

5. Environmental Analysis

5.13 UTILITIES AND SERVICE SYSTEMS

This section of the EIR addresses the utilities and service systems that serve the Project Site and surrounding areas and addresses potential impacts of the Proposed Project on the facilities and services of utility providers. Information was derived from responses to the Notice of Preparation (Appendix B); consultation with the various utility providers (Appendix O); and the websites of these providers. In addition, the following technical report was prepared for the Proposed Project:

- *Water Supply Assessment (WSA) for the Los Angeles County Consolidated Correctional Treatment Facility Project*, City of Los Angeles Department of Water and Power, April 28, 2015.

This study is in Appendix N of this EIR.

Impacts on the following utilities are analyzed in this section, and the service provider is noted parenthetically:

- Wastewater Treatment and Collection (Los Angeles Department of Public Works, Bureau of Sanitation)
- Water Supply and Distribution Systems (Los Angeles Department of Water and Power)
- Solid Waste (Los Angeles Department of Public Works, Bureau of Sanitation)

Storm drainage systems and impacts to such systems are discussed in Section 5.8, *Hydrology and Water Quality*, of this EIR. Impacts related to energy use, including electricity and natural gas, are discussed in Section 9, *Energy*, of this EIR. Please note that Sections 5.11 and 5.13 are formatted differently than the other sections in Chapter 5 so that issue areas (e.g., wastewater, water, solid waste, etc.) can be grouped together.

5.13.1 Wastewater Treatment and Collection

5.13.1.1 ENVIRONMENTAL SETTING

Regulatory Setting

County Sanitation District Wastewater Ordinance

The Sanitation Districts of Los Angeles County (LACSD) has adopted a wastewater ordinance for the operation and financing of its wastewater conveyance, treatment, and disposal facilities. Under this ordinance, the LACSD requires industrial wastewater discharge permits that regulate industrial wastewater discharges to protect the public sewage system (LACSD 1998).

Existing Conditions

Wastewater Treatment and Collection

Wastewater services to facilities in the City of Los Angeles are provided by the City's Department of Public Works, Bureau of Sanitation, Wastewater Services Division (BOS). The BOS is responsible for collecting, cleaning, and recycling the City's liquid and solid wastes. Los Angeles has one of the largest sewer systems in

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the world, with more than 6,600 miles of sewers, 140,000 maintenance holes, and 46 pump stations serving a population of more than four million. The City's sewers are classified into two groups: primary sewers (more than 15 inches in diameter) and secondary sewers (15 inches or less in diameter). Primary sewers have been divided into 26 basins, and secondary sewers into 218 basins. When a problem occurs, the sewer lines are inspected as soon as possible—usually within 48 hours of the initial occurrence of an overflow—by closed-circuit television to identify any necessary repairs or special maintenance needs. Flow monitoring and television inspection records are reviewed to identify deficiencies and sewers that exhibit high flow levels or operational failure. These may trigger further reviews to determine cause and/or immediate or accelerated corrective actions, and priorities and schedules are set based on the severity of the problem.

The sewer system consists of three separate sanitary sewer systems—Hyperion Sanitary Sewer System, Terminal Island Water Reclamation Plant Sanitary Sewer System, and City of Los Angeles Regional Sanitary Sewer System. The Project Site is in the Hyperion service area, where the generated sewage is treated at the Hyperion Treatment Plant in Playa Del Rey. Hyperion Treatment Plant, operated by the BOS, is the largest treatment facility in the Los Angeles Metropolitan Area and has a dry weather capacity of 450 million gallons per day (mgd) for full secondary treatment and a wet weather capacity of 850 mgd, with a current flow of 340 mgd (LASP 2011). The City's sewer system is subject to Section 201 of the federal Clean Water Act. According to the Clean Water Act, the City must adopt a facilities plan in accordance with the United States Environmental Protection Agency Rules and Regulations, Code of Federal Regulations, Title 40, Section 35.917.

Wastewater service requirements are related to the size and type of projects and geographic area served. The City of Los Angeles Wastewater Capital Improvement Program includes planned improvements to the City's major sewers, pumping plants, and treatment/reclamation plants. The capital improvement program is funded through sewer service fees and charges; revenue bonds and long-term debt; and state and federal appropriations and grants (City of Los Angeles 2012).

5.13.1.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-1 Would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- U-2 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.
- U-5 Would result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

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5.13.1.3 PLANS, PROGRAMS, AND POLICIES

Project Design Features

- PDF USS-1 The Project's specifications will require that the Proposed Project include the following onsite utility infrastructure improvement:
- New connections of the existing onsite sewage pipelines to ensure connection to new onsite buildings.
- PDF USS-2 The Project's specifications will require that the Proposed Project include the following onsite utility infrastructure improvements:
- New onsite fire and domestic/potable water pipelines, meters, fire hydrants, and/or other fire safety features that connect to all new buildings, as required by the City of Los Angeles Fire Department and/or City of Los Angeles Department of Water and Power.
- PDF USS-3 The Proposed Project will be developed in conformance with the City of Los Angeles Water Efficiency Requirements Ordinance No. 180822 as assumed under the CCTF Water Supply Assessment. The Ordinance mandates ultra-low-flow plumbing requirements for plumbing fixtures installed in new buildings and retrofits, which includes all residential, commercial and industrial projects.

Regulatory Requirements

- RR USS-1 The Proposed Project will be designed, constructed, and operated in accordance with the County of Los Angeles Sanitation District's (LACSD) Wastewater Ordinance. All wastewater discharges into LACSD facilities shall be required to comply with the discharge standards set forth to protect the public sewage system.
- RR USS-2 The Project's sewer, storm drain, and other utility infrastructure improvements will be designed, constructed, and operated in accordance with the applicable regulations in the Los Angeles County Code, which incorporates by reference the California Building Code, the California Electrical Code, the California Mechanical Code, the California Plumbing Code, the California Fire Code, and the Green Building Standards Code.

RR HAZ-1, RR HAZ-2, and RR HYD-2 are also applicable to Utilities and Service Systems.

5.13.1.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for potentially significant impacts of the Proposed Project. The applicable thresholds are identified in brackets after the impact statement.

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Impact 5.13-1 Project-generated wastewater would not exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board. [Threshold U-1]

Impact Analysis:

Short-Term Construction Impacts

The construction of the Proposed Project would not generate wastewater that would exceed the wastewater treatment requirements of the Los Angeles RWQCB. No construction-related wastewater during demolition or building construction would be allowed to flow to the area sewage system. Although construction activities could generate construction runoff containing polluted materials (paints, primers, herbicides, fuels, lubricants, fluids, etc.), these potentially hazardous materials would not enter the local sewer system but would be treated and properly disposed of in accordance with appropriate local, state, and federal regulations (RR HAZ-1 and RR HAZ-2). The potential impact of the Proposed Project would not be significant.

Long-Term Operational Impacts

The Project Area lies within the jurisdiction of Los Angeles RWQCB (Region 4) and is subject to the waste discharge requirements of the Coastal Watersheds of Los Angeles County MS4 Permit (Order No. R4-2012-0175) and NPDES Permit No. CAS004001 (RR HYD-2). Discharge limits for concentrations of hazardous materials discharged into sanitary sewers are set by wastewater treatment agencies. Wastewater treatment facilities can treat sanitary wastewater that meets these discharge limits. The Proposed Project would not change the existing land use onsite; therefore, the nature and type of wastewater would not be adversely impacted. As discussed under Impact 5.13-2, the Proposed Project would not result in increased generation of wastewater, therefore, the volume treated by the wastewater treatment facilities would not be increased to cause adverse impact. Additionally, the Proposed Project would be required to comply with the LACSD's wastewater ordinance (RR USS-1), which requires that all wastewater discharges to LACSD's facilities comply with the discharge standards. The Proposed Project would incorporate sustainable and green technologies to improve the overall wastewater conditions. The Proposed Project would not exceed the requirements of the Los Angeles RWQCB. No significant impacts are anticipated.

Spring Street Parking Structure Site (Option 1)

The SSPS would not include restrooms or other uses that would convey wastewater to sewer system. New onsite water system would be for fire safety purposes and for cleaning and maintenance. No impacts to wastewater treatment facilities would result from the SSPS construction or operation; therefore, wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board would not be exceeded.

Vignes Lot (Option 2)

The Vignes Lot parking structure would not include restrooms or other uses that would convey wastewater to sewer system. New onsite water system would be for fire safety purposes and for cleaning and maintenance. No impacts to wastewater treatment facilities would result from the Vignes Lot parking structure

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construction or operation; therefore, wastewater treatment requirements of the Los Angeles RWQCB would not be exceeded.

Level of Significance before Mitigation: With implementation of RR HAZ-1, RR HAZ-2, RR HYD-2, and RR USS-1, Impact 5.13-1 would be less than significant.

Impact 5.13-2: Project-generated wastewater could be adequately treated by the wastewater service provider for the Project. [Thresholds U-2 (part) and U-5]

Impact Analysis:

Short-Term Construction Impacts

The Project Site is already being served by the local sewer system, and no excessive wastewater demands would be created during construction compared to the existing conditions as some existing inmates and employees would be relocated to other County facilities with existing capacity. As stated in PDF USS-1, the Project's specifications would require that connections from the existing onsite sewage pipelines to new onsite buildings are provided. Improvements and upgrades to the existing wastewater system would be phased and coordinated to minimize any disruption of service. No increased wastewater services demands would be created during construction compared to the existing conditions that would require new or expanded wastewater facilities.

Long-Term Operational Impacts

Based on the three-year historical wastewater generation data from the County (2011 to 2013), the MCJ facility's sewer demand is approximately 92 percent of the total water demand; three-year average water demand was 204,242,896 gallons (626.798 acre-feet), and the three-year wastewater demand was 187,386,217 gallons (575.066 acre-feet) (LA County 2015). LADWP prepared a Water Supply Assessment (WSA) to ensure the Proposed Project is consistent with the City's conservation goals and long-term water supply availability. The existing and future water demands from the WSA are shown in Section 5.13.2.5, Table 5.13-3, *Existing and Proposed Water Use*. Therefore, assuming the WSA's total estimated water demand of 560.23 acre-feet per year (afy), the wastewater generation for the Proposed Project is 92 percent of 560.23 afy, which is 515.41 afy (167,947,609 gallons) or 460,130.43 gallons per day (gpd). Therefore, the Proposed Project would result in a decrease in sewer flow and treatment volume to the area sewer system, from 575.07 afy to 515.41 afy. There would be a net decrease of 64.61 afy or 57,675.70 gpd, and the Proposed Project would not result in any deficient sewer capacity compared to the existing conditions.

The Proposed Project would decrease the overall volume of wastewater demands at the Project Site. Although the number of employees and building area would increase, the improved water-efficiency requirements assumed under the WSA (i.e., City of Los Angeles Water Efficient Requirements Ordinance No. 180822, 2013 California Plumbing Code, 2013 CALGreen, 2014 Los Angeles Plumbing Code, and 2014 Los Angeles Green Building Code pursuant to PDF USS-2 and RR USS-1) would ensure that water demands from the CCTF would be less than the existing MCJ facilities as quantified in Table 5.13-3, *Existing and Proposed Water Use*. The Proposed Project would implement PDF USS-2, PDF USS-3, and RR USS-2 to

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conserve water and would improve outdated wastewater infrastructure by implementing PDF USS-1 and RR USS-2. Moreover, the Hyperion Treatment Plant, which treats wastewater from the MCJ site, has residual treatment capacity of about 88 mgd. The MCJ site is currently being served by the Hyperion Treatment Plant and the Proposed Project would result in decrease in sewer flow and treatment volume. Therefore, the Proposed Project would not result in new or expanded wastewater facilities and no significant impacts are anticipated.

Spring Street Parking Structure Site (Option 1)

The SSPS would not include restrooms or other uses that would generate wastewater. However, water services would be provided for cleaning and maintenance purposes and the projected water demand for parking structure is estimated at 345 gallons per day for only 12 times a year (0.013 afy), as discussed under Impact 5.13-3, SSPS Site. The wastewater from the SSPS Site would drain to the existing stormwater system and not to the wastewater system. Even if cleaning and maintenance wastewater were to be connected to the City's sewer system, assuming wastewater generation of 92 percent of water consumed, the SSPS would generate 317.4 gpd or 0.012 afy. No impact to the City's sanitary sewer system would occur and no expansion of existing or new wastewater system would be required to be constructed during construction and/or operation. Impacts would not be significant.

Vignes Lot (Option 2)

The Vignes Lot parking structure would not include restrooms or other uses that would generate wastewater. However, water services would be provided for cleaning and maintenance purposes and the projected water demand for parking structure is estimated at 690 gallons per day for only 12 times a year (0.026 afy), as discussed under Impact 5.13-3, Vignes Lot. The wastewater from the Vignes Lot would drain to the existing stormwater system and not to the wastewater system. Even if cleaning and maintenance wastewater were to be connected to the City's sewer system, assuming wastewater generation of 92 percent of water consumed, the Vignes Lot would generate 634.8 gpd or 0.024 afy. Therefore, no impact to the City's sanitary sewer system would occur and no expansion of existing or new wastewater system would be required to be constructed during construction and/or operation. Impacts would not be significant.

Level of Significance before Mitigation: With implementation of PDF USS-1 through PDF USS-3, and RR USS-2, Impact 5.13-2 would be less than significant.

5.13.1.5 CUMULATIVE IMPACTS

The area considered for cumulative impacts to wastewater services is the BOS service area for sewer, specifically, the treatment and conveyance for Hyperion Treatment Plant service area, which covers most of the City of Los Angeles south of the Santa Monica Mountains and Hollywood Hills, plus the City of Santa Monica and the unincorporated community of Marina Del Rey. Because the Proposed Project would reduce the inmate capacity in MCJ site and implement water-efficient features that reduce the wastewater generation, it would not contribute to the need for new or expanded wastewater treatment facilities nor would it affect the treatment capacity of the Hyperion Treatment Plant; therefore, impacts would not be cumulatively considerable.

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5.13.1.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

With implementation of RR HAZ-1, RR HAZ-2, RR HYD-2, and RR USS-1, the following impact would be less than significant:

- **Impact 5.13-1** Project-generated wastewater would not exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board.

With implementation of PDF USS-1 through PDF USS-3, and RR USS-2, the following impact would be less than significant:

- **Impact 5.13-2** Project-generated wastewater could be adequately treated by the wastewater service provider for the Project.

5.13.1.7 MITIGATION MEASURES

No mitigation measures are necessary because there were no significant impacts identified under the applicable threshold.

5.13.1.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Because no mitigation measures are required, impacts are the same as described in Section 5.13.1.6.

5.13.2 Water Supply and Distribution Systems

The analysis in this section is based in part on the following technical reports.

- *Water Supply Assessment for the Los Angeles County Consolidated Correctional Treatment Facility Project*, City of Los Angeles Department of Water and Power, Water Resources Section, May 19, 2015.
- *Urban Water Management Plan 2010*, Los Angeles Department of Water and Power, approved April 11, 2011.

The WSA is included in Appendix N of this EIR. The UWMP is available for review at the City of Los Angeles Department of Water and Power or on-line at the following location:

- http://www.water.ca.gov/urbanwatermanagement/2010uwmps/Los%20Angeles%20Department%20of%20Water%20and%20Power/LADWP%20UWMP_2010_LowRes.pdf.

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5.13.2.1 ENVIRONMENTAL SETTING

Regulatory Setting

Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code, Division 6, Part 2.6, §§ 10610 *et seq.*) was enacted in 1983 and applies to municipal water suppliers that serve more than 3,000 customers or supply more than 3,000 afy of water. The UWMP Act requires these suppliers to prepare and update their UWMPs every five years to demonstrate an appropriate level of reliability in supplying anticipated short-term and long-term water demands during normal, dry, and multiple-dry years. The UWMP Act specifies the data necessary to document the existing and projected future water demand over a 20-year projection and requires that the projected demands be presented in 5-year increments for the 20-year projection. The City of Los Angeles, including the Project Site, is addressed in the City's 2010 UWMP, prepared by the LADWP.

Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act of 2006 (AB 1881) reduces outdoor water waste through improvements in irrigation efficiency and selection of plants requiring less water. The act required an update to the Model Water Efficient Landscape Ordinance (MWELo) and adoption of this ordinance or an equivalent ordinance by local agencies no later than January 1, 2010. In accordance with this act, the DWR prepared a MWELo, as contained in the California Code of Regulations (Title 23, Division 2, Chapter 2.7). Cities and counties had the option to adopt DWR's ordinance or develop their own.

In May 1996, the City's Landscape Ordinance (No. 170,978) became effective, with an overarching goal to improve the efficient use of outdoor water. This ordinance was amended in 2009 to comply with the Water Conservation in Landscaping Act of 2006 and the MWELo.

The County Green Building Standards Code, Title 31, Section 4.106.5, requires that no more than 25 percent of landscaped area be covered with turf, no less than 75 percent of landscaped areas be planted with noninvasive drought-tolerant plants, and incorporation of hydrozoning irrigation techniques in the landscape design; Section 4.304.1 requires use of automatic irrigation system controllers.

Water Conservation Act of 2009

The Water Conservation Act of 2009 or Senate Bill 7 (SBX7-7) was approved in November 2009 and required urban water retail suppliers in California to reduce per capita water use by at least 10 percent on or before December 31, 2015, and to achieve a 20 percent reduction by December 31, 2020. In their 2010 UWMPs, urban retail water suppliers must include the baseline daily per capita water use, the urban water use target, the interim urban water use target, and the compliance daily per capita water use, along with the basis for determining those estimates and references to the supporting data. Urban wholesale water suppliers must also include an assessment of present and proposed measures, programs, and policies needed to achieve the water use reductions required by this act. While it does not require existing customers to undertake changes in product formulation, operations, or equipment that would reduce process water use, suppliers may provide technical assistance and financial incentives to customers to implement efficiency measures for process water.

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Mandatory Water Conservation

Following Governor Brown's declaration of a state of emergency on July 15, 2014, the SWRCB adopted Resolution No. 2014-0038 prohibiting several activities, including (1) the application of potable water to outdoor landscapes in a manner that causes excess runoff; (2) the use of a hose to wash a motor vehicle except where the hose is equipped with a shut-off nozzle; (3) the application of water to driveways and sidewalks; and (4) the use of potable water in non-recirculating ornamental fountains. The SWRCB resolution also directed urban water suppliers to implement the stage of their water shortage contingency plans that imposes mandatory restrictions on outdoor irrigation of ornamental landscaping or turf with potable water and report monthly water production information to the SWRCB.

On April 1, 2015, Governor Brown signed Executive Order (EO) B-29-15, which contains a total of 31 directives—the primary requirement being a 25 percent statewide water reduction in potable urban water use through February 28, 2016, as compared to the amount used in 2013. EO B-29-15 requires the SWRCB to impose restrictions to achieve the 25 percent reduction and to consider the relative per capita water usage of each water supplier's service area. Areas with high per capita use will be required to achieve proportionally greater reductions than those with low use.

On February 2, 2016, the SWRCB approved the extension of the Emergency Water Conservation Regulations through October 2016. The new regulations include several revisions that allow for adjustments to urban water suppliers' conservation requirements based on climate, population growth, and new local drought-resilient supply credits.

On May 9, 2016, the latest drought-related EO B-37-16 established new water use efficiency framework for California through measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans and improving agricultural water management and drought plans.

On April 7, 2017, Executive Order B-40-17 ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. It maintains water reporting requirements and prohibitions on wasteful practices. The order was built on actions taken in Executive Order B-37-16, which remains in effect. In a related action, state agencies, including DWR, released a plan to continue making water conservation a way of life.

Water Supply Assessment

SB 610 amended the California Public Resources Code and California Water Code, effective January 1, 2002, to improve the link between information on water supply availability and land use decisions. Under SB 610 (codified in the California Water Code beginning at Section 10910), cities or counties approving certain projects subject to CEQA are required to identify any public water system that may supply water and request those water systems to prepare a water supply assessment. A WSA is required for any project that is subject to CEQA and that proposes one or more of the following:

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- A residential development of more than 500 dwelling units.
- A shopping center or business establishment with either 1,000 employees or more than 500,000 square feet (sf) of floor space.
- A commercial office development with either 1,000 employees or more than 250,000 sf of floor space.
- A hotel or motel with more than 500 rooms.
- An industrial development that has 1,000 employees, occupies more than 40 acres of land, or has more than 650,000 sf of floor space.
- A mixed-use project that includes one or more of the requirements above.
- A project that would require water that is equal to or more than the water demand of 500 dwelling units.
- A project that is served by a public water system having fewer than 5,000 service connections; a proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections; or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by a residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections..

In general, SB 610 requires a WSA to include an evaluation of the sufficiency of the water supplies available to the water supplier to meet existing and anticipated future demands (including the demand associated with the project) over a 20-year horizon that includes normal, single-dry, and multiple-dry years.

Existing Conditions

Pursuant to the California State Water Code, Sections 10910 to 10915, LADWP prepared a WSA for the proposed CCTF. The WSA was prepared in conformance with California law and City ordinances that ensure projects that utilize water resources are consistent with the City's conservation goals and long-term water supply availability as detailed in the Water System's 2010 UWMP. The WSA carefully evaluated the Proposed Project in the context of the 2010 UWMP and current conditions, such as restrictions on State Water Project (SWP) pumping from the Sacramento-San Joaquin River Delta imposed by a Federal Court. The Metropolitan Water District of Southern California (MWD), from whom the City purchases its SWP and Colorado water supplies, has also been actively developing plans and making efforts to provide additional water supply reliability for the entire Southern California region. LADWP coordinates closely with MWD to ensure implementation of MWD's water resource development plans. Part of MWD's planning effort is the implementation of its Integrated Water Resources Plan and Regional Urban Water Management Plan, which are designed to address potential reductions in water supply due to the effects of variable hydrologic conditions and regulatory restrictions on exports from the Delta.

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Water Supplies

LADWP obtains water from four major sources: the Los Angeles Aqueducts (LAA) importing water from the eastern Sierra Nevada; local groundwater; water imported from northern California and the Colorado River and purchased from MWD; and recycled water. Imported water comprises over 85 percent of the City's water supplies.

Los Angeles Aqueducts

Snowmelt runoff from the eastern Sierra Nevada is collected and conveyed to the City via the LAAs. The first LAA began deliveries in 1913 and was extended to the Mono Basin in Mono County in 1940. The second LAA was completed in 1970. LAA supplies come primarily from snowmelt and secondarily from groundwater pumping and can fluctuate yearly due to varying hydrologic conditions. In recent years, LAA supplies have been less than the historical average because of environmental restoration obligations in Mono and Inyo counties.

Average deliveries from the LAA system have been approximately 199,196 afy over the last five years. The average annual long-term LAA delivery over the next 25 years is expected to decline gradually from 254,000 afy to 244,000 afy due to projected climate change impacts.

Groundwater

LADWP obtains groundwater from the San Fernando and Sylmar groundwater basins, each underlying portions of the San Fernando Valley, and from the Central Basin, which underlies approximately the northeast half of the portion of the Los Angeles Basin in Los Angeles County.¹ Groundwater from all three basins is managed pursuant to court judgments. Annual LADWP entitlements are 87,000 af from the San Fernando Basin, 3,405 af from the Sylmar Basin, and 15,000 af from the Central Basin, totaling 105,405 af. Between July 2012 and June 2013, LADWP extractions from the three basins consisted of 50,550 af from the San Fernando Basin, 1,952 af from the Sylmar Basin, and 6,310 af from the Central Basin, totaling 58,812 af.

Imported Water

MWD is the largest water wholesaler for domestic and municipal uses in Southern California. As one of 26 member agencies, LADWP purchases water from MWD in addition to the supplies from local groundwater and LAA. MWD imports a portion of its water supplies from Northern California through the SWP's California Aqueduct and from the Colorado River through MWD's own Colorado River Aqueduct. As of June 30, 2014, LADWP has a preferential right to purchase 20.13 percent of MWD's total water supply.

MWD water supplies have been constrained in recent years due to court-ordered restrictions on pumping of water from the Sacramento-San Joaquin Delta for the protection of several threatened and endangered species, and due to an ongoing extraordinary drought in California that began in 2012 and ended in most parts of California in 2017.

¹ The Los Angeles Basin as referenced here is bounded by the Hollywood Hills and Santa Monica Mountains on the northwest, the Puente Hills on the northeast, and the Pacific Ocean on the south and west.

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Recycled Water

LADWP is committed to significant expansion of recycled water in the City’s water supply portfolio. LADWP’s water recycling program is dependent on the City’s wastewater treatment infrastructure. Wastewater in the City of Los Angeles is collected and transported through some 6,500 miles of major interceptors and mainline sewers, more than 11,000 miles of house sewer connections, 46 pumping plants, and four treatment plants. As early as 1960, the City recognized the potential for water recycling and invested in infrastructure that processed water to tertiary quality, a high treatment standard for wastewater. LADWP expects to increase the use of recycled water to 59,000 afy by 2035 to offset imported water. Demand for recycled water is driven by customer acceptance of recycled water as a viable alternative to traditional potable supplies.

Past Water Supply Summary

Table 5.13-1, *Past Water Supply*, shows the City’s water supply by source for the past five years. Total production is from the LAA, local groundwater, imported water, and recycled water.

Table 5.13-1 Past Water Supply (Acre-Feet for Fiscal Year)

Calendar Year	LAA	Local Groundwater	MWD	Recycled Water	Transfer, Spread, Spills, and Storage	Total
2009	137,261	66,998	350,918	7,570	3,052	559,695
2010	251,123	68,346	203,745	6,900	-938	531,055
2011	357,752	49,915	119,381	7,708	-153	534,909
2012	166,858	57,784	325,439	5,965	3,386	552,660
2013	64,801	66,148	438,492	9,253	-2,404	581,098

Water Treatment Facilities

City of Los Angeles Department of Water and Power

LADWP groundwater treatment systems in the San Fernando Valley include those listed in Table 5.13-2, *Water Treatment Facilities, Los Angeles Department of Water and Power*.

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Table 5.13-2 Water Treatment Facilities, Los Angeles Department of Water and Power

Facility	Contaminants Treated	Technology	Capacity
San Fernando Valley Groundwater Basin			
Tujunga Wellfield Joint Project	Volatile organic compounds (VOCs)	Liquid-phase granular activated carbon	4,680 af treated in 2011–2012 water year; restored 12,000 afy pumping capacity that had become inoperable due to water quality constraints.
North Hollywood Operable Unit	VOCs	Air stripping	1,248 af treated in 2011–2012 water year
Pollock Wells Treatment Plant	VOCs	Four liquid-phase granular activated carbon units	2,957 af treated in 2011–2012 water year
Sylmar Groundwater Basin			
Mission Wells Improvement Project (expected completion August 2014)	Trichloroethylene (a VOC)	Not available	3,405 afy

Source: LADWP 2011.

Metropolitan Water District of Southern California

MWD owns and operates five water treatment facilities. Two of the facilities are in the County: the Joseph Jensen Treatment Plant in the Community of Granada Hills in the City of Los Angeles and the F. E. Weymouth Treatment Plant in the City of La Verne. The combined capacity of those two facilities is about 1.27 billion gpd. Two of the remaining facilities are in western Riverside County, and one is in Orange County. The total capacity of the five facilities is about 2.64 billion gpd (MWD 2014a; MWD 2014b).

5.13.2.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-2 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.
- U-4 Would not have sufficient water supplies available to serve the project from existing entitlements and resources, such that new and/or expanded entitlements would be needed.

5.13.2.3 PLANS, PROGRAMS, AND POLICIES

Project Design Features

- PDF USS-4 The County has committed to implement the following water conservation measures that are in addition to those required by codes and ordinances.
- Kitchen faucets with flow rate of 1.5 gallons per minute (gpm) or less
 - Inmate-patient dwelling unit showerheads with flow rate of 1.5 gpm

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- All other showerheads with flow rate of 1.8 gpm
- Cooling tower conductivity controllers or cooling tower pH conductivity controllers

PDF USS-5 The Project's specifications will require that the Proposed Project be developed in conformance with the County's Tree Planting Ordinance found in Title 31 of the Los Angeles County Code.

Regulatory Requirements

RR USS-2 The Project's sewer, storm drain, and other utility infrastructure improvements will be designed, constructed, and operated in accordance with the applicable regulations in the Los Angeles County Code, which incorporates by reference the California Building Code, the California Electrical Code, the California Mechanical Code, the California Plumbing Code, the California Fire Code, and the Green Building Standards Code.

5.13.2.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for potentially significant impacts of the Proposed Project. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.13-3: The Proposed Project would be served by sufficient water supplies without procurement of additional water entitlements. [Thresholds U-2 (part) and U-4]

Impact Analysis:

Short-Term Construction Impacts

The Proposed Project would use water during the construction phase mainly for suppressing dust during earth-disturbing activities. SCAQMD Rules 402 and 403, as discussed in Section 5.2, *Air Quality*, of this EIR, provide requirements for controlling fugitive dust and avoiding emission nuisances. Use of water during construction would be temporary and of limited volume. Existing water lines on the Project Site or water trucks would be used, and no additional procurement of water supplies would be necessary.

Pursuant to PDF USS-2 and RR USS-2, a new and upgraded water distribution system—fire and domestic/potable water pipelines, meters, fire hydrants, etc.—would be constructed in accordance with applicable regulations. Construction of utility lines mainly involves grading, excavation, and movement and placement of infrastructure lines and facilities, which could result in environmental impacts related to air quality, GHG, hazards and hazardous materials, and noise, as discussed in appropriate sections of the EIR.

Long-Term Operational Impacts

According to the WSA, the existing MCJ facility uses approximately 560.45 afy of water, and the MCJ cooling plant uses 71.57 afy for a combined total of 632.02 afy. The WSA determined that a 4,860-bed CCTF facility and other associated uses would demand about 635.09 afy before taking credits for the existing MCJ facility

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and additional conservation measures. Provided that approximately 9.43 afy of water savings could be removed from the total demand, the WSA determined that water consumption would be reduced by approximately 6 afy as compared to existing conditions.

Since the preparation of the WSA in May 2015, the maximum number of beds was reduced from 4,860 to 3,885. Therefore, the projected water demands for the proposed CCTF would be less than previously determined by the WSA. Table 5.13-3, *Existing and Proposed Water Use*, shows the projected water demands for the 3,885-bed CCTF using the same water use factors and units as the WSA in Appendix N to this EIR.

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Table 5.13-3 Existing and Proposed Water Use

Existing	Quantity	Unit				GPD	AFY
MCJ Facility ^{1, 2}	935,150	SF	--	--	--	500,332	560.45
MCJ Cooling Water Demand ³	2,200	Ton	--	--	--	63,888	71.57
Total Existing Water Demand			--	--	--	564,220	632.02
Proposed	Quantity	Unit	Water Use Factor ⁴ (gpd/unit)	Base Demand (gpd)	Required Water Saving ⁵ (gpd)	GPD	AFY
CCTF	3,885	Inmate-Patient	85	330,225	0	330,225	369.90
Arrestment Court	42,000	SF	0.12	5,040	5,530	37,090	41.55
Clinic	45,076	SF	0.25	11,269			
Admin & Support Center	219,258	SF	0.12	26,311			
Cafeteria	375	Seat	30	11,250	2,163	9,087	10.18
Courtline and Bus Queuing Area ⁶				35		35	0.04
Parking Structure ⁷	1,600	Stall	0.23	368		368	0.41
Cooling Tower ⁸	4,200	Ton		135,168	13,200	121,968	136.63
Landscaping ⁹	22,750	SF		1,936	581	1,355	1.52
Proposed Water Demand Total				604,477	21,474	500,128	560.23
<i>Existing MCJ Water Demand</i>						<i>(564,220)</i>	<i>(632.02)</i>
<i>Additional Water Conservation¹⁰</i>						<i>(7,196.25)</i>	<i>(8.06)</i>
NET WATER DEMAND						(71,288.25)	(79.85)

Source: LADWP 2015, Table 1, Los Angeles County Consolidated Correctional Treatment Facility Project Calculated Total Additional Water Demand.

- ¹ The existing water demand is based on the LADWP billing data (average of September 2010–August 2013).
- ² The existing 5,673-bed MCJ facility to be demolished also includes kitchen, infirmary, central heating plant, bus loading yard, parking structures (1,363 stalls), but parking, bus maintenance/transportation facility, Central Arrestment Court, and approximately 1 acre landscaping.
- ³ The Central Cooling Plant is located offsite on TTCF and currently has a 5,500-ton chiller capacity, serving both the TTCF and MCJ. Applying the approximate ratio of developmental square footages for both facilities, 2,200 tons of chiller capacity, representing 40 percent of total 5,500 tons were assumed for the MCJ and remaining 3,300 tons is attributed to TTCF.
- ⁴ Water Use assumptions are based on 2012 City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates Table available at <http://www.lacsysan.org/fmd/pdf/sfscfeerates.pdf>.
- ⁵ Proposed development land uses would conform to Water Efficient Requirements Ordinance No. 180822, 2013 California Plumbing Code, 2013 CALGreen, 2014 Los Angeles Plumbing Code, and 2014 Los Angeles Green Building Code.
- ⁶ Water demand is for washing down inmate-patients' chains (4-10 minutes per wash at 5 gallons per minute), and bus washing at 6 bays (7 min. per wash at 5 gpm per bay), both once a week.
- ⁷ Based on City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates Table, 12 times per year cleaning and 350 square feet per stall assumption.
- ⁸ The proposed chiller capacity at buildout of TTCF and CCTF is 7,500 tons. The new CCTF demand was estimated by taking the difference between the 7,500 tons chiller capacity and the remaining 3,300 tons for TTCF.
- ⁹ Baseline landscaping water use is estimated per California Code of Regulations Title 23, Division 2, Chapter 2.7. Model Water Efficient Landscape Ordinance.
- ¹⁰ Additional water conservation commitment agreed by the County as estimated by the table below.

CCTF Estimated Additional Water Conservation					
Conservation Measures	Quantity	Unit	Water Saving Factor ¹	Water Saved	
				GPD	AFY
Inmate-Patient DU Showerheads	3,385	Inmate-Patient	1.25	4,856.25	5.44
Office/Common Area Showerheads	12	Each	24.00	288	0.32
Kitchen Faucets	22	Each	54.00	1,188	1.33
Landscaping Conservation ²				864	0.97
Total Additional Conservation				7,196.25	8.06

¹ Based on LADWP estimates.
² Landscaping water conservation is estimated per California Code of Regulations Title 23, Division 2, Chapter 2.7 Model Water Efficient Landscape Ordinance.

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As shown Table 5.13-3, the decrease in number of beds by 975 (from 4,860 to 3,885 beds) would result in projected water demands less than the current water demands at the MCJ facility—from 632.02 afy to 560.23 afy. Water demands for employees and visitors are captured by other proposed uses such as clinic, administration and support center, cafeteria, and other uses. When accounting for the additional conservation measures that the County is committed to implement for using water-conserving showerheads and faucets and water-efficient landscape (PDF USS-3, PDF USS-4, and PDF USS-5), the projected water demands from the CCTF would be approximately 79.85 afy less than the existing MCJ. It should also be noted that the CCTF would be constructed to meet the LEED Gold level of certification, or a successor, equivalent standard which would further reduce actual water demands created by the Proposed Project. Although the specific number of staff members was not detailed in the water demand analysis, the WSA's water use factors accounted for the number of inmate-patients and the square footage and/or unit of different uses proposed. According to the historical water usage data for the past three years (2011 through 2013), the existing MCJ facility consumed an annual average 204,242,896 gallons of water, or 626.8 afy. This water consumption volume is similar to the WSA's existing MCJ water use of 632.02 afy.

The LADWP's UWMP indicated that there are adequate water supplies through planning year 2035 under regular, single-dry, and multiple-dry year weather conditions to meet the total demands in the service boundaries. Because the Proposed Project would result in less total water demands than the existing MCJ facility, sufficient water supplies are available to the serve the Proposed Project by the LADWP. As the Proposed Project would demand 79.85 afy less water compared to the existing conditions, long-term operational water impacts would be less than significant.

Spring Street Parking Structure (Option 1)

Construction of the new parking structure would use water mainly for suppressing dust during earth-disturbing activities. SCAQMD Rules 402 and 403, as discussed in EIR Section 5.2, *Air Quality*, provide requirements for controlling fugitive dust and avoiding emission nuisances. Use of water during construction would be temporary and limited in volume. Water trucks would be used and no additional procurement of water supplies would be necessary.

Pursuant to PDF USS-2 and RR USS-2, a new on-site water distribution system—fire and domestic/potable water pipelines, meters, fire hydrants, etc.—would be constructed. During operation, water use would be limited to cleaning and maintenance. Using the same assumptions contained in the WSA, a 1,500-stall SSPS would demand 345 gpd or 0.013 afy of water for cleaning, which is based on 350 SF/stall and 12 times/year cleaning. Such increase in water demand would result in negligible water services impact. Although the SSPS Site is currently not connected to a water line, there are water lines on New High Street and New Spring Street. New connection to existing water lines would involve grading, excavation, and placement of infrastructure lines and facilities, which could result in environmental impacts related to air quality, GHG, hazards and hazardous materials, and noise. Each of these potential impacts is discussed in the appropriate sections of the EIR.

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Vignes Lot (Option 2)

Construction of the new parking structure would use water mainly for suppressing dust during earth-disturbing activities. SCAQMD Rules 402 and 403, as discussed in EIR Section 5.2, *Air Quality*, provide requirements for controlling fugitive dust and avoiding emission nuisances. Use of water during construction would be temporary and limited in volume. Water trucks would be used and no additional procurement of water supplies would be necessary.

Pursuant to PDF USS-2 and RR USS-2, a new on-site water distribution system—fire and domestic/potable water pipelines, meters, fire hydrants, etc.—would be constructed. During operation, water use would be limited to cleaning and maintenance. Using the same assumptions contained in the WSA, a 3,000-stall Vignes Lot parking structure would demand 690 gpd or 0.026 afy of water for cleaning, which is based on 350 SF/stall and 12 times/year cleaning. Such increase in water demand would result in negligible water services impact. Water connections are available in the streets surrounding the Vignes Lot, including N. Vignes Street and North Alhambra Avenue. New connection to existing water lines would involve grading, excavation, and placement of infrastructure lines and facilities, which could result in environmental impacts related to air quality, GHG, hazards and hazardous materials, and noise. Each of these potential impacts is discussed in the appropriate sections of the EIR.

Level of Significance before Mitigation: With implementation of PDF USS-2 through PDF USS-5, and RR USS-2, Impact 5.13-3 would be less than significant.

5.13.2.5 CUMULATIVE IMPACTS

Tables 5.13-4 and 5.13-5 show LADWP's estimated water supplies and demands until planning year 2035 under average weather years and multiple-dry years. As shown, there are adequate water supplies to support planned developments within the LADWP's service area. The Proposed Project would reduce the number of beds and implement various water conservation measures (PDF USS-2, PDF USS-3, and RR USS-2) to result in a net decrease in water demands. The anticipated water demand from the Proposed Project and planned developments in the service area boundaries falls within the LADWP UWMP's projected water supplies for average weather years as well as multiple-dry years (see Tables 5.13-4 and 5.13-5). Therefore, the Proposed Project would result in net beneficial impact to overall water services impacts, individually or cumulatively, based on reduced demand on the water supply. Impacts would not be cumulatively considerable.

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Table 5.13-4 LADWP Estimated Water Supplies, Average Weather Years (Acre-Feet)

Source	Actual (2009/2010)	2015	2020	2025	2030	2035
Existing/Planned Supplies						
Los Angeles Aqueduct	199,739	252,000	250,000	248,000	246,000	244,000
Groundwater	76,982	40,500	96,300	111,500	111,500	110,405
Conservation	8,178	14,180	27,260	40,340	53,419	64,368
Recycled Water						
- Irrigation and Industrial Use	6,703	20,000	20,400	27,000	29,000	29,000
- Groundwater Replenishment	0	0	0	15,000	22,500	30,000
Water Transfers	0	40,000	40,000	40,000	40,000	40,000
Subtotal	291,602	366,680	433,960	481,840	502,419	517,773
MWD Water Purchases With Existing/Planned Supplies	263,875	248,120	218,040	193,760	198,781	193,027
Total Supplies	555,477	614,800	652,000	675,600	701,200	710,800
Potential Supplies						
Stormwater Capture						
- Capture and Reuse	0	2,000	4,000	6,000	8,000	10,000
- Increased Groundwater Production (Recharge)	0	0	2,000	4,000	8,000	15,000
Subtotal	0	2,000	6,000	10,000	16,000	25,000
MWD Water Purchases With Existing/Planned/Potential Supplies	263,875	246,120	212,040	183,760	182,781	168,027
Total Supplies	555,477	614,800	652,000	675,600	701,200	710,800
Demands						
Total Demands	555,477	614,800	652,000	675,600	701,200	710,800

Source: LADWP 2015.

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Table 5.13-5 LADWP Estimated Water Supplies, Multiple Dry Years (Acre-Feet)

Source	Actual (2009/2010)	2015	2020	2025	2030	2035
Existing/Planned Supplies						
Los Angeles Aqueduct ¹	199,739	105,770	105,770	105,770	105,770	105,770
Groundwater ²	76,982	40,500	96,300	111,500	111,500	110,405
Conservation	8,178	14,180	27,260	40,340	53,420	64,368
Recycled Water		0	0	0	0	0
- Irrigation and Industrial Use	6,703	20,000	20,400	27,000	29,000	29,000
- Groundwater Replenishment	0	0	0	15,000	22,500	30,000
Water Transfers	0	40,000	40,000	40,000	40,000	40,000
Subtotal	291,602	220,450	289,730	339,610	362,190	379,543
MWD Water Purchases With Existing/Planned Supplies	263,875	406,650	375,370	349,490	353,010	345,457
Total Supplies	555,477	627,100	665,100	689,100	715,200	725,000
Potential Supplies						
Stormwater Capture						
- Capture and Reuse	0	2,000	4,000	6,000	8,000	10,000
- Increased Groundwater Production (Recharge)	0	0	2,000	4,000	8,000	15,000
Subtotal	0	2,000	6,000	10,000	16,000	25,000
MWD Water Purchases With Existing/Planned/Potential Supplies	263,875	404,650	369,370	339,490	337,010	320,457
Total Supplies	555,477	627,100	665,100	689,100	715,200	725,000
Demands						
Total Demands	555,477	627,100	665,100	689,100	715,200	725,000

Source: LADWP 2015.

¹ Los Angeles Aqueduct supply is estimated to decrease 0.1652% per year due to climate change impacts.

² North Hollywood/Rinaldi-Toluca Treatment Complex is expected to be in operation in FY 2019-20. Tujunga Groundwater Treatment Plant is expected to be in operation in 2020-21. Storage credit of 5,000 afy will be used to maximize the pumping in FY 2020-21 and thereafter. Sylmar Basin production was increased to 4,500 afy from FY 2014-15 to FY 2029-30 to avoid the expiration of stored water credits, then go back to its entitlement of 3,405 afy in FY 2030-31.

5.13.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

With implementation of PDF USS-2 through PDF USS-5, and RR USS-2, the following impact would be less than significant:

- **Impact 5.13-3** The Proposed Project would be served by sufficient water supplies without procurement of additional water entitlements.

5.13.2.7 MITIGATION MEASURES

No mitigation measures are necessary because there were no significant impacts identified under the applicable threshold.

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5.13.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Because no mitigation measures are required, impacts are the same as described in Section 5.13.2.6.

5.13.3 Solid Waste

5.13.3.1 ENVIRONMENTAL SETTING

Regulatory Setting

State

AB 939 (Integrated Solid Waste Management Act of 1989; California 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.

AB 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.

AB 1826 (California Public Resources Code §§ 42649.8 et seq.), signed into law in September 2014, requires recycling of organic matter by businesses and multifamily residences of five or more units, generating such wastes in amounts over certain thresholds.

The California Solid Waste Reuse and Recycling Access Act of 1991 was passed by the State legislature and instructs the California Integrated Waste Management Board (now known as “CalRecycle”) to draft a “model ordinance” for the disposal of construction waste associated with development projects. The model ordinance has been in effect for the County since 1994. In 2005, the County adopted a Construction and Demolition Debris Recycling and Reuse Ordinance, discussed below. This act also requires local agencies to ensure that development projects have adequate areas for the collection and loading of recyclable materials.

SB 1016 (Solid Waste Disposal Measurement Act of 2008) builds on AB 939 compliance requirements by implementing a simplified measure of jurisdiction’s performance by changing to a disposal-based indicator—the per capita disposal rate—that uses 1) a jurisdiction’s population (or in some cases employment) and (2) its disposal, as reported by disposal facilities.

Section 5.408 of the 2013 CALGreen (Title 24, California Code of Regulations, Part 11) requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

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Local

Integrated Waste Management Plan

In accordance with AB 939, the County adopted its Integrated Waste Management Plan in 1996, which includes the following components: Source Reduction and Recycling Element, Household Hazardous Waste Element, Countywide Siting Element, and the Non-disposal Facility Element. The Source Reduction and Recycling Element describes policies and programs that the County must implement for its unincorporated areas to achieve the State's mandate of 25 and 50 percent waste disposal reductions by the years 1995 and 2000, respectively. The Household Hazardous Waste Element provides for the management of household hazardous waste generated by the residents in its jurisdiction. The Countywide Siting Element projects waste generation and waste disposal capacity in the County. The Non-disposal Facility Element identifies all existing, expansions of existing, and proposed new non-disposal facilities that will be needed to implement its Source Reduction and Recycling Element.

Countywide Siting Element

In 1997, the County prepared a Countywide Siting Element that estimates the amount of solid wastes generated in the County and proposes various diversion and alternate disposal options. The Countywide Siting Element is a long-term planning 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 siting element identifies DPW 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. In addition, the Siting Element contains goals and policies on a variety of solid waste management issues. The County will continue to meet its disposal capacity needs by implementing enhanced waste reduction and diversion programs and greater resource recovery efforts.

Construction and Demolition Debris Recycling and Reuse Ordinance

The County Board of Supervisors adopted the C&D Debris Recycling and Reuse Ordinance on January 4, 2005. The ordinance added Chapter 20.87 to the County Code, requiring projects in unincorporated areas to recycle or reuse 50 percent of the debris generated. Its purpose is to increase the diversion of construction and demolition debris from disposal facilities and assist the County in meeting the State of California's waste reduction mandate. Effective January 1, 2011, the County adopted the Green Building Standards Code, as discussed below, which sets forth recycling requirements for construction and demolition projects in the unincorporated areas of the County. Nonresidential construction projects consisting of commercial, industrial, or retail structures, as well as all tenant improvements, irrespective of the square footage, must recycle a minimum of 65 percent of the debris generated by weight.

Green Building Standards Code

In response to the mandates set forth in the 2010 CALGreen, the Board of Supervisors initially adopted the Los Angeles County Green Building Standards Code into Title 31 of the County Code. In 2013, the County adopted the updated 2013 CALGreen by reference into Title 31 of the County Code, with certain changes and modifications. These modifications include required compliance with the County's Low Impact Development Standards (Chapter 12.84 of Title 12 of the County Code); landscaping requirements (e.g., use

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of automatic irrigation system controllers, no more than 25 percent of landscaped areas covered with turf, and no less than 75 percent of landscaped areas planted with noninvasive drought-tolerant plants); and construction and demolition debris recycling, salvage, and/or reuse of a minimum of 65 percent of the nonhazardous construction and demolition debris by weight or volume.

Recycling and Waste Reduction Policies

The County has adopted a number of specific policies to recycle and reduce waste from County operations and facilities. These include the purchase and use of re-refined motor oil in all County motorized vehicles and equipment; purchase and use of 30 percent recycled-content paper; mandated recycling programs; electronic waste surplus donation; recycling or donation of used printer cartridges; an environmental purchasing policy; reduced paper-based correspondence; beverage container collection and recycling; paper collection and recycling; purchase and use of remanufactured laser toner cartridges for black and white printers and copiers; restricted use of styrofoam containers; and prohibited use of plastic carryout bags.

Leadership in Energy and Environmental Design Certification for County Buildings

As part of the County's Energy and Environmental Policy, all new County buildings with floor areas greater than 10,000 square feet proposed under the County's Capital Project Program are required to achieve at least the LEED Gold level of certification, or a successor, equivalent standard established by the U.S. Green Building Council. LEED is the certification standard of the U.S. Green Building Council where buildings are certified for performance under various design and construction categories. LEED points are given for diverting non-hazardous construction waste from landfills.

City of Los Angeles Municipal Code

Chapter 18, Article 1, of the City's Municipal Code, *Solid Waste and Recycled Materials Management*, incorporates AB 939 by reference and sets forth requirements pursuant to AB 939.

Requirements for construction waste reduction, disposal, and recycling are set forth in Los Angeles Municipal Code Section 99.04.408 for residential construction and Section 99.05.408 for nonresidential construction.

The City of Los Angeles' C&D Waste Recycling Ordinance, No. 181519, became effective January 1, 2011. This ordinance requires all non-source-separated C&D waste generated within City limits to be taken to City Certified C&D waste processing facilities. Further, it requires that all C&D waste be handled by a City Permitted Solid Waste Hauler. Compliance with the ordinance is accomplished through the City's Waste Hauler Permit Program.

Existing Conditions

Solid Waste Generation and Collection

Universal Waste Systems, Inc., collects solid waste from the Project Site. Solid waste collected from the Project Site during the three months between October 2014 and December 2014 totaled 800 tons, or 8.7 tons per day—equivalent to 2.1 pounds per day (ppd) per capita for the average inmate population of 4,782 and 3,685 County employees.

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Solid Waste Recycling and Disposal

Solid waste collected from the Project Site is taken to the Central Los Angeles Recycling and Transfer Station (CLARTS) at 2201 East Washington Boulevard in Los Angeles. Trash is hauled from CLARTS to the Sunshine Canyon City/County Landfill in the Community of Sylmar. CLARTS has permitted capacity of 4,025 tons per day and existing capacity of 2,500 tons per day (BOS 2014). The Sunshine Canyon City/County Landfill has 96,393,000 cubic yards remaining capacity, 12,100 tons per day permitted capacity, average daily disposal of 7,221 tons, residual daily disposal capacity of 4,879 tons, and an estimated closing date of 2037 (CalRecycle 2014).

Solid Waste Diversion

Solid waste diversion data are not reported for the City of Los Angeles on the CalRecycle website; instead, data are reported for the Los Angeles Regional Agency (LARA), a consortium currently consisting of 18 member cities in the County, including the City of Los Angeles. Although the Project Site is under County jurisdiction and would be required to comply with the County's solid waste diversion programs, because it is in the City of Los Angeles and served by Universal Waste Systems, which also serves the City of Los Angeles, the Proposed Project would contribute to the LARA's waste stream.

Compliance with AB 939 is measured in part through actual disposal rates compared to target rates; actual rates at or below target rates are consistent with AB 939. In 2013, target solid waste disposal rates for the LARA were 7.1 ppd per resident and 17.5 ppd per employee; actual disposal rates were 4.5 ppd per resident and 11.3 ppd per employee; thus, solid waste disposal rates in the LARA are consistent with AB 939.

5.13.3.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

- U-6 Would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- U-7 Would not comply with federal, state, and local statutes and regulations related to solid waste.

5.13.3.3 PLANS, PROGRAMS, AND POLICIES

Regulatory Requirements

- RR USS-3 The Project will be constructed in accordance with the County's Green Building Standards Code and Construction and Demolition Debris Recycling and Reuse Ordinance, which requires a minimum of 65 percent of the "non-hazardous construction and demolition debris" (by weight or volume) to be recycled or reused unless a lower percentage is approved by the Director of Public Works.

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RR USS-4 The Project will be designed, constructed, and operated in accordance with the County's Departmental Recycling Program Directives to implement waste reduction and recycling measures.

5.13.3.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for potentially significant impacts of the Proposed Project. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.13-4: Implementation of the Proposed Project would not adversely impact a landfill with insufficient capacity or adversely impact the County's ability to comply with related solid waste regulations. [Thresholds U-6 and U-7]

Impact Analysis:

Short-Term Construction Impacts

The short-term construction impact for the Project Site and the SSPS Site or the Vignes Lot has been combined in this analysis. Implementation of the Proposed Project would generate construction and demolition wastes such as concrete, asphalt, wood, drywall, metals, and other miscellaneous and composite materials. The total area to be demolished is 1,415,699 square feet, which includes not only the 935,150 square feet of jails but all structures in the MCJ site, such as the two-story parking structure, arraignment court, infirmary, etc. Using the square feet to tons conversion used in CalEEMod of 0.046 ton/building square foot, the Proposed Project would result in demolition of 65,122 tons. Additionally, 3,218 tons of asphalt area was assumed to be demolished, which includes the SSPS Site. Therefore, a combined total of 68,340 tons of demolition waste would result from the MCJ and SSPS Site for Option 1. Demolition at the Vignes Lot would generate approximately 7,820 tons of concrete waste. Therefore, a combined total of 72,942 tons of demolition waste would result from the MCJ and Vignes Lot for Option 2. In addition to the demolition waste, construction of the 2.4-million-square-foot CCTF would generate about 5,483 tons of waste, and SSPS development would generate about 1,632 tons of waste, to a combined total of 7,115 tons (thegreenestbuilding.org 2015)² for Option 1. The SSPS building area was assumed at 272,124 square feet. Construction of the 2.4-million-square-foot CCTF would generate about 5,483 tons of waste, and Vignes Lot development would generate about 3,264 tons of waste, to a combined total of 8,747 tons (thegreenestbuilding.org 2015)³ for Option 2.

However, these materials would be recycled and salvaged to the maximum extent feasible at a minimum of 65 percent as required by the County's Construction and Demolition Debris Recycling and Reuse Ordinance (RR USS-3). Therefore, 65 percent of 68,340 tons of demolition waste and 6,030 tons of construction waste would be diverted, and approximately 26,030 tons of C&D waste would be hauled to landfills under Option 1. Under Option 2, 65 percent of 72,942 tons of demolition waste and 8,747 tons of construction

² Assumed 4.02 lbs per square foot of construction waste based on <http://www.thegreenestbuilding.org/waste.html>, which relied on the U.S. EPA report, Characterization of Building-Related Construction and Demolition Debris in the United States.

³ Assumed 4.02 lbs per square foot of construction waste based on <http://www.thegreenestbuilding.org/waste.html>, which relied on the U.S. EPA report, Characterization of Building-Related Construction and Demolition Debris in the United States.

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waste would be diverted, and approximately 28,591 tons of C&D waste would be hauled to landfills. The Proposed Project would occur over a nine-year period, and extended construction duration would reduce the daily demolition waste to be taken to designated landfills. Sunshine Canyon Landfill has adequate capacity to accommodate the proposed short-term C&D waste with its daily residual disposal capacity of 4,879 tons. Therefore, impacts would be less than significant. In addition, the Project Site's hazardous materials wastes—such as asbestos-containing materials, lead-based paint, underground storage tanks, etc.—as discussed in Section 5.7, *Hazards and Hazardous Materials*, of this EIR, would be managed, handled, and disposed of by qualified personnel and in compliance with state and County requirements. Construction and demolition waste impacts to landfill capacity would be temporary and would not create a need for additional solid waste disposal facilities to adequately handle Project construction-generated waste. RR USS-3 would be implemented and impacts would not be significant.

Long-Term Operational Impacts

The existing MCJ generates approximately 2.1 ppd of solid waste per capita (2016), calculated based on the existing staffing number of 3,711 and the average inmate population of 4,782, producing an average of 8.9 tons per day of solid waste. Therefore, for the purposes of this analysis, 2.1 ppd per capita were used to project the anticipated solid waste demands. With implementation of the Proposed Project, 1,223 fewer beds and 50 additional employees at CCTF and TTCF would reduce solid waste by 2,568.3 lbs. related to the beds and increase solid waste by 565 lbs. per day related to the staffing increase, for a combined total reduction of 2,003.3 lbs. per day or 1 ton per day.

The Sunshine Canyon City/County Landfill has residual daily disposal capacity of 4,879 tons, and would continue to serve the Proposed Project. The anticipated decrease of 1 ton per day would improve residual capacity at area landfills. There is adequate landfill capacity in the region for Project-generated solid waste, and the Proposed Project would not require construction of new or expanded landfill facilities. (CalRecycle 2014) Impacts would be less than significant.

The Proposed Project would include storage areas for recyclable materials and organic matter in compliance with AB 341 and AB 1826, respectively. Portions of Project C&D waste would be recycled or reused in compliance with the California Green Building Standards Code and County's Construction and Demolition Debris Recycling and Reuse Ordinance (RR USS-3).

The Proposed Project would decrease solid waste volume during operation and benefit the regional system. The Proposed Project would be required to be designed, constructed, and operated in accordance with the County's Department of Recycling Program Directives to implement waste reduction and recycling measures (RR USS-4). Therefore, the Proposed Project would not conflict with AB 939 or the County's Source Reduction and Recycling Element and Household Hazardous Waste Element under its Integrated Waste Management Plan. During operation, hazardous wastes would also be handled and disposed of in accordance with existing regulations, as discussed in Section 5.7, *Hazards and Hazardous Materials*, of this EIR. Therefore, impacts would not be significant.

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Spring Street Parking Structure Site (Option 1)

Operation of the SSPS would generate minimal solid waste because there would be no ongoing uses that generates regular waste stream. Moreover, the SSPS would also be operated in accordance with the County's Departmental Recycling Program Directives to implement waste reduction and recycling measures as required by RR USS-4, as applicable.

Vignes Lot (Option 2)

Operation of the Vignes Lot parking structure would generate minimal solid waste because there would be no ongoing uses that generates regular waste stream. Moreover, the Vignes Lot parking structure would also be operated in accordance with the County's Departmental Recycling Program Directives to implement waste reduction and recycling measures as required by RR USS-4, as applicable.

Level of Significance before Mitigation: With implementation of RR USS-3 and RR USS-4, Impact 5.13-4 would be less than significant.

5.13.3.5 CUMULATIVE IMPACTS

The geographic area for cumulative analysis of solid waste services is the LADWP service area. The Proposed Project and other projects in the area would result in increased solid waste generation. However, the County landfill system provides adequate capacity to handle the increased solid waste volume, as the Sunshine Canyon City/County Landfill has residual daily disposal capacity of 4,879 tons, where waste generated by the Proposed Project would be reduced as compared to existing conditions. Therefore, the Proposed Project would not result in a significant impact incrementally to cause cumulative impacts. Compliance with the existing recycling and disposal programs would further ensure that the Proposed Project does not exceed service levels at applicable landfills. Impacts would not be cumulatively considerable.

5.13.3.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

With implementation of RR PS-3 and RR PS-4, the following impact would be less than significant:

- **Impact 5.13-4** Implementation of the Proposed Project would not adversely impact a landfill with insufficient capacity or adversely impact the County's ability to comply with related solid waste regulations.

5.13.3.7 MITIGATION MEASURES

No mitigation measures are necessary because there were no significant impacts identified under the applicable threshold.

5.13.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Because no mitigation measures are required, impacts are the same as described in Section 5.13.3.6.

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5.13.4 References

- California Department of Resources Recycling and Recovery (CalRecycle). 2016 (accessed). Waste Characterization, Public Sector and Institutions: Estimated Solid Waste Generation, Waste generation source for government use rate of 0.59 tons/emp/year.
<http://www.calrecycle.ca.gov/wastechar/wastegenrates/Institution.htm>.
- Los Angeles, City of. 2012, June. Water IRP 5-Year Review Final Documents.
http://san.lacity.org/irp/documents/FINAL_IRP_5_Year_Review_Document.pdf.
- . 2013, August 2. Wastewater Capital Improvement Program, Fiscal Years 2013/14 through 2022/23.
<http://lacitysan.org/fmd/wcip/WCIPbook13-14.pdf>.
- . 2014, December 10. Wastewater: Facts and Figures.
<http://www.lacitysan.org/wastewater/factsfigures.htm>.
- Los Angeles, County of. 2015. Mira Loma Detention Women’s Center Draft Environmental Impact Report.
- Los Angeles Department of Water & Power (LADWP). 2011, April 11. 2010 Urban Water Management Plan.
http://www.water.ca.gov/urbanwatermanagement/2010uwmps/Los%20Angeles%20Department%20of%20Water%20and%20Power/LADWP%20UWMP_2010_LowRes.pdf.
- . 2015, April 28. Water Supply Assessment (WSA) for the Los Angeles County Consolidated Correctional Treatment Facility Project.
- Metropolitan Water District of Southern California (MWD). 2014a, October 15. Joseph Jensen Treatment Plant. <http://www.mwdh2o.com/mwdh2o/pages/yourwater/plants/jensen01.html>.
- . 2014b, October 15. F. E. Weymouth Treatment Plant.
<http://www.mwdh2o.com/mwdh2o/pages/yourwater/plants/weymouth01.html>.
- Pitt, Robert (University of Alabama), and Shirley Clark (Pennsylvania State University). 2007, February. Module 7: Sanitary Sewer Design.
- thegreenestbuilding.org. 2016, March 29. The Greenest Building Is the One Already Built.
<http://www.thegreenestbuilding.org/waste.html>.
- US Environmental Protection Agency (USEPA). 1998, June. Characterization of Building-Related Construction and Demolition Debris in the United States. Washington, D.C.: Municipal and Industrial Solid Waste Division. Prepared by Franklin Associates.