental Health, Solid Waste Management Program is the designated Local Enforcement Agency (LEA) for solid waste facilities within the unincorporated portion of Los Angeles County and in cities in the County that do not have designated LEAs.

Los Angeles County Public Works

The Los Angeles County Public Works (LACPW) prepares, maintains, and administers the Los Angeles County Countywide Integrated Waste Management Plan, the County's Countywide Siting Element, and maintains the integrity of public drainage structures. The LACDPW is consulted during landfilling activities and upon closure of a solid waste disposal facility.

Other Jurisdictions

In addition to the County, the Countywide Siting Element (CSE) Revisions contemplate up to six potential site locations within cities including Carson, Santa Monica and South Gate. Three potential site locations are within unincorporated areas of the County. Each of the cities has adopted General Plans and Municipal Codes (or Ordinances), which may include specific policies related to hazards and hazardous materials, in addition to being under the jurisdiction of Local Enforcement Agencies (LEAs). Depending where future facilities are located, local plans and policies would be applicable to those facilities.

5.7.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regard to hazards and hazardous materials would be considered significant if the project was determined to:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would result in a safety hazard for people residing or working in the Project Area.
- For a project in the vicinity of a private airstrip, result in a safety hazard for people residing or working in the Project Area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to the urbanized areas or where residences are intermixed with wildlands.

5.7.4 Environmental Impacts

CSE Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternative technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County plans to maintain sufficient solid waste disposal capacity over a 15-year period (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to hazards and hazardous materials; however, depending on phasing and implementation, certain policies may result in project-level impacts through existing facility construction activities or construction of new facilities.

CSE Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste at or land disposal facilities or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to hazards and hazardous materials. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County for review and approval.

Impact 5.7-1: Routine Transport, Use or Disposal of Hazardous Materials

Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction activities and long-term operations associated with future facilities could involve the use, transport, and disposal of hazardous substances such as diesel fuel, gasoline, equipment fluids, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. These materials and waste have the potential to be toxic and may pollute, poison, or degrade environmental resources in the Plan and Focus Areas. These activities already occur under existing conditions and the adoption of the Plan would not otherwise create significant, new hazards. Additionally, extensive safety procedures and measures required by federal, state, and local regulations for the use, transport, and disposal of hazardous substances would minimize the risk of an accidental release of hazardous materials during construction. Other known hazardous substances and toxic emissions are controlled by existing rules and regulations

regarding the transport and disposal of hazardous materials, such as lead-based paint, polychlorinated biphenyls, and contaminated soils. Mandatory compliance with these required procedures would minimize impacts related to the removal of these materials during construction and future operation. As a result, the impact would be less than significant.

Impact 5.7-2: Possible Risk to the Public or Environment through Release of Hazardous Materials

Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Although accidents and spills may increase proportionally to the increase in facility construction and hazardous waste transportation activities, infrastructure and programs to protect human health and the environment from new construction and transportation activities are already in place throughout the nation and in California. No new significant hazards to the public or the environment are anticipated since existing regulations are in place relating to hazardous waste transportation treatment, storage and disposal regulations.

New alternative technology (AT) facilities would be required to comply with local significance thresholds adopted by the SCAQMD and evaluate localized air emissions based on the type of technology proposed. Compliance with local SCAQMD regulations, including the preparation of a health risk assessment (HRA), would be required. Compliance with the existing regulatory framework combined with future project-level environmental review would minimize impacts related to the Plan's adoption, such that a less than significant would result.

Impact 5.7-3: Hazardous Emissions within One-quarter Mile of Existing or Proposed School

Would the project emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Future facilities contemplated by the Proposed Plan include construction of new AT facilities. The development of future facilities on proposed site locations pursuant to the Proposed Plan would be located in areas zoned for heavy manufacturing, industrial, and utilities. Facilities that handle solid waste are not typically sited near or adjacent to sensitive uses (i.e., residences, schools, hospitals, senior care facilities, daycare, parks) as most are located in industrial or manufacturing zones. Future facilities would be required to comply with the Siting Criteria in Appendix 6-A of the CSE to ensure that facilities are not located in close proximity to sensitive uses. The following siting criteria would apply to future facilities:

- All Facilities: Facility must be in conformance with local land use and zoning requirements of a county or city planning agency.
- Land Disposal Facilities: Los Angeles County prohibits construction of buildings or structures on or within 1,000 feet of a land disposal facility, which contains decomposable materials/waste, unless the facility is isolated by an approved natural or manmade protection system. The Cities within Los Angeles County may have similar restrictions.
- AT Facilities: These facilities should be located where the zoning and existing land use are compatible with the proposed use. For example, an abandoned chemical plant site in an industrial district could be considered to be a compatible land use for an AT facility (e.g., conversion technology, transformation).

Each future development project would be required to comply with existing state and local regulations (i.e., applicable General Plan and zoning ordinance), including the proposed CSE Siting Criteria. Compliance with these regulations would minimize impacts associated with proximity to sensitive uses such that a less than significant impact would result.

Impact 5.7-4: Hazardous Materials Sites

Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or environment?

Government Code Section 65962.5(a)(1) requires DTSC to compile and update, at least annually, a list of all hazardous waste facilities where DTSC has: (1) taken corrective action because a facility owner or operator has failed to comply with corrective action requirements (HSC §25187); or (2) has determined that immediate corrective action is necessary to abate an imminent or substantial endangerment. Due to the uncertainty of where future facilities would be located, there is a potential that the facility could be located on or adjacent to a site that is listed by DTSC as needing corrective action.

As shown in Tables 4-1 and 4-2, the development of future facilities on proposed site locations pursuant to the Proposed Plan would be located in areas zoned for heavy manufacturing, industrial, and utilities. Future facilities would be required to comply with the following proposed CSE Siting Criteria:

- All Facilities: Facility must be in conformance with local land use and zoning requirements of a county or city planning agency.
- AT Facilities: These facilities should be located where the zoning and existing land use are compatible with the proposed use. For example, an abandoned chemical plant site in an industrial district could be considered to be a compatible land use for an AT facility (e.g., conversion technology, transformation).

Additionally, prior to siting waste facilities and as part of the project-level environmental analysis, a Phase I Environmental Site Assessment (ESA) would be conducted in conformance with industry-accepted practices. Based on the Phase I ESA findings, recommendations for further assessment would be issued, as appropriate. Proposed facilities would also need to comply with federal, state, and local regulations, including the proposed CSE Siting Criteria. Adherence to these regulations would minimize the potential for any impacts. As a result, this impact would be less than significant.

Impact 5.7-5: Safety Hazard to the Public Residing or Working within Proximity to a Private Airstrip

For a project in the vicinity of a private airstrip, result in a safety hazard for people residing or working in the Project Area?

Based on a review of aerial maps, there are no future facilities proposed under the Proposed Plan that are located within two miles of a private airstrip. Therefore, people working at future facilities would not be exposed to safety hazards due to proximity to a private airstrip. No impact would occur.

AT Site #3 is located at the existing public Santa Monica Airport. The proximity of this potential AT site to this public airport could potentially expose people working at future facilities to safety hazards. However, as indicated in Chapter 3, this AT site would likely not be developed until following the planned closure of Santa Monica Airport in 2028. In addition, federal and state regulations exist that would prevent hazards to the public and environment near public airports. These include FAA regulations, which establish safety standards for civil aviation, and the State Aeronautics Act, which establishes air safety hazards. In addition, if future sites are proposed within two miles of an airport, the County requires that development projects near public airports comply with any

applicable ALUCP. Furthermore, future facilities would be required to comply with the Siting Criteria in Appendix 6-A of the CSE. Existing federal, state, and local regulations are intended to identify and properly address potential airport hazards prior to implementation of specific projects. Therefore, potential impacts associated with public airports are less than significant.

Impact 5.7-6: Emergency Response Plan or Emergency Evacuation Plan

Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction and operation of future facilities may increase traffic in the surrounding areas, impairing evacuation routes used in established emergency response or emergency evacuation plans. The distances on minor routes should be kept to a minimum to avoid interference with commercial or residential traffic and reduce the risks of accidents. Future facilities considered under the Proposed Plan would have to comply with state and local regulations, including the following CSE Siting Criteria:

All Facilities: Distance traveled on minor roads should be kept to a minimum. Facilities are best located near an exit of a major route or accessed from major routes via routes used locally for truck traffic. Alternatively, local roads could be upgraded by increasing their load capacity, improving traffic controls, or building truck-only lanes or routes. The facility developer may build a direct access road to avoid the minor route(s).

Adherence to federal, state, and local regulations, including the proposed CSE Siting Criteria would minimize impacts to less than significant.

Impact 5.7-7: Risk of Loss, Injury, or Death Involving Wildland Fires

Would the Project site expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to the urbanized areas or where residences are intermixed with wildlands?

As previously indicated above, the following potential site locations are located within a very high hazard severity zone delineated by the State: CR&R Catalina (AT Site #6). In an effort to reduce the threats to lives and property, the Los Angeles County Fire Department (LACoFD) has instituted a variety of regulatory programs and standards for vegetation management, pre-fire management and planning, fuel modification, and brush clearance. In addition to these programs, the LACoFD and the Los Angeles County Public Works enforce fire and building codes related to development in very high fire hazard severity zones.

Fuel modification plans are required for projects within areas designated as fire hazard severity zones (FHSZs) within the State Responsibility Areas or very high fire hazard severity zones (VHFHSZs) within the Local Responsibility areas, as described in Title 32, Fire, Section 4908. The fuel modification plan identifies specific zones within a property that is subject to fuel modification. Vegetation management, as it relates to wildland fire, refers to the total or partial removal of high-fire-hazard grasses, shrubs, or trees. This includes thinning to reduce the amount of fuel and modification of vegetation arrangement and distribution to disrupt fire progress. The Vegetation Management Program (VMP) is a cost-sharing program that focuses on the use of prescribed fire, hand crews, mechanical, biological and chemical means, for addressing wildland fire fuel hazards, habitat restoration, and other resource management issues on State Responsibility Area (SRA) and Local Responsibility Area (LRA) lands.

Compliance with applicable regulations will minimize impacts related to wildland fires to a less than significant level.

5.7.5 Cumulative Impacts

Depending on the location of future facilities, as well as other projects that are proposed in the vicinity, there may be a cumulative impact from the transportation, use, storage, recycling and disposal of hazardous wastes that may be generated during implementation of the Proposed Plan. Upon determination of the facility location, a project-level CEQA analysis would be conducted to determine if the construction of such facilities would have a cumulatively considerable impact. The future cumulative analysis will utilize a list of project and/or use projections to determine the project-level impacts from the transportation, use, storage, recycling and disposal of hazardous wastes within the Plan and/or Focus Areas.

5.7.6 Level of Significance Before Mitigation

Compliance with applicable regulatory requirements, including the proposed CSE Siting Criteria, impacts related to hazards and hazardous would be less than significant.

5.7.7 Mitigation Measures

No mitigation measures are required.

5.7.8 Level of Significance After Mitigation

No significant hazards or hazardous materials impacts are identified that would otherwise require mitigation.

5.7.9 References

California Code of Regulations. 1991. Section 66261.122. Criteria and Requirements of a Special waste. Accessed July 20, 2016. https://govt.westlaw.com/calregs/Document/

5.8



Hydrology and Water Quality



5.8 HYDROLOGY AND WATER QUALITY

This section analyzes the potential impacts related to hydrology and water quality as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing hydrology and water quality conditions within the Plan Area. Potential hydrology and water quality impacts, including potential cumulative impacts, are considered programmatically in the impact analysis. If applicable this section identifies proposed mitigation measures for any significant impacts.

5.8.1 Environmental Setting

The Plan Area crosses a large number of jurisdiction boundaries from a hydrology and water quality perspective. The Plan Area includes the unincorporated communities located throughout Los Angeles County (County), 88 incorporated cities, three Regional Water Quality Control Boards (RWQCBs), the State Water Resources Control Board (SWRCB), and the Federal Emergency Management Agency (FEMA).

Water quality concerns are addressed at the County level, but are typically an application of water quality standards developed by the governing regional water quality control board in order to obtain a general NPDES permit. Region 4, the Los Angeles RWQCB, contains all of the potential projects in the Focus Area.

Watersheds and Drainage

California is divided into 10 hydrologic regions by the California Department of Conservation. The majority of the County is split between the South Coast Region and South Lahontan Region, with a small part of the northwest corner of the County within the Tulare Lake Hydrologic Region. Within these regions the Plan Area is further divided into six major watersheds with over 900 miles of major river systems, 2,600 miles of smaller streams, and 25 square miles of pond, lake, and reservoir surface (County of Los Angeles 2014a). These include the Antelope Valley Watershed, Los Angeles River Watershed, Dominguez Channel and Los Angeles Harbor Watershed, San Gabriel River Watershed, Santa Clara Watershed, and the Santa Monica Bay Watershed (Malibu Creek and Ballona Creek) (see Figure 5.8-1, Major Watersheds). The San Pedro Channel Islands Watershed is located on the southeast portion of the Santa Catalina Island.

Table 5.8-1 identifies the watershed areas containing the potential facilities included within the EIR Focus Area. Each of the major watersheds within the Plan Area are described in further detail below.

Table 5.8-1. Focus Area Watersheds

Site Location	Site Name	Watershed (and Area)
AT Site #1	City of Carson Public Works Yard	Dominguez Channel
AT Site #2	Santa Monica Pier	Santa Monica Bay
AT Site #3	Santa Monica Airport	Santa Monica Bay
AT Site #4	City of Santa Monica Public Works Corps Yard	Santa Monica Bay
AT Site #5	City Terrace Recycling LLC	Los Angeles River
AT Site #6	CR&R Catalina	San Pedro Channel Islands
AT Site #7	Interior Removal Specialists, Inc.	Los Angeles River
AT Site #8	Carson Revitalization Project	Dominguez Channel
AT Site #9	Waste Resources Recovery, Inc.	Dominguez Channel

Source: California Watershed Atlas 2014

Figure 5.8-1. Major Watersheds



Source: County of Los Angeles 2014

Antelope Valley Watershed

The Antelope Valley Watershed occupies 3,365 square miles. It is located in the northern portion of the County, southeast of Kern County, and west of San Bernardino County. The watershed includes both the Tehachapi Mountains, and the El Paso mountains which have southeast-facing slopes. Numerous streams drain from the mountain ranges and because the watershed does not have an outlet to the ocean, the surface water either infiltrates into the groundwater or enters into the Rogers Dry Lake, Rosamond Dry lake, and Buckhorn Dry Lake; all of which are within the Edwards Air Force Base (County of Los Angeles 2014a). Most storm drains in the Antelope Valley discharge to undeveloped desert land (County of Los Angeles 2014a).

Los Angeles Watershed

The Los Angeles River Watershed spans 830 square miles of western, central, and southern Los Angeles County, with a small portions reaching into eastern Ventura County (County of Los Angeles 2014a). The watershed extends from the San Gabriel Mountains in the northeast to the Santa Susana Mountains and Santa Monica Mountains on the northwest and west, and extends south to the Los Angeles River in the City of Long Beach (County of Los Angeles 2014a).

The primary discharge channels within the watershed are the Los Angeles River and Rio Hondo. The Los Angeles River is the primary stream in the watershed, and extends 48 miles from the confluence of Bell Creek and the Arroyo Calabasas in the southwest San Fernando Valley to the Pacific Ocean at the City of Long Beach (County of Los Angeles 2014a). Additionally, there are several retention basins near the Community of Sylmar in the City of Los Angeles.

Dominguez Channel and Los Angeles Harbor Watershed

The Dominguez Watershed spans 133 square miles of southwest Los Angeles County. Most of the watershed is in the Los Angeles Basin, and encompasses north-facing slopes of the Palos Verdes Hills. The Dominguez channel is the primary drainage channel in the watershed, extending 15 miles from the City of Hawthorne to the Los Angeles Harbor.

San Gabriel River Watershed

The San Gabriel River Watershed occupies 905 square miles of east-central and southeast Los Angeles County and a portion of northwest Orange County. The primary stream in the watershed is the San Gabriel Valley River which extends about 61 miles from the San Gabriel Mountains to the Pacific Ocean. The watershed extends from the San Gabriel Mountains on the north, encompasses the east half of San Gabriel Valley, Puente Hills, and a large portion of the southeast Los Angeles Basin, and extends south to the mouth of the San Gabriel Valley River in the City of Seal Beach.

Santa Clara River Watershed

The Santa Clara River Watershed occupies 1,624 square miles in northwest Los Angeles County and Ventura County. The Santa Clara River is the principal stream and drainage channel in the watershed, extending 83 miles from northwest Los Angeles County to its mouth on the Pacific Ocean at the south end of Ventura City. The two largest reservoirs, Castaic Lake and Pyramid Lake, are located in the Santa Clara Watershed. These reservoirs are water storage reservoirs and are the southern terminals for the California Aqueduct, which is a major component of the State Water Project (County of Los Angeles 2014a).

Santa Monica Bay Watershed (Malibu Creek and Ballona Creek)

The Santa Monica Bay Watershed includes both Malibu Creek and Ballona Creek; three of the potential projects in the Focus Area reside in the portion designated Ballona Creek. Many streams in the Santa Monica Mountains, Palos Verdes Hills, and the Los Angeles Basin provide drainage in the watershed. Unlike the Los Angeles Watershed, drainage in this watershed is not dominated by one stream. Ballona Creek is the major drainage route for the watershed in the Los Angeles Basin.

San Pedro Channel Islands Watershed

The Channel Islands include: Anacapa, San Nicolas, Santa Barbara, Santa Catalina, and San Clemente Islands. CR&R Catalina (Alternative Technology [AT] Site #5), is located on Santa Catalina Island which is approximately 22 miles south of the Palos Verdes Peninsula and 22 miles southwest of the Orange County shoreline (County of Los Angeles 1983). The island is approximately 21 miles long and eight miles wide. The ocean waters adjacent to the Santa Catalina Island (not the entire circumference of Santa Catalina however) were designated Areas of Special Biological Significance (ASBS) by the State of California (LARWQCB n.d.).

Groundwater Basins

As previously described, the County is divided into three hydrologic regions: Tulare Lake, South Coast, and South Lahontan; however, the County is almost entirely split between South Coast and South Lahontan hydrologic regions. The County overall gets about one-third of its water supply from groundwater and many communities have a larger proportion of their water supply come from groundwater. The County's Flood Control District spreading grounds serve a vital function in replenishing many of the groundwater basins in Los Angeles County (County of Los Angeles 2014a). Countywide there are approximately 3,634 acres of spreading ground, most of which are owned by the Los Angeles County Flood Control District (LACFCD). The County also contains 21 groundwater basins in the coastal plain and valleys. Excluding periods of drought, groundwater extraction accounts for nearly one-third of water usage in the unincorporated areas. Additionally, hundreds of households located in rural areas depend solely on private wells that rely on local groundwater sources (County of Los Angeles 2014a).

Table 5.8-2 identifies the groundwater basins (and basin ID) that underlie portions of the Focus Area. These groundwater basins (and sub-basins) are described further below.

Table 5.8-2. Focus Area Groundwater Basins

Site Location	Site Name	Groundwater Basins (and ID)
AT Site #1	City of Carson Public Works Yard	Coastal Plain of Los Angeles (4-11.03)
AT Site #2	Santa Monica Pier	Coastal Plain of Los Angeles (4-011.01)
AT Site #3	Santa Monica Airport	Coastal Plain of Los Angeles (4-011.01)
AT Site #4	City of Santa Monica Airport Public Works Corps Yard	Coastal Plain of Los Angeles (4-11.01)
AT Site #5	City Terrace Recycling LLC	Coastal Plain of Los Angeles (4-11.04)
AT Site #6	CR&R Catalina	
AT Site #7	Interior Removal Specialists, Inc.	Coastal Plain of Los Angeles (4-11.04)
AT Site #8	Carson Revitalization Project	Coastal Plain of Los Angeles (4-11.03)
AT Site #9	Waste Resources Recovery, Inc.	Coastal Plain of Los Angeles (4-11.03)

Source: DWR 2015

South Coast Region

The South Coast region covers about 11,100 square miles and includes all of Orange County, major portions of Los Angeles, Riverside, San Bernardino, San Diego, and Ventura counties, and a small portion of Santa Barbara County (Department of Water Resources [DWR] 2015). The groundwater in the South Coast region typically contains calcium, sodium cations, and bicarbonate anions (DWR 2015). Below is a description of the numerous ground water basins and subbasins that make up the County; as well as, a discussion of the groundwater quality within these basins:

The Coastal Plain of Los Angeles Basin (No. 4-11) spans approximately 491 square miles, underlying nearly all of the Los Angeles Basin in Los Angeles County south of the Puente Hills and Repetto Hills (DWR 2015). The basin contains some of the most heavily extracted groundwater basins in the South Coast region (DWR 2015). The Coastal Plain of Los Angeles Basin is comprised of four ground water subbasins: Santa Monica (No. 4-11.01), Hollywood (No. 4-11.02), West Coast (No. 4-11.03), and Central (No. 4-11.04) DWR 2015). The West Coast and Central subbasins make up a majority of the basins (County of Los Angeles 2014a). The major groundwater recharge basins in the Central subbasin are the Rio Hondo and San Gabriel Coastal Spreading Grounds. Ground water in the West Coast subbasin is recharged mostly though injection wells (County of Los Angeles 2014a).

Overall, the ground water in the Central subbasin and West Coast subbasin continues to be of high quality, suitable for potable and non-potable uses (County of Los Angeles 2014a). The Central subbasin also includes a groundwater treatment facility in the City of Pico Rivera (Water Quality Protection Project) to treat groundwater for a volatile organic compounds (VOCs) contamination plume originating from the San Gabriel Valley (County of Los Angeles 2014a).

■ The San Fernando Valley Groundwater Basin (No. 4-12) is located north of the Coastal Plain of Los Angeles Groundwater Basin and underlies all of the San Fernando Valley and valley areas in the San Fernando Valley Planning Area, which is approximately 227 square miles (DWR 2015).

Regarding the groundwater quality within this basin, half of the 115 groundwater wells owned by the Los Angeles Department of Water and Power (LADWP) are inactive due to groundwater contamination from VOCs, trichloroethylene (TCE), perchloroethylene (PCE), carbon tetrachloride, nitrates, and perchlorate. Within this basin, groundwater treatment is provided through three systems which include: the Tujunga Wellfield Joint Project, the North Hollywood operable Unit, and the Pollock Wells Treatment Plant (County of Los Angeles 2014a).

- The San Gabriel Valley Groundwater Basin (No. 4-13) is located northeast of the Coastal Plain of Los Angeles Groundwater Basin, and is approximately 199 square miles. It underlies most of the San Gabriel Valley and Puente Valley. The major groundwater recharge facilities for the main San Gabriel Valley Groundwater Basin are reservoirs in and just upstream of the Basin. These include Cogswell Reservoir, San Gabriel Reservoir, Morris Reservoir, Santa Fe Reservoir and Whittier Narrows Reservoir. The Basin includes 30 groundwater treatment sites operating in the service area of the Upper San Gabriel Municipal Water District.
- The Santa Clara River Valley East Subbasin (No. 4-4.07) underlies about 104 square miles in the Santa Clarita Valley in the Santa Clarita Planning Area. The groundwater in this subbasin meets drinking water standards (County of Los Angeles 2014a).

South Lahontan Region

The Antelope Valley Groundwater Basin (No. 6-44) spans 1,585 square miles in the Antelope Valley within northern Los Angeles County, southeast Kern County, and westernmost San Bernardino County (DWR 2015). Groundwater quality within the

basin's principle aquifer is good and meets drinking water standards; however, the quality begins to degrade toward the northern portion of the dry lakes. There are currently 12 wells belonging to various agencies with the southern portion of the Antelope Valley that have tested in excess of the proposed maximum containment level (MCL) of 10 parts per billion (ppb), by the State of California (County of Los Angeles 2014a).

Santa Catalina Island

The City of Avalon, the location of CR&R Catalina (AT Site #6), is located within a small watershed that discharges into the coast and is designated as an area of special biological significance.

Floodplains

Flood Hazard Zones are geographic areas that FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area. Table 5.8-3 identifies the flood zone for each of the potential site locations within the Focus Area. Low to moderate flood risk areas are indicated by the letter X, high flood risk areas are indicated by the letter D.

Table 5.8-3. Flood Zones

AT Site	Site Name	Zone
AT Site #1	City of Carson Public Works Yard	0.2% Annual Chance Flood Hazard
AT Site #2	Santa Monica Pier	A and 0.2% Annual Chance Flood Hazard
AT Site #3	Santa Monica Airport	х
AT Site #4	City of Santa Monica Public Works Corps Yard	x
AT Site #5	City Terrace Recycling LLC	Х
AT Site #6	CR&R Catalina	D
AT Site #7	Interior Removal Specialists, Inc.	0.2% Annual Chance Flood Hazard
AT Site #8	Carson Revitalization Project	0.2% Annual Chance Flood Hazard
AT Site #9	Waste Resources Recovery, Inc.	X

Source: FEMA 2016

Water Quality

The U.S. Environmental Protection Agency (USEPA) found that approximately 218 million Americans live within 10 miles of a polluted lake, stream, river, or coastline; and a majority of the County falls within this category. Federal and state agencies, such as the USEPA and the Regional Boards, are identifying contaminates, imposing clean-up efforts, and bringing enforcement actions against polluters. In order to comply with surface water quality regulations to protect existing clean water bodies and restore impaired water bodies, the County and all cities are implementing water pollution prevention programs appropriate for their jurisdiction (County of Los Angeles, 2015).

The USEPA maintains a list of water quality impaired water bodies, called the Clean Water Act (CWA) Section 303(d) list (33 USC 1250 et seq., at 1313(d)). These water bodies are identified as water bodies that do not meet water quality standards; and are thus considered "impaired" and placed onto the CWA Section 303(d) list. On July 30, 2015, the USEPA approved California's 2012 CWA Section 303(d) list of impaired waters and disapproved the omission of several water bodies and associated pollutants that meet federal listing requirements. Project developers are required to identify

303(d) listed water bodies in the vicinity of their proposed development/facility. Any project facility discharging directly to a 303(d) listed water body will have to verify that anticipated pollutants will not exacerbate existing impairments and demonstrate mitigation measures implemented to the maximum extent practicable.

There are a significant number of water bodies within the County, including rivers, lakes, coastal estuaries, bays, and beaches that are included on the 303(d) list; and for each impaired water body, states are required to develop a total maximum daily load (TMDL). TMDL is a tool by which water quality standards are implemented. TMDL establishes allowable pollutant loading for a water body, and any pollution or residual above this threshold is allocated for reduction among the various sources of the pollutant in order to regain the beneficial uses of the water body (County of Los Angeles 2015). As of 2013, there are 34 TMDLs developed for water bodies within the Plan Area; all of which are being implemented through the National Pollutant Discharge Elimination System (NPDES) Permit. Additionally, TMDLs are expected in the future for the remaining pollutants on the 303(d) list.

Seiche, Tsunami, and Mudflow

A seiche is a wave that oscillates in a water body (e.g., lake, bays, or gulf) from a few minutes to a few hours as a result of seismic or atmospheric disturbances. Reservoirs and aboveground water storage tanks can also generate seiches posing substantial flooding hazards.

A tsunami is a wave caused by the sudden displacement of a large volume of water, usually an ocean, but can also occur in lakes. This is most often due to earthquakes occurring below or near the ocean floor (County of Los Angeles 2014b). The Plan Area includes coastal and low-lying areas that could be inundated in the event of a tsunami and have been mapped by the California Geological Survey. These inundation areas include the Santa Monica Mountains Planning Area and the Westside Planning Area. The South Bay and Gateway Planning Areas do not have tsunami inundation areas in the unincorporated areas; the entire coastline of these two planning areas consists of cities only (County of Los Angeles 2014a). The most recent tsunami that struck the County was the 2011 tsunami caused by the earthquake in Japan. If a tsunami were to occur the impacts on life, property, infrastructure, and the economy could be severe. Considerable damage is caused by the resultant floating debris.

A mudflow and/or debris flow is a fast-moving downhill flow of mud and soil, with rock and vegetative matter (e.g. trees, branches, and roots) loosened by rainfall or melting snow. An area of potential mudflow and/or debris flow within the project Plan Area would be associated with canyon areas and areas along the bases of mountain slopes, particularly areas that may have been recently subject to wildland fires. The LACFCD reservoirs receive large volumes of sediment due to mudflows from tributary watersheds, which affect the reservoir's ability to protect against flooding and capacity to conserve water. The LACFCD also has numerous debris basins and inlets above many of the foothill communities which also provide protection from flooding and aide in water conservation; however, these basins and inlets require cleanouts in order to maintain the function.

5.8.2 Existing Plans and Regulations

Federal, state, regional, and local requirements influence hydrology and water quality within the project Plan Area. This section lists and briefly describes the relevant plans, policies, and regulations that pertain to hydrology and water quality.

Federal

Clean Water Act of 1977 Section 311 and 402, United States Code Title 33 Section 1342, Code of Federal Regulations Title 40 Parts 123-136

The federal Water Pollution Control Act (also known as the Clean Water Act [CWA]) was amended in 1972 to prohibit discharge of any pollutant into Waters of the United States unless the discharge is authorized by a NPDES Permit. Originally, the NPDES program focused on reducing pollutants from discharges from industrial process wastewater and municipal sewage treatment plants. In 1987, the CWA was amended to require the USEPA to regulate stormwater discharges through use of NPDES stormwater permits. Section 402(p) of the CWA established a framework for regulating discharges under the NPDES program.

In California, the EPA has delegated authority to issue NPDES permits to the SWRCB. The SWRCB and nine RWQCBs carry out the regulation, protection, and administration of water quality standards. The state is divided into nine regions related to water quality and quantity characteristics. Each RWQCB is required to adopt a Water Quality Control Plan that recognizes and reflects the regional differences in existing water quality, the beneficial uses of the region's ground and surface water, and local water quality conditions and problems. The project Plan Area includes all or part of three RWQCBs: Los Angeles, Lahontan, and Central Valley. The various Water Quality Control Plans for these basins are designed to preserve and enhance water quality and protect the beneficial uses of all regional waters.

Section 303(d), Total Maximum Daily Loads

As described in the existing conditions, Section 303(d) of the CWA (33 USC 1250 et seq., at 1313(d)) requires states to identify impaired water bodies as those that do not meet water quality standards. States are required to compile this information in a list and submit the list to EPA for review and approval. As part of this process, states are required to prioritize waters and watersheds for future development of TMDL requirements. SWRCB and RWQCBs have ongoing efforts to monitor and assess water quality, to prepare the Section 303(d) list, and to develop TMDL requirements. The applicable RWQCBs responsible for protecting surface waters and ground water within the project Plan Area are the Los Angeles RWQCB, Lahontan RWQCB and Central Valley RWQCB.

National Flood Insurance Act

The FEMA is responsible for managing the National Flood Insurance Program (NFIP), which makes federally backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. The NFIP, established under the National Flood Insurance Act, requires that participating communities adopt certain minimum floodplain management standards. To help identify areas with flood potential, FEMA has developed Flood Insurance Rate Maps (FIRMs) that can be used for planning purposes, including floodplain management, flood insurance, and enforcing mandatory flood insurance purchase requirements. The County of Los Angeles is a participating jurisdiction in the NFIP, and, therefore, all new development must comply with the minimum requirements of the NFIP.

State

Department of Water Resources

The Department of Water Resources (DWR) is responsible for preparing and updating the California Water Plan to guide development and management of the State's water resources; planning, designing, constructing, operating, and maintaining the State Water Resources Development System; regulating dams; providing flood protection; assisting in emergency management to safeguard life and property; educating the public; and serving local water needs by providing technical assistance. DWR also cooperates with local agencies on water resources investigations; supports watershed and river restoration programs; encourages water conservation; explores conjunctive use of

ground and surface water; facilitates voluntary water transfers; and, when needed, operates a State drought water bank.

California Porter-Cologne Water Quality Control Act 1998, California Water Code Section 13000-14957, Division 7

The California Water Code contains provisions regulating water and its use. Division 7 establishes a program to protect water quality and beneficial uses of the state water resources including groundwater and surface water. The SWRCB and RWQCB administer the program and are responsible for control and water quality. They establish waste discharge requirements, water quality control planning and monitoring, enforcement of discharge permits, and ground and surface water quality objectives.

California Water Code Section 13260

California Water Code Section 13260 (as prescribed by the Porter-Cologne Quality Act) requires that any person discharging waste or proposing to discharge waste that could affect the quality of the waters of the State, other than into a community sewer system, must submit a Report of Waste Discharge to the applicable RWQCB. The RWQCB is responsible for issuing a Waste Discharge Requirements (WDRs) permit for any facility that discharges or proposes to discharge waste that may affect groundwater quality. This may include systems that have waste storage systems with land disposal, such as a seasonal storage and reuse. Potential dischargers must file a complete Report of Waste Discharge with the RWQCB at least 120 days prior to discharging waste. Issuance of WDRs for a permit is based on information provided in the Report of Waste Discharge. WDRs may set effluent standards for activities that do not pose a threat or nuisance to water quality.

National Pollutant Discharge Elimination System (NPDES) Permits

The NPDES permit system was established in the federal CWA to regulate municipal and industrial discharges to surface waters of the U.S. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. CWA Section 402 regulates stormwater discharges to surface waters through the NPDES program, administered by the EPA. In California, the State Water Resources Control Board is authorized by the USEPA to oversee the NPDES program through the RWQCB.

Non-point sources diffuse and originate over a wide area rather than from a definable point. Non-point pollution often enters receiving water in the form of surface runoff, but is not conveyed by way of pipelines or discrete conveyances. As defined in the federal regulations, such non-point sources are generally exempt from federal NPDES permit program requirements. However, three types of non-point source discharges are controlled by the NPDES program: non-point source discharge caused by general construction activities, the general quality of stormwater in municipal stormwater systems, and discharges associated with industrial operations. The 1987 amendments to the CWA directed the federal EPA to implement the stormwater program in two phases.

Phase 1 requires NPDES permits for storm water discharge from a large number of priority sources including medium and large municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 to 250,000 or more and several categories of industrial activity including construction activity that disturbs five or more acres. Phase 1 permits for MS4s mostly cover larger cities, and require them to develop a storm water management program, and to track, monitor, and submit periodic reports for facilities regulated under the NPDES stormwater program. These permits are reissued as the permits expire. The following industrial sectors are regulated by Phase 1: facilities subject to EPA storm water effluent guidelines, new source performance standards, or toxic pollutant effluent standards; heavy manufacturing facilities; mining/oil and gas; hazardous waste facilities; landfills; recycling facilities; steam electric power; transportation facilities; sewage treatment plants; construction activity; and light manufacturing facilities.

Phase II of the storm water program, which this guide addresses, requires permits for storm water discharges from certain small municipal separate storm sewer systems and construction activity generally disturbing between 1 and 5 acres. Phase II can be divided into three main components:

Regulated Small MS4s General Permit

A certain subset of operators of small MS4s (primarily those located in urbanized areas) are required to implement programs and practices to control polluted storm water runoff from the jurisdiction serviced by the MS4. The operator must design its storm water management program to satisfy applicable CWA water quality requirements and technology standards. The program must include the development and implementation of best management practices (BMPs) and measurable goals to implement the following six minimum measures: public education and outreach; public participation and involvement; illicit discharge detection and elimination; construction site runoff control; post-construction runoff control; and pollution prevention/good housekeeping.

The SWRCB adopted the MS4 General Permit (Order No. 2013-0001-DWQ) on February 5, 2013, which supersedes Order No. 2003-0005-DWQ.

NPDES General Construction Permit

Construction of the project must comply with the requirements of the NPDES permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Order No. 2009-0009-DWQ). This permit regulates discharges from construction sites that disturb one acre or more of total land area. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least one acre of total land area must be in compliance with the provisions of the NPDES Permit and develop and implement an effective Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must include BMPs to reduce pollutants and any more stringent controls necessary to meet water quality standards.

The SWRCB also adopted the General Construction Permit (Order No. 2012-0006-DWQ) on September 2, 2009, and General Construction Permit (Order No. 2010-0014-DWQ) on November 16, 2010. Both of these amend Order No. 2009-DWQ.

NPDES General Industrial Permit

After approval and assessment of the proposed projects in the Focus Area, operation will require compliance with the requirements of the NPDES permit for Discharges of Stormwater Associated with Industrial Activities. This general NPDES permit covers all stormwater and some non-stormwater discharges associated with certain industrial activities. The proposed project will be covered according to its Standard Industrial Classification (SIC), Refuse Systems (SIC 4953). The permit requires control of pollutant discharges using best available technology (BAT) economically achievable and best conventional technology (BCT) to prevent pollutants as necessary to meet water quality standards.

The SWRCB adopted General Industrial Permit (Order No. 2014-0057-DWQ) on April 1, 2014, which supersedes Water Quality Order No. 97-03-DWQ. Currently the SWRCB and RWQCB are undergoing the public review process for the Industrial General Permit TMDL implementation language for TMDLs listed in Attachment E of Order No. 2014-0057-DWQ. The RWQCBs will have a 30-day comment period for each draft TMDL implementation language in which no action will be taken by the RWQCB. The Industrial General Permit TMDLs will collectively then go through a separate public process at the SWRCB. The draft amendment to the General Permit and supporting documentation was released to the public in December 2017.

Table 5.8-4 lists the applicable NPDES permits for the Focus Area.

Table 5.8-4. Applicable NPDES Permits

Applicable Statewide NPDES Permit	County/Regional Permit
General Permit for Waste Discharge Requirements (WDRs) for Storm Water Discharge from Small Municipal Separate Storm Sewer Systems (MS4s)	Waste Discharge Requirements for MS4 Discharges within the Coastal Watersheds of Los Angeles County.
Order No. 2013-0001-DWQ, NPDES No. CA000004	Order No. R4-2012-0175 as amended by WQ2015-0075, NPDES CAS004001
General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities	
Order No. 2009-0009-DWQ, NPDES No. CAS000002 as amended by Order No. 2010-0014-DWQ and 2012-0006-DWQ	
General Permit for Storm Water Discharges Associated with Industrial Activities	
Order No. 2014-0057-DWQ, NPDES No. CAS000001	

Source: RWQCB 2016

Local

County of Los Angeles

Municipal Separate Storm Sewer System NPDES Permit

As separate Permittees under the MS4 NPDES Permit, the LACFCD and the unincorporated County of Los Angeles each implements its own stormwater program. The latest MS4 Permit was adopted by the LARWQCB on November 8, 2012 and became effective December 28, 2012. In addition to the LACFCD and County, the Permit is also issued to 84 municipalities within the County (the cities of Palmdale, Lancaster, Avalon, and Long Beach are excluded). Each Permittee is responsible for implementing its own stormwater program.

County of Los Angeles Grading Code

The Building and Safety and Land Development Division of the Los Angeles County Public Works are the agencies responsible for the enforcement of the grading code (Title 26, County of Los Angeles Building Code, Appendix J) for the unincorporated areas of Los Angeles County as well as contract cities. The grading code requires erosion control and water quality for grading operations. NPDES compliance is required for all projects in the Plan Area.

For new non-residential projects consisting of disturbed, graded areas less than one acre, an Erosion and Sediment Control Plan (ESCP) is required prior to issuance of a grading permit by the County. The ECSP should include specific BMPs to minimize the transport of sediment and protect public and private property from the effects of erosion, flooding, or deposition of mud, debris, or construction related pollutants.

For projects consisting of a graded area of one acre or greater, a SWPPP must be prepared and a Notice of Intent (NOI) should be filed with the State Water Resources Control Board. Filing of the NOI and attainment of a Waste Discharge Identification (WDID) number from the state is required for projects at this scope prior to issuance of a grading permit by the County. If a SWPPP is prepared in accordance with the Construction General Permit, it can be accepted as an ESCP.

County of Los Angeles Stormwater and Runoff Pollution Control Ordinance

The purpose of this ordinance (Title 12, Chapter 80, Part 6) is to implement pollutant reduction and control measures at certain industrial/commercial facilities, as may be required by a NPDES municipal stormwater permit governing county unincorporated areas. The director will maintain an inventory of all registered industrial/commercial facilities for the purpose of tracking and inspecting facilities that are critical sources of stormwater pollution. Each registered facility that has been inspected and found

in compliance with any applicable requirements of a NPDES municipal stormwater permit will be issued a certificate of inspection by the director. Facilities subject to the ordinance include municipal landfills, hazardous waste treatment disposal or recovery facilities, and facilities subject to the Superfund Amendments and Reauthorization Act of 1986.

Low Impact Development (LID) Ordinance and Standards Manual

On October 2008, the County adopted LID Ordinance into the Los Angeles County Code Title 12, Chapter 84 which requires the use of LID principles in all development projects except road and flood infrastructure projects. The 2012 MS4 permit (Order No. R4-2012-0175) made it necessary for the County to modify the ordinance to reflect the new stormwater runoff water quality and hydromodification requirements for new development and redevelopment projects (County of Los Angeles 2014c). In November 2013, the County amended the Ordinance 12.84, to incorporate the requirements of the MS4 Permit. The LID Standards Manual was prepared to complement and be consistent with the November 2013 LID Ordinance requirements. Project applicants for individual projects must submit an LID plan and analysis demonstrating compliance with the LID Standards Manual for review and approval by the Director of Public Works. The LID Plan must include the following information:

- Identification of whether the proposed project is a Designated or Non-Designated Project. If the proposed project is a Designated Project, identification of the project category;
- Feasibility of infiltration including a percolation report as part of a geotechnical report prepared by a geotechnical engineer;
- Source control measure(s) proposed to be implemented
- Calculation of the Stormwater Quality Design Volume (SWQDV);
- Discussion on whether stormwater runoff harvest and use is feasible;
- Stormwater quality control measure(s) proposed to be implemented;
- Discussion of how the applicable water quality standards and TMDLs will be addressed (off-site mitigation projects only);
- Proposed hydromodification controls and calculations (if necessary); and
- Proposed maintenance plan (if necessary).

The LID plan will be a separate plan that will be:

- A section of, or appendix to the Hydrology Report that must be submitted to the Land Development Division;
- A section of, or appendix to the Grading Report submitted to the Building and Safety Division.

Los Angeles County Flood Control District Code

Chapter 21 of the County Flood Control District Code, *Stormwater and Runoff Pollution Control*, sets forth requirements regulating discharges to LACFCD storm drains.

The following discharges to County storm drains are prohibited:

- Discharges of stormwater containing pollutant concentrations that exceed or contribute to the exceedance of a water-quality standard.
- Non-storm water discharges unless authorized by an NPDES Permit and by a permit issued by the Chief Engineer.
- Discharges of sanitary or septic waste or sewage from any property or residence, any type of recreational vehicle, camper, bus, boat, holding tank, portable toilet, vacuum truck or other mobile source, or any waste holding tank, container or device.
- Pollutants, leaves, dirt, or other landscape debris (County Flood Control District Code Sections 21.07 and 21.11).

Applicable Plans and Programs

Groundwater Basins Master Plan

The Water Replenishment District of Southern California (WRD) is the regional groundwater management agency for the two most utilized groundwater basins in the state of California, the West Coast and Central Basins. The WRD service area lies entirely within Los Angeles County and serves 43 incorporated cities, including the cities of Los Angeles, Long Beach, Downey and Torrance (ESA 2015). Beginning in 1962, the WRD and County Sanitation Districts of Los Angeles County pioneered the use of recycled water for groundwater recharge (ESA 2015). WRD operates a number of clean water programs, including detection, prevention and removal of contaminants in the groundwater. The WRD also implements programs to monitor groundwater quality, provide wellhead treatment, remediate contamination, and mitigate saltwater intrusion.

The WRD is in the process of finalizing the Groundwater Basin Master Plan (GBMP). The Draft GBMP's Programmatic EIR ended its public review on February 15, 2016. The purpose of the GBMP is to provide a single reference document of the entities responsible for managing and maintaining the West Coast and Central groundwater basins. It establishes a framework to enhance groundwater replenishment in the two basins, increase reliability of groundwater water supplies, improved and protect groundwater quality, and accommodate growing potable water demands (ESA 2015).

In 2018, the San Gabriel Basin Water Quality Authority released its San Gabriel Basin Groundwater Quality Management and Remediation Plan ("§406 Plan"), which is required by this agency's enabling act. The §406 Plan identifies a framework of overarching remedial principals and sets forth specific projects proposed to be facilitated by the WQA or by others within the Basin.

Water Quality Control Plan Los Angeles Region (4)

The southern portion of the Plan Area is within the jurisdiction of the Los Angeles RWQCB. The Los Angeles RWQCB has prepared a Water Quality Control Plan for the Los Angeles Region (Los Angeles Basin Plan), which encompasses all coastal drainage flowing to the Pacific Ocean between Rincon Point (on the coast of western Ventura County) and the County's eastern line, as well as the drainages of five coastal islands (Anacapa, San Nicolas, Santa Barbara, Santa Catalina, and San Clemente). In addition, the Los Angeles region includes all coastal waters within three miles of the continental and island coastlines. The eastern boundary of the County strays somewhat from the hydrologic divide into the Santa Ana region. Thus, the Los Angeles and Santa Ana regions share jurisdiction over watersheds along their common border. The Los Angeles Basin Plan was adopted in 1975 per requirements of California's 1969 Porter-Cologne Water Quality Control Act and was subsequently revised in 1994.

The purpose of the Los Angeles Basin Plan is to preserve and enhance water quality and to protect the beneficial uses of all regional waters. The Los Angeles Basin Plan:

- Sets water quality objectives to protect designated beneficial uses;
- Sets specific parameters (numeric objectives) and general characteristics of the water body (narrative objectives); and
- Describes implementation programs to protect regional waters.

Los Angeles Basin Plan also incorporates all applicable state and regional board plans and policies, and other pertinent water quality regulations. Regulations include:

- Preparing, monitoring compliance with, and enforcing WDRs including NPDES permits;
- Implementing and enforcing local stormwater control efforts;
- Enforcing water quality laws and regulations; and
- General Construction Activity Stormwater Discharges.

Water Quality Control Plan Lahontan Region (6)

The northern portion of the Plan Area is within the jurisdiction of the Lahontan RWQCB. The Lahontan RWQCB has prepared a Water Quality Control plan for the Lahontan Region (Lahontan Basin Plan) which serves as the basis for the Regional Board's regulatory program. The Lahontan Basin Plan recognizes the natural water quality, existing and potential beneficial uses, and water quality problems associated with human activities. It also identifies required or recommended control measures for these issues. The Lahontan Basin Plan also summarizes past and present water quality monitoring programs, and identifies monitoring activities, which should be carried out to provide the basis for future updates to the basin plan and WDRs of conditional waivers.

The Lahontan RWQCB has the regulatory authority to enforce the requirements of the CWA and the California Water Code; and as previously described, this includes the regulatory authority to enforce the implementation of TMDLs, the adoption of waste WDRs to ensure compliance with surface water quality objectives (WQOs), and groundwater management. Under the Water Quality Management Plan for the Lahontan Region, it prohibits certain types of discharges in particular areas. This includes, prohibiting discharge of material to lands within the 100-year floodplain. The intent is to protect floodplain function such as conveyance and storage, along with other hydrologic, geomorphic, biologic and ecologic processes such as ground water recharge, floodwater filtration, sediment transport, spawning gravel replenishment, seed dispersal, and riparian vegetation maintenance (Lahontan RWQCB 1995). Exemptions to this prohibition may be granted on a case by case basis as long as discharges do not reduce or adversely affect the existing floodplain function; or restore and/or improve previously impacted floodplain functions.

County of Los Angeles General Plan

Los Angeles County recently adopted an update to its General Plan in 2015. The General Plan's Conservation and Natural Resources Element and Safety Element include policies adopted for the purposes of guiding long-term conservation of natural resources and to reduce the risk of death, injuries, and economic damage resulting from natural and manmade hazards.

Conservation (C) and Natural Resources (NR) Element

- Policy C/NR 5.1: Support the LID philosophy, which seeks to plan and design public and private development with hydrologic sensitivity, including limits to straightening and channelizing natural flow paths, removal of vegetative cover, compaction of soils, and distribution of naturalistic BMPs at regional, neighborhood, and parcel-level scales.
- Policy C/NR 5.2: Require compliance by all County departments with adopted Municipal Separate Storm Sewer System (MS4), General Construction, and point source NPDES permits.
- Policy C/NR 5.3: Actively engage with stakeholders in the formulation and implementation of surface water preservation and restoration plans, including plans to improve impaired surface water bodies by retrofitting tributary watersheds with LID types of BMPs.
- Policy C/NR 5.4: Actively engage in implementing all approved Enhanced Watershed Management Programs/Watershed Management Programs and Coordinated Integrated Monitoring Programs/Integrated Monitoring Programs or other County-involved TMDL implementation and monitoring plans.
- Policy C/NR 5.5: Manage the placement and use of septic systems in order to protect nearby surface water bodies.
- Policy C/NR 5.6: Minimize point- and nonpoint- source water pollution.

- Policy C/NR 5.7: Actively support the design of new and retrofit of existing infrastructure to accommodate watershed protection goals, such as roadway, railway, bridge, and other-particularly- tributary street and greenway interface points with channelized waterways.
- Policy C/NR 6.1: Support the LID philosophy, which incorporates distributed, post-construction, parcel-level stormwater infiltration as part of new development.
- Policy C/NR 6.2: Protect natural groundwater recharge areas and regional spreading grounds.
- Policy C/NR 6.3: Actively engage in stakeholder efforts to disperse rainwater and stormwater infiltration BMPs at regional, neighborhood, infrastructure, and parcel-level scales.
- Policy C/NR 6.4: Manage the placement and use of septic systems in order to protect high groundwater.
- Policy C/NR 6.5: Prevent stormwater infiltration where inappropriate and unsafe, such as in areas with high seasonal groundwater, on hazardous slopes, within 100 feet of drinking water wells, and in contaminated soils.
- Policy C/NR 7.1: Support the LID philosophy, which mimics the natural hydrologic cycle using undeveloped conditions as a base, in public and private land use planning and development design.
- Policy C/NR 7.2: Support the preservation, restoration and strategic acquisition of available land for open space to preserve watershed uplands, natural streams, drainage paths, wetlands, and rivers, which are necessary for the healthy function of watersheds.
- Policy C/NR 7.3: Actively engage with stakeholders to incorporate the LID philosophy in the preparation and implementation of watershed and river master plans, ecosystem restoration projects, and other related natural resource conservation aims, and support the implementation of existing efforts, including Watershed Management Programs and Enhanced Watershed Management Programs.
- Policy C/NR 7.4: Promote the development of multiuse regional facilities for stormwater quality improvement, groundwater recharge, detention/attenuation, flood management, retaining non stormwater runoff, and other compatible uses.

Safety Element

- Policy S 2.1: Discourage development in Los Angeles County's Flood Hazard Zones.
- Policy S 2.2: Discourage development from locating downslope from aqueducts.
- Policy S 2.3: Consider climate change implications in planning for flood and inundation hazards.
- Policy S 2.4: Ensure that developments located within Los Angeles County's Flood Hazard Zones are sited and designed to avoid isolation from essential services and facilities in the event of flooding.
- Policy S 2.5: Ensure that the mitigation of flood related property damage and loss limits impacts to biological and other resources.
- Policy S 2.6: Work cooperatively with public agencies with responsibility for flood protection and with stakeholders in planning for flood and inundation hazards.
- Policy S 2.7: Locate essential public facilities, such as hospitals and fire stations, outside of Flood Hazard Zones, where feasible.

Other Jurisdictions

In addition to the County, the Countywide Siting Element (CSE) Revision contemplates up to six potential site locations within cities including Carson, Santa Monica, and South Gate. Three potential sites are within unincorporated areas of the Los Angeles County. Each of these cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to hydrology and water quality. Depending where future facilities are located, local plans and policies would be applicable to those facilities.

5.8.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to hydrology and water quality would be considered significant if the project was determined to:

- Violate any water-quality standards or waste-discharge requirements.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- Be subject to inundation by seiche, tsunami, or mudflow.

Issues Requiring No Further Evaluation

Following the application of the significance criteria identified above, the following criteria require no further consideration based on the actions proposed Chapter 3. These criteria are not applicable to the actions described in Chapter 3 or would have no impact.

- The Proposed Plan would not involve the placement of housing within a 100year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- Adoption of the Plan would not include new facilities that could expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

5.8.4 Environmental Impacts

Countywide Siting Element Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternative technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County plans to maintain sufficient solid waste disposal capacity over a 15-year period (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to hydrology, water quality, or floodplains; however, depending on phasing and implementation, certain policies may result in future project-level impacts through existing facility construction activities or construction of new facilities.

Countywide Siting Element Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste AT or land disposal facilities or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to hydrology, water quality, and floodplains. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County for review and approval.

Impact 5.8-1: Water Quality Standards and Waste Discharge requirements

Would the project violate any water quality standards or waste discharge requirements?

The Plan Area encompasses multiple watersheds, including but not limited to the Los Angeles River Watershed, for which the Los Angeles RWQCB has identified multiple beneficial uses and associated water quality standards. Table 5.8-1 more specifically identifies the watershed areas containing the potential AT facilities included within the Focus Area. As provided in Table 5.8-4, many of the potential sites would be co-located with existing solid waste processing and/or disposal facilities, which are currently subject to existing NPDES permits and WDRs issued by the Los Angeles RWQCB.

The Proposed Plan does not involve any physical development or construction activity that would otherwise result in new wastewater or industrial discharges that could contribute to existing water quality impairments. Depending on future proposals at one or more locations within the Focus Area, construction and implementation of these facilities could have an impact on local receiving water as a result of one or more pollutants that may be discharged from the site. There are eight types of facilities that could be developed under the proposed project. Table 5.8-5 contains a summary of the types of solid waste facilities contemplated under the Plan and the anticipated pollutants that could be generated over the planning period.

Table 5.8-5. Industrial Facility Pollutant Generation Summary

Processing Facility	Anticipated Pollutants
Composting (Aerobic - Large-Scale and Small-Scale)	Sediment, Nutrients, Heavy Metals, Organic Compounds, Trash and Debris, Oxygen Demanding Substances, Oil and Grease, Bacteria and Viruses, Pesticides
Composting (Anaerobic Digestion)	Sediment, Nutrients, Heavy Metals, Organic Compounds, Trash and Debris, Oxygen Demanding Substances, Oil and Grease, Bacteria and Viruses, Pesticides
Alternative Technology – Advanced Thermal Recycling	Ash residue (including unused flue gas cleaning reagents [i.e., lime, carbon, ammonia or urea], Sediment, Heavy Metals, Organic Compounds, Trash and Debris, Oxygen Demanding Substances, Oil and Grease
Alternative Technology – Biological (Anaerobic Digestion)	Sediment, Nutrients, Heavy Metals, Organic Compounds, Trash and Debris, Oxygen Demanding Substances, Oil and Grease, Bacteria and Viruses, Pesticides
Alternative Technology – Thermal (Plasma Arc, Gasification and Pyrolysis)	Ash residue (including unused flue gas cleaning reagents [i.e., lime, carbon, ammonia or urea]), Sediment, Heavy Metals, Organic Compounds, Trash and Debris, Oxygen Demanding Substances, Oil and Grease

The proposed facilities in the Plan Area (and Focus Area) are located in major cities with established sanitary sewer and drainage infrastructure. Depending on the type of facility proposed and availability of drainage and/or sanitary sewer infrastructure, the implementation of the Proposed Plan carries the potential to directly or indirectly impact surface water or groundwater quality.

Future discharges from these sites would be subject to Sections 6.4 and 6.6, Siting and Permitting, of the CSE (2018), which would include new or amended NPDES permits, WDRs, and Low Impact Development (LID) requirements to address the pollutants of concern at each facility. For example, the SWRCB requires Class III landfills to obtain WDRs. The WDRs establish conditions for the protection of groundwater and surface water, specify the types of wastes that may be accepted at the facility, and include a comprehensive water quality Monitoring and Reporting Program. If a discharge to surface water is proposed, a NPDES permit would be required from the RWQCB (Los Angeles or Lahontan) and coordinated with the SWRCB and USEPA, Region IX, so that the discharge complies with water quality standards for applied beneficial uses and, if applicable, associated TMDLs.

The Proposed Plan generally consolidates the proposed solid waste management facilities (e.g., AT) at existing solid waste management facilities. Other agency approvals may also be required based on the facility type, location, and available infrastructure. With these factors in combination with adherence to existing state and local regulations, including the proposed CSE Siting Criteria, the Proposed Plan would not violate any water quality standards or waste discharge requirements and the corresponding impact would be less than significant.

Impact 5.8-2: Groundwater

Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?

The County contains 21 groundwater basins in the coastal plain and valleys. Future sites proposed under the CSE and the underlying groundwater basins are provided in Table 5.8-2. The proposed CSE planning document would not include the construction or physical development of any of the contemplated solid waste facilities identified in Chapter 3. In this context, the adoption of the CSE would not directly result in the construction of any new solid waste management facilities that could otherwise result in the depletion of groundwater levels. In addition to federal, state, and local requirements, project siting would be required to comply with proposed CSE criteria, including:

■ Land Disposal Facilities: Facilities must comply with the California RWQCB permit requirements for groundwater monitoring.

Throughout these groundwater basins are a number of regional groundwater recharge areas, or spreading grounds, which capture close to 80 percent of the runoff that flows from the mountains. Countywide there are approximately 3,634 acres of spreading ground. Construction of future facilities could have a significant impact on groundwater recharge rates. Project siting would be required to comply with the proposed CSE criteria, including:

Land Disposal Facilities: Facilities must meet the State of California's
minimum requirements for ensuring no impairment of beneficial use of surface
water or of groundwater beneath or adjacent to the landfill, which also includes
location restrictions.

With adherence to federal, state, and local regulations, including the proposed CSE Siting Criteria, groundwater impacts, in terms of both quantity and quality, resulting from the Proposed Plan would be less than significant.

Impact 5.8-3: Changes to Drainage Patterns and Erosion

Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site?

Those solid waste facilities contemplated under the Plan and within the Focus Area would generally be co-located with existing solid waste management facilities (e.g., materials recovery facilities [MRFs]) or compatible industrial uses in developed areas. Drainage patterns for these areas are already established by the existing facilities but they could be further modified by the addition of new facilities (e.g., new impervious surfaces). The construction of these facilities could increase the amount of run off, possibly increasing diversion or redirection of flows. This increase in run off volume, rate, duration, and velocity can create sediment transport issues for existing streams resulting in channel erosion, bank failure, change in channel form, etc. These impacts to existing drainage patterns and peak runoff (quantity and timing) would be avoided or minimized through the preparation of project-specific drainage plans and/or water quality management plans in accordance with state and local regulations. For this reason, changes in drainage patterns and erosion impacts resulting from hydromodification would be less than significant.

Impact 5.8-4: Changes to Drainage Patterns and Flooding

Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Those solid waste facilities contemplated under the Plan and within the Focus Area would generally be co-located with existing solid waste management facilities (e.g., MRFs) or compatible industrial uses in developed areas. Drainage patterns for these areas are already established by the existing facilities but they could be further modified by the addition of new facilities (e.g., new impervious surfaces). The construction of these facilities could increase the amount of run off from existing conditions, possibly increasing diversion or redirection of flows. These impacts to existing drainage patterns and peak runoff (quantity and timing) would be avoided or minimized through the preparation of project-specific drainage plans/or water quality management plans in accordance with state and local regulations. For this reason, flooding impacts resulting from hydromodification would be less than significant.

Impact 5.8-5: Exceed Drainage Capacity and Source of Polluted Runoff

Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The proposed CSE planning document would not include the construction or physical development of any of the contemplated solid waste facilities identified in Chapter 3. In this context, the adoption of the CSE would not directly result in the construction of any new solid waste management facilities that could otherwise result in construction or operational-related discharges to existing storm drain infrastructure. However, with the adoption of the CSE, new AT sites could result in new discharges in the future if all approvals are secured. These discharges would be considered an indirect impact of adopting the CSE.

During future site grading and construction activities, large areas of bare soil would be exposed to erosive forces for potentially long periods of time. Construction activities involving soil disturbance, excavation, cutting/filling, stockpiling, and grading activities could result in increased erosion and sedimentation to surface waters. Additionally, accidental spills or disposal of potentially harmful materials used during construction could possibly wash into and pollute surface water runoff. Materials that could potentially contaminate the construction area, or spill or leak, include lead-based paint flakes, diesel fuel, gasoline, lubrication oil, hydraulic fluid, antifreeze, transmission fluid, lubricating grease, and other fluids. Similar issues could occur in conjunction with facility operations.

In order to reduce potential impacts to water quality during construction and future operations, future project applicants will be required to file a Notice of Intent (NOI) to comply with the General NPDES Construction Permit and, if applicable, the General NPDES Industrial Permit. Both General Permits require the preparation of a projectspecific SWPPP that would include BMPs targeted at minimizing and controlling construction and post-construction runoff and erosion to the "maximum extent practicable." Additionally, Los Angeles County Grading Code (Title 26 of the County Code) requires the project applicant to use a qualified engineer in the site-specific application of BMPs for the project's grading plan. Additionally, as noted in Section 5.7, Hazards and Hazardous Materials, future projects would be subject to mandatory hazardous material and waste transport, storage, and disposal requirements as managed in accordance with site's hazardous materials business plan. Based on these existing regulations, including compliance with the NPDES General Construction and General Industrial Permits, combined with the site-specific application of BMPs during future project-level environmental review, impacts to storm drain systems and associated water quality impacts are considered less than significant.

Impact 5.8-6: Degradation of Water Quality

Would the project otherwise substantially degrade water quality?

As stated previously, the development of the proposed facilities in the CSE has the potential to impact water quality. Construction discharge may lead to contaminated runoff and facility operation may lead to contamination of groundwater basins. Future facilities would be required to implement SWPPP and comply with applicable NPDES permits (Table 5.8-4). The following CSE Siting Criteria would also be applicable to future facilities:

- Facilities Generating Wastewaters: Facilities should be located in areas with adequate sewer capacity to accommodate the expected wastewater discharge. If sewers are not available, on-site capture and treatment should be considered. Alternatively, wastewaters could also be transported in bulk via highways to facilities capable of treating them.
- Land Disposal Facilities: Federal and State regulations require new and expansions of existing Class III landfills to be fitted with containment structures that meet specified permeability standards. In addition, the facility must be fitted with a groundwater protection system and a leachate collection and removal system.

Adherence to Federal, State, and local regulations, including the proposed CSE Siting Criteria, would minimize impacts to water quality. Impacts to water quality are considered less than significant.

Impact 5.8-7: 100 Year Flood Hazard

Would the project be placed within a 100-year flood hazard area, which would impede or redirect flood flows, or expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

Inundation of a solid waste facility (e.g., AT) by flood waters, debris, and/or flash flooding may lead to the physical transport of wastes, possibly impacting water quality and water-dependent species. In addition, flooding interrupts the operation of the facility and could stress the leachate handling systems of a land disposal facility. As provided in Table 5.8-3, a few of the new AT facilities are located on parcels containing a flood risk zone designation. The placement of new facilities within a flood zone could affect flood flows by impeding or redirecting flooding.

Future facility siting would be required to comply with proposed CSE Siting Criteria, including:

■ Land Disposal Facilities: Federal and State regulations require new, existing, and expansions of existing Class III landfills to be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return period. In addition, the landfill must not reduce the flow of a 100-year flood or reduce the temporary storage capacity of the floodplain.

If a future facility is proposed within a floodplain, a floodplain study would be required to address FEMA or jurisdictional floodplain management requirements during the project entitlement process and final engineering. The floodplain study would investigate the hydrology of the river system and develop a hydraulic model to quantify existing and proposed water surface elevations and velocities.

Adherence to the federal, state, and local regulations, including the proposed CSE Siting Criteria, would minimize impacts of flooding and is considered less than significant.

Impact 5.8-8: Seiche, Tsunami, or Mudflow

Would the project be subject to inundation by seiche, tsunami, or mudflow?

Landscapes most susceptible to potential mudflow and/or debris flow within the project Plan Area would be associated with canyon areas and areas at the bases of mountain slopes, particularly areas that may have been recently subject to wildland fires. However, new solid waste facilities constructed as part of the Proposed Plan would be required to comply with the Siting Criteria in Appendix 6-A of the CSE by ensuring the structural stability and safety of the facility thereby minimizing or avoiding the impact of mudflows and/or debris flows. Since new facilities would generally be co-located with existing solid waste management facilities (e.g., MRFs) or compatible industrial uses in developed areas, the Plan would not exacerbate the existing threat of tsunami impacts in low lying portions of the Focus Area. Seiche is a risk associated with the creation of waves in a lake as a result of a seismic event. No facilities are planned adjacent to, or near large lakes that would present a risk of damage due to seiche. For this reason, the impact is less than significant.

5.8.5 Cumulative Impacts

The construction of the proposed facilities included in the CSE would take place throughout the County of Los Angeles. The facility proponents would need to assess the impacts of other projects in the vicinity or general area. Future facility proponents would need to investigate, quantify, and mitigate any potential impacts from their facility, including their cumulative impacts to the watershed. Proposals for future facilities would require assessment of cumulative impacts of facilities in the vicinity of the Focus Area. Similar to the future projects contemplated under the Proposed Plan, other cumulative projects must follow established regulations in regards to water quality and runoff.

The RWCQB's in the area have established Basin Plans pertaining to water quality standards and control measures for both groundwater and surface water protection. These plans identify beneficial uses for water bodies and identify water quality improvement objectives, waste discharge prohibitions, and other measures to protect these beneficial uses. Any TMDL requirements are also identified. Proponents of future development within the Focus Area would need to review the master drainage plan in the vicinity of any future facilities and their flow to the ultimate discharge of the drainage. Urban areas will have an existing drainage master plan identifying the site conditions, while other natural drainages will need assessment to further identify potential impacts to the overall system. Any deviations from existing master plan assumptions would need to be addressed in future developments.

Based on the pre-existing regulatory framework for issues relating to hydrology, flooding, and water quality, the Plan's contribution to a cumulative impact would not be cumulatively considerable and, therefore, less than significant.

5.8.6 Level of Significance Before Mitigation

Compliance with the proposed CSE Siting Criteria and applicable regulatory requirements in conjunction with future project-level environmental review would minimize or avoid direct and indirect impacts to hydrology, flooding, and water quality such that impacts would be less than significant.

5.8.7 Mitigation Measures

No mitigation measures are required to minimize or reduce impacts related to hydrology and flooding.

5.8.8 Level of Significance After Mitigation

Plan related impacts to hydrology and water quality would be less than significant and no mitigation is required.

5.8.9 References

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- County of Los Angeles. 2014a. General Plan Update EIR. Available at: http://planning.lacounty.gov/generalplan/ceqa
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5.9



Land Use and Planning



5.9 LAND USE AND PLANNING

This section analyzes the potential impacts related to land use and planning as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing land use and planning conditions within the Plan Area. Potential land use and planning impacts, including potential cumulative impacts, are considered in programmatically in the impact analysis. If applicable this section identifies proposed mitigation measures for any significant impacts.

5.9.1 Environmental Setting

This EIR incorporates by reference the land use setting for the Plan Area, as identified in Section 5.10, Land Use and Planning, of the County's General Plan and EIR. This includes the description of the 11 Planning Areas within the County and the existing land uses by Planning Area (see Figure 4-2 in Section 4 of this EIR). Additionally, descriptions of the locally adopted Area Plans for the Antelope Valley, Santa Monica Mountains North Area, and Santa Clarita Valley are incorporated by reference. Similarly, descriptions of the Santa Catalina Island Specific Plan and Local Coastal Plan (LCP) and East Los Angeles Community Plan as provided in the County General Plan Update and EIR (2015) are incorporated by reference.

As provided in Section 3.2 of Chapter 3 herein, the Plan Area includes a network of Class III minor and major Landfills, inert waste landfills, materials recovery facilities (MRF), transfer stations, and Alternative Technology (AT) Facilities that comprise the County's solid waste management system. These include one inert waste landfill, four Class III minor landfills, six Class III major landfills, 30 MRFs, 19 transfer stations, and two AT facilities. Under the Proposed Plan, these facilities would continue to operate under their permitted capacity in accordance with their approved Solid Waste Facility Permits (SWFPs).

Beyond the current permitted operations as described in Chapter 3, the Proposed Plan includes the potential for up to nine new AT facilities. These potential future projects would occur at up to nine site locations (or the EIR Focus Area) and are located within multiple cities and unincorporated areas of the County. Table 5.9-1 presents the three potential facility locations within unincorporated areas, the type of facility, and the associated General Plan land use and zoning.

The CSE Revision contemplates up to six potential site locations within cities including Carson, Santa Monica, and South Gate. Table 5.9-2 presents the six potential facility locations within each of the three cities, the type of facility, and the associated General Plan land use and zoning.

Table 5.9-1. CSE Revision - Contemplated Facilities in Unincorporated Areas

AT Site	Site Name	Land Use Plan	General Plan Land Use Zoning
AT Site #5	City Terrace MRF	East Los Angeles Community Plan	Industrial Heavy Manufacturing (M-2)
AT Site #6	CR&R Catalina	Santa Catalina Island Land Use Plan	Public Utilities and Industrial (U/I)
AT Site #9	Waste Recovery and Recycling MRF/TS	East Rancho Dominquez - Victoria Specific Plan	Heavy Industrial (IH) Heavy Manufacturing (M-2)

Table 5.9-2. CSE Revision - Contemplated Facilities in Incorporated Cities

AT Site	Site Name	Jurisdiction, General Plan Land Use and Zoning
AT Site #1	City of Carson Public Works Yard	City of CarsonHeavy IndustrialNot Listed
AT Site #2	Santa Monica Pier	 City of Santa Monica Industrial Oceanfront (OF)
AT Site #3	Santa Monica Airport	City of Santa MonicaIndustrialNot Listed
AT Site #4	Santa Monica Public Works Corps Yard	City of Monica Industrial Industrial Conservation (IC)
AT Site #7	Interior Removal Specialist, Inc.	 City of South Gate Industrial Heavy Manufacturing (M2) and Industrial Flex (IF)
AT Site #8	Carson Revitalization Project	City of Carson Heavy Industrial Not Listed

5.9.2 Existing Plans and Regulations

Federal

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was enacted by Congress in 1976 to protect human health and the environment from the potential hazards of waste disposal, conserve energy and natural resources, reduce the amount of waste generated, and ensure that wastes are managed in an environmentally sound manner. RCRA gives the Environmental Protection Agency (EPA) the authority to control hazardous waste from "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid waste.

A series of amendments to RCRA were adopted in 1984, known as the Federal Hazardous and Solid Waste Amendments, and focused on waste minimization and phasing out land disposal of hazardous waste, as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the Environmental Protection Agency (EPA), more stringent hazardous waste management standards, and a comprehensive underground storage tank program.

State

The California Integrated Waste Management Act

Assembly Bill (AB) 939 (Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) established an integrated waste-management system that focused on source reduction, recycling, composting, and land disposal of waste. AB 939 required every California city and county to divert 50 percent of its waste from landfills by the year 2000. Compliance with AB 939 is measured in part by comparing solid waste disposal rates for a jurisdiction with target disposal rates. Actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years of disposal capacity for all jurisdictions in the county or show a plan to transform or divert its waste.

Assembly Bill 341 (Chapter 476, Statutes of 2011) increased the statewide solid waste diversion goal to 75 percent by 2020. The law also mandates recycling for commercial and multifamily residential land uses as well as schools and school districts.

Section 5.408 of the 2013 California Green Building Standards Code (Title 24, California Code of Regulations, Part 11) requires that at least 50 percent of the non-hazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

Senate Bill 1000 (Amendment to the State Planning and Zoning Law)

The State's Planning and Zoning Law requires the legislative body of each county and city to adopt a comprehensive, long-term general plan for the physical development of the county or city and of any land outside its boundaries that bears relation to its planning. That law requires this general plan to include several elements, including, among others, a safety element for the protection of the community from unreasonable risks associated with the effects of various geologic hazards, flooding, wildland and urban fires, and climate adaptation and resilience strategies.

SB 1000 adds to the required elements of the general plan by requiring the inclusion of an environmental justice element, or related goals, policies, and objectives integrated in other elements, that identifies disadvantaged communities, as defined, within the area covered by the general plan of the city or county, if it contains a disadvantaged community. The bill would also require the environmental justice element, or related environmental justice goals, policies, and objectives integrated in other elements, to identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities, as specified, identify objectives and policies to promote civil engagement in the public decision-making process, and identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.

The County is in the process of addressing the requirements of SB 1000 for unincorporated areas of the Plan Area. Local municipalities, containing disadvantaged populations, are also in the process of integrating these requirements into their respective general plans.

Local

This EIR incorporates by reference the General Plan policies from the County's recently adopted General Plan EIR.

County of Los Angeles General Plan

Los Angeles County recently adopted an update to its General Plan in 2015. The General Plan's Land Use and Planning and Public Services and Facilities Element includes policies adopted for the purposes of avoiding or mitigating adverse environmental impacts to land use. Applicable General Plan policies are identified below for the reader's benefit.

Public Services and Facilities (PS/F) Element

 Policy PS/F 5.3: Discourage incompatible land uses near or adjacent to solid waste disposal facilities identified in the Countywide Integrated Waste Management Plan.

Construction and Demolition Debris Recycling and Reuse Ordinance

The County of Los Angeles Board of Supervisors adopted the Construction and Demolition Debris Recycling and Reuse Ordinance on January 4, 2005. The Ordinance added Chapter 20.87 to the Los Angeles County Code, which requires projects in the unincorporated areas to recycle or reuse 50 percent of the debris generated for the project. Its purpose was to increase the diversion of construction and demolition debris from disposal facilities and to assist the County in meeting the State of California's 50 percent waste reduction mandate.

Los Angeles County Land Use Compatibility Plan

The Los Angeles County Land Use Compatibility Plan sets forth land use compatibility policies applicable to future development in the vicinity of the airport (Los Angeles County ALUC 2004). The policies are designed to ensure that future land uses in the surrounding area will be compatible with potential long range aircraft activity at the airport. As adopted by the Los Angeles County Airport Land Use Commission (ALUC), these policies provide the basis by which the Commission can carry out its land use development review responsibilities in accordance with the California State Aeronautics Act (Section 21670 et seq. of the Public Utilities Code) (Los Angeles County ALUC 2004). The Santa Monica Airport site (AT Site #3) is within Santa Monica Airport's influence area, and is therefore subject to the Los Angeles County Land Use Compatibility Plan. The airport is scheduled to shut down in 2028.

Santa Catalina Island Local Coastal Program

The California Coastal Act of 1976 sets forth a requirement to establish policies to guide new development and to improve public access to coastal areas through the approval of a LCP. The Santa Catalina LCP, which addresses the island's unincorporated territory, ensures that the vast majority of the island will remain in its present natural state for future generations to enjoy by establishing detailed land use policy and development standards within its respective zone. Island resources, such as Significant Ecological Area (SEA) designations, are identified in the LCP and are subject to restrictive development regulations. Any changes to the SEA boundaries or associated regulations require an amendment to the LCP and certification by the California Coastal Commission. Additionally, in accordance with the California Coastal Act, all development within the coastal zone must obtain a Coastal Development Permit from the California Coastal Commission.

Other Jurisdictions

In addition to the County, the CSE Revision contemplates up to six potential site locations within cities including Carson, Santa Monica, and South Gate. Three potential site locations are within unincorporated areas in the County. Each of the cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to land use and planning. Depending where future facilities are located, local plans and policies would be applicable to those facilities.

5.9.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to land use and planning would be considered significant if the project was determined to:

- Physically divide an established community.
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

5.9.4 Environmental Impacts

Countywide Siting Element Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, AT facilities, and alternatives to landfill technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County will maintain sufficient solid waste disposal capacity over the next 15 years (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to land use and planning; however, depending on phasing and implementation, certain policies may result in project-level impacts through existing facility construction activities or construction of new facilities.

Countywide Siting Element Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste AT or land disposal facilities or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to land use and planning. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County for review and approval.

Impact 5.9-1: Division of an Established Community

Would the project physically divide an established community?

The Proposed Plan includes the potential for up to nine new AT facilities. These facilities would be located within multiple cities and unincorporated areas of the County. Each of the solid waste facilities must have land use approval from the jurisdiction in which it resides. As stated in Appendix 6A of the Siting Criteria, facilities should be located where the zoning and existing land use is compatible with the proposed use. As proposed and presented in Chapter 3, new solid waste disposal facilities proposed under the Plan would be co-located with existing solid waste management facilities (e.g., MRFs) or compatible industrial uses in developed areas. As a result, new facilities developed pursuant to the Proposed Plan would be located in areas zoned for heavy manufacturing, industrial, utilities, and public uses. These facilities would not be sited near or adjacent to residential uses (as defined by the jurisdiction with discretionary approval), which could otherwise physically divide an established community. In this context, this impact is less than significant.

Impact 5.9-2: Conflict with Applicable Plan, Policy, or Regulation

Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The Proposed Plan is a countywide long-term (15 years) planning and policy document which identifies the proposed management strategy for the disposal of solid waste generated within the County during that time period. In accordance with the County of Los Angeles Countywide Integrated Waste Management Plan, the Proposed Plan includes new or expanded solid waste facilities to accommodate the County's solid waste disposal needs through 2033. These facilities could include up to nine new AT facilities, which would be constructed within unincorporated and incorporated (cities) portions of the County. Prior to developing these facilities, the local jurisdiction would be responsible for evaluating each individual project based on the application information submitted for compliance with laws, rules, and regulations of the residing jurisdictions (including, but not limited to the general plan, specific plan, local coastal program, redevelopment plan, interim control ordinance, habitat/community conservation plan, and zoning ordinance).

Under CEQA, the focus of planning consistency is oriented towards whether the Proposed Plan or a policy contained within the Plan is in conflict with other plans or policies adopted for the purpose of avoiding or mitigating a significant environmental effect. For example, if a new facility were proposed in or near a residential land use or school and determined to result in an adverse effect as a result of facility operations (e.g., noise, traffic, odor, etc.) a conflict would be identified. In the case of the Proposed Plan, a combination of features are included to avoid potential conflicts. First, the Proposed Plan co-locates new facilities at existing solid waste facilities or compatible industrial uses in developed areas that contain the appropriate zoning and supporting infrastructure (e.g., roads, offices, scales, maintenance buildings, etc.). Second, future facilities would be required to comply with the Siting Criteria in Appendix 6A of the CSE, including but not limited to the following:

- Conform with local land use and zoning requirements of a county or city planning agency.
- Prohibit land disposal facilities within 10,000 feet of airport runways used by turbojet aircraft and 5,000 feet of airport runways used by piston aircraft.
- Locate new facilities in areas with sufficient sewer capacity.
- Facilities located in agricultural areas are required to obtain a use permit from the local jurisdiction.
- Centrally locate new facilities within the wasteshed being served.
- If an amendment to a General Plan is required the proposed facility must be found in conformance with the Proposed Plan through a finding of conformance by the County Solid Waste Management Subcommittee and Integrated Waste Management Task Force.

As provided in Table 5.9-1 and 5.9-2, each of the AT sites are located on properties that are generally in conformance with the above criteria. However, given the programmatic nature of this analysis, the precise placement of the AT facilities is not currently known. In addition, notwithstanding conformance with a site's zoning, the location of the AT sites are such that localized, non-confirming land uses, including residences, continue to exist in relatively close proximity (e.g. 500 feet) to multiple AT sites. Further, a majority of these communities contain high CalEnviroScreen Scores¹ (CalEPA 2017). As a result and

¹ The overall CalEnviroScreen score is calculated by multiplying the Pollution Burden and Population Characteristics scores. Since each group has a maximum score of 10, the maximum CalEnviroScreen Score is 100. The geographic areas are ordered from highest to lowest, based on their overall score. A percentile for the overall score is then calculated from the ordered values. As for individual indicators, a geographic area's overall CalEnviroScreen percentile equals the percentage of all ordered CalEnviroScreen scores that fall below the score for that area.

depending on the specific technologies employed at each of the contemplated AT sites, the placement could increase the pollution burden in these communities and/or sources of odor.

Adherence to Federal, State and local regulations, including the CSE Siting Criteria and local environmental justice policies, as they are adopted, would minimize conflicts with the applicable jurisdiction's General Plan. Based on the existing regulatory framework in place combined with the co-locating of new facilities at existing solid waste management facilities or compatible industrial uses in developed areas, impacts related to on-site plan consistency and zoning are less than significant. Notwithstanding these considerations, the placement of these facilities could still result in indirect, health risk and/or odor impacts to locally disadvantaged communities in the immediate vicinity. This impact would be significant and, therefore, Mitigation Measures AQ-2 and AQ-.3 are proposed to minimize the potential localized health risk and odor impacts resulting from each AT facility.

Impact 5.9-3: Habitat Conservation Plan

Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

As proposed in Chapter 3, new solid waste disposal facilities proposed under the Plan would be co-located with existing solid waste management facilities (e.g., MRFs) or compatible industrial uses in developed areas. In general, the Proposed Plan avoids areas included within an adopted habitat conservation plan (HCP) or natural communities conversation plan (NCCP).

The proposed Siting Criteria in Appendix 6A, Table 6A-2 requires that new facilities not be placed in habitats of threatened or endangered species unless the local land use authority determines that the future project does not pose a substantial threat to the resource. Further, the proposed Siting Criteria requires the avoidance of County-designated Sensitive Ecological Areas (SEAs) unless the applicant is able to demonstrate project-compatibility. Based on the existing regulatory framework in place combined with the co-locating of new facilities at existing solid waste management facilities or with compatible industrial uses in developed areas, potential conflicts with adopted HCP and NCCP would be avoided and no impact would result.

5.9.5 Cumulative Impacts

Consistency with applicable land use plans would be determined on a facility-by-facility basis and would also take into consideration the existing and proposed development (other cumulative projects) at the time an application is filed. The ability for the project and the future facilities to contribute to a cumulative land use impact will be dependent upon the siting of the future facilities, what the applicable General Plan and zoning is for the site, and what the surrounding uses are. Additionally, other projects proposed or under construction in the vicinity of the future facilities would be considered. Due to the long-range planning nature of the Proposed Plan, project analysis makes it difficult to provide a specific cumulative impact analysis. However, the Proposed Plan must be in compliance with the Siting Criteria and other Federal, State and local regulations which when implemented would minimize any impacts to less than significant.

5.9.6 Level of Significance Before Mitigation

No significant land use and planning impacts have been identified.

5.9.7 Mitigation Measures

Mitigation Measures AQ-2 and AQ-3 as presented in Section 5.2 of the EIR are proposed to address potential conflicts with residential land uses in close proximity to one or more AT sites.

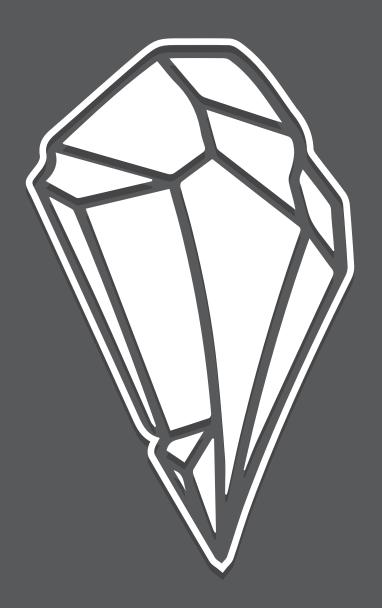
5.9.8 Level of Significance After Mitigation

No significant land use and planning impacts have been identified.

5.9.9 References

- California Environmental Protection Agency (CalEPA) 2017. Update to the California Communities Environmental Health Screening Tool. January 2017
- County of Los Angeles, Department of Regional Planning, 2015. General Plan 2035. Available at http://planning.lacounty.gov/generalplan/generalplan. Accessed April 20, 2016.
- Los Angeles County Airport Land Use Commission. 2004. Accessed May 17, 2015. http://planning. lacounty.gov/assets/upl/project/aluc_fox-lucp.pdf

5.10



Mineral Resources



5.10 MINERAL RESOURCES

This section analyzes the potential impacts related to mineral resources as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing mineral resource conditions within the Plan Area. Potential mineral resources impacts, including potential cumulative impacts, are considered programmatically in the impact analysis. If applicable, this section identifies proposed mitigation measures for any significant impacts.

5.10.1 Environmental Setting

Mineral Resources

Mineral resources are commercially-viable aggregate or mineral deposits, such as sand, gravel, and other construction aggregate. California is the largest consumer of sand and gravel in the country, but is also a major producer, generating approximately one billion dollars-worth of these mineral resources annually. The Los Angeles metropolitan area produces and consumes more construction aggregate than any other metropolitan area in the country. A continuous supply of aggregate materials for urban infrastructure is essential to the Southern California economy.

The County depends on the California Geological Survey to identify deposits of regionally-significant aggregate resources. These clusters or belts of mineral deposits are designated as Mineral Resource Zones (MRZ-2s). Four major MRZ-2s are identified in or partially within the unincorporated areas and are shown in Table 5.10-1: Little Rock Creek Fan, Soledad Production Area, Sun Valley Production Area, and Irwindale Production Area. The Soledad and Little Rock Creek MRZ-2s contain significant deposits that are estimated to provide for future needs through the year 2046. However, the Sun Valley MRZ-2 is near depletion, and the Irwindale MRZ-2 is expected to approach depletion in 2017 (County of Los Angeles 2015).

Based on a review of MRZ maps for the Plan Area utilizing the County's GIS-NET3 interactive geographic information system (GIS) web mapping application, none of the site locations within the Focus Area are located within an MRZ.

Table 5.101. Geologic Inventory of Mineral Resources in Los Angeles County

Production Region	Aggregate Reserves as of 1999	Per Capita Consumption Rates	Estimated Depletion Year
Irwindale Production Area	250 Million Tons	4.0 Tons	2017
Little Rock Creek Fan	250 Million Tons	12.7 Tons	2046
Soledad Production Area	160 Million Tons	9.9 Tons	2046
Sun Valley Production Area	20 Million Tons	2.4 Tons	Near depletion

Source: County of Los Angeles 2015

Oil and Natural Gas

California has 51,776 oil wells in production (California Department of Conservation 2009). In the Los Angeles Basin area, oil field properties offer one of the few open areas still available for development. The conditions of oilfield properties vary, with some in heavily urbanized areas, hillsides, and in coastal zones. Individual lots containing plugged or abandoned oil wells are often the last oilfield areas to be developed. There are numerous oil fields located throughout the Plan Area. Oil fields are located parallel to and along the coast line from Ventura County to the Newport Beach area. Additional pockets of oil fields are located west of the City of Los Angeles in the Beverly Hills area,

south in the Inglewood and Rosecrans area, and in the area of Montebello extending east to the City of Corona. There are no existing oil and gas wells in the vicinity of the Focus Area.

Geothermal Resources

According to the Department of Conservation, Division of Oil, Gas, and Geothermal Resources' (DOGGR's) Online Mapping System (DOMS), the Plan Area generally corresponds with Geothermal District G2. The area of Desert Hot Springs is identified as the closest geothermal field to the Plan Area.

5.10.2 Existing Plans and Regulations

State

Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act (SMARA), Chapter 9, Division 2 of the Public Resources Code (PRC), requires the State Mining and Geology Board to adopt State policy for the reclamation of mined lands and the conservation of mineral resources. These policies are prepared in accordance with the Administrative Procedures Act, (Government Code) and are found in California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1.

The SMARA Act of 1975 (PRC Sections 2710-2796) provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the state's mineral resources. The State Mining and Geology Board is also granted authority and obligations under the following statues:

- PRC Section 2207 provides annual reporting requirements for all mines in the state
- PRC Section 2208: Site Inspections Conducted by the Department of Conservation.
- PRC Section 10295.5 (a)-(e) and 20676 (a)-(c): Purchase and Use of Mined Materials by State and Local Agencies.
- Water Code Section 13397 et seq.: Liability Limitations for Remediation/ Reclamation of Abandoned Mines.

Mineral Land Classification System

To implement Article 4, Section 2761b of SMARA, the State Geologist developed the Mineral MRZ nomenclature and criteria based on the California Mineral Land Classification System. The four major divisions are:

- 1. Areas of Identified Mineral Resource Significance;
- 2. Areas of Undetermined Mineral Resource Significance;
- 3. Areas of Unknown Mineral Resource Significance; and
- **4.** Areas of No Mineral Resource Significance.

The divisions between these major "knowledge" categories marks the divisions between areas classified MRZ-1, MRZ-2, MRZ-3, and MRZ-4.

Department of Conservation, Division of Oil, Gas, and Geothermal Resources

DOGGR is charged with implementing Section 3208.1 of the PRC. DOGGR oversees the drilling, operation, maintenance, and closing of oil, natural gas, and geothermal wells. The division is intended to protect the environment, prevent pollution, and ensure public safety (DOGGR 2013a). It functions as an information repository but also regulates oil and gas extraction activities consistent with state regulations that include Section 3000 et seq. of the State PRC and Title 14, Division 2, Chapter 4 of the California Code of Regulations. These codes include provisions regulating the distribution of oil wells.

Before issuing building or grading permits, local permitting agencies review and implement the DOGGR's preconstruction well requirements. Interaction between local permitting agencies and DOGGR helps resolve land use issues and allows for responsible development in oil and gas fields. Additionally, DOGGR developed the Construction-Site Plan Review Program to assist local permitting agencies in identifying and reviewing the status of oil or gas wells located near or beneath proposed structures.

Conservation of Geothermal Resources

California laws for the Conservation of Geothermal Resources, Division 3, Chapter 4, of the PRC governs the regulation of geothermal operations. These laws are based on the determination that the citizens of the State of California have a direct and primary interest in the development of geothermal resources. The State of California, through the authority vested in the State Oil and Gas Supervisor, should exercise its power and jurisdiction to require that wells for the discovery and production of geothermal resources be drilled, operated, maintained, and abandoned in such manner as to safeguard life, health, property, and the public welfare, and to encourage maximum economic recovery.

Local

This EIR incorporates by reference the General Plan policies from the County's recently adopted General Plan EIR (2015).

Los Angeles County General Plan

Los Angeles County recently adopted an update to its General Plan in 2015. The General Plan's Conservation and Natural Resources and Safety Element includes policies adopted for the purposes of avoiding or mitigating adverse environmental impacts to mineral resources. Applicable General Plan policies are identified below.

Conservation and Natural Resources (C/NR) Element

■ Policy C/NR 10.1: Protect MRZ-2s and access to MRZ-2s from development and discourage incompatible adjacent land uses.

Community Standards Districts

Community Standards Districts (CSDs) are established by the County as supplemental districts to implement special development standards. CSDs also provide a means of addressing issues that are unique to certain geographic areas within the County. Chapter 22.44 of the County Code contains development standards for the Baldwin Hills CSD and West Rancho Dominguez-Victoria CSD related to regulation of oil and natural gas facilities. Provisions for the Baldwin Hills CSD specifically state that its associated standards are intended, in part, to ensure that oil field operations are "conducted in harmony with adjacent land uses."

Other Jurisdictions

In addition to the County, the CSE Revision contemplates up to six potential site locations within cities including Santa Monica, Carson, and South Gate. Three potential site locations are within unincorporated areas in Los Angeles County. Each of these

cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to mineral resources. Depending where future facilities are located, local plans and policies would be applicable to those facilities.

5.10.3 Thresholds of Significance

As identified in Appendix G of the CEQA Guidelines, project impacts with regards to mineral resources would be considered significant if the project was determine to:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Issues Requiring No Further Evaluation

Following the application of the significance criteria identified above, the following criteria require no further consideration based on the actions proposed in Chapter 3. These criteria are not applicable to the actions described in Chapter 3 or would have no impact.

Loss of Availability of a Known Mineral Resource: None of the potential site locations located within the Focus Area are located within a delineated MRZ.

5.10.4 Environmental Impacts

CSE Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, AT facilities, and alternatives to landfill technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County will maintain sufficient solid waste disposal capacity over the next 15 years (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to mineral resources. However, depending on phasing and implementation, certain policies may result in project-level impacts through existing facility construction activities or construction of new facilities.

CSE Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste AT or land disposal facilities or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to mineral resources. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County for review and approval.

Impact 5.10-1: Locally Important Mineral Resource Recovery Site

Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The potential for future facilities to result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan is dependent upon where these facilities are sited. Any future facility located in an area supporting oil or gas wells would require coordination with DOGGR. The local permitting agency in coordination with DOGGR would conduct a Construction Site Review. Compliance with the DOGGRs requirements would minimize the potential for impacts to mineral resources. As a result, this impact is less than significant.

5.10.5 Cumulative Impacts

Depending on the location of future facilities, as well as other projects that are proposed in the vicinity, and their relationship to valuable mineral resources sites, there could be a cumulative impact on mineral resources. Preliminary studies found that the proposed facilities are not located within a delineated MRZ and would not result in the loss of availability of locally important mineral resources. Due to the long-range planning nature of the Proposed Plan, it is difficult to provide a specific cumulative analysis and further CEQA analysis might be required at the project-level. At the program level, adherence to Federal, State, and local regulations would minimize any cumulative impacts such that they would not be cumulatively considerable or significant.

5.10.6 Level of Significance Before Mitigation

Compliance with applicable regulatory requirements would reduce the potential for impacts to mineral resources to less than significant.

5.10.7 Mitigation Measures

No mitigation measures are required.

5.10.8 Level of Significance After Mitigation

No significant mineral resources impacts are identified that would otherwise require mitigation.

5.10.9 References

- County of Los Angeles, Department of Regional Planning. 2015. General Plan 2035. Chapter 9 Conservation and Natural Resources Element. Accessed April 20, 2016.
- Department of Conservation, State Mining and Geology Board Guidelines, Classification and Designation of Mineral Lands. Accessed February 16, 2016. http://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf
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- Department of Conservation, Division of Oil, Gas & Geothermal Resources, Well Finder GIS Database. Accessed February 17, 2016. http://maps.conservation.ca.gov/doggr/#close



5.11



Noise



5.11 NOISE AND VIBRATION

This section analyzes the potential impacts related to noise and vibration as a result for adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing noise and vibration conditions within the Plan Area. Potential noise and vibration impacts, including potential cumulative impacts, are considered in programmatically in the impact analysis. If applicable this section identifies proposed mitigation measures for any significant impacts.

5.11.1 Environmental Setting

This EIR incorporates by reference the noise setting for the Plan Area as identified in Section 5.12 of the County's General Plan EIR.

Noise Descriptors

The following are brief definitions of terminology used in this section:

- Sound: A disturbance created by a vibrating object, which when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
- Noise: Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- **Decibel (dB):** A unit of level that denotes the ratio between two quantities that are proportional to power. The number of decibels is 10 times the logarithm (base 10) of this ratio which has a reference quantity in the denominator. For sound pressure decibels, the reference quantity is 20 micropascals (µPa).
- A-Weighted Decibel (dBA): An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- Equivalent Continuous Noise Level (Leq): The mean of the noise level, energy averaged over the measurement period.
- Statistical Sound Level (Ln): The sound level that is exceeded "n" percent of time during a given sample period. For example, the L50 level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period), which is half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the "median sound level." The L10 level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the "intrusive sound level." The L90 is the sound level exceeded 90 percent of the time and is often considered the "effective background level" or "residual noise level."
- Day-Night Sound Level (Ldn or DNL): The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.
- Community Noise Equivalent Level (CNEL): The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the levels occurring during the period from 7:00 PM to 10:00 PM and 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.

Characteristics of Sound

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in Hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the loudness of sound is the dB. Changes of 1 to 3 dB are detectable under quiet, controlled conditions and changes of less than 1 dBA are usually

indiscernible. A 3 dB change in noise levels is considered the minimum change that is detectable with human hearing in outside environments. A change of 5 dB is readily discernible to most people in an exterior environment whereas a 10 dBA change is perceived as a doubling (or halving) of the sound.

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all and are "felt" more as a vibration. Similarly, while people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz. Since the human ear is not equally sensitive to sound at all frequencies, a special frequency dependent rating scale is usually used to relate noise to human sensitivity. The dBA performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise is defined as unwanted sound, and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, the State of California, and many local governments have established noise criteria to protect public health and safety and to prevent disruption of certain human activities.

Measurement of Sound

Sound intensity is measured through the A-weighted measure to correct for the relative frequency response of the human ear. In other words, an A-weighted noise level deemphasizes low and very high frequencies of sound similar to the human ear's deemphasis of these frequencies.

Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale, representing points on a sharply rising curve. This logarithmic scale is used to better account for the large variations in pressure amplitude (the above range of human hearing, 0 to 140 dBA, represents a ratio in pressures of 100 trillion to one). All noise levels in this study are relative to the industry-standard pressure reference value of 20 micropascals. Because of the physical characteristics of noise transmission and perception, the relative loudness of sound does not closely match the actual amounts of sound energy.

In practical application, an increase of 10 dB is 10 times more intense than 1 dB, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud). To help relate noise level values to common experience, Table 5.11-1 shows typical noise levels from noise sources.

Table 5.11-1. Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 9o —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	- 70 -	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 6o —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher next room
		Theater, large conference room
Quiet urban nighttime	— 40 —	(background)
Quiet suburban nighttime		
	— 3o —	Library
Quiet rural nighttime		Bedroom at night, concert
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	-0-	Lowest threshold of human hearing

Source: Caltrans, Technical Noise Supplement, November 2009.

Sound levels are generated from a source and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. This phenomenon is known as "spreading loss." For a single point source, sound levels decrease by approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by onsite operations from stationary equipment or activity at a project site. If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dB for each doubling of distance in a hard site environment. Line source noise in a relatively flat environment with absorptive vegetation decreases by 4.5 dB for each doubling of distance.

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called Leq), or alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L50 noise level represents the noise level that is exceeded 50 percent of the time. Half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L2, L8 and L25 values represent the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5,

and 15 minutes per hour. These "L" values are typically used to demonstrate compliance for stationary noise sources with a given city's or county's noise ordinance, as discussed below. Other values typically noted during a noise survey are the Lmin and Lmax. These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law and most local jurisdictions (including the County of Los Angeles [County]) require that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the CNEL or Ldn. The CNEL descriptor requires that an artificial increment of 5 dBA be added to the actual noise level for the hours from 7:00 PM to 10:00 PM and 10 dBA for the hours from 10:00 PM to 7:00 AM. The Ldn descriptor uses the same methodology except that there is no artificial increment added to the hours between 7:00 PM and 10:00 PM. Both descriptors give roughly the same 24-hour level with the CNEL being only slightly more restrictive (i.e., higher).

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects our entire physiological system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, and thereby affecting blood pressure, functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA could result in permanent hearing damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 190 dBA will rupture the eardrum and permanently damage the inner ear.

Vibration Fundamentals

Vibration is a trembling, quivering, or oscillating motion of the earth. Like noise, vibration is transmitted in waves, but in this case through the earth or solid objects. Unlike noise, vibration is typically of a frequency that is felt rather than heard.

Vibration can be either natural as in the form of earthquakes, volcanic eruptions, sea waves, landslides, or manmade as from explosions, the action of heavy machinery or heavy vehicles such as trains. Both natural and manmade vibration may be continuous such as from operating machinery, or transient as from an explosion. The way in which vibration is transmitted through the earth is called propagation. Propagation of earthborn vibrations is complicated and difficult to predict because of the endless variations in the soil through which waves travel. There are three main types of vibration propagation: surface, compression and shear waves. Surface waves, or Raleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or "side-to-side and perpendicular to the direction of propagation."

As vibration waves propagate from a source, the energy is spread over an ever-increasing area such that the energy level striking a given point is reduced with the distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. Wave energy is also reduced with distance as a result of material damping in the form of internal friction, soil layering, and void spaces. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

As with noise, vibration can be described by both its amplitude and frequency. Amplitude

may be characterized in three ways: displacement, velocity, and acceleration. Particle displacement is a measure of the distance that a vibrated particle travels from its original position and for the purposes of soil displacement is typically measured in inches or millimeters. Particle velocity is the rate of speed at which soil particles move in inches per second or millimeters per second. Particle acceleration is the rate of change in velocity with respect to time and is measured in inches per second or millimeters per second. Typically, particle velocity (measured in inches or millimeters per second) and/or acceleration (measured in gravities) are used to describe vibration.

Vibrations also vary in frequency and this affects perception. Typical construction vibrations fall in the 10 to 30 Hz range and usually occur around 15 Hz. Traffic vibrations exhibit a similar range of frequencies; however, due to their suspension systems, buses often generate frequencies around 3 Hz at high vehicle speeds. It is less common, but possible, to measure traffic frequencies above 30 Hz.

Noise- and Vibration-Sensitive Receptors

Certain land uses are particularly sensitive to noise and vibration. These uses include residential, schools, libraries, churches, nursing homes, hospitals, and open space/recreation areas where quiet environments are necessary for enjoyment, public health, and safety. Commercial and industrial uses are generally not considered noise- and vibration-sensitive uses, unless noise and vibration would interfere with their normal operations and business activities.

Noise Setting

Los Angeles County is impacted by a multitude of noise sources. Mobile sources, especially automobiles, trucks, and trains, are the most common and significant sources of noise in most communities and the predominant source of noise in Los Angeles County. Major sources of transportation noise include a large number of highways and rail lines that traverse unincorporated areas. In addition, commercial, industrial, and institutional land uses (i.e., schools, fire stations, utilities) throughout Los Angeles County generate stationary-source noise. These different classes of noise sources are discussed in more detail in the following subsections.

Local Noise

For the County General Plan EIR (2015), ambient noise measurement data from several recent project studies within the County were compiled. The data found that energy-average (Leq) community noise levels are most often in the range of low-60's to low-70's dBA. Maximum (Lmax) sound levels and the similar intrusive sound levels (L10) can often reach into the mid- to upper-80s dBA; depending on the proximity to heavily traveled roadways and/or other, major noise sources. These sample data for ambient conditions are judged to be typical for primarily developed areas within a large, metropolitan region. As such, they inherently include noise from traffic along major roadways, traffic at busy intersections, movements along commuter and freight rail lines, and aircraft flyovers.

Military Installations and Operations Areas

The County includes several military installations that contribute to the noise environment in the unincorporated areas. The U.S. Department of Defense is responsible for thousands of acres within Los Angeles County, including installations and facilities. Coordination between the County and U.S. Department of Defense is important to ensure compatibility between military installations and operation areas, and adjacent land uses. The management of natural resources within the military installations and operation areas are described in greater detail in the Conservation and Natural Resources Element (Los Angeles County General Plan 2015).

Although much of the Antelope Valley Planning Area consists of undeveloped land, a substantial portion of this land is used for military operations. Noise from military installations would primarily be related to aircraft operations and, secondarily, to ground-

based activities involving vehicle movements and/or weapons training. In general, noise from military installations is exempt from the purview of local jurisdictions, such as cities or counties.

Rail Noise

The County has an extensive rail network that is focused on the efficient and safe movement of people and goods throughout the region. For transporting people via rail lines, there are three systems that operate within the County: Metro, Metrolink, and Amtrak.

The Los Angeles County Metropolitan Transportation Authority (Metro) operates the Metro rail system, which is exclusively within the County. The Metro rail system consists of the following lines: Red, Purple, Blue, Green, Gold, and Expo. The hub of the system is in Downtown Los Angeles at Union Station. The Metro lines that primarily serve the unincorporated areas include the Metro Blue, Green, and Gold Lines. Two additional rail service operators that provide services in the County are Metrolink and Amtrak. The Southern California Regional Rail Authority (SCRRA) operates the 416-mile Metrolink commuter rail system, which has its hub in Downtown Los Angeles at Union Station and extends to Ventura, San Bernardino, Riverside, Orange, and San Diego counties, and serves some of the unincorporated areas. Amtrak provides interstate service from points around the country to Union Station, as well as regional service between major cities throughout California.

For the movement of goods, the Southern Pacific Railway and the Union Pacific Railway operate between the ports of Los Angeles and Long Beach and the central Los Angeles freight yard transfer stations, with connections onward to the transcontinental rail network.

In general, noise from rail operations, both for people and goods movement, is under the jurisdiction of the Federal Railroad Administration (FRA) who sets forth and enforces safety standards, including noise emissions for railroad locomotive cabs, at-grade crossing bells, and locomotive warning horns.

Aircraft Noise

Los Angeles County includes approximately 15 public- and private-use airports that contribute to the noise environment. In general, community-based annoyance reactions to airport noise increases as the noise environment increases.

Communities with the strongest reaction from airport noise are those with homes and businesses that lie beneath the flight path of major airports, such as Santa Monica Airport and Los Angeles International Airport (LAX). Noise from aircraft and airports is regulated by the Federal Aviation Administration (FAA).

Vibration

The primary existing sources of vibration within Los Angeles County are rail and truck traffic. Perceptible vibration levels may be caused by train pass-bys in areas adjacent to the railroad lines. Also, heavy trucks hitting discontinuities in the pavement from gaps and potholes can cause potentially troublesome vibration effects. Under normal conditions with well-maintained asphalt, vibration levels are usually not perceptible beyond the road right-of-way. There are no known major sources of vibration, such as heavy industrial equipment, that would cause substantial levels of vibration to nearby sensitive uses.

On-Road Vehicles

By far, the largest single source of community noise within Los Angeles County is the flow of traffic on major roadways. Motor vehicle noise is generated by engine vibrations, the interaction between tires and the road, and the exhaust system. Reducing the average motor vehicle speed reduces the noise exposure of receptors adjacent to the road. Each reduction of five miles per hour reduces noise by about 1.3 dBA.

In order to assess the potential for mobile-source noise impacts, it is necessary to determine the noise currently generated by vehicles traveling through the Focus Area. The results of modeling conducted for the Los Angeles County General Plan EIR (2015) indicated that average noise levels along arterial segments ranged from approximately 46 dBA to 79 dBA CNEL as calculated at a distance of 100 feet from the centerline of the road.

Stationary Sources of Noise

Whereas mobile-source noise affects many receptors along an entire length of roadway, stationary noise sources affect only their immediate areas. Stationary sources of noises may occur from all types of land uses. Residential uses would generate noise from landscaping, maintenance activities, and air conditioning systems. Commercial uses would generate noise from heating, ventilation, air conditioning (HVAC) systems, loading docks and other sources. Industrial uses may generate noise from HVAC systems, loading docks, and, possibly, machinery; all of which may be on a more continual basis due to the nature of the particular activities¹. Also, noise from at-grade railroad crossing bells and/or train warning horns, both regulated by the Federal Railway Administration, can generate notable noise levels near the crossings.

Noise generated by residential, commercial, and school uses is generally short and intermittent. Schools are considered noise-sensitive because of the necessity for quiet in the classroom to provide an adequate environment for learning. However, outdoor activities that occur on school campuses throughout Los Angeles County can generate noticeable levels of noise. While it is preferable to have schools in residential areas to support the neighborhood, noise generated on both the weekdays (by physical education classes and sports programs) and weekends (by use of the fields by youth organizations) can elevate noise levels. Noise from stationary sources is regulated through the County Code (described above).

5.11.2 Existing Plans and Regulations

Federal

Noise Control Act of 1972 (42 US Code 4910)

The Noise Control Act of 1972 (42 US Code [USC] 4910) is a national policy which promotes an environment for all Americans free of noise that jeopardizes their health and welfare. The Noise Control Act of 1972 serves to establish a means for:

- 1. Effective coordination of Federal research and activities in noise control;
- **2.** The establishment of Federal noise emissions standards for products distributed in commerce; and
- **3.** Providing information to the public with respect to the noise-emission and noise-reduction characteristics of such products.

United States EPA Recommendations in "Information on Levels of Environmental Noise Requisite to Protect Health and Welfare with an Adequate Margin of Safety" (NTIS 550/9-74-004, United States EPA, Washington, D.C., March 1974)

The development of noise policies and programs has been established by federal agencies and interagency committees. In response to a federal mandate, the U.S. Environmental Protection Agency (USEPA) has established general guidelines for noise levels in sensitive areas to provide state and local agencies guidance in establishing local laws, ordinances, and standards. The document containing the provisions of the guidelines is commonly referred to as the "Levels Document." This document does not

¹ Noise exposure to workers within industrial facilities is controlled by federal and state employee health and safety regulations, whereas noise levels outside of industrial and other facilities are subject to local standards.

constitute USEPA regulations or standards but identifies safe levels of environmental noise exposure without consideration of costs for achieving these levels or other potentially relevant considerations. The USEPA guidelines suggest that the average residential outdoor noise level be 55 dBA and the indoor level be 45 dBA. Most metropolitan areas in the United States have outdoor noise levels above the 55 dBA guideline. The agency is careful to stress that the recommendations contain a factor of safety and do not consider technical or economic feasibility issues and therefore should not be construed as standards or regulations.

Title 40 Code of Federal Regulations (CFR) Part 205, Subpart B

Federal regulations have established noise limits for medium and heavy trucks under Title 40 Code of Federal Regulations (CFR) Part 205, Subpart B. The federal truck pass-by noise standard is 80 dB at 50 feet from the centerline of the roadway. These standards are implemented through regulatory controls on truck manufacturers.

The federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that "noise sensitive" uses are either prohibited from being sited adjacent to a highway or that the developments are planned and constructed in such a manner that potential noise impacts are minimized. Since the federal government has pre-empted the setting of standards for noise levels that can be emitted by transportation sources, the County is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning. These are discussed further under county regulations.

Occupational Safety and Health Administration Occupational Noise Exposure; Hearing Conservation Amendment (Federal Register 48 [46], 9738-9785, 1983)

The standard stipulates that protection against the effects of noise exposure shall be provided for employees when sound levels exceed 90 dBA over an 8-hour exposure period. Protection shall consist of feasible administrative or engineering controls. If such controls fail to reduce sound levels to within acceptable levels, personal protective equipment shall be provided and used to reduce exposure of the employee. Additionally, a Hearing Conservation Program must be instituted by the employers whenever employee noise exposure equals or exceeds the action level of an 8-hour time-weighted average sound level of 85 dBA. The Hearing Conservation Program requirements consist of periodic area and personal noise monitoring, performance and evaluation of audiograms, provision of hearing protection, annual employee training, and record keeping.



State

State of California Building Code (Title 24, Building Standards Administrative Code, Part 2)

The State of California's noise insulation standards are codified in the California Code or Regulations, Title 24, Building Standards Administrative Code, Part 2, California Building Code. These noise standards are applied to new construction in California for the purpose of interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

California Noise Control Act of 1973

The California Health and Safety Code established the California Noise Control Act of 1973 (§46000 et seq.) to "establish and maintain a program on noise control." This act mirrors the federal Noise Control Act of 1972 and also defers the enforcement of noise emission standards to local county and city agencies.

California Government Code Section 65302 (f)

California Government Code Section 65302 (f) states that general plans must include a noise element section which identifies and appraises noise problems in the community, and recognizes the guidelines established by the Office of Noise Control. The adopted noise element should serve as a guideline for compliance with the state's noise standards. Table 5.11-2 identifies guidelines for normally acceptable, conditionally acceptable and clearly unacceptable noise levels for various land uses to be considered in general plans.



Table 5.11-2. Land Use Compatibility for Community Noise Environments



Normally Acceptable:

Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.



Conditionally Acceptable:

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. Outdoor environment may seem noisy.



Normally Unacceptable:

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made with needed noise insulation features included in the design. Outdoor areas must be shielded.



Clearly Unacceptable:

New construction or development should generally not be undertaken. Construction costs to make the indoor environment acceptable would be prohibitive and the outdoor environment would not be usable.

Source: State of California Governor's Office of Planning and Research, General Plan Guidelines, 1990.

Local

This EIR incorporates by reference the General Plan policies from the County's recently adopted General Plan EIR.

County of Los Angeles General Plan

Los Angeles County's recently adopted update to its General Plan in 2015 includes Noise Element policies for the purposes of reducing and limiting the exposure of the general public to excessive noise levels.

Noise (N) Element

- Policy N 1.1: Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts.
- Policy N 1.2: Reduce exposure to noise impacts by promoting land use compatibility.
- Policy N 1.3: Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies (BAT).
- Policy N 1.4: Enhance and promote noise abatement programs in an effort to maintain acceptable levels of noise as defined by the Los Angeles County Exterior Noise Standards and other applicable noise standards.
- Policy N 1.5: Ensure compliance with the jurisdictions of State Noise Insulation Standards (Title 24, California Code of Regulations and Chapter 35 of the Uniform Building Code), such as noise insulation of new multifamily dwellings constructed within the 60 dB (CNEL or Ldn) noise exposure contours.
- Policy N 1.6: Ensure cumulative impacts related to noise do not exceed healthbased safety margins.
- Policy N 1.7: Utilize traffic management and noise suppression techniques to minimize noise from traffic and transportation systems.
- Policy N 1.9: Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 dBA CNEL and above, when unavoidable impacts are identified.
- Policy N 1.12: Decisions on land adjacent to transportation facilities, such as the airports, freeways and other major highways, must consider both existing and future noise levels of these transportation facilities to assure the compatibility of proposed uses.

The County Noise Control Ordinance (Title 12 § 12.08.010 et seq., of the Los Angeles County Code)

The County of Los Angeles is chiefly involved in maintaining the health and welfare of its residents in respect to noise through nuisance abatement ordinances and land use planning. The County Noise Control Ordinance, Title 12 of the County Code, was adopted by the Board of Supervisors in 1977 "...to control unnecessary, excessive, and annoying noise and vibration" It declared that County policy was to "...maintain quiet in those areas which exhibit low noise levels and to implement programs aimed at reducing noise in those areas within the county where noise levels are above acceptable values" (Section 12.08.010 of the County Code).

On August 14, 2001, the Board of Supervisors approved an ordinance amending Title 12 of the County Code to prohibit loud, unnecessary, and unusual noise that disturbs the peace and/or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitivity residing in the area. Regulations can include requirements for sound barriers, mitigation measures to reduce excessive noise, or the placement and orientation of buildings, and can specify the compatibility of different uses with varying noise levels, as shown in Table 5.11-3. In addition to the countywide noise ordinance, many communities address noise concerns in their individual area or community plans.

Table 5.11-3. Los Angeles County Exterior Noise Standards

Noise Zone	Designated Noise Zone Land Use (Receptor Property)	Time Interval Exterior Noise	Exterior Noise Level (dB)	
I	Noise-sensitive area, designated to ensure exceptional quiet	Anytime	45	
II Res		10:00 PM to 7:00 AM	45	
	Residential properties, zoned as such in County Code Title 22	(nighttime)		
		7:00 AM to 10:00 PM	50	
		(daytime)		
III		10:00 PM to 7:00 AM		
	Commercial properties, zoned as such in County Code Title 22	(nighttime)	55	
		7:00 AM to 10:00 PM	60	
		(daytime)		
IV	Industrial properties, zoned as such in County Code Title 22	Anytime	70	

Source: Los Angeles County 1978.

Other Jurisdictions

The Plan Area includes 88 cities in addition to the unincorporated areas. Each of these cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to noise and vibration. Depending where future facilities are located, local plans and policies would be applicable to those facilities.

5.11.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to noise and vibration would be considered significant if the project was determined to:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- For a project located within an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project Area to excessive noise levels.
- For a project within the vicinity of a private airstrip, expose people residing or working the Project Area to excessive noise levels.

Issues Requiring No Further Evaluation

- Exposure to Public or Private Airport Noise. Two of the potential alternative technology (AT) sites are located within two miles of public airports: (1) Compton/Woodley Airport, and (2) Santa Monica Airport. Based on the proposed uses and likely activities (e.g. solid waste disposal), the proximity of these potential sites to public airports is unlikely to expose people working at these locations to excessive noise levels. Additionally, the proposed Siting Criteria restricts the placement of potential facilities within 10,000 feet of a runway used by turbojet aircraft. As provided in Chapter 3, the Santa Monica Airport is scheduled for closure by 2028, within the implementation timeline for the Proposed Plan. In this context, utilization of AT Site #4 would be restricted until after the scheduled shutdown of the airport thereby eliminating any conflict with an airport runway. For these reasons, no impact would result.
- Exposure to Private Airstrip Noise. Based on a review of aerial maps, there are no future facilities proposed under the Proposed Plan that are located within two miles of a private airstrip. Therefore, people working at future facilities would not be exposed to excessive noise levels due to proximity to a private airstrip. Additionally, the proposed Siting Criteria restricts the placement of potential facilities within 510,000 feet of a runway used by piston-type aircraft. Therefore, no impact would occur.

5.11.4 Environmental Impacts

Countywide Siting Element Revision Policy and Program Analysis

The proposed Countywide Siting Element (CSE) Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternative technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County plans to maintain sufficient solid waste disposal capacity over a 15-year period (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to noise and vibration; however, depending on phasing and implementation, indirect, project-level impacts as a result of existing facility construction activities or operation could result based on future project-level analysis.

Countywide Siting Element Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste AT or land disposal facilities or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to noise and vibration. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County for review and approval.

Impact 5.11-1: Noise Levels in Excess of Standards

Would the project result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Noise standards vary within the Plan Area depending on the local jurisdiction. The potential for a future facility to exceed an adopted noise standard (interior or exterior) would vary depending on where the future facility is located, what building materials are used, what type of operation, and the uses adjacent to the future facility. Future facilities could result in short-term noise and vibration as a result of future facility construction. Long-term noise and vibration could also result from the operational activities, which can include traffic-associated noise from vehicles, as well as equipment in the facility. Potential impacts due to construction and operation are discussed below.

Construction activities for future facilities would vary depending on the type of facility, but it is assumed that some type of grading and excavating would be required to prepare the site for future landfilling or for structural foundations. In addition to earthmoving equipment, equipment would be used to construct structures and could include equipment such as cranes, concrete saws, and pneumatic tools. Construction-related traffic, including construction crew trips and material deliveries are additional sources of noise associated with facility construction. Additionally, final site preparation, including paving of travel ways and parking areas is likely to occur. Table 5.11-4 provides maximum noise levels for typical construction equipment at 50 feet from the noise source.

Table 5.11-4. Typical Construction Equipment Noise Levels

Type of Equipment	Maximum (Lmax) Level, dBA (50 feet)	
Backhoe	78	
Concrete saw	90	
Crane	81	
Excavator	81	
Front-end loader	79	
Jackhammer	89	
Paver	77	
Pneumatic tools	85	
Dozer	82	

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, 2006

During construction of future facilities, noise from construction activities could adversely affect noise-sensitive land uses if they are located in the immediate area. Most of the heavy equipment that produces the highest noise levels would be in use during the excavation and grading phases of construction, as well as during the finishing phase of construction. As provided in Tables 5.9-1 and 5.9-2 in Section 5.9 Land Use and Planning, the potential facility locations are located in areas zoned for public, heavy commercial, or industrial uses and, as a result, generally do not contain sensitive land uses. For this reason, it is unlikely that noise sensitive receivers would be located adjacent to these facilities and subject to construction-related noise. Further, the proposed Siting Criteria (CSE Table 6A-2) both restricts the placement of new facilities with incompatible zoning and encourages the incorporation of buffers or use of natural (or engineered barriers) to protect the population at large.

These combined factors would minimize any construction-related noise impacts to noise sensitive land uses through the initial facility siting process by locating future facilities in commercial and industrial zones where sensitive receivers (including but not limited to residential, schools, hospitals, senior care facilities, parks, etc.) are not present. Therefore, noise exposure from construction activities would be unlikely to exceed established noise standards for industrial zoning. This impact is considered less than significant.

Once operational, the proposed facilities have the potential to generate noise resulting from the transport of solid waste to the facility and from stationary noise-generating equipment located at the facility. The specific location of noise-generating equipment at new facilities would need to be identified and noise levels determined based on whether they are located within an enclosed building and their distance to the nearest sensitive receptor. The proposed future facilities would be subject to additional environmental review pursuant to CEQA to determine operational noise impacts. However, since the proposed facilities would be located in commercial and industrial zones, the nearest sensitive receivers would likely be at distances of greater than 1,000 feet. Therefore, noise exposure to operational equipment would not likely have a significant impact on sensitive receivers and would not likely exceed established noise standards.

The increase in traffic resulting from implementation of the project would increase the ambient noise levels at off-site locations in the vicinity of future facilities. However, at this time, the specific truck haul routes that would be utilized for transport is unknown. As the locations of the facilities are determined, a specific traffic study would be required to evaluate the incremental increase in traffic, which would then dictate the change over existing noise levels. Based on the need for future project-level review combined with the existing noise regulations in place at the County and local jurisdictions, noise impacts result from the Plan are considered less than significant.

Impact 5.11-2: Excessive Groundborne Vibration

Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Depending on the construction or operational equipment used, ground-borne vibrations can be perceptible within 30 to 100 feet of a vibration source. Structural damage from vibration typically does not occur in buildings more than 50 feet from the location of the activity (Caltrans, 2004). Pile driving typically generates the highest vibration levels and, at this time, it is not known whether pile driving would be necessary to construct the type of facilities that would be proposed under the Proposed Plan. In addition, it is likely that neighboring buildings would be located more than 100 feet away. Additionally, based on the types of land uses and associated zones affected (e.g. industrial), vibration-related annoyance to adjacent noise sensitive land uses is unlikely. Furthermore, buffer distances and/or the incorporation of barriers (e.g. topography) as proposed in the Siting Criteria would minimize the potential for vibration impacts (annoyance or damage) during the facility siting process. Therefore, impacts related to vibration levels associated with future facilities is considered less than significant.

Impact 5.11-3: Substantial Permanent Increase in Ambient Noise Levels

Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Future facilities have the potential to generate noise resulting from the on-site operations and transport of recyclables, organic materials, and municipal solid waste to and from the facilities contemplated in the CSE. The determination of whether future project-related increases in noise would be contingent on the type of operation, access routes, and the proximity of noise sensitive land uses and ambient noise environment. A project-specific noise study would be required to characterize the existing noise environment in the vicinity of the proposed site location and, if necessary, off-site locations.

Through the incorporation of buffer distances and/or physical barriers (e.g.. topography) as proposed in the Siting Criteria, permanent noise impacts would be minimized through project-specific design and engineering. By siting new facilities in areas of compatible land uses, the Plan avoids direct noise impacts on noise sensitive land uses. Compliance with the Plan as it relates to siting new facilities combined with future project-specific analysis, which may include a noise study, this impact is considered less than significant.

Impact 5.11-4: Substantial Temporary Increase in Ambient Noise Levels

Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

As noted earlier, construction-related noise levels could have the potential to exceed the construction noise standard at the property boundary depending upon where the sensitive receiving property boundary is located. Construction-related noise levels that increase existing noise levels above the construction noise standard established within the County, or pertinent jurisdiction and surrounding areas, would be considered a potentially significant impact.

However, as shown in Tables 5.9-1 and 5.9-2 (see Section 5.9 Land Use and Planning), the development of future facilities on proposed site locations pursuant to the Proposed Plan would be located in areas zoned for heavy manufacturing, industrial, and utilities. As stated in the Siting Criteria in Appendix 6-A of the CSE, "Los Angeles County prohibits construction of buildings or structures on or within 1,000 feet of a land disposal facility which contains decomposable materials/waste unless the facility is isolated by an approved natural or manmade protection system. The Cities within Los Angeles County may have similar restrictions." Based on this consideration, future facilities would be sited at distances of 1,000 feet or greater from buildings or structures. Therefore, noise exposure from construction equipment would not have a significant impact on sensitive receivers and would not exceed established noise standards. This is considered a less than significant impact.

5.11.5 Cumulative Impacts

Cumulative projects in the Los Angeles County region would have the potential to result in a cumulative noise impact if they would, in combination with regional growth in the immediate area, create excessive community noise levels. In the absence of predictive noise levels at each of the potential facility locations, which should account for ambient noise levels and cumulative traffic conditions, future project-level analysis would need to quantify existing and with-project noise levels to determine the need for any corresponding mitigation.

Further, cumulative projects under the buildout of the Proposed Plan within Los Angeles County would be required to comply with the applicable land use compatibility classification or they would not be approved without a general plan amendment. Therefore, the Proposed Plan would not contribute to a significant cumulative noise impact above and beyond what has already been identified above.

5.11.6 Level of Significance Before Mitigation

Assuming compliance with applicable regulatory requirements, noise impacts would be less than significant.

5.11.7 Mitigation Measures

No mitigation measures are required.

5.11.8 Level of Significance After Mitigation

No significant noise or vibration impacts have been identified.

5.11.9 References

- County of Los Angeles, Department of Regional Planning. 2015. General Plan 2035. Chapter 11 Noise Element. Accessed April 20, 2016.
- County of Los Angeles Municipal Code. 1987 (updated July 19, 2016). Accessed July 22, 2016. https://www.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances?nodeld=LOS_ANGELES_CO_CODE
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5.12



Population and Housing



5.12 POPULATION AND HOUSING

This section analyzes the potential impacts related to population and housing as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing population and housing conditions within the Plan Area. Potential population and housing impacts, including potential cumulative impacts, are considered in programmatically in the impact analysis. If applicable this section identifies proposed mitigation measures for any significant impacts.

5.12.1 Environmental Setting

Population

The California Department of Finance (DOF) prepares reports on population statistics and demographics throughout the State on an annual basis. Table 5.12-1 presents the most recent annual population estimates for the unincorporated areas of the County, the incorporated cities in which potential future projects could be located, and the Plan Area. The Countywide Siting Element (CSE) Revision contemplates up to six potential site locations within Carson, Santa Monica, and South Gate. The remaining three potential site locations are located in unincorporated areas of the County.

As shown in Table 5.12-2, the individual population forecasts for the unincorporated areas of the County, three incorporated cities in which potential future projects could be located, and the Plan Area are anticipated to increase in population over the next 25 years.

Table 5.12-1. Population Estimates

0 /0:	Total Po	D (C)	
County/City	1/1/2014	1/1/2015	Percent Change
County of Los Angeles (unincorporated)			0.4
City of Carson	92,677	93,148	0.5
City of Santa Monica	92,229	93,283	1.14
City of South Gate	96,101	96,547	0.5
Plan Area (all jurisdictions)	10,054,852	10,136,559	0.8

Source: California Department of Finance Table E-1, 2015.

Table 5.12-2. Population Forecasts

010:5	Population Forecasts			
County/City	2012	2020	2035	2040
County of Los Angeles (unincorporated)	1,040,700	1,106,600	1,216,100	1,273,700
City of Carson	92,000	96,100	104,200	107,900
City of Santa Monica	90,700	95,300	101,700	103,400
City of South Gate	94,700	99,300	107,300	111,800
Plan Area	9,922,600	10,326,200	11,145,100	11,514,800

Source: Southern California Association of Governments 2016

Employment

Table 5.12-3 shows the employment information provided by the California Employment Development Department (EDD) for the Plan Area and the incorporated cities in which potential future projects could be located. Table 5.12-3 shows the August 2018 preliminary data for industry employment. As shown in Table 5.12-4, Southern California Association of Governments (SCAG) projects employment in the Plan Area to grow to 5,225,800 by 2040.

Table 5.12-3. Employment Information

County/City	Number of Employed Persons
County of Los Angeles (unincorporated)	360,500
City of Carson	44,200
City of South Gate	41,000
Plan Area (all jurisdictions)	4,878,200

Source: EDD 2018

Table 5.12-4. Employment Forecasts

010:5	Employment Forecasts			
County/City	2012	2020	2035	2040
County of Los Angeles (unincorporated)	229,900	237,500	272,400	288,400
City of Carson	58,500	64,000	67,400	69,700
City of Santa Monica	89,600	95,100	99,900	103,700
City of South Gate	20,400	22,100	23,200	24,000
Plan Area	4,246,600	4,662,500	5,062,100	5,225,800

Source: Southern California Association of Governments 2016.

Housing

According to the DOF calculations for 2015, the unincorporated areas of the County, three incorporated cities in which potential future projects could be located, and the Plan Area are currently not experiencing a housing shortage. As shown in Table 5.12-5, the vacancy rate in the Plan Area is 5.8 percent. There is an average of 3.03 persons per household in the Plan Area.

It is forecasted that the unincorporated areas of the County, three incorporated cities in which potential future projects could be located, and the Plan Area will experience increased housing demands through 2040 based on an increase in population. As shown in Table 5.12-6, household projections for the Plan Area are anticipated to reach up to 3,946,600 in 2040.

Table 5.12-5 Housing Information

	Housing Information			Dougous was	
County/City	Total	Occupied	Vacancy Rate	Persons per Household	
County of Los Angeles (unincorporated)	311,272	294,397	5.4%	3.51	
City of Carson	26,123	25,334	3.0%	3.62	
City of Santa Monica	51,977	47,056	9.5%	1.90	
City of South Gate	24,253	23,368	3.6%	4.13	
Plan Area	3,487,434	3,285,160	5.8%	3.03	

Source: California Department of Finance Table E-5, 2015.

Table 5.12-6. Housing Forecasts

Communication (City	Housing Forecasts			
County/City	2012	2020	2035	2040
County of Los Angeles (unincorporated)	292,700	332,700	371,800	392,400
City of Carson	25,300	27,400	29,800	30,800
City of Santa Monica	47,100	49,000	53,400	53,900
City of South Gate	23,200	25,200	27,200	28,300
Plan Area	3,257,600	3,493,700	3,809,300	3,946,600

Source: Southern California Association of Governments 2016.

5.12.2 Existing Plans and Regulations

State

Housing Element Law

State law requires each city and county to adopt a general plan containing at least seven mandatory elements, including housing. Unlike the other general plan elements, the housing element, required to be updated every five to six years, is subject to detailed statutory requirements and mandatory review by the California Department of Housing and Community Development. Housing element law requires local governments to adequately plan to meet their existing and projected housing needs including their share of the regional housing need. A region's share of the statewide housing need is based on the Department of Finance population projections and regional population forecasts used in preparing regional transportation plans. A Regional Housing Need Plan (RHNP) allocates the region's share of the statewide need to the cities and counties within the region. The law recognizes that in order for the private sector to adequately address housing needs and demand, local governments must adopt land-use plans and regulatory schemes that provide opportunities for, and do not unduly constrain, housing development in order to meet the regional housing need identified in each Regional Housing Needs Allocation (RHNA) for each locality.

California Relocation Act

The provisions of the California Relocation Act apply if a public entity undertakes a project for which federal funds are not present. In this case, the public entity must provide relocation assistance and benefits to any private property acquisitions. Where acquisition and relocation are unavoidable, owners of private property have state constitutional guarantees that their property would not be taken or damaged for public use unless they first receive just compensation.

Local

Regional Growth Management Policies: SCAG

SCAG is recognized by the state and federal governments as the regional planning agency for the six-county south coast region that includes Los Angeles County. In 2004, SCAG adopted a voluntary regional growth strategy known as the Compass Blueprint. SCAG's Compass Blueprint is an advisory or voluntary plan that promotes mixed-use development, better access to jobs, conservation of open space, public/private

partnerships, and user-fee infrastructure financing, improving the capacity and efficiency of movement of goods, reducing vehicle miles traveled (VMT), improving air quality, improving housing availability and affordability, renovating urban cores, and creating over 500,000 high-paying jobs.

In 2012, the Regional Council of SCAG adopted the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to increase mobility for the region's residents and visitors. Furthermore, the 2012–2035 RTP/SCS commits to reducing emissions from transportation sources to comply with SB 375, improving public health, and meeting the National Ambient Air Quality Standards. The SCS envisions combining transportation and land use elements in order to achieve emissions reduction targets set by the California Air Resources Board (CARB).

Los Angeles County Housing Element

The Housing Element is one of seven mandatory elements of the County's General Plan. The Housing Element provides an overview of demographics, household, housing stock, economic, and regulatory factors affecting housing development and affordability within the County. The Housing Element sets forth a series of goals and implementing policies to address a variety of housing issues, including identifying vacant and underutilized sites to accommodate the County's RHNA. The RHNA is a state-mandated number of units by income category for which a jurisdiction must identify adequate development potential. The Los Angeles County Housing Element, 2014–2021, identifies adequate sites. It was adopted by the County Board of Supervisors and certified by the California Department of Housing and Community Development on May 1, 2014. The Housing Element will guide housing development through 2021. This time frame applies to all housing elements in the SCAG region.

Other Jurisdictions

In addition to the County, the CSE Revision contemplates up to six potential site locations within Carson, Santa Monica, and South Gate. Three potential site locations are within unincorporated areas in the County. Each of these cities has adopted General Plans and Municipal Codes which may include specific policies related to population and housing. Depending where future facilities are located, local plans and policies would be applicable to those facilities.

5.12.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to population and housing would be considered significant if the project was determined to:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

5.12.4 Environmental Impacts

Countywide Siting Element Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternative technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines

how the County plans to maintain sufficient solid waste disposal capacity over a 15-year period (through 2033). The CSE Revision does not involve any physical development or construction activity.

Countywide Siting Element Revision Facility Analysis

An essential component of the CSE Revision is to identify an area or areas for the location of new solid waste alternative technology (AT) or land disposal facilities or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have to population and housing. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County or local jurisdictions for review and approval.

Impact 5.12-1: Growth Inducement

Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The Proposed Plan responds to future projected growth within the Plan Area through a long-term strategy that provides for sufficient solid waste disposal capacity over a 15-year period through 2033. Solid waste disposal facilities are demand-response public service systems that develop in response to community growth. The Plan provides a strategy for the provision of disposal capacity as a response to the projected demand for responsible solid waste management. The Plan does not provide the actual capacity; rather future solid waste projects would provide the needed capacity in response to continued growth. In this context, future facilities would not promote new growth, but would merely respond to it on an incremental, project-by-project basis. Based on these considerations, no direct or indirect growth inducing impacts are associated with the Plan's adoption and the impact is considered less than significant.

Impact 5.12-2: Displacement of Housing

Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The development of future solid waste disposal and AT facilities within the Focus Area pursuant to the Proposed Plan would be located in areas zoned for heavy manufacturing, industrial, and utilities. Facilities that handle solid waste are not typically sited near or adjacent to residential uses as most are located in industrial or manufacturing zones. Further, it is unlikely that housing would be demolished to accommodate future facilities. However, future facilities may require acquisition of land that is privately owned and/ or that has been improved with structures, including fencing, barns, etc. If, at the time of construction, property acquisition is necessary, the County or local jurisdiction where the facility would be constructed will be required to adhere to applicable federal, state, and local laws regarding acquisition of property. This would include any compensation to displaced property owners or tenants and, if required, relocation assistance and benefits for persons who may be displaced. Pursuant to the California Relocation Act, the public entity that undertakes a project must provide relocation assistance and benefits to any private property owners displaced by acquisitions. Adherence to applicable federal, state, and local laws would minimize impacts such that they would be less than significant.

Impact 5.12-3: Displacement of Substantial Numbers of People

Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Future facilities contemplated under the Proposed Plan would be located in areas zoned for heavy manufacturing, industrial, and utilities. Facilities that handle solid waste are not typically sited near or adjacent to residential uses as most are located in industrial or manufacturing zones. Therefore, it is unlikely that people would be displaced from their homes to accommodate future facilities. However, future facilities may require acquisition of land that is privately owned and/or that has been improved with structures, including public or private residences. The Santa Monica Pier (AT Site #2), Santa Monica Airport (AT Site #3) and City of Santa Monica Public Works Corps Yard (AT Site #4) sites are located near existing residences. If, at the time of construction, acquisition is necessary, the County or local jurisdiction where the facility would be constructed will be required to adhere to applicable federal, state, and local laws regarding acquisition of property, compensation to displaced property owners or tenants, and relocation assistance and benefits for persons who may be displaced. Pursuant to the California Relocation Act, the public entity that undertakes a project must provide relocation assistance and benefits to any private property owners displaced by acquisitions. Where acquisition and relocation are unavoidable, owners of private property have state constitutional guarantees that their property would not be taken or damaged for public use unless they first receive just compensation. Adherence to applicable federal, state, and local laws would minimize the potential for displacing substantial numbers of people. As a result, this impact is less than significant.

5.12.5 Cumulative Impacts

Implementation of the Plan is not expected to have an impact related to population and housing, since future facilities are expected to be proposed in areas where no existing residences are located. Residences are not anticipated to be removed and residents are not anticipated to be displaced. The planning documents, such as County General Plan and general plans prepared by the incorporated cities, would be subject to regional plans such as SCAG's Regional Comprehensive Plan (RCP) and the RTP/SCS, similar to the Proposed Plan. Likewise, the general plans of adjacent jurisdictions have been prepared to be consistent with the population forecast of the regional planning documents. Thus, these planning documents, as adopted, would accommodate anticipated future growth, not induce new growth, similar to the Proposed Plan, which responds to the waste management needs of the future population. Thus, the Proposed Plan is not expected to contribute to a cumulatively considerable impact for population and housing.

At the time facilities are proposed, a project-level CEQA analysis will be conducted, which will include a new cumulative impact analysis for population and housing.

5.12.6 Level of Significance Before Mitigation

No significant population and housing impacts have been identified.

5.12.7 Mitigation Measures

No mitigation measures are required.

5.12.8 Level of Significance After Mitigation

No significant population and housing impacts have been identified.

5.12.9 References

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5.13



Public Services and Recreation



5.13 PUBLIC SERVICES AND RECREATION

This section analyzes the potential impacts relating to public services and recreation as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing public services and recreation conditions within the Plan Area. Potential public services and recreation impacts, including potential cumulative impacts, are considered programmatically in the impact analysis. If applicable this section identifies proposed mitigation measures for any significant impacts.

The solid waste facilities identified in the Proposed Plan are not expected to result in an increase in population that would generate an increase in demand on existing schools, libraries, public or private parks, or other recreational facilities that could result in the physical deterioration of these facilities. Therefore, these issue areas are not further analyzed in this section.

5.13.1 Environmental Setting

This EIR incorporates by reference the public services setting for the Plan Area as identified in Section 5.14 of the County's General Plan EIR.

Fire Protection and Emergency Services

The Los Angeles County Fire Department (LACoFD) serves the unincorporated areas of Los Angeles County as well as 58 cities that choose to have the County of Los Angeles (County) provide fire and emergency medical services (EMS) services. The LACoFD provides fire suppression and emergency medical services to over four million residents within Los Angeles County. The LACoFD operates 172 fire stations within nine divisions. The LACoFD had a total of 4,760 personnel in 2016. In addition to fire suppression, the LACoFD also provides fire prevention services, EMS, hazardous materials services, and urban search and rescue (USAR) services.

Under a mutual aid pact covering federal forestlands, responsibility for non-structure fires within the National Forest belong to the United States Forest Service (USFS), while LACoFD has the primary mission of suppressing structure fires. Although these responsibilities are stated in the mutual aid pact, each agency fights both wild and structure fires in actual fire emergencies. In addition, an automatic aid agreement, which is an agreement that allows the closest municipality to provide an initial response to fires that may occur in a part of another municipality, exists between USFS and LACoFD. Firefighting, however, is not the primary function of USFS, and the agency is on duty at only certain times of the day. As a result, LACoFD would be called upon to provide fire service if fires involving structures or brushlands near the National Forest boundary occur after USFS's hours of service.

The LACoFD has several standards to maintain adequate fire protection within their service area. The current standards for response times are:

- 5 minutes or less for response time for urban area;
- 8 minutes or less for suburban area; and
- 12 minutes or less for rural areas.

In June 2011, the LACoFD approved an update to its Strategic Plan to be more responsive to the dynamic environment in which the County operates by developing strategic priorities and ensuring that these priorities are addressed effectively and timely through department-level strategic planning and operations. The LACoFD includes eight bureaus, including the new Leadership and Professional Standards Bureau, which report directly to the Fire Chief. Much of the EIR Focus Area is covered by one of these bureaus or by the incorporated City. Table 5.13-1 provides a jurisdictional summary of the fire and emergency response responsibilities for each of the site locations within the EIR Focus Area.

Table 5.13-1. Fire Protection Responsibilities

Service Provider	Division	Site Name
Los Angeles County	Central Region Operations	■ City of Carson Public Works Corps Yard (AT Site #1)
Fire Department	Bureau - Division 1	■ CR&R Catalina (AT Site #6)
		■ Carson Revitalization Project (AT Site #8)
		■ Waste Resources Recovery, Inc. (AT Site #9)
	Central Region Operations Bureau - Division 6	■ Interior Removal Specialists, Inc. (AT Site #7)
		■ Waste Recovery and Recycling Inc. (AT Site #9)
City of Santa Monica		■ Santa Monica Pier (AT Site #2)
		■ Santa Monica Airport (AT Site #3)
		 City of Santa Monica Public Works Corps Yard (AT Site #4)

Source: LACFD 2011.

Law Enforcement

Law enforcement services in the Plan Area are provided by the Los Angeles County Sheriff's Department (LASD). LASD provides general-service law enforcement to unincorporated areas of Los Angeles County, serving as the equivalent of the county police for unincorporated areas, as well as cities within Los Angeles County that have contracted with the agency for law-enforcement services.

LASD staff has indicated that an officer-to-population ratio of one officer to every 1,000 residents provides the desired level of service for its service area. This ideal standard typically is applied in EIRs for proposed projects that are served by the LASD as a means to develop a rough assessment of the project's impacts on law enforcement services.

Table 5.13-2 identifies the law enforcement responsibility for each of the site locations within the EIR Focus Area.

Table 5.13-2. Law Enforcement Service Providers

AT Site	Site Name	Service Provider
AT Site #1	City of Carson Public Works Corps Yard	Carson Sheriff
AT Site #2	Santa Monica Pier	Santa Monica Police
AT Site #3	C . M . A.	Santa Monica Police
	Santa Monica Airport	LAPD Pacific Division
AT Site #4	City of Santa Monica Public Works Corps Yard	Santa Monica Police
AT Site #5	City Terrace Recycling LLC	East Los Angeles Sheriff
AT Site #6	CR&R Catalina	Avalon Sheriff
AT Site #7	Interior Removal Specialists, Inc.	South Gate Police
AT Site #8	Carson Revitalization Project	Carson Sheriff
AT Site #9	Waste Resources Recovery, Inc.	Compton Sheriff

Source: Los Angeles County 2018

5.13.2 Existing Plans and Regulations

Federal

There are no federal regulations pertaining to public services that are applicable to the project.

State

California Health and Safety Code (Section 13000 et seg.)

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and child care facility standards, and fire suppression training. The State Fire Marshal enforces these regulations and building standards in all State-owned buildings, State-occupied buildings, and State institutions throughout California.

California Code of Regulations (CCR) Title 24, Part 2 and Part 9

Part 2 of Title 24 of the CCR refers to the California Building Code, which contains complete regulations and general construction building standards for state adopting agencies, including administrative, fire and life safety, and field inspection provisions. Part 2 was updated in 2008 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains fire-safety-related building standards referenced in other parts of Title 24. This Code is preassembled with the 2000 Uniform Fire Code of the Western Fire Chiefs Association. This Code was revised in January 2008 with a change in the base model/consensus code from the Uniform Fire Code series to the International Fire Code.

California Public Resource Code (PRC) Sections 4201-4204

This section of the PRC was amended in 1982 to require the California Department of Forestry to classify all State Responsibility Areas (SRAs) into fire hazard severity zones. The purpose of this code is to provide classification of lands within SRAs in accordance with the severity of fire hazard present for the purpose of identifying measures to be used to retard the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.

Local

Los Angeles County General Plan

The County General Plan Public Facilities and Safety Elements include the following applicable goals and polices.

Goal Public Services/Facilities (PS/F) 1: A coordinated, reliable, and equitable network of public facilities that preserves resources, ensures public health and safety, and keeps pace with planned development.

- Policy PS/F 1.1: Discourage development in areas without adequate public services and facilities.
- Policy PS/F 1.2: Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.
- Policy PS/F 1.3: Ensure coordinated service provision through collaboration between County departments and service providers.
- Policy PS/F 1.4: Ensure the adequate maintenance of infrastructure.
- Policy PS/F 1.5: Focus infrastructure investment, maintenance and expansion efforts where the General Plan encourages development.
- Policy PS/F 1.6: Support multi-faceted public facility expansion efforts, such as substations, mobile units, and satellite offices.
- Policy PS/F 1.7: Consider resource preservation in the planning of public facilities.

Los Angeles County Fire Code (Ord. 2010-0060 §4, 2010; Ord. 2002-0080 §4, 2002)

Title 32 of the Los Angeles County Fire Code establishes regulations affecting or relating to fire flow, minimum distance to fire stations, and public and private fire hydrant. With respect to fire flows, water pressure, and hydrant spacing, the County Fire Code requirements vary based on land use, building size, density, and terrain. In addition, fire prevention issues addressed in the County Fire Code include the provision of access roads, adequate road widths, and clearance of brush around structures located in hillside areas that are considered wildland fire risk areas.

Other Jurisdictions

In addition to the County, the Countywide Siting Element (CSE) Revisions contemplates up to six potential site locations within Carson, Santa Monica, and South Gate. Three potential site locations are within unincorporated areas of the County. Each of these cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to public services and recreation. Depending on where future facilities are located, local plans and policies would be applicable to those facilities.

5.13.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to public services and recreation would be considered significant if the project was determined to:

- Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for the following services:
 - Fire Protection
 - Police Protection
 - o Schools
 - o Parks
 - Other public facilities
- Increase the use of existing neighborhood parks and regional parks or other recreational facilities such that substantial physical deterioration of the facility would result.
- Include recreational facilities or require the construction of recreational facilities which might have an adverse physical effect on the environment.

Issues Requiring No Further Evaluation

The following issue areas are not applicable and/or would result in no impact.

- Schools. Implementation of the Plan does not include school facilities or require the construction or expansion of school facilities which might have an adverse physical impact on the environment. No impact would result.
- Solid Waste. The Plan proposes a strategy for accommodating the solid waste disposal needs of the County and would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. For this reason, no impact would result.
- Impacts to Parks. The Plan contemplates new facilities on industrial and commercially zoned properties. Existing park facilities would generally be avoided. Additionally, adoption of the Plan is unlikely to generate new population growth. For these reasons, no impact would occur.
- New Parks or Recreational Facilities. The Plan does not include other public facilities or require the construction or expansion of other public facilities, including park and other recreational facilities, which might have an adverse physical effect on the environment. No impact would result.

5.13.4 Environmental Impacts

Countywide Siting Element Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternative technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County plans to maintain sufficient solid waste disposal capacity over a 15-year period (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to public services and recreation; however, depending on phasing and implementation, indirect, project-level impacts could result from existing facility construction activities and operation in the future.

Countywide Siting Element Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste, alternative technology (AT), land disposal facilities, or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to public services and recreation. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County or local jurisdiction for review and approval.

Impact 5.13-1: Response Times

Would the project create staffing or response time problems at the fire station or sheriff's substation serving the project site?

Fire Station Response Times

Standard criteria for evaluating acceptable service levels and determining the need for expansion of existing fire stations is based primarily on the ability to meet response time goals and not exceed maximum distances between fire stations. The standards are expressed in terms of service radius, equipment, and response time.

Fire protection at existing transformation facilities consists of a sprinkler system similar to typical industrial type buildings with combustible contents. The sprinkler systems are triggered by heat sensors. All future facilities considered in the Proposed Plan under the jurisdiction of the County of Los Angeles would be required to incorporate applicable fire protection measures included in Title 32 of the Los Angeles County Fire Code. Future facilities proposed in incorporated cities would likely be required to incorporate similar fire protection measures.

The ability of a fire department to respond to potential fire calls will be dependent on the location of the new facilities in relation to a station, as well as current staffing at that station. Development projects within the County and other jurisdictions are required to pay development impact fees. Such fee payments would be required of future facilities in high-growth areas (e.g. Malibu/Santa Monica Mountains, Santa Clarita Valley, and the Antelope Valley) that are constructed and may only be used to fund the development and equipping of new fire stations within these high-growth areas. Payment of these fees, which would be required as part of the development of future facilities, would reduce potential impacts on fire protection services. For this reason, impacts to fire protection and response would be less than significant.

Sheriff's Station Response Times

Future facilities would include fencing and lighting to provide a level of safety and security at the facilities. The ability of the law enforcement entity to respond to potential law enforcement-related calls at future facilities will be dependent on the location of the new facilities in relation to the nearest police or sheriff station, as well as current staffing at that station and available officer resources. Development projects within the County and other jurisdictions are required to pay development impact fees, a portion of which pays for the increased demand for police or sheriff protection services. Such fee payments would be required as part of the conditions of approval for future facilities that would go towards the acquisition of additional police or sheriff protection personnel and equipment. Payment of these fees, which would be required as part of the development of future facilities, would reduce minimize impacts to police or sheriff protection services. For this reason, the impact is less than significant.

5.13.5 Cumulative Impacts

The potential for cumulative impacts is dependent upon where future facilities are proposed in the future and the existing level of services for the affected service providers. Upon determination of the facility location, a project-level CEQA analysis would be conducted to determine if the facility would have an incremental, cumulative impact on the affected service providers. Given that the Plan, on its own, would not generate any new demands and that future projects will be subject to project-level environmental review and, if applicable, subject to impact fees, decreases in public services as a result of the Plan are unlikely and no cumulatively considerable impact would result.

5.13.6 Level of Significance Before Mitigation

Assuming compliance with applicable regulatory requirements, public services impacts would be less than significant.

5.13.7 Mitigation Measures

No mitigation measures are required.

5.13.8 Level of Significance After Mitigation

No significant public services impacts have been identified.

5.13.9 References

County of Los Angeles. General Plan EIR.

County of Los Angeles. General Plan Parks and Recreation Element.

County of Los Angeles. 2011. Los Angeles County Fire Department Strategic Plan, 2011.

Los Angeles County Fire Department. 2011. Los Angeles County Fire Department Strategic Plan.



5.14



Transportation



5.14 TRANSPORTATION AND TRAFFIC

This section analyzes the potential impacts related to transportation and traffic as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing transportation and traffic conditions within the Plan Area. Potential transportation and traffic impacts, including potential cumulative impacts, are considered programmatically in the impact analysis. If applicable, this section identifies proposed mitigation measures for any significant impacts.

5.14.1 Environmental Setting

This EIR incorporates by reference the transportation and traffic setting for the Plan Area, as identified in Section 5.16, Transportation and Traffic, of the County of Los Angeles's (County) General Plan Update and EIR (2015); as well as Chapter 7, Mobility Element, of the County's General Plan.

Los Angeles County has one of the largest transportation systems in the world, providing rail, bus, paratransit, roadway, bikeway, and pedestrian mobility systems throughout the County. Despite continuing efforts to increase transportation services and build transportation infrastructure, transportation systems are heavily burdened by the demands of a growing population and a diversity of activities. Transportation is also one of the biggest contributors of noise, and greenhouse gases and other air pollutants.

The regional transit system network is comprised of an extensive network of services provided by dozens of operators. The network includes fixed-route local bus lines, community circulators, express and rapid buses, Bus Rapid Transit (BRT), demand response¹, light rail transit, heavy rail transit (subway), and commuter rail. Based on the scope of the Proposed Plan, bus, all rail types, and demand response modes of transportation would not be affected by the plan; therefore, this section will only address roadways and bicycle pathways.

Freeway, Highway, and Local Road Networks

The highway network is comprised of the State Highway System, which consists of 915 freeway and highway miles, and includes U.S. Interstate freeways and state-maintained freeways and highways, High Occupancy Vehicle (HOV) lanes, and county and city highways. The California Department of Transportation (Caltrans) is the state agency responsible for the maintenance of freeways and highways. Caltrans estimates that on average there are more than 100 million vehicle miles traveled (VMT) per day in the County via the State Highway System.

Public Works (PW) is generally responsible for the design, construction, operation, maintenance, and repair of roads within the unincorporated Plan Area, as well as in a number of jurisdictions that contract with the County for these services. PW maintains over 3,100 miles of major roads and local streets in the unincorporated areas and over 1,700 miles in 22 cities. The primary transportation focus of the County is on the portions of the highway system that fall within the unincorporated areas. Primary responsibility for transportation planning in the County is the Los Angeles County Metropolitan Transportation Authority (Metro). As a result, the County is not directly responsible for overall transportation planning or service provision in the County. The County's Highway Plan designates the functional classifications of the County's highway system and these roadway classifications are depicted in Figure 5.14-1 and described in Table 5.14-1.

While the Highway Plan map displays a majority of the arterial highways in the County, these designations officially apply only to the Plan Area. The contiguous segments of roadways that fall within city areas are governed by the applicable city plans. For

^{1 &}quot;Demand response" is defined as a transit mode comprised of passenger cars, vans, or small buses operating in response to calls from passengers or their agents for transportation to a destination.

example, South Vermont Avenue in the unincorporated portion of the South Bay Planning Area is designated as a Major Highway in the Highway Plan. To the north is the City of Torrance, and to the south is the City of Lomita. Those cities classify Vermont Avenue based on the respective city's functional designation. In many cases, the functional classification types between cities and the Highway Plan match, as do the right-of-way designations. In some cases, however, the Highway Plan designation may differ from the adjacent city designation. In other cases, although the name of the classification may be different, the underlying key features, such as number of lanes and right-of-way width, match. For example, some cities label Secondary Highways as Secondary Arterials, although both classifications operate and function identically to one another.

In the northern portion of the County, the Highway Plan governs a relatively larger portion of highway mileage than the areas to the south as a result of the northern portion, particularly the Antelope Valley, being a larger proportion of the land area unincorporated. Also, in these areas, the potential for significant land use change and growth is greater because the highways fall within undeveloped areas. This is especially true in the areas west of Interstate (I) 5 near the City of Santa Clarita, the areas paralleling State Route (SR) 14 between the City of Santa Clarita and City of Palmdale, and the areas east of the City of Palmdale and the City of Lancaster. Throughout much of the Plan Area south of the City of Santa Clarita, most Major and Secondary Highways are fully built to their ultimate cross sections, and further widening would not be feasible. In some cases, turn lanes (left- and right-turn lanes) can be added at intersections to provide additional capacity, but in most cases the roadways will not be significantly widened.

Bicycle Network

The County uses the same bicycle network classification system as Caltrans. In addition to the bikeways within unincorporated areas, the Los Angeles County maintains many regional bicycle paths that travel through incorporated cities, which including: Ballona Creek Bicycle Path, Compton Creek Bicycle Path, Coyote Creek Bicycle Path, Dominguez Channel Bicycle Path, La Canada Verde Creek Bicycle Path, Laguna Dominguez Bicycle Path, Laguna Dominguez Bicycle Path, Laguna Dominguez Bicycle Path, Los Angeles River Bicycle Path, North Fork Coyote Creek Bicycle Path, Rio Hondo Bicycle Path, San Gabriel River Bicycle Path, San Jose Creek Bicycle Path, Santa Anita Wash Bicycle Path, and Marvin Braude Bicycle Path.

Figure 5.14-1. Highway Plan Policy Map



Source: County of Los Angeles 2015

Table 5.14-1. Highway Plan Roadway Classifications

Classification	Description
Major Highway	This classification includes urban and rural highways that have countywide significance and are the most highly traveled routes. These roads generally require four or more lanes of moving traffic, channelized medians, and, to the extent possible, access control and limits on intersecting streets.
	In urban areas, the typical right-of-way width for these highways is 100 feet. Alternative major highway sections may be established by the County to accommodate features such as raised medians, bicycle facilities, and wider parkways with varying right-of-way widths.
	In rural areas, major highways are intended to maintain a rural appearance (without curb, gutter, and/or sidewalk) to reflect the rural character of various communities throughout Los Angeles County. The typical right-of-way width of a rural major highway is 108 feet. Additional right-of-way may be required to accommodate other transportation uses. In addition, beyond the ultimate road right-of-way, there may be a need for additional dedications for trail purposes to accommodate equestrian and other non-vehicular uses.
Secondary Highway	This classification includes urban and rural routes that serve or are planned to serve an area wide or countywide function, but are less heavily traveled than major highways. Secondary highways also frequently act as oversized collector roads that feed the countywide system. In this capacity, the routes serve to remove heavy traffic from local streets, especially in residential areas. Access control, especially to residential property and minor streets, is desirable along these roads.
	In urban areas, secondary highways generally have four lanes of vehicular traffic on 80 feet of right-of-way. However, configuration and width may vary with traffic demand and existing conditions. In a few cases, routes that carry major highway levels of traffic are classified as secondary highways because it is impractical to widen them to major highway standards. Alternative secondary highway sections may be established by the County to accommodate features such as raised medians, bicycle facilities, and wider parkways with varying right-of-way widths.
	In rural areas, certain connector highways to and between rural communities are also classified as secondary highways. These highways are intended to maintain a rural appearance (without curb, gutter, and/or sidewalk) to reflect the rural character of various communities throughout Los Angeles County. The typical right-of way width of rural secondary highways is 86 feet. Additional right-of-way may be required to accommodate other transportation uses. In addition, beyond the ultimate road right-of-way, there may be a need for additional dedications for trail purposes to accommodate equestrian and other non-vehicular uses.
Limited Secondary Highway	This classification includes urban and rural routes that provide access to low-density areas. In urban areas, limited secondary highways generally feature lower traffic volumes and multimodal transportation facilities. The typical right-of-way width of these highways generally ranges between 64 and 80 feet. Alternative secondary highway sections may be established by the County to accommodate features such as raised medians, bicycle facilities, and wider parkways with varying right-of-way widths.
	In rural areas, limited secondary highways are generally located in rural communities and remote foothill, mountain, and canyon areas. These highways are intended to maintain a rural appearance (without curb, gutter, and/or sidewalk) to reflect the rural character of various communities throughout Los Angeles County. The typical right-of-way width of rural limited secondary highways is 64 feet. Additional right-of-way width may be required to accommodate left turn pockets and passing lanes may be provided when required for traffic safety. The right-of-way may be increased for additional improvements where traffic or drainage conditions warrant. In addition, beyond the ultimate road right-of-way, there may be a need for additional dedications for trail purposes to accommodate equestrian and other non-vehicular uses.
Parkway	This classification includes urban and rural routes that have park-like features either within or adjacent to the roadway. The right-of-way width required varies as necessary to incorporate these features, typically a minimum of 80 feet. Roadway improvements vary depending on the composition and volume of traffic carried.
Expressway	This classification includes urban and rural controlled-access highways connecting communities. Expressways can generally accommodate six to ten traffic lanes and are intended for thrutraffic, featuring full or partial control of access. The right-of-way required varies as necessary to incorporate these features, but is typically 180 feet in width. Roadway improvements vary depending upon the composition and volume of traffic carried.

Source: County of Los Angeles 2015

5.14.2 Existing Plans and Regulations

State

California Department of Transportation

Caltrans has jurisdiction over the construction and maintenance of highways and freeways within the Plan Area. Caltrans also coordinates several statewide transportation programs that directly impact the circulation system in the region. These include: the State Transportation Improvement Program (STIP), the Congestion and Mitigation and Air Quality Program (CMAQ), and the Traffic Congestion Relief Program (TCRP).

Traffic analysis in California is also guided by policies and standards set by local jurisdictions and by Caltrans. Caltrans, which has jurisdiction over State highways, sets maximum load limits for trucks and safety requirements for oversized vehicles that operate on State highways. Caltrans regulations listed below apply to the potential transportation and traffic impacts related to the Focus Area.

California Vehicle Code Division 15, Chapters 1 through 5 (Size, Weight, and Load)

Include regulations pertaining to licensing, as well as the size, weight, and load of vehicles that operate on State highways.

California Street and Highway Code Sections 660-711

Require permits from Caltrans for any roadway encroachment. The sections also include regulations pertaining to the care and protection of State and County highways and provisions for the issuance of written permits, which are required when a load exceeds Caltrans' weight, length, or width standards for public roadways and State highways.

California Highway Design Manual (2006), Section 100-2, Topic 102

Highway Capacity identifies a level of service (LOS) standard of C to D for rural, two-lane highways with a corresponding design year peak hour traffic volume (average vehicles per lane per hour) of 1,000 to 1,200 vehicles.

Local

This EIR incorporates by reference the General Plan policies from the County's recently adopted General Plan EIR.

Los Angeles County General Plan

The County recently adopted an update to its General Plan in 2015. The General Plan's Mobility Element includes policies adopted for the purposes of avoiding or mitigating adverse environmental impacts. Applicable General Plan policies are identified below.

Mobility (M) Element

- Policy M 2.3: Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following intersection designs, whenever appropriate and feasible.
 - o Right angle intersections that reduce intersection skew.
 - Smaller corner radii to reduce crossing distances and slow turning vehicles.
 - Traffic calming measures, such as bulb-outs, sharrows, medians, roundabouts, and narrowing or reducing the number of lanes (road diets) on streets.
 - o Crossings at all legs of an intersection.
 - Shorter crossing distances for pedestrians.
 - Right-turn channelization islands. Sharper angles of slip lanes may also be utilized.
 - Signal progression at speeds that support the target speed of the corridor.
 - Pedestrian push buttons when pedestrian signals are not automatically recalled.
 - Walk interval on recall for short crossings.
 - Left turn phasing.
 - o Prohibit right turn on red.
 - Signs to remind drivers to yield to pedestrians.
- Policy M 2.4: Ensure a comfortable walking environment for pedestrians by implementing the following, whenever appropriate and feasible:
 - o Designs that limit dead-end streets and dead-end sidewalks.
 - Adequate lighting on pedestrian paths, particularly around building entrances and exits and transit stops.
 - Designs for curb ramps, which are pedestrian friendly and compliant with the Americans with Disabilities Act (ADA).
 - Perpendicular curb ramps at locations where it is feasible.
 - Pedestrian walking speed based on the latest standard for signal timing. Slower speeds should be used when appropriate (i.e., near senior housing, rehabilitation centers, etc.)
 - Approved devices to extend the pedestrian clearance times at signalized intersections.
 - Accessible Pedestrian Signals (APS) at signalized intersections.
 - Pedestrian crossings at signalized intersections without double or triple left or right turn lanes.
 - Pedestrian signal heads, countdown pedestrian heads, pedestrian phasing and leading pedestrian intervals at signalized intersections.
 - Exclusive pedestrian phases (pedestrian scrambles) where turning volume conflicts with very high pedestrian volumes.
 - Advance stop lines at signalized intersections.
 - Pedestrian Hybrid Beacons
 - Medians or crossing islands to divide long crossings.
 - High visibility crosswalks

- Pedestrian signage
- Advanced yield lines for uncontrolled crosswalks
- Rectangular Rapid Flashing Beacon or other similar approved technology at locations of high pedestrian traffic.
- Safe and convenient crossing locations at transit stations and transit stops located at safe intersections

Southern California Association of Governments

Regional Comprehensive Plan (October 2008)

The Regional Comprehensive Plan (RCP) is a guidance document to guide the Southern California Association of Government's (SCAG's) role in transportation, land use, and air quality planning, and recommends key roles and responsibilities for public and private sector stakeholders to implement policies.

2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (April 2016)

The 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a major planning document for regional transportation and the land use network. This document lays the groundwork for the region's future mobility and housing needs with economic, environmental and public health goals. The plan incorporates highways, railway, bikeways, and walkways. This long-range plan is updated every four years and is an evolving blueprint for the future of the region. This plan has been updated to include California Senate Bill 375, which outlines growth strategies to better integrate land use and transportation planning to reduce the State's greenhouse gas emissions for cars and light trucks.

According to the 2016 RTP/SCS, the population of Los Angeles County is anticipated to increase by 1.2 million people by the year 2040. Based on the projected population and employment trends, regional daily traffic delays are expected to result in 3.6 million person-hours of daily delay and 11.8 minutes of daily delay per capita along the region's highways and local arterials (SCAG 2016). SCAG measures regional growth, and cumulative impacts in vehicle miles traveled (VMT), vehicle hours traveled (VHT), and heavy-duty truck VHT. The VMT base year in 2012 was 21.5 miles with a 14.7-minute delay and a projected 2040 baseline of 20.2 miles with a 16.4-minute delay (SCAG 2016). Implementation of the 2040 plan would reduce the VMT to 18.4 miles with an 11.5-minute delay.



Metro Congestion Management Plan (2010)

The Congestion Management Plan (CMP) was created following the passage of Proposition 111. The CMP assesses transportation operating conditions at key locations for the County and is implemented by Metro. The CMP also addresses the impact of local growth on regional transportation system, linking the local land use decision with associated impacts on regional transportation and air quality and developing a partnership among transportation decision makers on determining appropriate transportation solutions for all modes of travel.

The CMP was developed to meet the requirements of Section 65089 of the California Government Code. As such, the CMP includes the following elements:

- A system of highways and roadways with minimum level of service performance
- A performance element including performance measures to evaluate multimodal system performance
- A travel demand element promoting alternative transportation strategies
- A program to analyze the impacts of local land use decisions on the regional transportation system, including an estimate of the costs of mitigating those impacts
- A seven-year capital improvement program of projects that benefit the CMP system
- A deficiency plan

The CMP requires designation of a system of highways and roadways, including all state highways and principal arterials. Statute also requires establishment of LOS standards to measure congestion on the system. LOS standards can be set no lower than LOS E, or the current level is worse than LOS E. An LOS E or lower would have a significant impact on driver comfort level.

The CMP requires the establishment of LOS standards to measure congestion on the system. LOS ranges from A to F, with LOS A representing free-flow conditions, and LOS F representing a high level of congestion. Table 5.14-2 describes LOS designations for freeway segments, and Table 5.14-3 describes designation for arterial intersections. According to the CMP, half of the freeway system operates at a LOS of E and F, in morning and afternoon rush hours. Almost 20 percent of the arterial intersections operate LOS E and F in the morning rush hours and just over 20 percent of the intersections operate at LOS E and F in the afternoon.

Additionally, as part of the 2003 Short Range Transportation Plan, the Metro Board authorized a nexus study to evaluate the feasibility of implementing a congestion mitigation fee.

Table 5.14-2. Levels of Service for Freeway Segments

Level of Service	Operating Speed	Delays	Flow Conditions
LOS A	55+	None	Highest quality of service. Free traffic flow, low volumes and densities. Little or no restriction on maneuverability or speed.
LOS B	50	None	Stable traffic flow, speed becoming slightly restricted. Low restriction on maneuverability.
LOS C	45	Minimal	Stable traffic flow, but less freedom to select speed change lanes, or pass. Density increasing.
LOS D	40	Minimal	Approaching unstable flow. Speeds tolerable but subject to sudden and considerable variation. Less maneuverability and driver comfort.
LOS E	35	Significant	Unstable traffic flow with rapidly fluctuating speeds and flow rates. Short headways, low maneuverability and low driver comfort.
LOS F	<20	Considerable	Forced traffic flow. Speed and flow may drop to zero with high densities.

Table 5.14-3. Levels of Service for Arterial Intersection

Level of Service	Volume to Capacity (V/C) Ratio	Operating Conditions
LOS A	0.00-0.60	At LOS A, there are no cycles that are full loaded, and few are even close to loaded. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turning movements are easily made, and nearly all drivers find freedom of operation.
LOS B	> 0.60-0.70	LOS B represents stable operation. An occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel somewhat restricted within platoons of vehicles.
LOS C	> 0.70-0.80	In LOS C stable operation continues. Full signal cycle loading is still intermittent, but more frequent. Occasionally drivers may have to wait through more than one red signal indication, and back-ups may develop behind turning vehicles.
LOS D	> 0.80-0.90	LOS D encompasses a zone of increasing restriction, approaching instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive back-ups.
LOS E	> 0.90-1.00	LOS E represents the most vehicles that any particular intersection approach can accommodate. At the volume to capacity (V/C) ratio of 1.00, there may be long queues of vehicles waiting upstream of the intersection and delays may be great (up to several signal cycles).
LOS F	>1.00	LOS F represents jammed conditions. Back-ups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration; hence, volumes carried are not predictable. V/C values are highly variable because full utilization of the approach may be prevented by outside conditions.

Los Angeles County Highway Plan

The Los Angeles County Highway Plan (Highway Plan) provides policy guidance for building a comprehensive highway network throughout the unincorporated areas. The Highway Plan provides a highway system that is consistent with and supportive of the goals and policies outlined in the County's General Plan Land Use Element. More specifically, the Highway Plan maintains right-of-way corridors to ensure space for future facility improvements and accommodate alternative modes of transportation. This is important in urbanized areas, which often have limited room for expansion, but are in need of additional facilities and improvements, such as bike lanes, sidewalks, and bus service. This is also important in rural areas to accommodate trails and landscaping, which encourage active transportation, provide shade, and reduce runoff from pollutants.

The purpose of the Highway Plan is to:

- Depict the general location of planned highway routes
- Provide a means for protecting highway rights-of-way within the unincorporated areas
- Establish a plan and process for coordinating highway policies with neighboring cities and counties
- Provide for a system of highways that is consistent with the General Plan

Los Angeles County Bicycle Master Plan

The Los Angeles County Bicycle Master Plan (Bicycle Master Plan), adopted in March 2012, provides policy guidance for building a comprehensive bicycle network throughout the unincorporated areas by identifying bikeways along rivers, creeks, and flood protection facilities, and transportation systems that are available for use by bicyclists for both recreational use and commuter travel countywide. These systems include roadways with bike lanes or designated bike routes and dedicated off-road bike paths, such as those along flood protection channels. The purpose of the Bicycle Master Plan is to:

- Guide the development of infrastructure, policies, and programs that improve the bicycling environment
- Depict the general location of planned bikeway routes
- Provide for a system of bikeways that is consistent with the General Plan

The Bicycle Master Plan also includes data on collisions involving bicyclists and motor vehicles in the unincorporated areas between the years 2004 and 2009. One of the goals of the Bicycle Master Plan is to reduce the number of collisions by making bicycling safer through the implementation of education programs and network improvements.

Other Jurisdictions

In addition to the County, the CSE Revision contemplates up to six potential site locations within Carson, Santa Monica, and South Gate. Three potential site locations are within unincorporated areas in the County. Each of these cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to transportation. Depending on where future facilities are located, local plans and policies would be applicable to those facilities.

5.14.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to transportation and traffic would be considered significant if the project was determined to:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- A conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- A change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Issues Requiring No Further Evaluation

The following issues are not applicable and/or have no impact as a result of the proposed:

- Change Air Traffic Patterns. The Proposed Plan is a planning and policy document that defines how the County will plan for solid waste disposal capacity through 2033. No construction or physical development is proposed by the Proposed Plan. As outlined by the Proposed Plan, future facilities would be located in established urban areas, co-located and not within close proximity to airports except for the facility at Santa Monica Airport (AT Site #3). The closure of the Santa Monica Airport is scheduled for 2028, within the same timeframe of implementation of the Proposed Plan. The utilization of AT Site #3 would occur after the closure of the airport; hence, the Proposed Plan does not have the potential to impact air traffic patterns, increase in air travel, nor change the location of travel so as to result in a substantial safety risk. No impact is identified for this issue area and no further evaluation is required.
- Inadequate Emergency Access. The Proposed Plan would not result in inadequate emergency access as it is solely a planning and policy document. The construction of future AT facilities would be analyzed in the future at the project-level following the availability more detailed site design and access plans. Therefore, no impact would result.
- Conflict with Policies, Plans, or Programs Regarding Public Transit, Bicycle or Pedestrian Facilities. The Proposed Plan is focused on the management of solid waste within the County and would not generate new growth that would conflict with policies, plans, or programs regarding public transit, bicycle or pedestrian facilities. The construction of future AT facilities would be further analyzed in the future at the project-level once project-specific information is available. Therefore, no impact would result.

5.14.4 Environmental Impacts

Countywide Siting Element Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternative technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County plans to maintain sufficient solid waste disposal capacity over a 15-year period (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to public services and recreation; however, depending on phasing and implementation, indirect, project-level impacts could result from existing facility construction activities and operation in the future.

Countywide Siting Element Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste, alternative technology (AT), land disposal facilities, or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to public services and recreation. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County or local jurisdictions for review and approval.

Impact 5.14-1: Circulation System Performance

Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Increases in traffic as a result of the Plan's adoption would be dependent upon the location of a specific facility as well as the operational characteristics of the facility and capacity of the surrounding roadway segments and intersections. As provided in Chapter 3, the new facilities would be co-located with existing solid waste management facilities (e.g., materials recovery facilities [MRFs]) or compatible industrial uses in developed areas and, therefore, existing access routes would likely be maintained. Construction and operation of the new facilities would generate different impacts to the local circulation network as described below.

New Construction/Reconstruction. Construction- of the individual projects would result in temporary construction-related traffic, which could result in a temporary and intermittent reduction in the capacities of access and haul routes because of the slower movements and larger turning radii of construction trucks compared to passenger vehicles. Since new facilities would be co-located at existing facilities or compatible industrial uses in developed areas, construction-related traffic would likely be in addition to existing solid waste management traffic. During construction, project traffic would be generated from two sources: truck trips to and from the work sites, and construction work crews and supervisor staff commuting to and from work sites. Construction-related truck trips would include trucks hauling equipment, material, or backfill to the work sites as well as trucks hauling spoils away for disposal or reuse offsite. In addition, off-site improvements may require temporary lane restrictions or reduced turning movements.

Operations. Some of the solid waste facilities contemplated for new AT facilities as part of the Proposed Plan and are currently subject to an existing Solid Waste Facility Permit (SWFP). The SWFP sets the maximum tonnage of materials that may be received at each facility on a daily basis, which in turn restricts the maximum number of daily disposal truck trips. As part of the Plan's adoption, no increase to the current maximum daily disposal capacity would be requested. Rather increases would occur incrementally over the duration of the Plan's implementation (2018-2033). A new SWFP would be required for locations and otherwise covered under an existing SWFP.

As new facilities are proposed, the affected jurisdictions would require the applicant to assess average daily and peak traffic volumes with and without traffic from the future facilities. Where feasible, existing haul truck routes and traffic control features such as traffic signals, striping, or medians would be maintained. Consistent with the Siting Criteria in Appendix 6A of the CSE, travel distances on minor routes would continue to be kept to a minimum, in favor of major routes (e.g., highways), to avoid interference with commercial or residential traffic and reduce the risk of accidents. Adherence to Federal, State, and local regulations, including the CSE Siting Criteria, would address the performance of the circulation system for transportation modes on a project-specific basis through preparation of a project-level traffic impact analysis. In this context and at the Plan level, impacts to traffic and circulation would be less than significant.

Impact 5.14-2: Congestion Management Program

Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Construction and operation of future facilities have the potential of increasing traffic and congestion on surrounding roadways and intersections. Roads that are currently operating at or near the maximum capacity vehicles would not be considered ideal routes for the transport of solid waste, including those identified in the County's CMP. Ideally the roads best suited for solid waste transportation are those on which the additional vehicles serving the facility would have little or no impact on the affected roadway and/or intersection LOS. Depending on the type of roadway affected (e.g., highway verses arterial) and level of congestion, future facilities would be required to comply with the Siting Criteria in Appendix 6A of the CSE:

- The changes in the ratio capacity to average annual daily traffic (AADT) should be negligible after calculating the number of trucks on the major and minor routes expected to service the facility.
- The minimum time path from major wasteshed areas to a facility should follow highways with low to moderate average annual daily traffic and accident rates as guided by the research and findings of state, regional, county, and city transportation planners.

Adherence to the CSE Siting Criteria combined with the preparation of a project-specific traffic impact analysis would avoid exceeding LOS standards and conflicts with adopted travel demand measures in the CMP. In this context and at the Plan level, impacts to traffic and circulation would be less than significant.

Impact 5.14-3: Design Features or Incompatible Uses

Would the Proposed Plan substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The CSE revision proposes nine potential locations for AT facilities. The proposed future facilities locations are zoned as industrial. As required by the Siting Criteria in Appendix 6A of the CSE, all future facilities must be in conformance with local land use and zoning requirements of a county or city planning agency. Therefore, the creation of new design hazards or incompatible uses is unlikely. Road design safety measures to ensure safe ingress and egress at the future sites would be incorporated into each location during project design and evaluated at the project-level in accordance with CEQA. Where appropriate, local roadways could be upgraded to increase their capacity, improve traffic controls, or to construct truck-only lanes or routes. These improvements would be determined at the project level pending subsequent, project-level environmental review. Based on these considerations, the impact is less than significant.

5.14.5 Cumulative Impacts

Cumulative traffic impacts are a function of future projects combined with existing traffic volumes and other proposed projects in the vicinity. Future facilities are required to comply with the CSE Siting Criteria (Appendix 6A) and project level CEQA compliance requirements, which would minimize the potential for future projects to operationally impact the local circulation network. Traffic control plans would be required to address temporary construction impacts, where identified. As provided in the project-level analysis, traffic and circulation impacts resulting from the Proposed Plan would be less than significant and not cumulatively considerable.

5.14.6 Level of Significance Before Mitigation

No significant transportation impacts have been identified.

5.14.7 Mitigation Measures

No mitigation measures are required.

5.14.8 Level of Significance After Mitigation

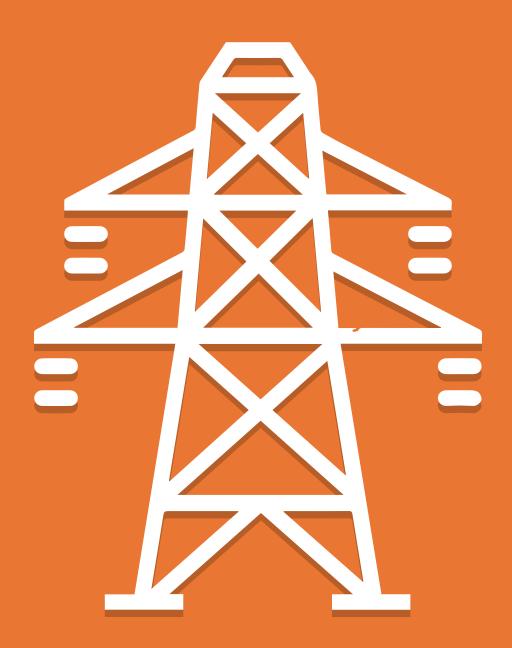
No significant transportation impacts have been identified.

5.14.9 References

- County of Los Angeles, Department of Regional Planning, 2015. General Plan 2035. Available at http://planning.lacounty.gov/generalplan/generalplan. Accessed April 20, 2016.
- Los Angeles County Department of Public Works (DPW). Bicycle Master Plan. 2012. Accessed April 11, 2016. http://dpw.lacounty.gov/pdd/bike/docs/bmp/BMP%20CHP%203.pdf
- Los Angeles County Metropolitan Transportation Authority (Metro). 2010. 2010. Congestion Management Plan. Accessed April 11, 2016. http://media.metro.net/projects_studies/cmp/ images/CMP _Final_2010.pdf
- Southern California Association of Governments (SCAG). 2016. Regional Transportation Plan/Sustainable Communities Strategy 2016-2040. Accessed May 19, 2016. http://scagrtpscs.net/ Documents/2016/final/f2016RTPSCS.pdf

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5.15



Utilities and Service Systems



5.15 UTILITIES AND SERVICE SYSTEMS

This section analyzes the potential impacts related to utilities and service systems as a result of adopting the Proposed Plan. The environmental setting includes a discussion of the applicable regulatory environment and describes existing utilities and service system conditions within the Plan Area. Potential utilities and service systems impacts, including potential cumulative impacts, are considered in programmatically in the impact analysis. If applicable this section identifies proposed mitigation measures for any significant impacts.

5.15.1 Environmental Setting

Water Supply

Los Angeles County receives its water supplies from a variety of sources in order to provide a continuous supply of clean water for everyday uses. County residents, businesses, and public agencies and organizations receive their water through a complex water management system, which consists of numerous water supply wholesale and retail providers and is regulated by the State Water Resources Control Board (SWRCB) and California Department of Public Health. Water supplies delivered by these agencies occur through an intricate system of aqueducts, reservoirs, and groundwater basins. As shown below in Table 5.15-1, imported water supplies comprise a large majority of the County's water supply. This situation is projected to continue through the County's General Plan horizon year of 2035.

Table 5.15-1. Water Supplies by Source for Los Angeles County (Acre-Feet per Year)

	2015	2020	2025	2030	2035
Groundwater	797,637	870,093	817,057	885,632	890,488
Imported Water	1,213,992	1,125,244	1,036,715	1,124,463	1,103,251
Surface Water	23,332	23,293	23,293	23,293	23,293
Recycled Water	108,190	138,536	144,956	160,522	168,904
Water Banking	39,950	39,950	34,950	34,950	34,950
Conservation	52,953	74,946	91,830	108,867	122,838
Stormwater Capture and Direct Use	3,423	5,984	9,974	15,958	24,935
Water Transfers	39,862	40,147	40,147	40,147	40,147
Desalination	500	21,000	26,000	26,000	31,000
Total	2,279,839	2,339,193	2,224,922	2,419,832	2,439,806

Source: County of Los Angeles 2015

Approximately 33 percent of the water supply comes from local sources, including surface water from mountain runoff, groundwater and recycled water. While local water supplies are the least costly, surface water and groundwater supplies fluctuate in response to variations in annual rainfall, contamination and effectiveness of conservation measures. Water is imported into Los Angeles County from three sources: the Colorado River, the Bay Delta in Northern California via the State Water Project, and the Owens Valley via the Los Angeles Aqueduct. The Los Angeles Aqueduct primarily serves the residents and businesses of the City of Los Angeles (County of Los Angeles 2015).

Water Agencies

- The Los Angeles County Waterworks Districts (LACWD), a division of the County of Los Angeles Department of Public Works, provides customers with water from three sources: local groundwater, water imported through the State Water Project (SWP) and the Colorado River Aqueduct. The State Water Project is a system of reservoirs, pump stations, storage facilities, power plants, and 660 miles of pipes and canals that spans two-thirds the length of California. LACWD purchases imported water from local SWP contractors:
- The Metropolitan Water District (MWD) buys imported SWP water; imports water from the Colorado River; and wholesales water to its member agencies. MWD wholesales water to its member agencies, who in turn distribute the water to end users. Twenty-seven member agencies contract with MWD and together serve approximately 300 cities and unincorporated areas in Southern California.
- Other water wholesalers in Los Angeles County include the Central Basin Municipal Water District, West Basin Municipal Water District, Upper San Gabriel Valley Municipal Water District, Castaic Lake Water Agency, Las Virgenes Municipal Water District, Three Valleys Municipal Water District, and Antelope Valley-East Kern Water Agency. The Central Basin Municipal Water District, West Basin Municipal Water District, Upper San Gabriel Valley Municipal Water District, and the Three Valleys Municipal Water District are member agencies of the MWD. Some water wholesalers also operate groundwater wells.
- Additional water purveyors providing water to retail customers include; agencies
 of cities or counties private companies, and special districts.

The Los Angeles Department of Water and Power (LADWP), services the City of Los Angeles and nearby cities. The LADWP 2005 Urban Water Management Plan (UWMP) indicates that Citywide water demand, based on normal weather conditions, will be about 776,000 acre-feet per year by 2030 (City of Los Angeles 2005, E-Ref 2010). Much of the unincorporated area within the Antelope Valley Planning Area that does have municipal water service is served by Los Angeles County Waterworks District 40 (WWD40), which also serves parts of the City of Lancaster and City of Palmdale (Los Angeles County 2014). Table 5.15-2 identifies the local water purveyors for each of the potential facility locations within the EIR Focus Area.

Governor's Drought Declaration

California Governor Edmund Brown Jr. declared a Drought State of Emergency on January 17, 2014, asking Californians to reduce water use by 20 percent. The U.S. Department of Agriculture designated 27 California counties, including Los Angeles County, as primary natural disaster areas on January 15, 2014, due to the drought. Average annual rainfall at the Los Angeles Civic Center is 14.41 inches, but the Civic Center received 5.93 inches of rainfall between October 2012 and September 2013, which is 41 percent of the average during the 2012–2013 water year. Rainfall at the Civic Center between October 2013 and January 2014 was 0.88 inches, only 12 percent of the average. The Department of Water Resources (DWR) announced on January 31, 2014, that if current dry conditions persist, customers would receive no deliveries from the State Water Project in 2014, except for small carryover amounts from 2013. Deliveries to agricultural districts with longstanding water rights in the Sacramento Valley ending up being cut 50 percent—the maximum permitted by contract (County of Los Angeles 2015).

Table 5.15-2. Water Purveyors in Focus Area

AT Site	Site Name	Water Purveyor
AT Site #1	City of Carson Public Works Corps Yard	Metropolitan Water District of Southern California and West Basin Municipal Water District
AT Site #2	Santa Monica Pier	City of Santa Monica
AT Site #3	Santa Monica Airport	City of Santa Monica
AT Site #4	Santa Monica Public Works Corp Yard	City of Santa Monica
AT Site #5	City Terrace MRF	Los Angeles Department of Water and Power
AT Site #6	CR&R Catalina	Southern California Edison Company- (Santa Catalina System)
At Site #7	Interior Removal Specialists, Inc.	City of South Gate Water Division
AT Site #8	Carson Revitalization Project	Metropolitan Water District of Southern California and West Basin Municipal Water District
AT Site #9	Waste Resources Recovery, Inc.	Southern California Water Company

Source: County of Los Angeles GIS 2018; County of Los Angeles 2018

Sanitary Sewer Collection, Treatment, and Disposal

In the unincorporated areas of the Plan Area, the Los Angeles County Sanitation Districts (LACSD), the Consolidated Sewer Maintenance District (CSMD), and municipal septic or wastewater systems provide sanitary sewer collection, treatment, and disposal with the goal of protecting public health. Construction operations and maintenance of facilities that collect, treat, recycle, and dispose of sewage and industrial wastes is the responsibility of LACSD. Local sewers connected to the LACSD's trunk sewer lines in unincorporated areas are the responsibility of the CSMDs.

The LACSD are a confederation of 24 independent districts, serving the wastewater and solid waste management needs covering over 820 square miles and servicing 78 cities and the unincorporated areas of the County (Pretreatment Program Annual Report, 2018). As of 2013, the LACSD owned, operated and maintained 1,400 miles of trunk sewers that conveyed 400 million gallons per day (gpd) of wastewater, 140 million gpd (MGD) of which is recycled at 11 wastewater treatment plants. The Joint Outfall System (JOS) is made up of 17 of the 24 Sanitation Districts, the Santa Clarita Valley Sanitation district, and the Antelope Valley (which is served by Sanitation District Nos. 14 and 20) (LACSD 2014). These districts are signatories to a Joint Outfall Agreement that provides sewerage services in the Los Angeles metropolitan area. The JOS service area encompasses 73 cities and unincorporated territory, and includes some areas within the City of Los Angeles (LACSD 2014).

The City of Los Angeles Bureau of Sanitation (LASAN) provides wastewater treatment for the City of Los Angeles and several unincorporated and incorporated areas adjacent to the City of Los Angeles. LASAN operates and maintains the largest wastewater sanitary sewer system in the nation, serving a population of over four million. LASAN's system consists of more than 6,500 miles of sewers, 140,000 maintenance holes, and 46 pump stations. LASAN also provides wastewater conveyance and treatment services to 29 satellite agencies under contractual agreements but is not responsible for satellite agencies' sewer system management. LASAN's sewer system consists of three separate sanitary sewer systems: Hyperion Sanitary Sewer System, Terminal Island Water Reclamation Plant Sanitary Sewer System, and the City's Regional Sanitary Sewer System (City of Los Angeles, 2010).

To comply with the waste discharge requirements issued by the State Water Resources Control Board, under the jurisdiction of the California Environmental Protection Agency, a Sewer System Management Plan (SSMP) was prepared for each of LACSD's and LASAN's sanitary sewer systems to control and mitigate all sanitary sewer overflows. The County Code requires that every business that disposes industrial wastewater obtain a permit. LASAN's Environmental Programs Division also permits and inspects industrial waste discharge into local sewers. Table 5.15-3 provides the sanitary sewer service providers and Table 5.15-4 provides the wastewater treatment providers and facilities for each of the facilities included within the EIR Focus Area.

Table 5.15-3. Sanitary Sewer Service Providers

AT Site	Site Name	City	Sanitary Sewer Service Provider	
AT Site #1	City of Carson Public Works Corps Yard	Carson	District 3 - JOS District 8 - JOS	
AT Site #1	Santa Monica Pier	Santa Monica	City of Santa Monica	
AT Site #2	Santa Monica Airport	Santa Monica	City of Santa Monica	
AT Site #3	Santa Monica Public Works Corp Yard	Santa Monica	City of Santa Monica	
AT Site #4	City Terrace MRF	Los Angeles	District 2 - JOS	
AT Site #5	CR&R Catalina	Avalon	City of Avalon	
AT Site #6	Interior Removal Specialists, Inc.	South Gate	District 1 - JOS District 2 - JOS	
AT Site #7	Carson Revitalization Project	Carson	District 3 - JOS District 8 - JOS	
AT Site #8	Waste Resources Recovery, Inc.	Gardena	District 1 - JOS District 5 - JOS District 8 - JOS	

Source: LACSD, n.d.

Table 5.15-4. Wastewater Treatment Provider and Treatment Facility

AT Site	Site Name	Los Angeles County Planning Area	Wastewater Treatment Provider	Wastewater Treatment Facility	Existing Capacity mgd
AT Site #1	City of Carson Public Works Corps Yard	South Bay	LACSD	JWPCP	400
AT Site #2	Santa Monica Pier	Metro	LASAN	Hyperion Treatment Plant	450
AT Site #3	Santa Monica Airport	Metro	LASAN	Hyperion Treatment Plant	450
AT Site #4	Santa Monica Public Works Corp Yard	Metro	LASAN	Hyperion Treatment Plant	450
AT Site #5	City Terrace Recycling, Inc.	Metro	LACSD	JWPCP	400
AT Site #6	CR&R Catalina	Coastal Island	City of Avalon	Avalon WRP	1.2
AT Site #7	Interior Removal	Gateway	LACSD	Long Beach WRP	25
	Specialists, Inc.			Los Coyotes WRP	37.5
AT Site #8	Carson Revitalization Project, Inc.	South Bay	LACSD	JWPCP	400
AT Site #9	Waste Resources Recovery, Inc.	Metro	LACSD	JWPCP	400

Source: County of Los Angeles 2014

Notes:

WRP = Water Reclamation Plant

JWPCP = Joint Water Pollution Control Plant

Drainage

Drainage systems responsible for receiving and conveying stormwater runoff from facilities comprising the Focus Area are described in Section 5.8, Hydrology and Water Quality.

Solid Waste Management

As previously discussed in Chapter 3.0 Project Description, solid waste for the unincorporated communities in Los Angeles and 88 incorporated cities is collected by both residential and commercial waste haulers through a diverse and complex system. Each jurisdiction utilizes various bin systems for the collection of its residential waste such as a one-bin system, two-bin system, and three-bin system; and in rare cases a four-bin system to segregate the waste stream by material types. The types of materials collected in these bins include Municipal Solid Waste (MSW), recycled materials, green materials and manure (in the case of a four-bin system). In the commercial sector, dumpsters are commonly used as storage bins for the collection of commercial waste.

A majority of the jurisdictions use an automatic solid waste collection method. After collection, waste is either hauled directly to the landfills or transformation facilities, or is hauled to the landfills/transformation facilities via a transfer station, materials recovery facility (MRF), or Construction, Demolition, and Inert (CDI) debris recycling facility. The County relies on a mixture of publicly and privately-owned and operated facilities to maintain a competitive environment for waste collection and disposal. Table 5.15-4 identifies the entities responsible for solid waste collection in the vicinity of the Focus Area sites.

Table 5.15-5. Solid Waste Collection for the EIR Focus Area

Alternative Technology Site	Solid Waste Collection Service Provider
City of Carson Public Works Corps Yard	Waste Management Inc.
Santa Monica Pier	Santa Monica Solid Waste Management Division
Santa Monica Airport	Santa Monica Solid Waste Management Division
Santa Monica Public Works Corp Yard	Santa Monica Solid Waste Management Division
CR&R Catalina	CR&R Waste Services
Carson Revitalization Project	Waste Management Inc.
Interior Removal Specialists, Inc.	Waste Management Inc.
Waste Resources Recovery, Inc.	Waste Resources, Inc.
City Terrace Recycling	Department of Public Works Bureau of Sanitation

Source: LACSD 2016

Once collected, solid waste is transported to an In-County or Out-of-County solid waste transfer or disposal facility. The County currently is a host to two classifications of land disposal facilities, namely Class III landfills and inert waste landfills. The first landfill classification, Class III, is allowed to accept most non-hazardous solid waste for disposal. Class III landfills are required to comply with strict environmental and technical standards mandated by local, state, and federal agencies. While this high level of regulation ensures safe disposal of solid waste and protection of the public health, it also increases the amount of time required for the siting and permitting of Class III facilities. Today, the siting and permitting of a Class III landfill can take anywhere from 10 to 15 years and, in some cases, longer.

As of December 31, 2018, the remaining permitted Class III landfill capacity in the County is estimated at 167.60 million tons (201.01 million cubic yards), of which the remaining permitted capacities for Major and Minor Landfills are 160.07 and 7.55 million tons (187.85 and 13.16 million cubic yards), respectively. Based on the 2018 average disposal rate of 15,806 tons per day (tpd) (excluding waste imported to the County), the reliance on in-County Class III landfills alone will not be sufficient in accommodating the County's disposal needs over the 15-year planning period of the Los Angeles County Countywide Siting Element (CSE) (County of Los Angeles 2018).

Major Class III Landfills. As of December 31, 2018, there are six existing permitted major Class III landfills within the County:

- Antelope Valley Recycling and Disposal Facility
- Calabasas Landfill
- Chiquita Canyon Landfill
- Lancaster Landfill and Recycling Center
- Scholl Canyon Landfill
- Sunshine Canyon City/County Landfill

The total average daily disposal rate in 2018 for the six existing permitted major Class III landfills, is approximately 15,664 tpd based on 2018 disposal data (County of Los Angeles 2018).

Minor Class III Landfills. As of December 31, 2018, there are four existing permitted minor Class III landfills within the County:

- Burbank Landfill No. 3 (City of Burbank use only)
- Pebbly Beach Disposal Site, Avalon, Santa Catalina Island
- San Clemente Landfill, U.S. Navy Facility, San Clemente Island
- Savage Canyon Landfill (City of Whittier use only)

The total average daily disposal rate in 2018 for the four existing permitted minor Class III landfills is approximately 396 tpd based on 2018 disposal data (County of Los Angeles 2018).

Inert Waste Landfills. Inert waste landfills include facilities/operations such as inert debris disposal facilities, inert debris engineered fill operations, and inert debris engineered fill activities. The combined total average disposal rate of the inert waste landfill in the County is 9,891 tpd as of December 31, 2018. The total remaining permitted disposal capacity for the inert waste landfill in the County as of December 31, 2018 is unknown (County of Los Angeles 2018). However, based on the available total remaining disposal capacity of the permitted inert waste landfill and Inert Debris Engineered Fill Operations (IDEFOs), there is currently sufficient daily capacity at permitted inert waste landfills.

As of December 31, 2018, there is one permitted inert waste landfill in the County:

Azusa Land Reclamation Landfill (inert waste only portion)

The total average daily disposal rate in 2018 for the permitted inert waste landfill is approximately 1,356 tpd based on 2018 disposal data. The total remaining permitted disposal capacity for the permitted inert waste landfill in the County is approximately 55.71 million tons (44.56 million cubic yards) as of December 31, 2018 (County of Los Angeles 2018). At the current average disposal rate of 1,356 tpd the total remaining permitted capacity will be exhausted in about 28 years.

As of December 31, 2018, there are 11 IDEFOs in the County:

- Durbin Landfill
- Hanson Aggregates (Livingston-Graham)
- Lower Azusa Reclamation Project
- Manning Pit
- Montebello Land and Water Company
- North Kincaid Pit
- Nu-Way Arrow Reclamation
- Peck Road Gravel Pit
- Reliance Landfill
- Sun Valley Landfill
- United Rock Products

The total average daily disposal rate in 2018 for the IDEFOs is approximately 8,535 tpd, based on 2018 disposal data (County of Los Angeles 2018).

Transformation Facilities. As of December 31, 2018, there are two transformation waste-to-energy facilities located within the County:

- Commerce Refuse-to-Energy Facility (CREF) (closed as of 2018)
- Southeast Resource Recovery Facility (SERRF)

The total average daily disposal rate in 2018 for the transformation facilities is approximately 1,571 tpd based on 2017 disposal data. The SERRF processed approximately 1,127 tpd of solid waste including about 145 tpd of solid waste imported from outside the County, while CREF processed approximately 252 tpd which includes about 47 tpd of solid waste imported from other counties (County of Los Angeles 2017). The residual ash generated from the transformation process is diverted for use in the production of Portland cement concrete and other uses.

City of Los Angeles Bureau of Sanitation

LASAN provides solid waste management services to single-family and multi-family residential building (up to 4 units) households in the City of Los Angeles (City). Private hauling companies collect other refuse, including most multi-family and all commercial and industrial waste. The City's Solid Resources program includes the collection, recycling, and disposal of solid waste, green waste, bulky items, and other special solid resources materials for residences City-wide, and management of contracted recycling programs for apartments, and commercial and industrial businesses. This includes the recycling and disposal of household hazardous waste, the development of long-term alternatives to landfill disposal, and clean fuel programs related to solid waste.

The LASAN collects, disposes, and recycles over 1.5 million tons per year of single-family residential solid waste, collecting refuse, recyclables, yard trimmings, and bulky items (City of Los Angeles SWIRP 2013). Solid waste facilities utilized by the City include: refuse collection yards; mulching/composting facilities; permanent Solvents, Automotive, Flammables, and Electronics (SAFE) centers for household hazardous waste; regional transfer stations and landfills, material recovery facilities (MRFs), animal rendering plants, and waste-to-energy facilities.

The Solid Waste Integrated Resource Plan (SWIRP) is a long-range master plan for solid waste management in the City. The blueprint for SWIRP is RENEW L.A. RENEW L.A. establishes the vision for Zero Waste. SWIRP proposes an approach for LA to achieve a goal of 75 percent diversion by 2013 and 90 percent diversion by 2025. These targeted diversion rates would be implemented through an enhancement of existing policies and programs, implementation of new policies and programs, making certain programs mandatory, and the development of future facilities to meet the City's recycling and solid waste infrastructure needs through 2030.

Solid Waste Facilities Permit

The local enforcement agency (LEA) for CalRecycle has the primary responsibility for processing and enforcing solid waste facilities permits (SWFP). The SWFP outlines accepted and prohibited waste streams for existing landfills. The primary goal/purpose of issuing or revising a solid waste facilities permit is to ensure protection of the public health and safety and prevention of environmental damage. The SWFP places limits and conditions for design and operation of solid waste facilities. Table 5.15-5 lists the SWFP number and corresponding daily tonnage and capacity limits for each of the potential facility locations within the EIR Focus Areas.

Electrical and Natural Gas

The following discussion incorporates by reference the existing setting for electricity and natural gas as identified in the County's General Plan EIR.

Southern California Edison (SCE) provides electricity to Los Angeles County. Total electricity demands in SCE's service area were 82,069 gigawatt-hours (GWH) per year in 2012 and are forecast to increase to 96,516 GWH in 2024; one GWH is equivalent to one million kilowatt-hours.

The Southern California Gas Company (SCGC) supplies natural gas to most of Los Angeles County except for a few cities, including the City of Vernon and City of Long Beach, which supply natural gas to their own residents and other customers. Total natural gas supplies available to SCGC are forecasted to remain constant at 3,875 million cubic feet per day (MMCF/Day) from 2018 through 2033.

Table 5.15-6. Solid Waste Facility Permits

AT Site	Site Name	Site Location	Permit Number	Permitted Maximum Daily Tonnage (tons per day)	Maximum Permitted Capacity (cubic yards)	Remaining Permitted Capacity as of 12/31/15 (tons)
AT Site #1	City of Carson Public Works Yard	2390 E Dominguez St., Carson, CA 90810	19-AS-0038			
AT Site #2	Santa Monica Pier	200 Santa Monica Pier, Santa Monica, CA 90401	N/A	1		
AT Site #3	Santa Monica Airport	3223 Donald Douglas Loop, Santa Monica, CA 90405	N/A	1		
AT Site #4	Santa Monica Public Works Corps Yard	200 Michigan Ave., Santa Monica, CA 90404	N/A	1		
AT Site #5	City Terrace Recycling, LLC	1525 Fishburn Ave., Los Angeles, CA 90063	19-AA-0859	700		
AT Site #6	CR&R Catalina	1 Dump Rd. Avalon, CA 90704	19-AA-0061	49	143,142	53,414
AT Site #7	Interior Removal Specialists, Inc.	8990 Atlantic Ave. South Gate, CA 90280	19-AA-1077	3,000		
AT Site #8	Carson Revitalization Project	20945 S. Wilmington Ave. Carson, CA 90810	N/A			
AT Site #9	Waste Resources Recovery, Inc.	357 W. Compton Blvd. Gardena, CA 90248	19-AA-0857	500		

Sources: SWIS, n.d.; SWIMS, n.d. County of Los Angeles 2018

5.15.2 Existing Plans and Regulations

The following section provides a description of the applicable regulatory environment for the proposed project.

Federal

Refer to Section 5.8, Hydrology and Water Quality for a description and overview of the Clean Water Act.

State

Urban Water Management Planning Act (California Water Code Sections 10610 et seq.)

The Urban Water Management Planning Act (California Water Code Sections 10610-10656) requires that all urban water suppliers with at least 3,000 customers prepare urban water management plans (UWMP) and update them every five years. The act requires that urban water management plans include a description of water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

Water Conservation Act of 2009 (Senate Bill X7-7)

Senate Bill 7 of Special Extended Session 7 (SB X7-7) was signed into law in November 2009. SB X7-7 calls for progress towards a 20 percent reduction in per capita water use statewide by 2020 and establishes a statutory framework intended to achieve the co-equal goals of providing a more reliable water supply to California and restoring and enhancing the Sacramento-San Joaquin River Delta Ecosystem. As a result, the legislation now mandates each urban water retail supplier to develop and report a water use target in the retailer's UWMP. The legislation further requires that retailers report an interim 2015 water use target, their baseline daily per capita use and 2020 compliance daily per capita use, along with the basis for determining those estimates. SB X7-7 provides four possible methods for an urban retail water supplier to use to calculate its water use target. DWR has also developed methodologies for calculating base daily per capita water use, baseline commercial, industrial and institutional water use, compliance daily per capita water use, gross water use, service area population, indoor residential water use and landscape area water use. Agencies not in compliance with SB X7-7 will be ineligible for state loan and grant funding.

Water Supply Assessments (Senate Bill 610 (Chapter 643, Statutes of 2001) and Senate Bill 221 (Chapter 643, Statutes of 2001))

Senate Bill (SB) 610 and SB 221 amended state law to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 are companion measures that seek to promote more collaborative planning between local water supplies and cities and counties. Both statutes require that detailed information regarding water availability be provided to city and county decision-makers prior to approval of specific large development projects, and be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Under SB 610, water supply assessments must be provided to local governments for inclusion in any environmental documentation for certain projects subject to CEQA, as defined in Water Code Section 10912(a), which is applicable to the Draft Environmental Impact Report (DEIR) for the Los Angeles County CSE.

In general, terms, prior to constructing developments with more than 500 homes or the commercial/industrial equivalent, SB 610 requires applicants to demonstrate that there is an adequate 20-year water supply. Water Code Section 10910(c)(3) states that a water supply assessment (WSA) generally must meet the following requirements:

If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regards to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year project will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.

Under SB 221, approval by a city or county of certain types of residential subdivisions requires an affirmative verification of sufficient water supply. SB 221 serves as a method to ensure collaboration on finding the needed water supplies to serve a new large subdivision before construction begins. General plans serve as an important planning tool for the local water supplier when they prepare the 20-year vision for the UWMP.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately-owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The CPUC serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy. One of the state's largest end uses of electricity is in the treatment, heating, and conveyance of water in California. This is known to many as the "Water/Energy Nexus." The investor-owned utilities (IOUs) currently offer many incentive programs in the areas of energy efficiency, demand response, and distributed generation related to the water/energy nexus.

Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations Title 24, Part 6)

Title 24, Part 6, of the California Code of Regulations establishes California's Energy Efficiency Standards for Residential and Nonresidential Buildings. For nonresidential buildings, the standards establish minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating/ventilation/air conditioning and water heating systems), indoor and outdoor lighting, and illuminated signs.

Assembly Bill 1890 (The Electric Utility Industry Restructuring Act)

On the State level, the CPUC and California Energy Commission (CEC) are two agencies with authority over different aspects of energy. The CPUC regulates privately owned utilities in the energy, rail, telecommunications, and water fields. AB 1890 made the generation of electricity competitive in California. The legislation became law on September 23, 1996. Before restructuring, a single utility provided each customer with generation, transmission, distribution, and metering and billing of electricity. Assembly Bill 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that was under the control of IOUs (e.g., SCE) was decoupled. The deregulation requirements do not apply to public-owned utilities. The new structure allowed customers in most, but not all, existing electric utility service areas to choose their electric generation supplier. Restructuring also brought changes to the transmission of electricity. Previously restricted transmission facilities were opened to power generators on a fair and equitable basis, overseen by a new organization, the Independent System Operator. The Independent System Operator has been given the responsibility for assuring reliability of the high voltage transmission system. Local utilities continue to distribute electricity.

Section 5.408 of the California Green Building Standards Code) (Title 24, California Code of Regulations, Part 11)

The 2013 California Green Building Standards Code (CalGreen), California Code of Regulations, Title 24, Part 11, took effect January 1, 2014. Section 5.408 of the 2013 California Green Building Standards Code (Title 24, California Code of Regulations, Part 11) requires that at least 50 percent of the non-hazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

Local

County of Los Angeles General Plan

Los Angeles County recently adopted an update to its General Plan in 2015. The General Plan's Public Services and Facilities Element includes policies adopted for the purposes of promoting the orderly and efficient planning of public services and facilities and infrastructure in conjunction with development and growth.

Public Services and Facilities (PS/F) Element

- Policy PS/F1.2: Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms.
- Policy PS/F1.3 Ensure coordinated service provision through collaboration between County Departments and service providers.
- Policy PS/F 3.1: Increase the supply of water through the development of new sources, such as recycled water, gray water, and rainwater harvesting.
- Policy PS/F 3.2: Support the increased production, distribution and use of recycled water, gray water, and rainwater harvesting to provide for groundwater recharge, seawater intrusion barrier injection, irrigation, industrial processes and other beneficial uses.
- Policy PS/F 4.1: Encourage the planning and continued development of efficient countywide sewer conveyance treatment systems.
- Policy PS/F 4.2: Support capital improvement plans to improve aging and deficient wastewater systems, particularly in areas where the General Plan encourages development, such as transit oriented developments.
- Policy PS/F 4.3: Ensure the proper design of sewage treatment and disposal facilities, especially in landslide, hillside, and other hazard areas.
- Policy PS/F 4.4: Evaluate the potential for treating stormwater runoff in wastewater management systems or through other similar systems and methods.
- Policy PS/F 5.1: Maintain an efficient, safe and responsive waste management system that reduces waste while protecting the health and safety of the public.
- Policy PS/F 5.2: Ensure adequate disposal capacity by providing for environmentally sound and technically feasible development of solid waste management facilities, such as landfills and transfer/processing facilities.
- Policy PS/F 5.4: Encourage solid waste management facilities that utilize conversion and other alternative technologies and waste to energy facilities.
- Policy PS/F 5.5: Reduce the County's waste stream by minimizing waste generation and enhancing diversion.
- Policy PS/F 5.6: Encourage the use and procurement of recyclable and biodegradable materials.
- Policy PS/F 5.7: Encourage the recycling of construction and demolition debris generated by public and private projects.
- Policy PS/F 5.8: Ensure adequate and regular waste and recycling collection services.
- Policy PS/F 5.9: Encourage the availability of trash and recyclables containers in new developments, public streets, and large venues.

Green Building Program

In 2008, Los Angeles County adopted the Green Building Program, which included Drought-Tolerant Landscaping, Green Building, and Low Impact Development Ordinances (the Ordinances), and created an Implementation Task Force and Technical Manual. In November 2013, in response to the mandates set forth in CalGreen (2010 California Green Building Standards Code), the Board of Supervisors adopted the Los Angeles County Green Building Standards Code (Title 31).

Other Jurisdictions

In addition to the County, the CSE Revisions contemplates up to six potential site locations within cities including Carson, Santa Monica, and South Gate. Three potential site locations are within unincorporated areas in the County. Each of these cities has adopted General Plans and Municipal Codes (or Ordinances) which may include specific policies related to utilities and service systems. Depending where future facilities are located, local plans and policies would be applicable to those facilities.

5.15.3 Thresholds of Significance

As defined in Appendix G of the CEQA Guidelines, project impacts with regards to utilities and service systems would be considered significant if the project was determined to:

- Would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Would require or result in the construction of new storm water drainage facilities, the construction of which could cause significant environmental effects.
- Would have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.
- Would result in a determination by the wastewater treatment provider which serves or may serve the project that has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Comply with federal, state, and local statutes and regulations related to solid waste.

Issues Requiring No Further Evaluation

The following issues are not applicable and/or have no impact as a result of the Proposed Plan.

• Compliance with Solid Waste Regulations. The Proposed Plan serves as a long-term planning and policy document that defines how the County will maintain sufficient solid waste disposal capacity over the next 15 years. The Proposed Plan provides a mechanism to identify locations for additional solid waste disposal facilities based on projected increases in demand. The main objective of the Proposed Plan is to comply with the State's Integrated Solid Waste Management Act and related regulations. For this reason, no impact would result.

5.15.4 Environmental Impacts

Countywide Siting Element Revision Policy and Program Analysis

The proposed CSE Revision establishes goals, policies, and guidelines for the proper planning and siting of Class III landfills, inert waste landfills, and alternative technologies on a Countywide basis. The CSE serves mainly as a long-term planning and policy document, rather than a detailed infrastructure development program, that defines how the County plans to maintain sufficient solid waste disposal capacity over a 15-year period (through 2033). The CSE Revision does not involve any physical development or construction activity. Therefore, the proposed CSE Revision would not result in direct impacts related to utilities and service systems; however, depending on phasing and implementation, certain policies may result in project-level impacts through future facility construction activities and operation.

Countywide Siting Element Revision Facility Analysis

The CSE Revision must include the identification of an area or areas for the location of new solid waste, alternative technology, land disposal facilities, or the expansion of existing facilities. The following analysis describes the potential impact that future facilities could have related to utilities and service systems. Future project-level environmental analysis will be required for new or amended entitlement applications as they are presented to the County or local jurisdictions for review and approval.

Impact 5.15-1: Exceed Wastewater Treatment Requirements

Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Future discharges from potential future facilities would be subject to Sections 6.4 and 6.6, Siting and Permitting, of the CSE (2017), which would include new or amended National Pollutant Discharge Elimination System (NPDES) permits, Waste Discharge Requirements (WDRs), and a Standard Urban Stormwater Mitigation Plan (SUSMP) to address the pollutants of concern at each facility. For example, the SWRCB requires Class III landfills to obtain WDRs. Facilities that will discharge treated wastewater to land, or that have surface impoundments, waste piles, or land treatment or disposal facilities, require WDRs. The WDRs establish conditions for the protection of groundwater and surface water, specify the types of wastes that may be accepted at the facility, and include a comprehensive water quality Monitoring and Reporting Program. If a discharge to surface water is required, a NPDES permit would be required from the Regional Water Quality Control Board (RWQCB) (Los Angeles or Lahontan) in coordination with USEPA, Region IX, so that the discharge complies with water quality standards for applied beneficial uses and, if applicable, associated total maximum daily loads (TMDLs).

Future facilities would be required to comply with the Siting Criteria in Appendix 6-A of the CSE by ensuring the protection of surface waters. Some facilities will generate a treated effluent requiring discharge to receiving waters. Facilities could discharge to sanitary sewers, with the appropriate regulatory agency requiring adequate pretreatment of wastewaters to a specified level before discharge. The following siting criteria would apply to potential future facilities:

Facilities Generating Wastewaters: Facilities should be located in areas with adequate sewer capacity to accommodate the expected wastewater discharge. If sewers are not available, on-site treatment should be considered. Alternately, wastewaters could also be transported in bulk via highways to facilities capable of treating them. Facilities discharging into streams or into the ocean, directly or via storm drains, will require NPDES permits issued by the RWQCB. The NPDES permit sets limitations on the quantity and quality of the waste discharges, and may specify engineering and technical requirements to ensure compliance.

The Proposed Plan generally consolidates the proposed solid waste management facilities (e.g. AT) at existing solid waste management facilities. These factors in combination with adherence to existing state and local regulations, including the proposed CSE Siting Criteria, would minimize impacts related to wastewater treatment. For this reason, the impact is considered less than significant.

Impact 5.15-2: New Water or Wastewater Treatment Facilities

Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Water demand is determined based on the individual jurisdiction. Each water purveyor is required to prepare an Urban Water Management Plan (UWMP) every five years. Water supply projections/capacity is typically determined based on population growth and is generally consistent with the City or County's general plan. If a facility is sited in an area consistent with the general plan land use designation for that jurisdiction, it is presumed that water supply would be sufficient. In addition to the UWMP and general plan assumptions, development applications for future facilities greater than 40 acres of land, having more than 650,000 square feet of floor area, or employing more than 1,000 persons shall include a WSA pursuant to SB 610. At this time, insufficient information is available to determine if a WSA would be required for one or more of the facilities contemplated under the Proposed Plan. For this reason, as individual projects are proposed and undergo the entitlement process, they would be subject to project-level CEQA review and, if necessary, a WSA. Based on these considerations, impacts to water supplies are considered less than significant.

Future facilities would be required to comply with the Siting Criteria in Appendix 6-A of the CSE by protecting surface waters through the incorporation of best management practices (BMPs). Some facilities will generate a treated effluent requiring discharge to receiving waters. Facilities could discharge to sanitary sewers, with the appropriate regulatory agency requiring adequate pretreatment of wastewaters to a specified level before discharge. The following siting criteria would apply to potential future facilities:

Facilities Generating Wastewaters: Facilities should be located in areas with adequate sewer capacity to accommodate the expected wastewater discharge. If sewers are not available, on-site treatment should be considered. Alternatively, wastewaters could also be transported in bulk via highways to facilities capable of treating them. Facilities discharging into streams or into the ocean, directly or via storm drains, will require NPDES permits issued by the RWQCB. The NPDES permit sets limitations on the quantity and quality of the waste discharges, and may specify engineering and technical requirements to ensure compliance.

Adherence to Federal, State, and local regulations, including the proposed CSE Siting Criteria, combined with project-level CEQA review would minimize impacts to less than significant.

Impact 5.15-3: New or Expanded Storm Water Drainage Facilities

Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Future facilities would be required to comply with all stormwater discharge requirements, as well as any applicable NPDES permits, as explained in Section 5.8, Hydrology and Water Quality. As new facilities are proposed within the Focus Area, each would be required to comply with the Siting Criteria in Appendix 6-A of the CSE. Future facilities would require compliance with Federal, State, and local regulations, including the proposed CSE Siting Criteria, in combination with project-level environmental review. In this context, impacts to storm drain facilities as a result of the Plans' adoption are less than significant.

Impact 5.15-4: Sufficient Water Supplies

Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlement needed?

As previously indicated, water demand is determined based on the supply availability of individual jurisdictions and their corresponding water purveyors. Each water purveyor is required to prepare an UWMP every five years. Water supply projections/capacity is typically determined based on population growth and is generally consistent with the City or County's general plan. If the facility is sited in an area consistent with the general plan land use designation for that jurisdiction, it is presumed that water supply would be sufficient. In addition to the UWMP and general plan assumptions, development applications for future facilities greater than 40 acres of land, having more than 650,000 square feet of floor area, or employing more than 1,000 persons are required to include a WSA pursuant to SB 610. The WSA would be prepared by the water agency serving the facility and address: (1) document wholesale water supplies; and (2) identify and quantify the existing and planned sources of water availability to the water supplier in five-year increments for the 20-year projection. For each identified supply, the WSA is required to detail the quantity available and whether it is a water supply entitlement, water right, or water service contract; (3) document the project demand; (4) document dry year supplies; (5) document dry year demand; and (6) determine if projected water supply is sufficient or insufficient for the proposed facility. This existing regulatory framework combined with project-level environmental review for specific projects would minimize impacts to existing water supplies. For this reason, this impact is considered less than significant.

Impact 5.15-5: Adequate Wastewater Treatment Capacity

Would the project result in the determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Future facilities would be required to comply with the Siting Criteria in Appendix 6-A of the CSE by ensuring the protection of surface waters. Some facilities will generate a treated effluent requiring discharge to receiving waters. Facilities could discharge to sanitary sewers, with the appropriate regulatory agency requiring adequate pretreatment of wastewaters to a specified level before discharge. The following siting criteria would apply to potentially future facilities:

■ Facilities Generating Wastewaters: Facilities should be located in areas with adequate sewer capacity to accommodate the expected wastewater discharge. If sewers are not available, on-site treatment should be considered. Alternately, wastewaters could also be transported in bulk via highways to facilities capable of treating them. Facilities discharging into streams or into the ocean, directly or via storm drains, will require NPDES permits issued by the RWQCB. The NPDES permit sets limitations on the quantity and quality of the waste discharges, and may specify engineering and technical requirements to ensure compliance.

Adherence to Federal, State, and local regulations, including the proposed CSE Siting Criteria, would minimize impacts to less than significant.

Impact 5.15-6: Sufficient Landfill Accommodation

Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

As stated previously, County of Los Angeles solid waste is collected by both residential and commercial waste haulers using various bin systems. Solid waste is collected and is, either, hauled directly to landfills or transformation facilities, or is hauled to landfills and AT facilities via a transfer station, MRF, or CDI debris recycling facility. A component of the Proposed Plan is to increase diversion rates to 75 percent by 2020 through implementation of new policies and programs in order to reduce disposal demand. Table 5.15-5 lists the SWFP number and corresponding daily tonnage and capacity limits for each of the potential facility locations within the Focus Areas.

The Proposed Plan and development of future facilities, following project-level CEQA review, would have a beneficial impact on solid waste disposal capacity, through the increased diversion of solid wastes, construction of alternative technology facilities, and leveraging out-of-County landfill capacity. Adherence to Federal, State, and local regulations, including the proposed CSE Revision would identify a beneficial impact for this issue area.

5.15.5 Cumulative Impacts

Based on the location of future facilities, as well as other planned projects in their vicinity, the resulting wastewater discharge, water consumption, energy consumption, and stormwater discharge could exceed available capacity. However, compliance with local regulations and the proposed Siting Criteria combined with future project-level environmental review would minimize potential project-level impacts and would not be cumulatively considerable.

5.15.6 Level of Significance Before Mitigation

Compliance with applicable regulatory requirements, including the proposed CSE Siting Criteria, would minimize the potential for impacts to public and private utilities such that impacts would be less than significant.

5.15.7 Mitigation Measures

No mitigation measures are required.

5.15.8 Level of Significance After Mitigation

No significant impacts to public utilities and service systems are identified that would otherwise require mitigation.

5.15.9 References

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Significant Unavoidable Adverse Impacts



6.0 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS



In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126(b), Environmental Impact Reports (EIRs) must include a discussion of significant environmental effects that cannot be avoided if the proposed project is implemented. The impact analysis, as detailed in Chapter 5.0 of this EIR, concludes that air quality impacts would remain significant, even after the incorporation of mitigation for the Proposed Plan.

Air Quality

Since specific facility-level analysis cannot be conducted at this time, due to the uncertainty of technologies to be implemented, Los Angeles County (County) is unable to verify if facility emission impacts will be reduced to below a level of significance through the implementation of proposed mitigation. Based on the analysis provided in Section 5.2, Air Quality, implementation of the proposed Countywide Siting Element (CSE) Revision would result in significant construction and operational emissions of criteria air pollutants, including nitrogen oxides (NO_x). Implementation of Best Available Control Measures (BACMs) in conjunction with Mitigation Measure AQ-1 would reduce some of the construction related emissions; however, the County is unable to confirm whether these reductions would be sufficient for reducing construction-related impacts to below a level of significance. For this reason, construction-related emissions are considered significant at the Plan level, pending a project specific air quality analysis.

From an operational perspective, implementation of the proposed CSE Revision would result in an increase in criteria air pollutants (e.g., NO_x). Although process-specific emissions control technologies would be employed at new or expanded facilities, their combined operations would result in an increase in criteria air pollutants when compared to existing solid waste management operations. In addition to stationary and area sources, NO_x emissions associated with vehicular and haul truck trips would further contribute to exceedances of South Coast Air Quality Management District (SCAQMD) (or Antelope Valley Air Quality Management District [AVAQMD]) thresholds. Adherence to the County's existing clean fuels programs and compliance with Mitigation Measure AQ-2 would reduce some of the NO_x emissions associated with haul trucks and other stationary sources, however, residual operational-related impacts could remain. Therefore, this impact is considered cumulatively considerable at the Plan level and significant pending a project-specific air quality analysis.





Alternatives to the Proposed Project



7.0 ALTERNATIVES TO THE PROPOSED PROJECT



7.1 PURPOSE AND SCOPE

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines Section 15126.6). This chapter identifies potential alternatives to the proposed Los Angeles County Countywide Siting Element (CSE) Revision and provides a comparative evaluation of their respective impacts, as required by CEQA.

Note, the Proposed Plan is described in detail in **Chapter 3.0** of this document. As described in Chapter 3.0, the anticipated disposal needs of the County cannot be met by pursuing a single disposal alternative (i.e., landfill expansions, out-of-County disposal, etc.), the Proposed Plan would entail the potential implementation of all solid waste management options available to the County to avert a disposal capacity shortfall. Implementation of the Proposed Plan assumes that a combination of one or more of the following actions would occur over the 15-year planning period to manage the County's projected solid waste disposal needs through 2033:

- 1. Increase in diversion rate (up to 75 percent by 2020);
- 2. Use of existing in-County permitted disposal facilities for MSW (including AT facilities and excluding disposal at inert waste landfills);
- 3. No new Class III landfills within the County;
- Increase in utilization of alternative technology (e.g., conversion technology) facility capacity (up to 1,600 tpd by 2033 see Figure 3-6 located in Chapter 3.0 of this EIR);
- 5. Utilization of current exports to out-of-County landfill disposal facilities; and
- **6.** Increase in exports to out-of-County disposal facilities including utilization of the waste-by-rail system to Mesquite Regional Landfill (up to 16,000 tpd by 2033).

Figure 3-7 (see Chapter 3.0 of this EIR) illustrates how each of these solid waste

management options, when combined, would accommodate the County's projected solid waste disposal needs through 2033.

Key provisions of the CEQA Guidelines on alternatives (Section 15126.6[a] through [f]) are summarized below to explain the foundation and legal requirements for the alternatives analysis in the EIR.

- "The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly" (15126.6[b]).
- The "specific alternative of 'no project' shall also be evaluated along with its impact" (15126.6[e][1]).
- If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives" (15126.6[e][2]).
- "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project" (15126.6[f]).
- "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)" (15126.6[f][1]).
- For alternative locations, "only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR" (15126.6[f][2][A]).
- "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative" (15126.6[f] [3]).

For each alternative, this analysis:

- Describes the alternative;
- Analyzes the impact of the alternative compared to the proposed project;
- Identifies the impacts of the project that would be avoided or lessened by the alternative;
- Assesses whether the alternative would meet most of the basic project objectives; and
- Evaluates the comparative merits of the alternative and the project.

7.2 PROJECT OBJECTIVES

As described in Section 3.3., Statement of Objectives, objectives have been established for the proposed CSE Revision and will aid decision makers in their review of the project and associated environmental impacts. Objectives include:

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

- 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.
- To promote, encourage, and expand waste diversion activities by solid waste facility operators.
- 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 materials, such as tarps, for landfill daily cover, provided the use of such materials protects the health, welfare, and safety of the citizens in Los Angeles County, as well as the environment.
- To protect the health, welfare, safety, and economic well-being of the County by ensuring that the cities and the County unincorporated communities are served by an efficient and economical public/private solid waste management system.
- To foster the development of alternative technologies as alternatives to landfill disposal.
- To provide siting criteria that considers and provides for the environmentally sound and technically feasible development of solid waste management facilities, including alternative technology facilities (e.g., conversion technology, transformation) and landfills.
- 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 2033) through development of environmentally sound 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 polices to:
 - Enhance in-County landfill disposal capacity, and
 - o Facilitate utilization of remote and/or out-of-County disposal facilities.

7.3 ALTERNATIVES ELIMINATED FROM DETAILED CONSIDERATION

In addition to specifying that the EIR evaluate "a range of reasonable alternatives" to the project, Section 15126.6(c) of the CEQA Guidelines requires that an EIR identify any alternatives that were considered but were rejected as infeasible. Below are alternatives that were initially considered by the County, but eliminated from consideration in this EIR due to more or greater environmental effects or an inability to achieve the basic project objectives (e.g. accommodate projected waste disposal needs).

7.3.1 Utilization of Existing Landfill Disposal Capacity

An alternative that would involve utilization of existing landfill disposal capacity would limit the disposal of all solid waste to existing permitted In-County disposal facilities only (excluding disposal at inert waste landfills). Similar to the proposed CSE Revision, this alternative would require an increase of the countywide diversion rate to 75 percent by 2020; however, no increase in existing In-County landfill capacity or Out-of-County exports would be included. Based on these alternative features, reliance on existing permitted In-County disposal capacity alone would be insufficient to meet the County's long-term disposal needs (through 2033). Therefore, a disposal capacity shortfall would be expected to occur during the planning period. For this reason, this alternative fails to meet the basic project objective of satisfying the County's disposal capacity demands (through 2033) and was eliminated from detailed consideration in the EIR.

7.3.2 Meeting CalRecycle's Statewide Disposal Target of 2.7 Pounds per Person per Day (ppd)

An alternative that would involve meeting CalRecycle's Statewide Disposal Targets would include the following features during the planning period: (1) use of existing In-County permitted disposal facilities (excluding disposal at inert waste landfills); (2) an aggressive diversion effort by each jurisdiction within the Study Area (increasing countywide diversion rate to 83 percent by 2020) in order to achieve CalRecycle's Statewide disposal target of 2.7 ppd which would also meet Senate Bill 1383 organic waste disposal reduction targets; (3) utilization of current exports to out-of-County landfills; and (4) no potential increase of existing Class III landfill capacity and/or new transformation facilities. Based on these assumptions, a disposal capacity shortfall is not expected to occur during the planning period. However, a diversion rate beyond 75 percent was considered speculative for the purpose of this analysis and could not be reasonably assumed. For this reason, this alternative would carry the potential of not accommodating the County's projected solid waste disposal needs and was not carried forward for consideration.

7.3.3 No Utilization of AT Capacity

The County considered alternatives that would exclude the utilization of additional alternative technology (AT) capacity (e.g., conversion technology, other alternatives to landfilling) as part of the County's solid waste disposal portfolio. However, in the absence of additional disposal capacity from AT facilities, the County would require additional In- or Out-of-County disposal capacity to avoid a shortfall during the planning period. As a consequence, eliminating the potential for new AT facilities would further limit the options available to the County for accommodating its projected solid waste disposal demands through 2033. Further, by eliminating AT facilities from the County's menu of solid waste disposal options, the County would be unable to take advantage of the potential reductions in greenhouse gas (GHG) emissions that are associated with AT facilities when compared to traditional landfill disposal methods. For these reasons, alternatives that excluded additional disposal capacity from AT facilities were not carried forward for consideration in the EIR.

7.4 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

7.4.1 No Project Alternative (Status Quo)

The No Project Alternative assumes a continuation of the status quo under the existing 1997 CSE. Under the No Project Alternative, the County would continue disposal at existing permitted In- and Out-of-County disposal facilities (excluding disposal at inert waste landfills) similar to existing conditions. Similar to the proposed CSE Revision, continued jurisdiction's diversion efforts (increasing countywide diversion rate to 75 percent by 2020 and thereafter) would be necessary to maintain sufficient disposal capacity through 2033 under this alternative. No new AT facilities would occur under this alternative. Under the No Project Alternative, the County would not experience a disposal capacity shortfall during the planning period.

However, over the long term the No Project Alternative would provide less than half the available landfill disposal capacity projected in 2033 when compared to the Proposed Plan. Additionally, the No Project alternative would rely on achieving 75 percent countywide diversion rates by 2020 and continued availability of Out-of-County disposal through 2033.

Aesthetics

Less than significant aesthetics impacts are identified for the proposed CSE Revision. This alternative would not create new or greater impacts to visual resources and aesthetics when compared to the proposed project. This alternative would avoid any expanded landfill facilities or new AT facilities; therefore, impacts would be less compared to the Proposed Plan.

Air Quality

The No Project Alternative would limit the disposal options available to the County by leveraging existing In- and Out-of-County landfill capacity over the planning period. This alternative would avoid potential emissions of criteria air pollutants and/or toxic air contaminants (TACs) resulting from new AT facilities or expanded landfill capacity as proposed under the Proposed Plan. However, given that this alternative would likely continue to feature landfill disposal as the primary disposal method, emissions of criteria air pollutants would continue to exceed local criteria thresholds. Further, by limiting the expansion potential for In-County landfill capacity, this alternative could result in greater cumulative emissions (beyond the planning period) as a result of the limited reserve capacity within the County and increased likelihood for increased Out-of County exports. Therefore, this alternative would not reduce, or avoid, any significant impacts related to criteria air pollutants and the impact would be significant. Impacts associated with this alternative would be similar to the Proposed Plan.

The No Project Alternative would eliminate the potential for new AT facilities. As a result, potential localized health risk impacts associated with potential AT facilities would be avoided under this alternative. However, given that TACs would still result from landfill operations, this impact would be significant. Mitigation Measure AQ-3 would be required if this alternative is selected.

Biological Resources

Less than significant biological resources impacts have been identified for the Proposed Plan. This alternative would not create new or greater biological impacts when compared to the Proposed Plan. No construction activities beyond existing permitted facilities would result under this alternative; therefore, impacts would be less compared to the Proposed Plan.

Cultural Resources

Less than significant cultural resources impacts have been identified for the proposed CSE Revision. This alternative would not create new or greater impacts to cultural resources when compared to the proposed project. No new construction would occur beyond existing permitted facilities; therefore, impacts would be less compared to the Proposed Plan.

Geology and Soils

Less than significant geology and soils impacts have been identified for the Proposed Plan. This alternative would not create a new or greater impact related to soils and geology when compared to the proposed project. Similar to the Proposed Plan, impacts resulting under this alternative would be less than significant.

Greenhouse Gas Emissions

Greenhouse gas emissions (GHG) are inherent to the solid waste transport and disposal process. As presented in Section 5.6, GHG emissions under the Proposed Plan may be reduced through a reduction in traditional landfill disposal methods and a corresponding increase in the use of AT facilities. This alternative would not facilitate an increase in the use of AT facilities and, therefore, would rely on traditional landfill disposal methods. As a result, GHG emissions may be greater than the proposed project under the No Project Alternative.

Hazards and Hazardous Materials

Less than significant hazards and hazardous materials impacts were identified for the Proposed Plan. This alternative would not create new or greater impacts related to hazards and hazardous materials when compared to the proposed project. Impacts would be similar compared to the Proposed Plan.

Hydrology and Water Quality

Less than significant hydrology and water quality impacts were identified for the Proposed Plan. This alternative would not create new or greater impacts related to hydrology and water quality when compared to the Proposed Plan. Impacts would be similar compared to the Proposed Plan.

Land Use and Planning

Less than significant land use and planning impacts were identified for the Proposed Plan. This alternative would result in the County being out of compliance with State law adopted for the purposes of avoiding or mitigating environmental effects as they related to solid waste disposal. As a result, the No Project Alternative would create new impacts related to land use and planning. In this context, impacts associated with the No Project Alternative would be significant and greater when compared to the Proposed Plan.

Mineral Resources

Less than significant mineral resources impacts were identified for the Proposed Plan. This alternative would not create new or greater impacts related to mineral resources when compared to the Proposed Plan. Impacts would be similar compared to the Proposed Plan.

Noise and Vibration

Less than significant noise and vibration impacts were identified for the Proposed Plan. This alternative would not create new or greater impacts related to noise and vibration when compared to the Proposed Plan. Impacts would be similar compared to the Proposed Plan.

Population and Housing

Less than significant population and housing impacts were identified for the Proposed Plan. This alternative would not create new or greater impacts related to population and housing when compared to the Proposed Plan. Impacts would be similar compared to the Proposed Plan.

Public Services and Recreation

Less than significant public services and recreation impacts were identified for the Proposed Plan. This alternative would not create new or greater impacts related to public services and recreation when compared to the Proposed Plan. Impacts would be similar compared to the Proposed Plan.

Transportation and Traffic

Less than significant transportation and traffic impacts were identified for the Proposed Plan. This alternative would not create new or greater impacts to transportation and traffic when compared to the Proposed Plan. Impacts would be similar compared to the Proposed Plan.

Utilities and Service Systems

Less than significant utilities and service systems impacts were identified for the Proposed Plan. This alternative would not create new or greater impacts to utilities and service systems when compared to the Proposed Plan. However, over the long term, this alternative would provide less than half the available landfill disposal capacity in 2033 projected.

7.4.2 Alternative 1 - Potential In-County Class III Landfill Expansions

Alternative 1, Potential In-County Landfill Expansions, includes a solid waste management strategy that places emphasis on expanding In-County landfill capacity. This alternative assumes the following during the planning period: (1) expansion of existing In-County permitted disposal facilities and increase in daily disposal rate (excluding disposal at inert waste landfills); (2) continued jurisdiction's diversion efforts (increasing countywide diversion rate to 75 percent by 2020 and thereafter); and (3) utilization of current exports to out-of-County landfills. No new AT facilities would be constructed under this alternative and no increase in out-of-County exports would occur. This alternative proposes an increase in In-County landfill capacity with the expansion of one or more existing landfills within the County during the 15-year planning period. This alternative would provide sufficient disposal capacity during the planning period.

Aesthetics

No significant aesthetics impacts were identified for the Proposed Plan. This alternative would place emphasis on In-County landfill expansions (as opposed to new AT facilities) over the planning period. Additional project-level review would be required for any potential landfill expansion once preliminary project plans are available. Notwithstanding this circumstance, this alternative would accelerate the use of the County's In-County landfill capacity over time and include future expansion at one or more landfills within the County, which may result in greater visual impacts when compared to the Proposed Plan. Similar to the Proposed Plan, this alternative would be subject to the CSE Siting Criteria, which could minimize the visual impacts of future expansions. However, future landfill expansions would occur in undeveloped areas in contrast to AT facilities, which would be constructed at infill locations within existing urbanized areas. In this context, at the program level these impacts would be significant and greater than the Proposed Plan.

Air Quality

Under this alternative, an increase in the daily permitted disposal rate would occur at one or more existing landfills. The increase in the daily permitted disposal rate would involve additional truck trips that originate from various points in the region and localized increases in point and/or area source emissions. No AT facilities would be constructed under this alternative and emissions of criteria air pollutants (e.g. NOx) may be lessened, but not avoided. An increase in the localized emissions of TACs may occur with expanding landfills as compared to new AT facilities, which could result in elevated health risk impacts. These air quality impacts could be greater when compared to the Proposed Plan.

Biological Resources

Less than significant biological resources impacts were identified for the Proposed Plan. Compared to the Proposed Plan, this alternative involves one or more landfill expansions, which could affect undeveloped, open space areas adjacent to existing landfills. These areas may contain SEA designated areas under the County's recently adopted General Plan. Therefore, this alternative would likely result in greater impacts to biological resources when compared to the Proposed Plan.

Cultural Resources

Less than significant cultural resources impacts were identified for the proposed CSE Revision. Unlike the Proposed Plan, this alternative would involve one or more landfill expansions. New landfill expansions would require structural alterations or subsurface excavations that could result in a significant impact to previously unidentified cultural resources. Therefore, this alternative has the potential to result in significant impacts to cultural resources, which are greater than those associated with the Proposed Plan.

Geology and Soils

Less than significant geology and soils impacts have been identified for the proposed CSE Revision. With the incorporation of standard engineering practices and compliance with the CSE siting criteria, this alternative would not create a new or greater impact related to soils and geology when compared to the proposed CSE Revision. Similar to the Proposed Plan, a less than significant impact would result.

Greenhouse Gas Emissions

As provided in Section 5.6, GHG emissions under the Proposed Plan would likely be reduced through a reduction in traditional landfill disposal methods with an increase in the use of AT facilities depending on size and type of AT facility. This alternative would not facilitate an increase in the use of AT facilities and, therefore, would rely on traditional landfill disposal methods. As a result, GHG emissions may be greater under Alternative 1 as compared to the Proposed Plan.

Hazards and Hazardous Materials

Less than significant hazards and hazardous materials impacts have been identified for the proposed CSE Revision. This alternative would not create a new or greater impact related to hazards and hazardous materials when compared to the Proposed Plan. Similar to the Proposed Plan, compliance with existing federal and state laws combined with adherence to the proposed siting criteria, impacts resulting under this alternative would be less than significant.

Hydrology and Water Quality

Less than significant hydrology and water quality impacts have been identified for the Proposed Plan. This alternative would involve one or more potential landfill expansions, which could create greater impacts to hydrology and water quality when compared to the Proposed Plan. In this context, this alternative could result in significant hydrology and water quality impacts that would not otherwise occur under the Proposed Plan.

Land Use and Planning

Less than significant land use and planning impacts have been identified for the Proposed Plan. This alternative would not create a new or greater impact related to land use and planning when compared to the Proposed Plan. Similar to the AT facilities proposed under the Plan, the expansion of one or more landfills would be required to follow the County (or City) entitlement process and comply with the proposed siting criteria. In this context, this impact would be less than significant.

Mineral Resources

Less than significant mineral resources impacts have been identified for the Proposed Plan. This alternative would not create a new or greater impact related to mineral resources when compared to the proposed CSE Revision. Similar to the Proposed Plan, impacts resulting under this alternative would be less than significant.

Noise and Vibration

Less than significant noise and vibration impacts have been identified for the Proposed Plan. This alternative would not create a new or greater impact related to noise and vibration when compared to the Proposed Plan. Similar to the Proposed Plan, impacts resulting under this alternative would be less than significant.

Population and Housing

Less than significant population and housing impacts have been identified for the Proposed Plan. This alternative would not create a new or greater impact related to population and housing when compared to the Proposed Plan. Similar to the Proposed Plan, impacts resulting under this alternative would be less than significant.

Public Services and Recreation

Less than significant public services and recreation impacts have been identified for the Proposed Plan. This alternative would not create a new or greater impact related to public services and recreation when compared to the Proposed Plan. Similar to the Proposed Plan, impacts resulting under this alternative would be less than significant.

Transportation and Traffic

Less than significant transportation and traffic impacts have been identified for the Proposed Plan. This alternative would not create a new or greater impact related to transportation and traffic when compared to the Proposed Plan. Similar to the Proposed Plan, a less than significant impact would result.

Utilities and Service Systems

Less than significant utilities and service systems impacts have been identified for the Proposed Plan. This alternative would not create a new or greater impact related to utilities and service systems when compared to the proposed CSE Revision. Similar to the Proposed Plan, impacts resulting under this alternative would be less than significant.

7.4.3 Alternative 2 – Increase in Exports to Out-of-County Landfills

Alternative 2, Increase in Exports to Out-of-County Landfills, includes a solid waste management strategy that places greater emphasis on Out-of-County landfills. This alternative assumes the following during the planning period: (1) use of existing In-County permitted disposal facilities with no expansion of capacity (excluding disposal at inert waste landfills); (2) continued jurisdiction's diversion efforts (increasing countywide diversion rate to 75 percent by 2020 and thereafter); and (3) increase in exports to out-of-County landfills (including additional disposal capacity through the waste-by-rail system). No increased capacity from In-County landfill expansions or AT facilities would be considered as part of this alternative during the planning period. This alternative would be capable of providing the required disposal capacity over the planning period.

Aesthetics

Less than significant aesthetics impacts have been identified for the Proposed Plan. Unlike the proposed CSE Revision, this alternative proposes an increase in the solid waste exports from the County to adjacent counties over the planning period. These increases in exports could result in new or greater visual impacts to adjacent counties due to accelerated use of out-of-County landfill capacity. Additional project-level review would be required once preliminary project plans are available. Notwithstanding this circumstance, this alternative would carry the potential to result in greater impacts when compared to the Proposed Plan. However, similar to the County, a project in an adjacent county jurisdiction would be subject to its respective CSE's siting criteria and CEQA compliance requirements. Therefore, at the program level, impacts would be less than significant.

Air Quality

In contrast to the proposed CSE Revision, this alternative places greater emphasis on exports of solid waste to Out-of-County facilities. Under this alternative, increases in the daily permitted disposal rate to Out-of-County disposal facilities would involve additional truck trips that originate from various points in the region and localized increases in point and/or area source emissions. No AT facilities would be constructed under this alternative and emissions of criteria air pollutants (e.g. NOx) would be lessened, but not avoided. The reduction of additional AT capacity and emphasis on additional Out-of-County capacity may result in reductions in criteria air pollutants; however, a corresponding increase in TACs would also be expected. An increase in the localized emissions of TACs could result in greater elevated health risk impacts when compared to the Proposed Plan.

Biological Resources

Less than significant biological resources impacts were identified for the Proposed Plan. Compared to the proposed CSE Revision, this alternative proposes additional solid waste exports to Out-of-County facilities. However, similar to the County, a project in other adjacent county jurisdictions would be subject to its respective CSE's criteria and CEQA compliance requirements. Therefore, at the program level, impacts to biological resources would be less than significant.

Cultural Resources

Less than significant cultural resources impacts were identified for the Proposed Plan. Compared to the proposed CSE Revision, this alternative proposes additional export of solid waste to Out-of-County facilities. However, similar to the County, a project in an adjacent county jurisdiction would be subject to its respective CSE's criteria and CEQA compliance requirements. Therefore, at the program level, impacts to cultural resources would be less than significant.

Geology and Soils

Less than significant geology and soils impacts have been identified for the Proposed Plan. Compared to the proposed CSE Revision, this alternative proposes additional export of solid waste to Out-of-County facilities. However, similar to the County, a project in an adjacent county jurisdiction would be subject to its respective CSE's criteria and CEQA compliance requirements. Therefore, at the program level, impacts to geology and soils would be less than significant.

Greenhouse Gas Emissions

As provided in Section 5.6, GHG emissions under the proposed CSE Revision would likely be reduced through a reduction in traditional landfill disposal methods and corresponding increase in the use of AT facilities. Less than significant GHG emissions impacts have been identified associated with the Proposed Plan. This alternative would not facilitate an increase in the use of AT facilities and, therefore, would rely on traditional landfill disposal methods. As a result, GHG emissions would likely be greater under Alternative 2. This impact would be significant.

Hazards and Hazardous Materials

Less than significant hazards and hazardous materials impacts have been identified for the Proposed Plan. Compared to the proposed CSE Revision, this alternative proposes additional export of solid waste to Out-of-County facilities. However, similar to the County, a project in an adjacent county jurisdiction would be subject to its respective CSE's criteria and CEQA compliance requirements. Therefore, at the program level, impacts to hazards and hazardous materials would be less than significant.

Hydrology and Water Quality

Less than significant hydrology and water quality impacts have been identified for the Proposed Plan. Compared to the proposed CSE Revision, this alternative proposes additional export of solid waste to Out-of-County facilities. However, similar to the County, a project in an adjacent county jurisdiction would be subject to its respective CSE's criteria and CEQA compliance requirements. Therefore, at the program level, impacts to hydrology and water quality would be less than significant.

Land Use and Planning

Less than significant land use and planning impacts have been identified for the Proposed Plan. Compared to the proposed CSE Revision, this alternative proposes additional export of solid waste to Out-of-County facilities. However, similar to the County, a project in an adjacent county jurisdiction would be subject to its respective CSE's criteria and CEQA compliance requirements. Therefore, at the program level, impacts to land use and planning would be less than significant.

Mineral Resources

Less than significant mineral resources impacts have been identified for the Proposed Plan. Compared to the proposed CSE Revision, this alternative proposes additional export of solid waste to Out-of-County facilities. However, similar to the County, a project in an adjacent county jurisdiction would be subject to its respective CSE's criteria and CEQA compliance requirements. Therefore, at the program level, impacts to mineral resources would be less than significant.

Noise and Vibration

Less than significant noise and vibration impacts have been identified for the Proposed Plan. Compared to the proposed CSE Revision, this alternative proposes additional export of solid waste to Out-of-County facilities. However, similar to the County, a project in an adjacent county jurisdiction would be subject to its respective CSE's criteria and CEQA compliance requirements. Therefore, at the program level, impacts to noise and vibration would be less than significant.

Population and Housing

Less than significant population and housing impacts have been identified for the Proposed Plan. Compared to the proposed CSE Revision, this alternative proposes additional export of solid waste to Out-of-County facilities. However, similar to the County, a project in an adjacent county jurisdiction would be subject to its respective CSE's criteria and CEQA compliance requirements. Therefore, at the program level, impacts to population and housing would be less than significant.

Public Services and Recreation

Less than significant public services and recreation impacts have been identified for the Proposed Plan. Compared to the proposed CSE Revision, this alternative proposes additional export of solid waste to Out-of-County facilities. However, similar to the County, a project in an adjacent county jurisdiction would be subject to its respective CSE's criteria and CEQA compliance requirements. Therefore, at the program level, impacts to public services and recreation would be less than significant.

Transportation and Traffic

Less than significant transportation and traffic impacts have been identified for the Proposed Plan. Compared to the proposed CSE Revision, this alternative proposes additional export of solid waste to Out-of-County facilities. However, similar to the County, a project in an adjacent county jurisdiction would be subject to its respective CSE's criteria and CEQA compliance requirements. Therefore, at the program level, impacts to transportation and traffic would be less than significant.

Utilities and Service Systems

Less than significant utilities and service systems impacts have been identified for the Proposed Plan. Compared to the proposed CSE Revision, this alternative proposes additional export of solid waste to Out-of-County facilities. However, similar to the County, a project in an adjacent county jurisdiction would be subject to its respective CSE's criteria and CEQA compliance requirements. Therefore, at the program level, impacts to utilities and service systems would be less than significant.

7.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the "environmentally superior alternative" and, in cases where the "No Project" Alternative is environmentally superior to the proposed project, the environmentally superior development alternative must be identified. Table 7-1 provides a qualitative comparison of the impacts for each alternative compared to the Proposed Plan. As shown, the No Project Alternative reduces some of the impacts identified for the Proposed Plan, but also results in greater impacts from GHGs emissions and truck emissions compared to the Proposed Plan, particularly affecting the areas surrounding the landfills. Additionally, the No Project Alternative fails to meet most of the project goals and objectives.

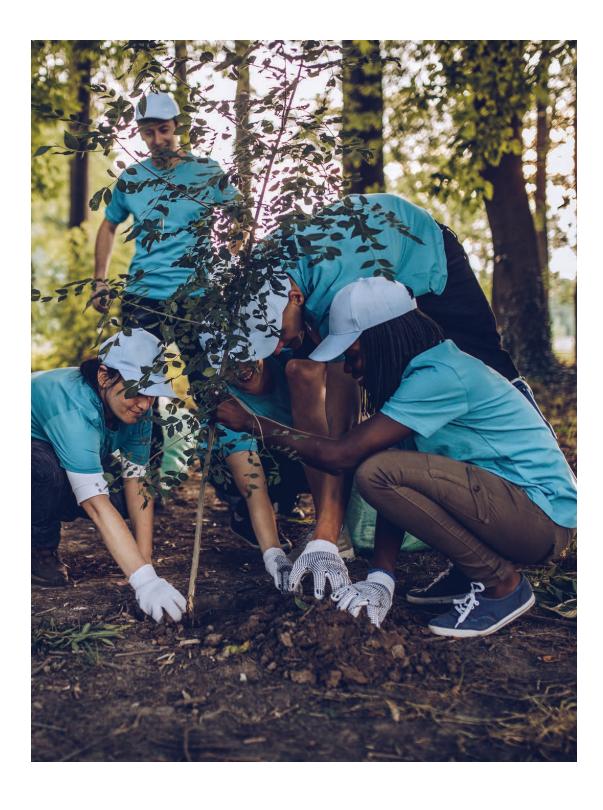


 Table 7-1. Comparison of Alternative Impacts to Proposed Project

Environmental Issue Area	Proposed Project	No Project Alternative	Alternative 1 – Increased In- County Landfill Expansions	Alternative 2 – Increase in Exports to Out-of-County Landfills
Aesthetics	Less than significant	Lesser	Greater	Similar
Air Quality	Significant and un- mitigable	Similar	Greater	Greater
Biological Resources	Less than significant	Lesser	Greater	Similar
Cultural Resources	Less than significant	Lesser	Greater	Similar
Geology and Soils	Less than significant	Similar	Similar	Similar
Greenhouse Gas Emissions	Less than significant	Greater	Greater	Greater
Hazards and Hazardous Materials	Less than significant	Similar	Similar	Similar
Hydrology and Water Quality	Less than significant	Similar	Greater	Similar
Land Use and Planning	Less than significant	Greater	Similar	Similar
Mineral Resources	Less than significant	Similar	Similar	Similar
Noise and Vibration	Less than significant	Similar	Similar	Similar
Population and Housing	Less than significant	Similar	Similar	Similar
Public Services and Recreation	Less than significant	Similar	Similar	Similar
Transportation and Traffic	Less than significant	Similar	Similar	Similar
Utilities and Service Systems	Less than significant	Similar	Similar	Similar

According to CEQA, the environmentally superior alternative is the one that would result in the least amount of environmental impacts. Environmental impacts identified for the Proposed Plan relate to the number and type of disposal facilities included within the County's disposal program and their relative proportion of the County's total daily disposal capacity. Both Alternatives 1 and 2 provide slight variations in the way the County achieves its total daily disposal capacity and assume the same level of solid waste diversion through maximizing reuse, recycling and composting programs. However, for each alternative, the amount of traditional In-County or Out-of-County landfill disposal capacity varies with neither alternative proposing an increase in capacity on a daily basis from AT facilities. Since it is unlikely that either of the alternatives would avoid significant air quality impacts and would negate the opportunity for potentially lowering GHG emissions in the future through the use of AT facilities to meet disposal needs, the County concluded that the Proposed Plan is environmentally superior. The Proposed Plan also diversifies the options for meeting the County's disposal needs over the planning horizon.

Of the alternatives considered, Alternative 2 would be considered environmentally superior to Alternative 1 given that it would entail the utilization of existing (or planned) Out-of-County landfill capacity as opposed to expanding additional landfill capacity within the County. Additionally, it is likely that Alternative 2 could avoid environmental impacts (e.g. aesthetics, biology, etc.) related to the operation of expanded landfill facilities within the County as contemplated under Alternative 1.





Impacts Found Not to be Significant





8.0 IMPACTS FOUND NOT TO BE SIGNIFICANT



Pursuant to Section 15128 of the California Environmental Quality Act (CEQA) Guidelines, an Environmental Impact Report (EIR) must contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to have significant impacts and were, therefore, not discussed in detail in the EIR.

Agriculture and Forestry Resources

The development of future AT facilities within the Focus Area pursuant to the Proposed Plan would be located in areas zoned for heavy manufacturing, industrial, and utilities and should not be located on farmland identified in the Los Angeles County Important Farmland Map. According to the Williamson Act Maps produced by the California Department of Conservation, (California Department of Conservation 2016), no portion of the County is under the provisions of an active Williamson Act contract, with the exception of a location on Santa Catalina Island. CR&R Catalina (AT Site #6), which is located on Santa Catalina Island, is not located on Williamson Act contract lands. For these reasons, the conversion of important farmland or cancellation of an active Williamson Act Contract through the adoption of the Countywide Siting Element is unlikely.



There are only two national forests in Los Angeles County; the Los Padres National Forest and the Angeles National Forest. Potential AT facilities would generally occur at industrially zoned locations and not in the vicinity of these two national forests. In this context, no impact would occur.

8.1 REFERENCES

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9

Significant
Irreversible
Changes Due to the
Proposed Project



9.0 SIGNIFICANT IRREVERSIBLE CHANGES DUE TO THE PROPOSED PROJECT



In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.2(c), an Environmental Impact Report (EIR) must identify any significant irreversible environmental changes that would be caused by the proposed project being analyzed. Irreversible environmental changes may include current or future commitments to the use of non-renewable resources or secondary growth-inducing impacts that commit future generations to similar uses. Growth-inducing impacts of the project are discussed in Chapter 10.0 of this EIR.

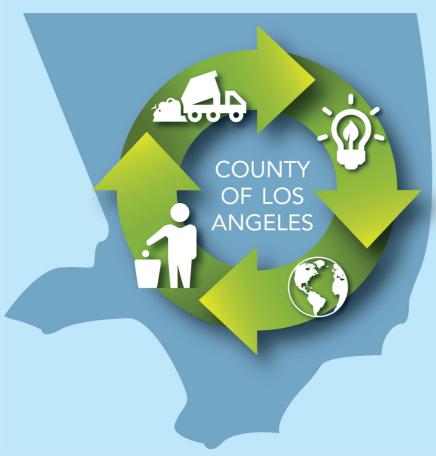
The proposed project is the adoption of a Plan which is a long-term planning and policy document that describes how the county and the cities within the county plan to manage the disposal of their solid waste for a 15-year planning period. The Plan emphasizes a variety of landfill diversion measures with objectives of decreasing 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.

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

There is currently no specific development project included in the Proposed Plan, and the Plan in and of itself, would not result in an irreversible commitment to non-renewable resources. Future development of certain solid waste related facilities identified in the Plan would likely involve construction activities that entail the commitment of non-renewable and/or slowly renewable energy resources, such as gasoline, diesel fuel, electricity; human resources; and natural resources such as lumber and other forest products, sand and gravel, steel, asphalt, copper, lead, other metals, and water.

An increased commitment of social services and public maintenance services (e.g., police, fire, sewer, water services) would also be required as projects identified in the Plan are developed over time.

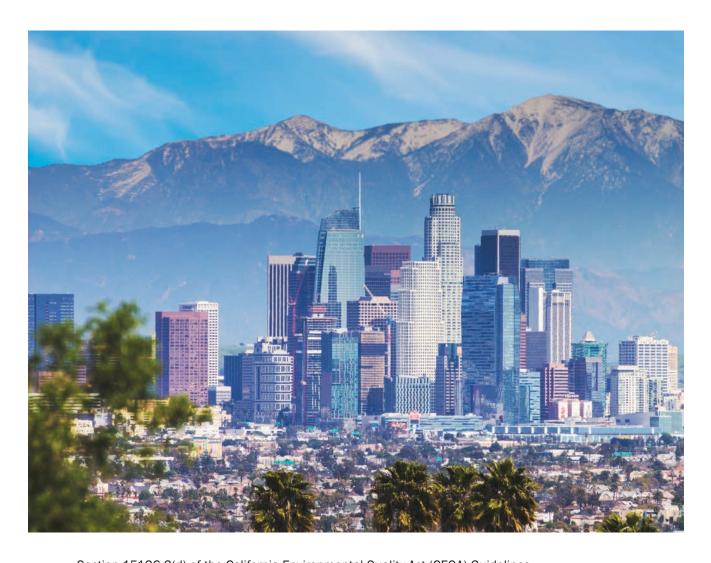
Future development of certain facilities identified in the Plan could be considered a long-term irreversible commitment of vacant parcels of land or redevelopment of existing developed land in the Plan Area.



Growth Inducing Impacts of the Proposed Project



10.0 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT



Section 15126.2(d) of the California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) "discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." A project would be considered to have a direct impact on growth should it require the construction of new housing. A project would be considered to have an indirect impact on growth if it would involve a substantial construction effort with short or long-term employment requirements such as the building of a new commercial complex. A project may also be considered growth-inducing if it removed an obstacle to additional growth development, such as the creation of new utilities or service facilities which would create an excess of resources that could eventually be filled by new development.

The elimination of either physical or regulatory obstacles to population growth is considered to be a growth-inducing impact. A physical obstacle to population growth typically involves the lack of public service infrastructure. The extension of public service infrastructure including roadways, water mains, and sewer lines into areas not currently provided with these services is expected to support new development. Similarly, the elimination of or change to a regulatory obstacle, including existing growth and development policies, can result in new population growth.

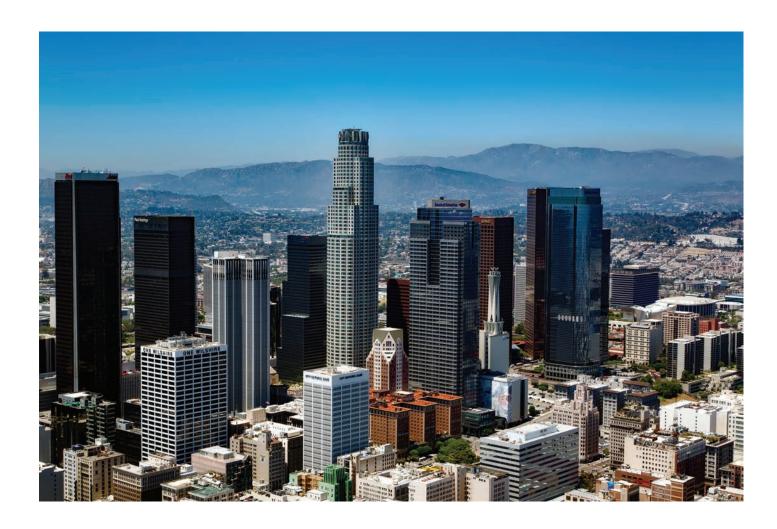
The proposed Los Angeles County Countywide Siting Element (CSE) Revision responds to future projected growth within the Plan Area through a long-term strategy that provides for sufficient solid waste disposal capacity over a 15-year period through 2033. Solid waste disposal facilities are demand-response public service systems that develop in response to community growth. The CSE Revision provides a strategy for the provision of disposal capacity as a response to the projected demand for responsible solid waste management. The CSE does not provide the actual capacity; rather, future solid waste projects would provide the needed capacity in response to continued growth. In this context, future new facilities and/or landfill expansions would not promote new growth, but would merely respond to it on an incremental, project by project basis. Based on these considerations, no direct or indirect growth inducing impacts are associated with the adoption of the CSE Revision.



Organizations and Persons Consulted



11.0 ORGANIZATIONS AND PERSONS CONSULTED



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

County of Los Angeles Department of Regional Planning

Note: LADPW to add to this section (i.e., Council of Government meeting, etc.)





Qualifications of Persons Preparing EIR



12.0 QUALIFICATIONS OF PERSONS PREPARING EIR

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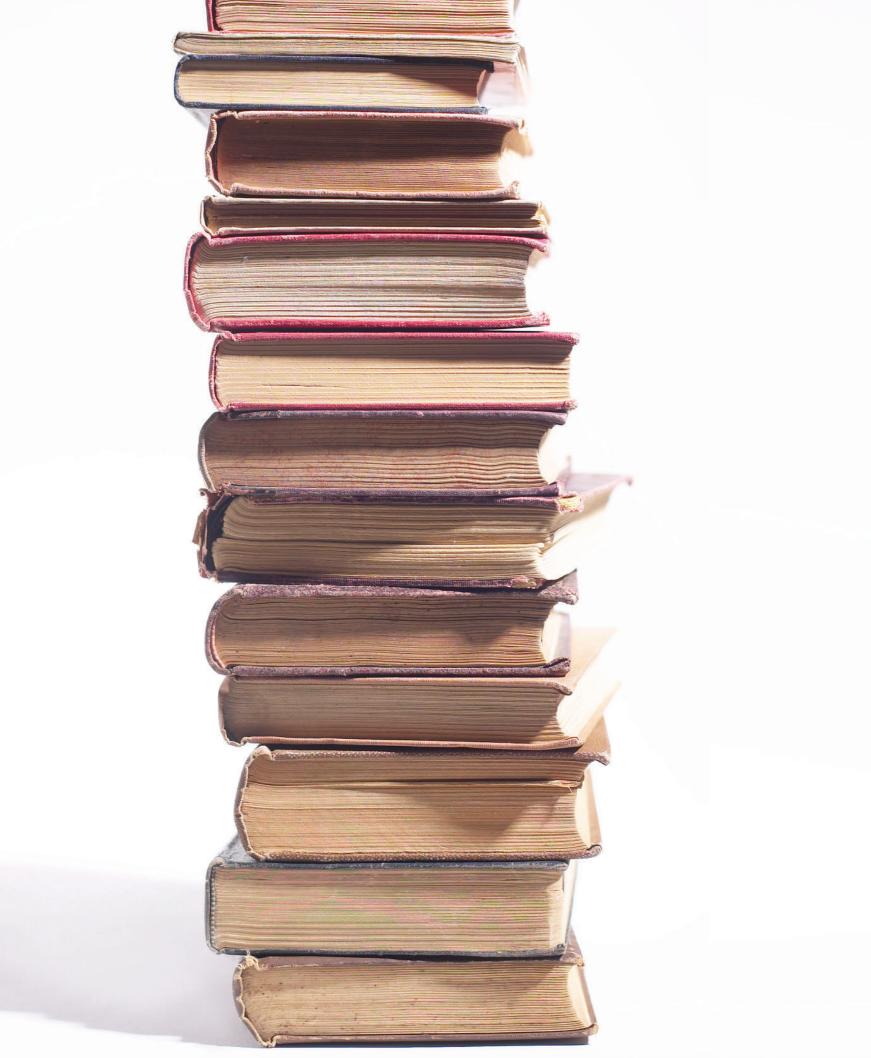
 BS, Urban and Regional Planning, California State Polytechnic University, 2008



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