3.15 Utilities and Service Systems

This section describes and evaluates potential impacts related to water supply, wastewater conveyance and treatment, stormwater drainage, and solid waste collection and disposal utilities and service systems that could result from implementation of the Proposed Project. The section contains: (1) a description of the existing and baseline conditions for each utility; (2) a description of the regulatory settling related to the relevant utilities and service systems; (3) an analysis of potential impacts as a result of increased demands that would be placed on these utilities associated with the implementation of the Proposed Project and/or cumulative development, and (4) any associated mitigation measures that would be required to avoid or lessen significant impacts of the Proposed Project or cumulative development.

Comments received in response to the NOP for the EIR regarding utilities and service systems can be found in Appendix B. Any applicable issues and concerns regarding potential impacts related to utilities and service systems as a result of implementation of the Project are analyzed within this section.

The analysis included in this section was developed based on project-specific construction and operational features, and data provided in the City of Inglewood General Plan, a project-specific Sewer Area Study Plan (Appendix XX), Golden State Water District's Urban Water Management Plan (UWMP), CalRecycle's Solid Waste Information System, and a project-specific Water Supply Assessment for the City by Todd Groundwater (Appendix J).

Water Supply

3.15.1 Environmental Setting

[Note to Team: Discussion is pending information from Golden State Water and the developing Water Supply Assessment.]

3.15.2 Adjusted Baseline Environmental Setting

[Note to Team: Discussion is pending information from Golden State Water and the developing Water Supply Assessment.]

3.15.3 Regulatory Setting

[Note to Team: Discussion is pending information from Golden State Water and the developing Water Supply Assessment.]

3.15.4 Analysis, Impacts and Mitigation

[Note to Team: Discussion is pending information from Golden State Water and the developing Water Supply Assessment.]

Wastewater Generation and Treatment 3.15.5 Environmental Setting

Regional and Local Setting

Municipal wastewater is generated in the City of Inglewood from residential, commercial, industrial, and public/institutional land uses. The Los Angeles County Sanitation District (LACSD) District Number 5 manages the wastewater collection and treatment system within the City. Wastewater is collected by gravity sewers and lift stations owned by the City and LACSD. There are two separate sewer systems in the vicinity of the project area: two LACSD trunk sewers (Prairie Avenue Trunk Sewer and South Inglewood Orange Trunk Sewer), and the City of Inglewood local collector sewer lines. Wastewater is transported through these wastewater lines to the LACSD's Joint Water Pollution Control Plant (JWPCP) in Carson, California. The JWPCP provides both primary and secondary wastewater treatment for an average dry weather flow of 280 million gallons per day (MGD). The JWPCP has a design capacity of 400 MGD. In 2015, 6,179 AF of wastewater was collected from within the City of Inglewood.

The JWPCP only provides primary and secondary treatment, and effluent produced at the plant does not meet recycled water quality standards. The treated wastewater is disinfected with hypochlorite and discharged to the Pacific Ocean through LACSD's network of outfalls.

In 2015, Metropolitan and LACSD announced a joint proposal to add Advanced Wastewater Treatment facilities to JWPCP that would meet recycled water quality standards, and could result in the reuse of up to 168,000 AFY of wastewater. Under this program, water would be purified at the plant and then injected or spread into local groundwater basins.

Existing Wastewater Generation and Infrastructure at the Project Site

Over 85 percent of the Project Site is currently vacant and not currently served by the City's sewer system. Approximately 4 acres located within the Arena Site are developed with a fast-food restaurant and catering service, a hotel, and warehouse and light manufacturing facilities. These existing uses generate wastewater that is conveyed by City and LACSD sewer lines and treated at the JWPCP. The existing sewage demand is estimated based on LACSD sewage generation factors. **Table 3.15-1** details the existing land uses, the estimated daily average flows, and estimated peak flows. Based on the land used, estimated the existing peak flow generated at the Project Site is approximately 0.032 MGD.

AECOM, 2018. Sewer Area Study Project Condor. September 19, 2018. p. 2.

Golden State Water Company, 2016. 2015 Urban Water Management Plan – Southwest.

TABLE 3.15-1
ESTIMATED EXISTING WASTEWATER GENERATION AT THE PROJECT SITE

Existing Land Use	Daily Average Sewage Generation Factor (GPD)	Unit Contribution	Daily Average Flow (GPD)	Peak Flow (2.5 x Average) (MGD)	Peak Flow (CFS)
Commercial (Restaurant and Catering)	1,000 Gallons/1,000 SF	2,252 SF	2,252	0.006	0.009
Commercial (Hotel)	125 Gallons/Room	38 Rooms	4,750	0.012	0.019
Manufacturing/Warehouse (Food Warehouse)	200 Gallons/1,000 SF	28,809 SF	5,762	0.014	0.022
Total	-	-	12,764	0.032	0.050

The following discussion details existing wastewater infrastructure at the Project Site.

Arena Site

The Arena Site is served by the City's 8-inch diameter wastewater lines located within South Prairie Avenue, West 102nd Street, and West Century Boulevard. In addition, LACSD's 15-inch Orange Trunk Sewer Line is located within South Doty Avenue, east of the Arena Site.

West Parking and Transportation Hub Site

The West Parking and Transportation Hub Site is served by the City's existing 8-inch wastewater lines located within West Century Boulevard, West 101^{st} Street, West 102^{nd} Street, and South Prairie Avenue. The LACSD's 30-inch Prairie Avenue Trunk Sewer is located northwest of the West Parking and Transportation Hub Site, at the intersection of West Century Boulevard and South Flower Street. The Prairie Avenue Trunk Sewer follows west along West Century Boulevard before turning south along Freeman Avenue, west of the Project Site.

East Parking and Hotel Site

The East Parking and Hotel Site is served by LACSD's 15-inch Orange Trunk Sewer line located north and west of the East Parking and Hotel Site within West Century Boulevard and South Doty Avenue. Additionally, there is an 8-inch diameter wastewater line located within West 102^{nd} Street.

Well Relocation Site

The Well Relocation Site is served by an 8-inch wastewater line within West 102nd Street.

3.15.6 Adjusted Baseline Environmental Setting

As discussed in Section 3.0, Environmental Impacts, Settings, and Mitigation Measures, the Proposed Project is not anticipated to be constructed and begin operations until mid-2023 for the 2023-24 NBA basketball season. Also as discussed in Section 3.0, Environmental Impacts, Settings, and Mitigation Measures, the City has issued building permits for, and construction has

[PAGE]3.45-4

commenced on, significant portions of the Hollywood Park Specific Plan, including the construction of the 70,000-seat NFL Stadium, a 6,000 seat performance venue, 518,077 sf of retail and restaurant uses, 466,000 sf of office space, 314 residential units, and approximately 9,900 parking spaces. Due to the certainty of these projects being constructed and in operation prior to opening of the Proposed Project, the City of Inglewood determined that it is appropriate to include these projects in an adjusted environmental setting for the Proposed Project. Accordingly, the wastewater generated associated with these developments within the Hollywood Park Specific Plan area are considered as part of the adjusted environmental baseline.

Table 3.15-2 details the land uses, daily average, and peak flows for the HPSP, which shows that the HPSP would generate an estimated 2.38 MGD of wastewater. To be conservative, this estimate assumes that no wastewater is currently being generated at the existing HPSP site. The JWPCP currently provides treatment for an average 280 MGD, with a capacity of 400 MGD. With the HPSP as part of the adjusted environmental baseline, this analysis assumes that the JWPCP provides treatment for an average of 282 MGD of wastewater.

TABLE 3.15-2
ESTIMATED HOLLYWOOD PARK SPECIFIC PLAN WASTEWATER GENERATION

Hollywood Park Specific Plan Land Use	Daily Average Sewage Generation Factor (GPD)	Unit Contribution	Daily Average Flow (GPD)	Peak Flow (2.5 x Average) (MGD)	Peak Flow (CFS)
Arena and Performance Center*	10 Gallons/Seat/Day	76,000 Seats	760,000	1.9	2.94
Retail	100 Gallons/1,000 SF	518,077 SF	51,808	0.13	0.20
Office	200 Gallons/1,000 SF	466,000 SF	93,200	0.23	0.35
Residential	156 Gallons/DU	314 DU	48,984	0.12	0.19
Total	-	-	953, 992	2.38	3.68

NOTE:

The Sewer Area Study differentiates generation rates between the arena use and the performance center use. However, the square footage of the HPSP performance center is unknown at the time of this analysis. Therefore, since the uses of an arena and a performance center are so similar, the arena generation rate was used as the number of seats within the performance center is known at this time.

SOURCE: Generation rates are based off of: AECOM, 2018. Sewer Area Study Project Condor. September 19, 2018.

The environmental baseline is also adjusted with regard to pipeline sewage flows and capacities of pipelines that would connect to the Project Site. The Project-specific Sewer Area Study Plan considers the HPSP Inglewood NFL Stadium at Hollywood Park Sewer Area Study findings. The capacities of existing City and LACSD sewer lines were analyzed using the HPSP flows, City and LACSD as-built record plans, and existing peak flows and sewer monitoring data.

Commented [MW1]: In the table below, use "stadium" instead of "arena"

3.15.7 Regulatory Setting

Federal

Clean Water Act

Water quality objectives for all waters of the United States are established under applicable provisions of Section 303 of the federal Clean Water Act (CWA). The CWA prohibits the discharge of pollutants to navigable waters from a point source unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit. Point sources are defined as any discernible, confined, and discrete conveyance including but not limited to any pipe, ditch, channel, tunnel, well, or vessel from which pollutants are discharged. Nonpoint sources come from many diffuse sources including land runoff, precipitation, drainage, seepage, or hydrologic modification. Because implementation of these regulations has been delegated to the State, additional information regarding this permit is discussed under the "State" subheading, below.

National Pollutant Discharge Elimination System Permits

The NPDES permit system was established in the CWA to regulate municipal and industrial point discharges to surface waters of the US. Each NPDES permit for point discharges contains limits on allowable concentrations of pollutants contained in discharges. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that the US Environmental Protection Agency (EPA) must consider in setting effluent limits for priority pollutants.

The CWA was amended in 1987 to require NPDES permits for non-point source (i.e., stormwater) pollutants in discharges. Stormwater sources are diffuse and originate over a wide area rather than from a definable point. The goal of NPDES stormwater regulations is to improve the quality of stormwater discharged to receiving waters to the "maximum extent practicable" through the use of structural and non-structural Best Management Practices (BMPs). BMPs can include the development and implementation of various practices including educational measures (workshops informing public of what impacts results when household chemicals are dumped into storm drains), regulatory measures (local authority of drainage facility design), public policy measures, and structural measures (filter strips, grass swales and detention ponds). The NPDES permits that apply to activities in the City of Inglewood are described under local regulations below.

US Environmental Protection Agency's National Combined Sewer Overflow Control Policy

The US EPA initiated its Combined Sewer Overflow (CSO) Control Policy (40 CFR 122) in April, 1994. The CSO Policy provides a national level framework for the control and management of CSOs. The CSO Policy provides guidance regarding how to achieve Clean Water Act goals and requirements when faced with management of a CSO.

State

Porter-Cologne Water Quality Control Act

The State Water Resources Control Board (SWRCB) and the Los Angeles Regional Water Quality Control Board (RWQCB) are delegated authority from the US EPA to implement portions of the CWA, and also implement the State's water quality law, the Porter-Cologne Water Quality Control Act (Porter-Cologne Act). These agencies have established water quality standards that are required by Section 303 of the CWA and the Porter-Cologne Act. The Porter-Cologne Act states that a Water Quality Control Plan, or Basin Plan, will consist of beneficial uses, water quality objectives, and a program of implementation for achieving water quality objectives. A Basin Plan, prepared by the Los Angeles RWQCB, establishes water quality numerical and narrative standards and objectives for rivers and their tributaries within the area subject to the Basin Plan. In cases where the Basin Plan does not contain a standard for a particular pollutant, other criteria apply such as EPA water quality criteria developed under Section 304(a) of the CWA. The Basin Plan that applies to the Project Site is described under local regulations below.

Local

City of Inglewood General Plan

The City of Inglewood General Plan Conservation Element, adopted on October 21, 1997, addresses the plan for conservation, development and utilization of natural resources found within the jurisdiction of the City. Chapter IV of the Conservation Element addresses the City's wastewater system. While the Conservation Element details the City's concerns related to effluent contaminating the ocean, no specific goals or policies are stated that are relevant to the Proposed Project.

Municipal Separate Storm Sewer System Permit

Los Angeles County and 84 incorporated cities, including the City of Inglewood, have a joint Municipal Separate Storm Sewer System NPDES permit (MS4 Permit) (Permit Order No. R4-2012-0175, NPDES Permit No. CAS004001) that was granted on November 8, 2012. The MS4 Permit is intended to implement BMPs to reduce pollutants in stormwater discharges to the maximum extent practicable. The permittees listed under the joint permit have the authority to develop, administer, implement, and enforce storm water management programs within their own jurisdiction. On June 27, 2013, the cities of El Segundo, Hawthorne, Inglewood, and Los Angeles (including the Port of Los Angeles), the County of Los Angeles, and the Los Angeles County Flood Control District formed the Dominguez Channel Watershed Management Area Group to develop a collaborative approach to meet the requirements of the MS4 Permit. [Note to Team: City to provide revised information, per edits in the Hydrology Chapter.]

Urban storm water runoff is defined in the MS4 Permit as including stormwater and dry weather flows from a drainage area that reaches a receiving water body or subsurface. The permit regulates the discharge of all wet and dry weather urban storm water runoff within the County of

Los Angeles (with exception to the City of Long Beach). Part VI.C of the Los Angeles County MS4 permit allows permittees the flexibility to develop Watershed Management Programs (WMP) or Enhanced Watershed Management Programs (EWMP) to implement the requirements of the permit on a watershed scale through customized strategies, control measures, and BMPs. The Dominguez Channel Watershed Management Area Group developed a EWMP that was approved by the Los Angeles Water Board on February 26, 2016.³ The EWMP includes water quality priorities for the Dominguez Channel Watershed Management Area, watershed control measures consisting of both structural and non-structural BMPs, financial strategies, and legal authority (permittees have the necessary legal authority to implement the BMPs identified in the EWMP or the legal authority exists to compel implementation of the BMPs).

Water Quality Control Plan: Los Angeles Region Basin Plan

The Los Angeles Region Basin Plan is designed to preserve and enhance water quality and protect beneficial uses of all regional waters. Specifically, the Basin Plan designates beneficial uses for surface and ground waters, sets narrative and numerical objectives that must be attained or maintained to protect designated beneficial uses, and describes implementation programs to protect all waters in the region. The Basin Plan incorporates all applicable state and regional board plans and policies and other pertinent water quality policies and regulations. The Basin Plan is a resource for the regional board and others who use water and discharge wastewater in the Los Angeles Region, and provides valuable information to the public about local water quality issues.

3.15.8 Analysis, Impacts and Mitigation

Significance Criteria

A significant impact to wastewater generation and treatment would occur if the Proposed Project would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; or
- Result in a determination by the Los Angeles County Sanitation District, which would serve the project, that it does not have adequate capacity to serve the project's projected demand in addition to the LACSD's existing commitments.

Methodology and Assumptions

The following impact analysis evaluates the potential for the Proposed Project to result in changes to existing infrastructure and supply and demand relating to wastewater resources. A project-specific Sewer Area Study Plan was prepared for the Proposed Project (Appendix XX), and its analysis and findings are integrated into the analysis below. It is assumed that all aspects of the Proposed Project would comply with all applicable laws, regulations, design standards, and plans.

As detailed in the Sewer Area Study Plan, the capacities of existing City and LACSD sewer lines were analyzed using City and LACSD as-built record plans, existing peak flows and sewer

[PAGE]3.45-4

³ Dominguez Channel Watershed Management Area Group, 2015. Enhanced Watershed Management Program.

monitoring data, and the HPSP Inglewood NFL Stadium at Hollywood Park Sewer Area Study findings. The Proposed Project's sewage demand is estimated based on LACSD sewage generation factors. Sewage demands were calculated based on the full day seating capacity for the arena and by square footage for all other proposed structures within the Project Site. The Project Site is subdivided in three tributary areas based on contribution to proposed points of connection. Note that parking structures are not part of calculations, because they do not have any sewer demand. **Table 3.15-3** details the main points of connection to the existing sewer system, the daily average and peak flows to each point of connection, and whether there is sufficient capacity to serve the Proposed Project. [Note to Team: Note that the Sewer Area Study does not include the proposed hotel use. Table 3.15-3 assumes that it will be part of Point of Connection 2. This needs to be confirmed.]

TABLE 3.15-3
ESTIMATED PROPOSED PROJECT WASTEWATER GENERATION AND SEWER CAPACITY SUMMARY

Point of Connection	Proposed Land Use	Daily Average Sewage Generation Factor (GPD)	Unit Contribution	Daily Average Flow (GPD)	Peak Flow (2.5 x Average) (MGD)	Peak Flow (CFS)	Pipe Capacity* (CFS)	Capacity?*
1 (City's sewer line at South	Food and Drink Building	1,000 Gallons/ 1,000 SF	24,000 SF	24,000	0.06	0.09	0.380	Yes
Prairie Avenue and West 102 nd Street)	Mixed Use Building	100 Gallons/ 1,000 SF	24,000 SF	2,400	0.006	0.01		
,	Subtotal		48,000	26,400	0.07	0.10	0.380	Yes
2 (City's sewer line at West 102nd	20% Arena	10 Gallons/ Seat/Day	3,608 Seats	36,080	0.09	0.14	0.380	Yes
Street west of South Doty Avenue)	Hotel	125 Gallons/ Room	up to 150 Rooms	18,750	0.05	0.08		
	Subtotal			54,830	0.14	0.22	0.380	Yes
3 (LACSD Prairie Trunk Sewer at Freeman Avenue	80% Arena	10 Gallons/ Seat/Day	14,432 Seats	144,320	0.36	0.56	0.870	Yes
and 103rd Street)	Practice Facility	300 Gallons/ 1,000 SF	85,000 SF	25,500	0.06	0.10		
	Office Space	200 Gallons/ 1,000 SF	71,000 SF	14,200	0.04	0.05		
	Parking Structure	25 Gallons/ 1,000 SF	447,924 SF	11,198	0.03	0.04		
	Sports Medicine Clinic	300 Gallons/ 1,000 SF	25,000 SF	7,500	0.02	0.03		
	Community Space	200 Gallons/ 1,000 SF	15,000 SF	3,000	0.01	0.01		
	Subtotal		518,924	195,218	0.51	0.80	0.870	Yes
	Total		-	257,698	0.72	1.1	-	-

*NOTE: Proposed sewer pipe design capacity was calculated as ½ full for pipe diameters of 12-inches or lower, and ¾ full for pipe diameters of 15-inches or higher

SOURCE: AECOM, 2018. Sewer Area Study Project Condor. September 19, 2018.

Impacts and Mitigation Measures

Impact 3.15-3: Implementation of the Proposed Project could exceed wastewater treatment requirements of the Regional Water Quality Control Board.

The Proposed Project would include an arena, practice facility, sports medicine clinic, team offices, retail/restaurants, and a hotel, which would result in an increase in wastewater generation at the Project Site. The Proposed Project would include wastewater pipelines to connect to the existing wastewater lines within surrounding streets. Wastewater generated by the Proposed Project would be treated at LACSD's JWPCP. The wastewater generated by the Proposed Project would be treated at the JWPCP, which has a maximum treatment capacity of 400 MGD. The JWPCP currently provides treatment for an average flow of 280 MGD, and with the HPSP as being part of the adjusted environmental baseline, the JWPCP provides treatment for an average of 282 MGD of wastewater. As shown on Table 3.15-3, the Proposed Project would generate a total of 0.72 MGD, which would be less than a percentage of maximum treatment capacity and average flows at the JWPCP. The JWPCP would have sufficient capacity to treat all wastewater generated from the Proposed Project.⁴

The JWPCP provides primary and secondary treatment by processing wastewater in anaerobic digestion tanks.⁵ The treated wastewater is disinfected with hypochlorite and discharged to the Pacific Ocean through LACSD's network of outfalls. Wastewater discharge requirements for the facility are based on all applicable state and federal regulations, policies, and guidance, and include limitations on effluent discharge and receiving water. In general, effluent discharge requirements include specifications for adequate disinfection treatment and limitations on pollutant concentrations, sediments, pH, temperature, and toxicity.

As a largely commercial use, the Proposed Project would not discharge wastewater that contains harmful levels of toxins that are regulated by the RWQCB (such as large quantities of chemicals that are more typical in agricultural and industrial uses). All effluent would comply with the wastewater treatment standards of the RWQCB, as wastewater would be transferred to the JWPCP and treated before being discharged to the ocean. Therefore, impacts related to the wastewater treatment requirements of the RWQCB would be **less than significant**.

Mitigation Measures	
None required.	

County Sanitation Districts of Los Angeles County, 2018. Will Serve Letter for Project Condor. January 19.
 County Sanitation Districts of Los Angeles County, 2018. Joint Water Pollution Control Plant. Available: https://www.lacsd.org/wastewater/wwfacilities/jwpcp. Accessed December 3, 2018.

Impact 3.15-4: Implementation of the Proposed Project could result in a determination by the LACSD, which would serve the project, that it does not have adequate capacity to serve the project's projected demand in addition to the LACSD's existing commitments.

Construction

Construction of the Proposed Project would not result in additional wastewater discharges to the JWPCP. During Project construction, use of the existing facilities on site would cease, which would in turn cease existing wastewater generation. All construction workers would use onsite portable restrooms. No other wastewater would be generated onsite requiring treatment during construction. Therefore, because no wastewater would be generated during construction, no impact would occur related to the capacity of the wastewater treatment plant.

Operation

The Proposed Project would increase wastewater generation at the Project Site with the addition of the arena, practice facility, sports medicine clinic, team offices, retail/restaurants, and a hotel. A project-specific Sewer Area Study Plan was prepared for the Proposed Project (Appendix XX). The Proposed Project would have three points of connection to the existing sewer systems. These points of connection include to the City's sewer line at South Prairie Avenue and West 102nd Street, the City's sewer line at West 102nd Street west of South Doty Avenue, and to the LACSD Prairie Trunk Sewer at Freeman Avenue and 103rd Street. According to the Sewer Area Study Plan, the existing 8-inch sewer line along West 102nd Street would be removed or abandoned in the portion of the street that would be vacated to accommodate project construction. New 8-inch and 10-inch pipelines would be constructed to serve the proposed uses and their laterals.

The northern portion of the Project Site would drain to City sewer lines at South Prairie Avenue and West 102^{nd} Street. The eastern portion would drain to the existing sewer line along West 102^{nd} Street and ultimately to the Orange Avenue Trunk Sewer along South Doty Avenue. Wastewater contribution to the eastern portion includes a fraction of the wastewater generated by the proposed arena. The remaining portion of the site would drain to the Prairie Avenue Trunk Sewer along Freeman Avenue.

All sewer mains that would serve the Project Site are sized between 8-inches and 12-inches. According to the Sewer Area Study Plan and as detailed in Table 3.15-2, the sewer mains that would serve the Proposed Project would meet the Los Angeles County capacity standards of no more than ½ full for mains under 15-inch diameter and no more than ¾ full for mains with a diameter of 15-inches and larger. More specifically:

- The Project Site would contribute approximately 0.51 MGD to the Prairie Avenue Trunk Sewer, which does not exceed the available capacity of 1.61 MGD;
- Existing City 8-inch sewer line along 103rd Street that would convey peak flow would be upsized to a 12-inch line and would extend to the Project Site;
- The Project Site would contribute 0.07 MGD to the City collector sewer line at South Prairie Avenue and West 102nd Street, which does not exceed the available capacity of 0.39 MGD;

- The Project Site would contribute 0.15 MGD to West 102nd Street east sewer line and ultimately to the Orange Avenue Trunk Sewer, which does not exceed existing peak flows of 0.17 MGD; and
- With proposed improvements along 103rd Street to upsize the existing 8-inch sewer line to a
 12-inch line extended to the Project Site, the existing City collector lines and LACSD sewer
 system would have adequate capacity to serve the Proposed Project.

The wastewater generated by the Proposed Project would be treated at the JWPCP, which has a maximum treatment capacity of 400 MGD and currently provides treatment for an average flow of 280 MGD. With the HPSP as being part of the adjusted environmental baseline, this analysis assumes the JWPCP provides treatment for an average of 282 MGD of wastewater. As shown on Table 3.15-3, the Proposed Project would generate a total of 0.72 MGD, which would be less than a percentage of maximum treatment capacity and average flows. According to the LACSD Will Serve Letter for the Proposed Project, the JWPCP would have sufficient capacity to treat all wastewater generated from the Proposed Project. Because the surrounding sewer mains and JWPCP would have adequate capacity to serve the Proposed Project, impacts would be **less than significant**.

Mitigation Measures		
None required.		

Cumulative Impacts

The geographic scope of analysis for cumulative impacts related to the JWPCP is the drainage basin of wastewater that is received for treatment at the JWPCP. The geographic scope of analysis for City and LACSD sewer and trunk lines are the network of those wastewater lines.

Impact 3.15-5: Implementation of the Proposed Project, in combination with other development, would not cumulatively exceed wastewater treatment requirements of the Regional Water Quality Control Board.

Cumulative projects (listed in Chapter 3.0, Environmental Impacts, Setting, and Mitigation Measures) would increase wastewater generation throughout the region. Similar to the Proposed Project, wastewater from cumulative projects would be treated at the JWPCP. Of the jurisdictions listed in Table 3.0-1, Cumulative Projects List, the cities of Inglewood, Hawthorne and El Segundo east of Sepulveda Boulevard are served by the JWPCP. **Table 3.15-4** shows the estimated wastewater generation that would be produced by the cumulative projects in these cities, based on land use. The table below assumes that there are no existing uses or existing wastewater being generated on these sites, as a conservative estimate of wastewater generated from these cumulative projects.

Inglewood Basketball and Entertainment Center Environmental Impact Report

⁶ County Sanitation Districts of Los Angeles County, 2018. Will Serve Letter for Project Condor. January 19.

Table 3.15-4
Estimated Cumulative Wastewater Generation

Cumulative Project List Number	Land Use	Daily Average Sewage Generation Factor (GPD)	Unit Contribution	Daily Average Flow (GPD)	Peak Flow (2.5 x Average) (MGD)
5	Hotel	125 Gallons/Room	190 Rooms	23,750	0.06
7	Hotel	125 Gallons/Room	152 Rooms	19,000	0.05
8	Office	200 Gallons/1,000 SF	3,050 SF	610	0.001
9	Office	200 Gallons/1,000 SF	73,000 SF	14,600	0.04
10	Office	200 Gallons/1,000 SF	52,000 SF	10,400	0.03
	Athletic Training Facility (Performance Center)	300 Gallons/1,000 SF	68,380 SF	20,514	0.05
11	School	200 Gallons/1,000 SF	240,000 SF	48,000	0.12
12	Office	200 Gallons/1,000 SF	63,550 SF	12,710	0.03
15	Office	200 Gallons/1,000 SF	61,545 SF	12,309	0.03
	Retail	100 Gallons/1,000 SF	13,660 SF	1,366	0.003
16	Office	200 Gallons/1,000 SF	93,569 SF	18,714	0.05
17	Office	200 Gallons/1,000 SF	106,000 SF	21,200	0.05
	Warehouse	25 Gallons/1,000 SF	117,000 SF	2,925	0.007
18	Office	200 Gallons/1,000 SF	1,740,000 SF	348,000	0.87
	Retail	100 Gallons/1,000 SF	75,000 SF	7,500	0.02
	School	200 Gallons/1,000 SF	7,000 SF	1,400	0.003
	Medical Buildings/Light Industrial	300 Gallons/1,000 SF	107,000 SF	32,100	0.08
	Hotel	125 Gallons/Room	100 Rooms	12,500	0.03
	Health Club	600 Gallons/1,000 SF	19,000 SF	11,400	0.03
19	Hotel	125 Gallons/Room	167 Room	20,875	0.05
20	Data Center (Office Building)	200 Gallons/1,000 SF	180,422 SF	36,085	0.09
24	Office	200 Gallons/1,000 SF	300,000 SF	60,000	0.15
25	Hotel	125 Gallons/Room	150 Rooms	18,750	0.05
27	Office	200 Gallons/1,000 SF	67,474 SF	13,495	0.03
	Manufacturing	200 Gallons/1,000 SF	11,471 SF	2,294	0.005
29	Office	200 Gallons/1,000 SF	20,955 SF	4,191	0.01
30	Ice Rink (Amusement)	350 Gallons/1,000 SF	17,315 SF	6,060	0.02
35	Multi-Family	156 Gallons/DU	116 DU	18,096	0.05
36	Multi-Family	156 Gallons/DU	171 DU	26,676	0.06
	Office	200 Gallons/1,000 SF	32,500 SF	6,500	0.01
37	Multi-Family	156 Gallons/DU	230 DU	35,880	0.09
	Restaurant	1,000 Gallons/1,000 SF	3,700 SF	3,700	0.01
38	Multi-Family	156 Gallons/DU	6 DU	936	0.002
39	Hotel	125 Gallons/Room	350 Rooms	43,750	0.11
40	Hotel	125 Gallons/Room	119 Rooms	14,875	0.04

TABLE 3.15-4
ESTIMATED CUMULATIVE WASTEWATER GENERATION

Cumulative Project List Number	Land Use	Daily Average Sewage Generation Factor (GPD)	Unit Contribution	Daily Average Flow (GPD)	Peak Flow (2.5 x Average) (MGD)
41	Multi-Family	156 Gallons/DU	4 DU	624	0.001
42	Multi-Family	156 Gallons/DU	4 DU	624	0.001
43	Multi-Family	156 Gallons/DU	12 DU	1,872	0.005
44	Multi-Family	156 Gallons/DU	38 DU	5,928	0.01
45	Multi-Family	156 Gallons/DU	10 DU	1,560	0.004
46	Multi-Family	156 Gallons/DU	3 DU	468	0.001
47	Multi-Family	156 Gallons/DU	12 DU	1,872	0.005
48	Multi-Family	156 Gallons/DU	5 DU	780	0.001
49	Living Facility (Hospitals Convalescent)	85 Gallons/Beds	18 Beds	1,530	0.004
50	Multi-Family	156 Gallons/DU	18 DU	2,808	0.007
51	Multi-Family	156 Gallons/DU	4 DU	624	0.001
52	Hotel	125 Gallons/Room	120 Room	15,000	0.04
53	Multi-Family	156 Gallons/DU	3 DU	468	0.001
54	Multi-Family	156 Gallons/DU	7 DU	1,092	0.003
55	Multi-Family	156 Gallons/DU	12 DU	1,872	0.005
56	Retail	100 Gallons/1,000 SF	2,542 SF	254	0.000
57	Multi-Family	156 Gallons/DU	40 DU	6,240	0.02
58	Multi-Family	156 Gallons/DU	116 DU	18,096	0.05
60	Retail	100 Gallons/1,000 SF	40,000 SF	4,000	0.01
61	Multi-Family	156 Gallons/DU	20 DU	3,120	0.008
62	Multi-Family	156 Gallons/DU	310 DU	48,360	0.12
63	Self-Storage (Warehouse)	25 Gallons/1,000 SF	81,613 SF	2,040	0.005
64	Multi-Family	156 Gallons/DU	3 DU	458	0.009
65	Living Facility (Hospitals Convalescent)	85 Gallons/Beds	18 Beds	1,530	0.004
68	Multi-Family	156 Gallons/DU	5 DU	780	0.002
69	Self-Storage (Warehouse)	25 Gallons/1,000 SF	120,000 SF	3,000	0.008
93	Multi-Family	156 Gallons/DU	393 DU	61,308	0.15
	Retail	100 Gallons/1,000 SF	22,000 SF	2,200	0.006
97	Hotel	125 Gallons/Room	128 Room	16,000	0.04
107	Multi-Family	156 Gallons/DU	36 DU	5,616	0.01
108	Multi-Family	156 Gallons/DU	32 DU	4,992	0.01
109	Multi-Family	156 Gallons/DU	9 DU	1,404	0.004
110	Multi-Family	156 Gallons/DU	4 DU	624	0.002
112	Multi-Family	156 Gallons/DU	19 DU	2,964	0.007

Table 3.15-4 Estimated Cumulative Wastewater Generation

Cumulative Project List Number	Land Use	Daily Average Sewage Generation Factor (GPD)	Unit Contribution	Daily Average Flow (GPD)	Peak Flow (2.5 x Average) (MGD)
128	Multi-Family	156 Gallons/DU	127 DU	19,812	0.05
Total	-	-		1,171,081	2.93

SOURCE: Generation rates are based off of: AECOM, 2018. Sewer Area Study Project Condor. September 19, 2018.

Approximately 3 MGD of wastewater requiring treatment at the JWPCP would be generated by cumulative projects. As previously detailed, the JWPCP has a maximum treatment capacity of 400 MGD, and currently provides treatment for an average flow of 282 MGD of wastewater (with the adjusted environmental baseline). Therefore, the JWPCP would have capacity to treat both the Proposed Project and cumulative projects and can accommodate this projected growth of these cities.

The JWPCP disinfects wastewater and discharges it to the Pacific Ocean. Wastewater discharge requirements for the facility are based on all applicable state and federal regulations, policies, and guidance, and include limitations on effluent discharge and receiving water. In general, effluent discharge requirements include specifications for adequate disinfection treatment and limitations on pollutant concentrations, sediments, pH, temperature, and toxicity. Similar to the Proposed Project, all effluent from cumulative projects would be required to comply with the wastewater treatment standards of the RWQCB, as wastewater would be transferred to the JWPCP and treated before being discharged to the ocean. Therefore, implementation of the Proposed Project, along with past, present, and reasonably foreseeable projects, would have a less than significant cumulative impact related to wastewater treatment requirements of the Regional Water Quality Control Board.

Mitigation Measures	
None required.	

Impact 3.15-6: Implementation of the Proposed Project, in combination with other development, would not result in a determination by the wastewater treatment provider that it does not have adequate capacity to serve projects' demand in addition to existing commitments.

The geographic scope for cumulative impacts on City and LACSD wastewater services is the network of City and LACSD wastewater lines running to the JWPCP. The JWPCP treats wastewater generated throughout the region, including for the cities of Inglewood, Hawthome, and El Segundo east of Sepulveda Boulevard. Table 3.15-4 above shows the wastewater generation that would be produced by the cumulative projects in cities served by the JWPCP. A

total of approximately 3 MGD would be generated by cumulative projects being served by the JWPCP. The JWPCP collects an average daily wastewater inflow of 282 MDG (with the adjusted environmental baseline), which is only 70 percent of its 400 MGD capacity. Therefore, the JWPCP would have capacity to treat both the Proposed Project and cumulative projects. In addition, similar to the Proposed Project, other cumulative projects within the JWPCP service area would be required to verify with the LACSD and City engineers that existing capacity exists to convey and treat the wastewater generated by the new developments prior to implementation. As existing capacity at the JWPCP exists, a **less than significant** cumulative impact would occur related to wastewater capacity.

Mitigation Measures		
None required.		

Storm Drainage Capacity and Conveyance 3.15.9 Environmental Setting

Existing Soil Drainage

The Project Site currently consists of both pervious and impervious surfaces, including commercial buildings, a hotel, a fast-food restaurant, and large portions of vacant land. The Project Site is currently made up of approximately 15 percent impervious surfaces and 85 percent pervious surfaces. Preliminary investigations of the Project Site indicate that the site's native soil characteristics have poor drainage with a low infiltration rate. 7.8 According to the Los Angeles County Guidelines for Low Impact Development (LID) Stormwater Infiltration, minimum standard for soil infiltration is 0.3 inches per hour. Preliminary percolation tests were conducted at five selected locations at the Project Site. Based on the results, infiltration rates for the soils in the upper 10 feet range from 0.32 to 3.52 inches per hour. However, the subsurface native soils at the Project Site consist predominately of clayey soils with estimated infiltration rates lower than 0.3 inches per hour and with few or no connectivity to permeable soil horizons. Moreover, the underlying, predominantly clayey soils at the Project Site have never experienced saturation. These characteristics indicate that infiltration is largely infeasible at the Project Site, and that the Project Site currently provides very little percolation of soils. Thus, under existing conditions, stormwater reaching the Project Site does not percolate, and existing drainage from the Project Site flows to adjacent off-site storm drain facilities and ultimately in to the City maintained storm drain mains located along all streets surrounding the Project Site.

AECOM, 2018. Inglewood Basketball & Entertainment Center Project Low Impact Development (LID) Report. August 23, 2018. p. 2.

⁸ AECOM, 2018. Preliminary Geotechnical Investigation. September 14, 2018. p. 34.
County of Los Angeles Department of Public Works, 2014. Administrative Manual: Guidelines for Design, Investigation, and Reporting Low Impact Development Stormwater Infiltration. p. 2.

Existing Drainage Infrastructure at the Project Site

Arena Site

West 102^{nd} Street crosses through the Arena Site in an east-west direction. Storm drainage facilities at this portion of the Project Site includes a 60-inch storm drain pipeline within South Prairie Avenue and a storm drain pipeline within West 102^{nd} Street. ¹⁰ In addition, an existing catch basin is located at the intersection of West 102^{nd} Street and South Prairie Avenue.

West Parking and Transportation Hub Site

The West Parking and Transportation Hub Site is currently vacant, with West 101st Street crossing through the site in an east-west direction. This portion of the Project Site includes a 24-inch diameter storm drain pipeline that begins in West 101st Street, travels north to West Century Boulevard, and turns east along West Century Boulevard. This portion of the Project Site also utilizes the abovementioned 60-inch diameter storm drain pipeline within South Prairie Avenue.

East Parking and Hotel Site

The East Parking and Hotel Site is currently vacant. Storm drainage pipelines are located within South Doty Avenue. In addition, a 54-inch diameter storm drainage pipeline crosses under parcels to the west of the East Parking and Hotel Site, extending north through West Century Boulevard and south through West $102^{\rm nd}$ Street.

Well Relocation Site

The Well Relocation Site is located east of the Arena Site and would contain a city-owned and operated potable water well. The Well Relocation Site is currently vacant. This portion of the Project Site includes storm drainage pipelines within West 102nd Street and South Doty Avenue, detailed above.

3.15.10 Adjusted Baseline Environmental Setting

As discussed in Section 3.0, Environmental Impacts, Settings, and Mitigation Measures, the Proposed Project is not anticipated to be constructed and begin operations until mid-2023 for the 2023-24 NBA basketball season. Also as discussed in Section 3.0, Environmental Impacts, Settings, and Mitigation Measures, the City has issued building permits for, and construction has commenced on, significant portions of the Hollywood Park Specific Plan, including the construction of the 70,000-seat NFL Stadium, a 6,000 seat performance venue, 518,077 sf of retail and restaurant uses, 466,000 sf of office space, 314 residential units, and approximately 9,900 parking spaces. Due to the certainty of these projects being constructed and in operation prior to opening of the Proposed Project, the City of Inglewood determined that it is appropriate to include these projects in an adjusted environmental setting for the Proposed Project. Accordingly, the runoff drainage associated with these developments within the Hollywood Park Specific Plan area are considered as part of the adjusted environmental baseline.

¹⁰ AECOM, 2015. Existing Conditions Plan Sheet C-101.

In its current condition, according to the Hollywood Park Specific Plan EIR, the Hollywood Park Specific Plan area is largely covered with impervious surfaces with soft landscaped areas including the main horseracing track and training track, as well as the active construction area. The Hollywood Park Specific Plan Project would further add impervious surfaces with the construction of the NFL stadium, performance venue, retail and restaurant uses, office space, and parking spaces.

Existing drainage infrastructure already exists at the Hollywood Park Specific Plan area, and additional drainage infrastructure would be constructed to accommodate the new development. New drainage infrastructure includes various on-site drains, open-channel drainage, an off-site bypass north of the Hollywood Park Specific Plan area, catch basins, and vegetated bio-retention areas. The Hollywood Park Specific Plan Project would include BMPs as required by the site-specific Stormwater Pollution Prevention Plan (SWPPP) to reduce runoff flows from leaving the site, in accordance with federal, state, and local regulations. Under the adjusted environmental baseline, stormwater flows surrounding the Project Site would largely remain similar to existing conditions due to the use of BMPs and compliance with drainage regulations pertaining to the Hollywood Park Specific Plan area.

3.15.11 Regulatory Setting

Federal

National Pollutant Discharge Elimination System Permits

The NPDES permit system was established in the CWA to regulate municipal and industrial point discharges to surface waters of the US Each NPDES permit for point discharges contains limits on allowable concentrations of pollutants contained in discharges. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that the EPA must consider in setting effluent limits for priority pollutants.

The CWA was amended in 1987 to require NPDES permits for non-point source (i.e., stormwater) pollutants in discharges. Stormwater sources are diffuse and originate over a wide area rather than from a definable point. The goal of NPDES stormwater regulations is to improve the quality of stormwater discharged to receiving waters to the "maximum extent practicable" through the use of structural and non-structural BMPs. BMPs can include the development and implementation of various practices including educational measures (workshops informing public of what impacts results when household chemicals are dumped into storm drains), regulatory measures (local authority of drainage facility design), public policy measures, and structural measures (filter strips, grass swales and detention ponds). The NPDES permits that apply to activities in the City of Inglewood are described under local regulations below.

Commented [MW2]: Needs to be updated to reflect current conditions

State

General Construction Activity Stormwater Permit

In accordance with NPDES regulations, to minimize the potential effects of construction runoff on receiving water quality, the State requires that any construction activity affecting one acre or more obtain coverage under a General Construction Activity Stormwater Permit (General Construction Permit). The current General Construction Permit is the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002, effective July 1, 2010. General Construction Permit applicants are required to prepare and implement a SWPPP which includes implementing BMPs to reduce construction effects on receiving water quality by implementing erosion and sediment control measures and reducing or eliminating non-stormwater discharges. Examples of typical construction BMPs in SWPPPs include, but are not limited to: using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment so as to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; and installing sediment control devices such as gravel bags, inlet filters, fiber rolls, or silt fences to reduce or eliminate sediment and other pollutants from discharging to the City drainage system or receiving waters.

Construction activity that results in soil disturbances of less than one acre is subject to the General Construction Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB.

Local

City of Inglewood General Plan

The City of Inglewood General Plan Conservation Element, adopted on October 21, 1997, addresses the plan for conservation, development and utilization of natural resources found within the jurisdiction of the City. Chapter IV of the Conservation Element addresses the City's storm drain system. While the Conservation Element details the City's concerns related to pollutants entering the storm drainage system and contaminating the coastal and ocean environment, no specific goals or policies are stated that are relevant to the Proposed Project.

Municipal Separate Storm Sewer System Permit

Los Angeles County and 84 incorporated cities, including the City of Inglewood, have a joint Municipal Separate Storm Sewer System NPDES permit (MS4 Permit) (Permit Order No. R4-2012-0175, NPDES Permit No. CAS004001) that was granted on November 8, 2012. The MS4 Permit is intended to implement BMPs to reduce pollutants in stormwater discharges to the maximum extent practicable. The permittees listed under the joint permit have the authority to develop, administer, implement, and enforce storm water management programs within their own jurisdiction. On June 27, 2013, the cities of El Segundo, Hawthome, Inglewood, and Los Angeles (including the Port of Los Angeles), the County of Los Angeles, and the Los Angeles County Flood Control District formed the Dominguez Channel Watershed Management Area Group to

develop a collaborative approach to meet the requirements of the MS4 Permit. [Note to Team: City to provide revised information, per edits in the Hydrology Chapter.]

Urban storm water runoff is defined in the MS4 Permit as including stormwater and dry weather flows from a drainage area that reaches a receiving water body or subsurface. The permit regulates the discharge of all wet and dry weather urban storm water runoff within the County of Los Angeles (with exception to the City of Long Beach). Part VI.C of the Los Angeles County MS4 permit allows permittees the flexibility to develop WMPs or EWMPs to implement the requirements of the permit on a watershed scale through customized strategies, control measures, and BMPs. The Dominguez Channel Watershed Management Area Group developed a EWMP that was approved by the Los Angeles Water Board on February 26, 2016. 11 The EWMP includes water quality priorities for the Dominguez Channel Watershed Management Area, watershed control measures consisting of both structural and non-structural BMPs, financial strategies, and legal authority (permittees have the necessary legal authority to implement the BMPs identified in the EWMP or the legal authority exists to compel implementation of the BMPs).

Standard Urban Stormwater Mitigation Plan and City of Inglewood Municipal Code Low Impact Development Requirements

In 2000, the Standard Urban Stormwater Mitigation Plan (SUSMP) was approved by the Los Angeles RWQCB as part of the MS4 program to address stormwater pollution from new construction and redevelopment. The SUSMP contains a list of minimum BMPs that must be employed to infiltrate or treat stormwater runoff, control peak flow discharge, and reduce postproject discharge of pollutants from stormwater conveyance systems. Based upon land type, the SUSMP defines the types of practices that must be included and issues that must be addressed as appropriate to the development type and size. One of the most important requirements of the SUSMP is the specific sizing criteria for stormwater treatment BMPs for new development and significant redevelopment projects. In 2015, the City replaced the SUSMP with Section 10-208 of the City of Inglewood Municipal Code, titled Low Impact Development Requirements for New Development and Redevelopment. This portion of the Municipal Code builds on the SUSMP and establishes requirements for construction activities and facility operations of development projects to comply with the current MS4 Permit. These include requirements to lessen the water quality impacts of development by using smart growth practices and integrate LID practices and standards for stormwater pollution mitigation

County of Los Angeles Low Impact Development Standards Manual

In 2014, the County of Los Angeles prepared the Los Impact Development Standards Manual (LID Standards Manual) to comply with the requirements of the NPDES MS4 Permit for stormwater and non-stormwater discharges from the MS4 within the coastal watersheds of Los Angeles County. 12 The LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in

Inglewood Basketball and Entertainment Center

Environmental Impact Report

¹¹ Dominguez Channel Watershed Management Area Group, 2015. Enhanced Watershed Management Program. County of Los Angeles Department of Public Works, 2014. Low Impact Development Standards Manual February 2018

unincorporated areas of the County with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. The City of Inglewood implements these standards for projects within the city.

3.15.12 Analysis, Impacts and Mitigation

Significance Criteria

A significant impact would occur to storm drainage capacity and conveyance if the Proposed Project would:

1. 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.

Methodology and Assumptions

The following impact analysis evaluates the potential for the Proposed Project to result in changes to existing infrastructure and capacity relating to stormwater drainage and conveyance. It is assumed that all aspects of the Proposed Project would comply with all applicable laws, regulations, design standards, and plans. An analysis of impacts to hydrology, water quality, and groundwater is included in Section 3.9, Hydrology and Water Quality.

Impacts and Mitigation Measures

Impact 3.15-7: Implementation of the Proposed Project would not 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.

Construction

Existing drainage from the Project Site flows to adjacent off-site storm drain facilities and ultimately in to the City maintained storm drain mains located along all streets surrounding the Project Site. Construction of the Proposed Project would require the use of water on-site for various purposes including dust control, concrete mixing, and sanitation. Construction activities and materials would alter the drainage pattern of the Project Site, potentially increasing water flow into the existing drainage system.

With implementation of BMPs as required by the site-specific SWPPP, runoff discharged from the Project Site would be reduced. Typical construction BMPs including but not limited to silt fences, fiber rolls, compost blankets, avoiding heavy grading and earthwork operations during the rainy season, and incorporating landscaping as early as possible would slow flows and reduce the rate of runoff leaving the Project Site. By controlling and limiting the flow of water, runoff to stormwater drainage systems would be reduced. With implementation of these regulations and BMPs, the Proposed Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or result in substantial additional sources of polluted runoff. Therefore, impacts during construction would be **less than significant**.

Operation

As detailed above, the Project Site currently provides very little percolation of soil. Under existing conditions, stormwater reaching the Project Site does not percolate, and existing drainage from the Project Site flows to adjacent off-site storm drain facilities and ultimately in to the City maintained storm drain mains located along all streets surrounding the Project Site. While the Project Site would add impervious surfaces, drainage would continue to run into surrounding drainage infrastructure, similar to existing conditions. In addition, as detailed in Section 3.9, Hydrology and Water Quality, the Proposed Project would include the following on-site drainage features and infrastructure improvements at the Arena Site, West Parking and Transportation Hub Site, and East Parking and Hotel Site, that would connect to existing storm drains within surrounding streets.

Arena Site

Under the Proposed Project, West 102nd Street would be vacated and the proposed arena would be built over the street. The Proposed Project would construct new site access roads along the periphery of the arena. The existing catch basin at the intersection of West 102nd Street and South Prairie Avenue would be removed, along with the existing storm drain line within West 102nd Street. Stormwater pipelines, storm drains, and storm drain overflow pipes would be installed within and along the proposed site access roads. The new stormwater pipelines within the proposed site access roads would connect to the existing storm drain lines within South Prairie Avenue. Grate opening catch basins, stormwater pipelines, and storm drain overflow pipelines would also be installed within the northern portion of the Arena Site to accommodate the public plaza, outdoor stage, community space, and retail/restaurant uses. Bio-filtration systems would be installed throughout the Arena Site, including but not limited to, along South Prairie Avenue, along the proposed site access roads, and within the public plaza space.

West Parking and Transportation Hub Site

With implementation of the Proposed Project, the proposed parking garage would be constructed over West 101st Street, and new site access roads would be constructed along the periphery of the parking garage to redirect traffic. An underground precast detention and pretreatment system would be installed west of the parking garage under the westerly proposed site access road. Stormwater pipelines and a side opening catch basin would be installed within West 101st Street to connect the proposed detention and pretreatment system to the existing storm drain line within West 101st Street. Stormwater pipelines, storm drain overflow pipe, and bio-filtration systems would be installed within the proposed periphery site access roads. In addition, a trench drain would be installed at the southwest corner of the West Parking and Transportation Hub Site.

East Parking and Hotel Site

Under the Proposed Project, stormwater pipelines and storm drain overflow pipe would be installed along the boundary of the East Parking and Hotel Site. An underground precast detention and pretreatment system would be installed at the southwest corner of the East Parking and Hotel Site. Stormwater pipelines would be installed within West 102^{nd} Street to connect the proposed detention and pretreatment system to existing storm drain line within West 102^{nd} Street.

Well Relocation Site

No storm drain infrastructure improvements would occur on the Well Relocation Site under the Proposed Project.

Analysis

As detailed above, portions of West 102nd Street and West 101st Street that cross the Project Site would be vacated and constructed over, which would include the removal of drainage features (including stormwater pipelines and an existing catch basin) within these roadways. Nevertheless, the Proposed Project would include new site access roads around the periphery of the Arena Site and West Parking and Transportation Hub Site, which would include new stormwater pipelines, storm drains, and storm drain overflow pipes. These features would also be constructed at the East Parking and Hotel Site. In addition, the Proposed Project would include grate opening catch basins, side opening catch basins, underground precast detention and pretreatment systems, and bio-filtration systems throughout the Project Site. All proposed onsite drainage features would be required to be approved by City engineers and comply with local regulations.

The Proposed Project would be required to comply with all applicable drainage regulations and standards, including the NPDES General Construction Permit, the City's Municipal Code, and the County's LID Standards Manual. The Proposed Project would utilize bio-filtration planters and bio-filtration systems to treat the stormwater runoff. Runoff would be directed from drainage areas to onsite bio-filtration plants and bio-swales, slowing the rate of runoff and in turn slowing the amount of water entering the stormwater drainage system. The bio-filtration systems are designed to capture site runoff from roof drains, treat the runoff through biological reactions within the planter soil media, and discharge at a rate intended to mimic pre-developed conditions.

With construction of on-site drainage features and infrastructure improvements that would connect to existing storm drains within surrounding streets, along with implementation of regulations and BMPs, the Proposed Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. Drainage infrastructure at the Project Site would be designed to discharge stormwater at a rate intended to mimic pre-developed conditions The expansion of stormwater drainage facilities at the Project Site are a component of the Proposed Project itself, the construction of which and their environmental effects is considered throughout the EIR. Therefore, as implementation of regulations and BMPs would not create or contribute runoff water that would exceed capacity of existing or planned stormwater drainage systems, impacts during operation of the Proposed Project would be **less than significant**.

Mitigation Measures

None required.

Cumulative Impacts

The geographic scope of analysis for cumulative impacts related to surface water runoff and drainage capacity is the City of Inglewood, as stormwater runoff flows to existing storm drain facilities which ultimately flow to City maintained storm drain mains.

Impact 3.15-8: Implementation of the Proposed Project, in combination with other development, would not result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

As the city is largely developed with impervious surfaces, cumulative projects (listed in Chapter 3.0, Environmental Impacts, Setting, and Mitigation Measures) would involve redevelopment of existing paved or developed sites, and would not substantially increase the amount of impervious surfaces. Thus, the change of runoff to stormwater drainage systems would largely be negligible after development of cumulative projects. Additionally, as previously discussed, cumulative projects would be required to comply with applicable stormwater runoff regulations, including the NPDES General Construction Permit, the City's Municipal Code Section 10-208, and the County's LID Standards Manual. BMPs associated with these regulations would reduce runoff, therefore reducing the amount of stormwater entering the drainage systems. In addition, redeveloped parcels would likely undergo changes that would eliminate outdated water drainage features that no longer meet current regulations. Older infrastructure would be replaced with features that would provide higher quality of stormwater runoff than exists under current conditions. Therefore, implementation of the Proposed Project, along with past, present, and reasonably foreseeable projects, would have a less than significant cumulative impact related to exceeding the capacity of storm drainage facilities.

Mitigation Measures	
None required.	

Solid Waste Generation and Landfill Capacity 3.15.13 Environmental Setting

Regional and Local Setting

The City of Inglewood is served by Consolidated Disposal Services (CDS), a subsidiary of Republic Services, Inc., which provides waste and recycling collection services for residential and commercial uses. ¹³ Solid waste is taken to the CDS American Waste Transfer Station where it is sorted. Residual garbage is taken to the Consolidated Volume Transport Disposal and

¹³ City of Inglewood, 2018. City of Inglewood Waste Collection FAQs. Available: https://www.cityofinglewood.org/FAQ.aspx?TID=30. Accessed November 28, 2018.

Recycling Center. Recycling and green waste is taken to CDS' Compton Transfer Station. Solid waste is then transferred to CDS-owned facilities, including the Sunshine Canyon Landfill in Sylmar, California.¹⁴

The Sunshine Canyon Landfill handles approximately one-third of the daily waste of all of Los Angeles County. ¹⁵ The landfill is permitted to receive a maximum of 12,100 tons of waste per day, or 4.4 million tons per year. In 2016 the landfill accepted an average of 7,496 tons of waste per day, and in 2018 accepted an average of 8,300 tons of waste per day (or 3 million tons of waste per year). ^{16.17} The landfill has an approximate cease operation date of 2037, and has approximately 96,800,000 cubic yards of remaining capacity. ¹⁸

3.15.14 Adjusted Baseline Environmental Setting

As discussed in Section 3.0, Environmental Impacts, Settings, and Mitigation Measures, the Proposed Project is not anticipated to be constructed and begin operations until mid-2023 for the 2023-24 NBA basketball season. Also as discussed in Section 3.0, Environmental Impacts, Settings, and Mitigation Measures, the City has issued building permits for, and construction has commenced on, significant portions of the Hollywood Park Specific Plan, including the construction of the 70,000-seat NFL Stadium, a 6,000 seat performance venue, 518,077 sf of retail and restaurant uses, 466,000 sf of office space, 314 residential units, and approximately 9,900 parking spaces. Due to the certainty of these projects being constructed and in operation prior to opening of the Proposed Project, the City of Inglewood determined that it is appropriate to include these projects in an adjusted environmental setting for the Proposed Project. Accordingly, the estimated solid waste generation associated with these developments within the Hollywood Park Specific Plan area are considered as part of the adjusted environmental baseline.

Table 3.15-5 details the estimated solid waste that would be generated by the HPSP, by land use. The HPSP is anticipated to generate approximately 6,625 tons per year of waste. The Sunshine Canyon Landfill currently accepts an average of 8,300 tons of waste per day, or 3 million tons of waste per year, with a maximum allowable throughput of 4.4 million tons of waste per year. The HPSP's solid waste contribution would be less than a percent of the current waste yearly accepted at the landfill. With the HPSP as part of the adjusted environmental baseline, the Sunshine Canyon Landfill would continue to accept an average of approximately 3 million tons of waste per year.

Commented [MW3]: In the table below, we should use the word "stadium" instead of "arena"

¹⁴ City of Inglewood, 2012. Solid Waste Proposal Summary. Available: https://www.cityofinglewood.org/Document Center/View/2716/a2pdf?bidId=.

Republic Services, Inc., 2018. Sunshine Canyon Landfill: About. Available: https://sunshinecanyonlandfill.com/about/. Accessed November 28, 2018.

¹⁶ County of Los Angeles, 2017. Countywide Integrated Waste Management Plan 2016 Annual Report. Available: https://dpw.lacounty.gov/epd/swims/ShowDoc.aspx?id=6530&hp=yes&type=PDF. p. 71.

¹⁷ Republic Services, Inc., 2018. Sunshine Canyon Landfill: About. Available: https://sunshinecanyonlandfill.com/about/. Accessed November 28, 2018.

¹⁸ CalRecycle, 2018. SWIS Facility Detail: Sunshine Canyon Landfill. Available: https://www2.calrecycle.ca.gov/swfacilities/Directory/19-AA-2000. Accessed November 28, 2018.

TABLE 3.15-5 HPSP Solid Waste Generation Estimates

Proposed Use	Unit Contribution	Solid Waste Generation Factor	Solid Waste Generation (tons/yr)
Arena	70,000 Seats	0.042 tons/seat/year	2,940
Performance Venue	6,000 Seats	0.042 tons/seat/year	252
Office	466,000 square feet	1 lb/100 sf/day	850
Retail/Restaurant	518,077 SF	2.5 lb/100 sf/day	2,364
Residential	314 DU	0.7 tons/unit-year	219
Total	-	-	6,625

NOTE

The square footage of the HPSP arena and performance center is not known as this time. Therefore, these uses use the solid waste generation from the Qualcomm Stadium Reconstruction EIR, which uses a generation rate based on number of seats.

SOURCE: Calculated by ESA, 2018 using generation factors from Sacramento Entertainment and Sports Center EIR, 2014 and the Qualcomm Stadium Reconstruction Project EIR, 2015.

3.15.15 Regulatory Setting

Federal

There are no federal regulations, plans, or policies applicable to solid waste that relate to the Proposed Project.

State

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) was enacted to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible. Specifically, the Act requires city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from landfill disposal by the year 2000. The Act also requires each city and county to promote source reduction, recycling, and safe disposal or transformation. Cities and counties are required to maintain the 50 percent diversion specified by AB 939 past the year 2000. The Act also requires each city and county to promote source reduction, recycling, and safe disposal or transformation. The City of Inglewood's City-wide diversion rate per AB 939 was 62 percent in 2010. 19

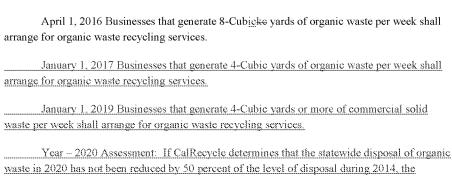
In 2007, SB 1016 was passed, changing the way the State measured waste diversion. SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of jurisdictions' performance. SB 1016 accomplishes this by changing to a disposal-based indicator (a per capita disposal rate). The AB 939 50 percent solid waste disposal reduction requirement is now measured in terms of per-capita disposal expressed as pounds of waste generated per person

¹⁹ City of Inglewood, 2012. Special Meeting of Special Council Evaluation of Solid Waste and Recycling Services Proposals. Available: http://v1.cityofinglewood.org/pdfs/wastemanagement/hfh.pdf. Accessed December 4, 2018.

per day, or pounds per employee per day. The focus is on program implementation, actual recycling, and other diversion programs instead of estimated numbers.

The State of California took another step to increase diversion in 2011, when the governor signed AB 341, increasing the current State goal from 50 percent diversion to 75 percent recycling by 2020. AB 341 created the Mandatory Commercial Recycling law, which requires that all businesses that generate four or more cubic yards of waste each week and all multi-family communities with five or more units must arrange for recycling service.

In 2014, Governor Brown signed AB 1826 into law, requiring businesses to recycle their organic waste, effective April 1, 2016, depending on the amount of waste generated per week. This law also requires that 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, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time.



organic recycling requirements on businesses will expand to cover businesses that generate 2-Cubic yards or more of commercial solid waste per week. Additionally, certain exemptions may no longer be available if this target is not met.

**Note: Multifamily dwellings are not required to have a food waste diversion program.

California Green Building Standards Code

The California Green Building Standards Code (CALGreen Code), California Code of Regulations (CCR) Title 24 is the first-in-the-nation mandatory green building standards code. The California Building Standards Commission (CBSC) was directed to develop green buildings standards in 2007 in an effort to meet the goals of California's landmark AB 32 initiative, which

established a comprehensive program of cost-effective reductions of greenhouse gases to 1990 levels by 2020. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings. Material conservation and resource efficiency is one of the categories of sustainable construction. Measures include means of achieving material conservation and resource efficiency through reuse of existing building stock and materials; use of recycled, regional, rapidly renewable and certified wood materials; and employment techniques to reduce pollution through recycling of materials.

Local

City of Inglewood General Plan

The City of Inglewood General Plan Conservation Element, adopted on October 21, 1997, addresses the plan for conservation, development and utilization of natural resources found within the jurisdiction of the City. Chapter IV of the Conservation Element addresses the City's solid waste management. The Conservation Element notes that the City's goal of a 25 percent reduction of solid waste between 1990 and 1995 was met by the City. While the Conservation Element details the City's concerns related to landfill capacities and the City's programs to minimize solid waste generation, no specific goals or policies are stated that are relevant to the Proposed Project.

3.15.16 Analysis, Impacts and Mitigation

Significance Criteria

A significant impact related to solid waste generated and landfill capacity would occur if the Proposed Project would:

- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- 2. Conflict with federal, state, and local statutes and regulations related to solid waste.

Methodology and Assumptions

The following impact analysis also evaluates the potential for the Proposed Project to result in changes to existing infrastructure and supply related to solid waste. Potential changes in solid waste generation are evaluated using waster generation factors shown in Table 3.15-6 below. It is assumed that all aspects of the Proposed Project would comply with all applicable laws, regulations, design standards, and plans.

TABLE 3.15-6
EXISTING AND PROPOSED SOLID WASTE GENERATION ESTIMATES

Proposed Use	Unit Contribution	Solid Waste Generation Factor	Solid Waste Generation (tons/yr)	Net Increase (tons/yr)
Existing				
Retail/Commercial	54,098 square feet	2.5 lb/100 sf-day	247	-

Inglewood Basketball and Entertainment Center Environmental Impact Report [PAGE]3.45-4

ESA / 171236 January 2019

Preliminary -- Subject to Revision

Proposed				
Retail/Commercial*	63,000 square feet	2.5 lb/100 sf-day	287	40
Office	71,000 square feet	1 lb/100 sf-day	130	130
Hotel	up to 150 guest rooms	3.2 lbs/unit-day	88	88
Arena**	1,045,000 square feet	1.29 tons/1000 sf-yr	1,348	1,348
Total			1,853	1,606

NOTES:

SOURCE: Calculated by ESA, 2018 using generation factors from Sacramento Entertainment and Sports Center EIR, 2014.

Impacts and Mitigation Measures

Impact 3.15-9: Implementation of the Proposed Project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

Construction

As previously detailed, the City of Inglewood is served by CDS, which transfers solid waste to the Sunshine Canyon Landfill in Sylmar, California. The Sunshine Canyon Landfill currently receives an average of 3 million tons of waste per year, and is permitted to receive a maximum of 4.4 million tons of waste per year. The landfill has approximately 96,800,000 cubic yards of remaining capacity. Based on the landfill's throughput and availability of land, the landfill has a cease operation date of 2037. Construction of the Proposed Project would include demolition of existing buildings on the Project Site, and would result in the generation of various construction waste including scrap lumber, scrap finishing materials, various scrap metals, and other recyclable and non-recyclable construction related wastes. Recyclable construction materials, including concrete, metals, wood, and various other recyclable materials would be diverted to recycling facilities.

Table 3.15-7 shows the solid waste that would be generated by the demolition of existing uses at the Project Site, which would total approximately 4,273 tons. This construction debris would be approximately one tenth of one percent of the average waste that enters the landfill per year. The landfill has approximately 96,800,000 cubic yards of remaining capacity. According to CalRecycle, construction debris (loose asphalt or concrete) produces approximately one cubic yard per 400 pounds.²² Using this conversion (which is conservative since demolition would consist of materials smaller than asphalt and concrete), demolition of the existing uses would

^{*} Includes the Community Uses and Commercial Uses at the Arena Site.

^{**}Includes the LA Clippers team practice and training facility and sports medicine clinic at the Arena Site

Republic Services, Inc., 2018. Sunshine Canyon Landfill: About. Available: https://sunshinecanyonlandfill.com/about/. Accessed November 28, 2018.

²¹ CalRecycle, 2018. SWIS Facility Detail: Sunshine Canyon Landfill. Available: https://www2.calrecycle.ca.gov/swfacilities/Directory/19-AA-2000. Accessed November 28, 2018.

²² CalRecycle, 2019. Solid Waste Cleanup Program Weights and Volumes for Project Estimates. Available: https://www.calrecycle.ca.gov/swfacilities/cdi/tools/calculations. Accessed January 13, 2019.

produce approximately 3,560 cubic yards of debris. After demolition of existing uses, the landfill would still have approximately 96,796,440 cubic yards of remaining capacity.

TABLE 3.15-7
SOLID WASTE GENERATION DURING DEMOLITION OF EXISTING USES

Land Use to be Demolished	Unit Contribution	Solid Waste Generation Factor*	Solid Waste Generation (tons)
Restaurant (Non-residential)	1,118 SF	158 lbs/SF	88
Motel (Non-residential)	16,806 SF	158 lbs/SF	1,328
Food Warehouse (Non-residential)	28,809 SF	158 lbs/SF	2,276
Commercial Vacant (Non-residential)	6,231 SF	158 lbs/SF	492
Catering (Non-residential)	1,134 SF	158 lbs/SF	89
Total	54,098 SF		4,273

SOURCE: US Environmental Protection Agency, 2003. Estimating 2003 Building-Related Construction and Demolition Materials Amounts

The above estimates are conservative as the Proposed Project would be required to comply with State requirements to divert a minimum of 50 percent of construction wastes to a certified recycling processor. In addition, the Project would meet or exceed current uniform codes designed to achieve a LEED Gold rating. The Project would apply for LEED certification of the proposed buildings and accompanying development in the Building Design + Construction (BD+C) category, and would adopt a LEED approach in order to capture site-wide strategies such as those related to solid waste management. The Proposed Project would commit to recycling construction wastes in excess of the minimum requirements of the State. Adhering to LEED Gold standards would minimize the total volume of demolition and construction waste that would be landfilled, but would not avoid landfilling entirely. In consideration of the large volume of landfill capacity available at Sunshine Canyon Landfill-available, sufficient landfill capacity would be available to serve the Proposed Project during construction. Therefore, the Proposed Project would not require new or expanded solid waste management or disposal facilities. Thus, as there is sufficient landfill capacity to serve the Proposed Project's solid waste disposal needs during construction, impacts would be less than significant.

Operation

Operation of the Proposed Project would result in the generation of waste in accordance with the proposed increase in use of intensity at the Project Site. Proposed operational wastes would include retail/commercial, office, hotel, and entertainment and sports center-related wastes. As shown in Table 3.15-6 above, the existing uses at the Project Site generate 247 tons of waste per year. The Proposed Project would generate approximately 1,853 tons of solid waste per year, for a net increase of 1,606 tons per year over existing conditions.

Waste generated by the Proposed Project would be removed from the site by CDS and recycled in accordance with City requirements, with the remaining waste landfilled at Sunshine Canyon

Landfill. As noted previously, this landfill currently accepts an average of 3 million tons of waste per year, and is permitted to receive a maximum of 4.4 million tons per year. The net increase in Project related wastes would represent less than one tenth of one percent of the average throughput for this landfill, with 1.4 million additional tons still available before the landfill reaches its maximum allowable throughput per year. The lifespan of a landfill is determined by land availability and its topography, refuse-to-cover ratios, settlement rates, and its planned throughput.²³ Even with the Project, there would still be an additional 1.4 million tons of throughput allowable before the landfill reaches its maximum allowable throughput. Thus, the Proposed Project is within planned waste acceptance growth for the landfill, and would not change the lifespan of the landfill, which would continue to have availability until 2037. Because sufficient landfill capacity would be available to serve the Proposed Project, the Proposed Project would not require new or expanded solid waste management or disposal facilities. Additionally, implementation of typical recycling rates and State diversion requirements would result in a portion of the total waste stream being diverted to recycling. This would further minimize impacts to landfill capacity. Therefore, as there is sufficient landfill capacity to serve the Proposed Project's solid waste disposal needs during operation, impacts would be less than significant.

Mitigation Measures	
None required.	

Impact 3.15-10: Implementation of the Proposed Project would not conflict with federal, state, and local statutes and regulations related to solid waste.

The Proposed Project would comply with federal, state, and local statutes and regulations related to solid waste. The City would be required to maintain the 50 percent diversion rate required by the State through the California Solid Waste Management Act. In addition, the Project would meet or exceed current uniform codes designed to achieve a LEED Gold rating. The Project would apply for LEED certification of the proposed buildings and accompanying development in the BD+C category, and would adopt a LEED approach in order to capture site-wide strategies such as those related to solid waste management. The Proposed Project would commit to recycling construction wastes in excess of the minimum requirements of the State. Adhering to LEED Gold standards would minimize the total volume of demolition and construction waste that would be landfilled. In addition, the Proposed Project would contract with CDS for all bin removal activities. Compliance with construction and operational debris removal and recycling requirements would occur with the City's Environmental Services Department and CDS' Sunshine Canyon Landfill. Therefore, as the Proposed Project would not conflict with federal,

²³ CalRecycle, 2018. Methodology for Determining Remaining Landfill Capacity. Available: https://www.calrecycle.ca.gov/lea/advisories/45. Accessed January 14, 2019.

state, and local statues related to solid waste, and would meet LEED Gold requirements, impacts would be **less than significant**.

Mitigation Measures		
None required.		

Cumulative Impacts

The geographic scope of analysis for cumulative impacts related to solid waste and landfill capacity is the Sunshine Canyon Landfill service area.

Impact 3.15-11: Implementation of the Proposed Project, in combination with other development, would be served by a landfill with sufficient permitted capacity.

As detailed above, the geographic scope for cumulative impacts on solid waste services is the Sunshine Canyon Landfill service area. Cumulative projects (listed in Chapter 3.0, Environmental Impacts, Setting, and Mitigation Measures) would increase solid waste generation. Of the cumulative projects listed in Table 3.0-1, Cumulative Projects List, the jurisdictions of Inglewood, El Segundo, Hawthorne, Culver City, Gardena, and the City of Los Angeles deliver waste to the Sunshine Canyon Landfill.²⁴ **Table 3.15-8** shows the solid waste generation that is estimated to be produced by the cumulative projects in these cities, based on land use. As a conservative estimate, the table below assumes that there is no existing solid waste generation at these sites. A total of 25,414 tons of waste per year would be generated by these cumulative projects.

Table 3.15-8
ESTIMATED CUMULATIVE SOLID WASTE GENERATION

Cumulative Project List Number	Land Use	Solid Waste Generation Factor	Unit Contribution	Solid Waste Generation (tons/year)
1	Office	1 lb/100 SF/day	281,209 SF	513
2	Residential	0.7 tons/DU/year	5 DU	3.5
	Retail	2.5 lb/100 SF/day	3,414 SF	16
	Commercial	2.5 lb/100 SF/day	2,340 SF	11
3	Service Bays (Warehouse)	0.005 lb/ SF/day	40,468 SF	37
4	Commercial	2.5 lb/100 SF/day	16,000 SF	73
	Residential	0.7 tons/DU/year	775 DU	542
5	Hotel	3.2 lbs/room/day	190 Rooms	111
6	Office	1 lb/100 SF/day	4,231,457 SF	7,722

²⁴ Sunshine Canyon Landfill, 2019. Communication with Chris Coyle RE: Sunshine Canyon Service Area. January 4, 2019.

[PAGE]3.45-4

TABLE 3.15-8
ESTIMATED CUMULATIVE SOLID WASTE GENERATION

Cumulative Project List Number	Land Use	Solid Waste Generation Factor	Unit Contribution	Solid Waste Generation (tons/year)
7	Hotel	3.2 lbs/room/day	152 Rooms	89
8	Office	1 lb/100 SF/day	3,050 SF	6
9	Office	1 lb/100 SF/day	73,000 SF	133
10	Office	1 lb/100 SF/day	52,000 SF	95
	Athletic Training Facility (Commercial)	2.5 lb/100 SF/day	68,380 SF	312
11	School	0.006 lb/SF/day	240,000 SF	263
12	Hotel	3.2 lbs/room/day	180 Rooms	105
	Office	1 lb/100 SF/day	63,550 SF	116
13	Multi-Family	0.7 tons/DU/year	4 DU	2.8
15	Office	1 lb/100 SF/day	61,545 SF	112
	Retail	2.5 lb/100 SF/day	13,660 SF	62
16	Office	1 lb/100 SF/day	93,569 SF	171
17	Office	1 lb/100 SF/day	106,000 SF	193
	Warehouse	0.005 lb/SF/day	117,000 SF	107
18	Office	1 lb/100 SF/day	1,740,000 SF	3,176
	Retail	2.5 lb/100 SF/day	75,000 SF	342
	Medical Buildings (commercial)	2.5 lb/100 SF/day	107,000 SF	488
	Hotel	3.2 lbs/room/day	100 Rooms	58
	Health Club	2.5 lb/100 SF/day	19,000 SF	87
19	Hotel	3.2 lbs/room/day	167 Room	98
20	Data Center (Office)	1 lb/100 SF/day	180,422 SF	329
22	Residential	0.7 tons/DU/year	8 DU	5.6
24	Office	1 lb/100 SF/day	300,000 SF	548
25	Hotel	3.2 lbs/room/day	150 Rooms	88
27	Office	1 lb/100 SF/day	67,474 SF	123
	Manufacturing (Commercial)	2.5 lb/100 SF/day	11,471 SF	52
29	Office	1 lb/100 SF/day	20,955 SF	38
30	Ice Rink (Recreational Facility)	5 lb/1,000 SF/day	17,315 SF	16
31	Residential	0.7 tons/DU/year	40 DU	28
32	Industrial (Commercial)	2.5 lb/100 SF/day	100,438 SF	458
33	Residential	0.7 tons/DU/year	1 DU	1

TABLE 3.15-8
ESTIMATED CUMULATIVE SOLID WASTE GENERATION

Cumulative Project List Number	Land Use	Solid Waste Generation Factor	Unit Contribution	Solid Waste Generation (tons/year)
35	Multi-Family	0.7 tons/DU/year	116 DU	81
36	Multi-Family	0.7 tons/DU/year	171 DU	119
	Office	1 lb/100 SF/day	32,500 SF	59
37	Multi-Family	0.7 tons/unit-year	230 DU	161
	Retail	2.5 lb/100 SF/day	3,700 SF	17
38	Multi-Family	0.7 tons/unit-year	6 DU	4
39	Hotel	3.2 lbs/room-day	350 Rooms	204
40	Hotel	3.2 lbs/room-day	119 Rooms	69
41	Multi-Family	0.7 tons/unit-year	4 DU	3
42	Multi-Family	0.7 tons/unit-year	4 DU	3
43	Multi-Family	0.7 tons/unit-year	12 DU	8
44	Multi-Family	0.7 tons/unit-year	38 DU	27
45	Multi-Family	0.7 tons/unit-year	10 DU	7
46	Multi-Family	0.7 tons/unit-year	3 DU	2
47	Multi-Family	0.7 tons/unit-year	12 DU	8
48	Multi-Family	0.7 tons/unit-year	5 DU	4
49	Living Facility (Hospitals Convalescent)	0.7 tons/unit-year	18 Beds	13
50	Multi-Family	0.7 tons/unit-year	18 DU	13
51	Multi-Family	0.7 tons/unit-year	4 DU	3
52	Hotel	3.2 lbs/room-day	120 Room	70
53	Multi-Family	0.7 tons/unit-year	3 DU	2
54	Multi-Family	0.7 tons/unit-year	7 DU	5
55	Multi-Family	0.7 tons/unit-year	12 DU	8
56	Retail	2.5 lb/100 SF/day	2,542 SF	12
57	Multi-Family	0.7 tons/unit-year	40 DU	28
58	Multi-Family	0.7 tons/unit-year	116 DU	81
59	Commercial	2.5 lb/100 SF/day	1,312 SF	6
60	Retail	2.5 lb/100 SF/day	40,000 SF	182
61	Multi-Family	0.7 tons/unit-year	20 DU	14
62	Multi-Family	0.7 tons/unit-year	310 DU	217
63	Self-Storage (Warehouse)	0.005 lb/ SF/day	81,613 SF	75
64	Multi-Family	0.7 tons/unit-year	3 DU	2

TABLE 3.15-8
ESTIMATED CUMULATIVE SOLID WASTE GENERATION

Cumulative Project List Number	Land Use	Solid Waste Generation Factor	Unit Contribution	Solid Waste Generation (tons/year)
65	Living Facility (Hospitals Convalescent)	0.7 tons/unit-year	18 Beds	13
67	Youth Orchestra (School)	0.5 lb/student-day	500 Students	46
68	Multi-Family	0.7 tons/unit-year	5 DU	4
69	Self-Storage (Warehouse)	0.005 lb/ SF/day	120,000 SF	110
71	School	0.5 lb/student-day	50 students	5
72	Hotel	3.2 lbs/room-day	178 Room	104
74	Multi-Family	0.7 tons/unit-year	140 DU	98
	Retail	2.5 lb/100 SF/day	2,600 SF	12
75	Multi-Family	0.7 tons/unit-year	137 DU	96
76	Restaurant (Commercial)	2.5 lb/100 SF/day	3,999 SF	18
77	Multi-Family	0.7 tons/unit-year	600 DU	420
79	Multi-Family	0.7 tons/unit-year	108 DU	76
	Office	1 lb/100 SF/day	4,000 SF	7
80	Retail (Commercial)	2.5 lb/100 SF/day	225,000 SF	1,027
81	Office	1 lb/100 SF/day	68,250 SF	125
82	School	0.5 lb/student-day	525 Students	48
83	School	0.5 lb/student-day	616 Students	56
84	Commercial	2.5 lb/100 SF/day	740,000 SF	3,376
85	Living Facility	0.7 tons/unit-year	49 DU	34.3
87	Commercial	2.5 lb/100 SF/day	1,835 SF	8
89	Multi-Family	0.7 tons/unit-year	176 Units	123
90	Restaurant (Commercial)	2.5 lb/100 SF/day	4,642 SF	21
91	Multi-Family	0.7 tons/unit-year	180 Units	126
92	Grocery Store (Commercial)	2.5 lb/100 SF/day	22,590 SF	103
93	Multi-Family	0.7 tons/unit-year	393 DU	275
	Retail	2.5 lb/100 SF/day	22,000 SF	100
94	Multi-Family	0.7 tons/unit-year	74 DU	52
96	Multi-Family	0.7 tons/unit-year	74 DU	52
97	Hotel	3.2 lbs/room-day	128 Room	75
98	Commercial	2.5 lb/100 SF/day	4,983 SF	23
99	Multi-Family	0.7 tons/unit-year	32 DU	22
100	Hotel	3.2 lbs/room-day	44 Rooms	26

TABLE 3.15-8 ESTIMATED CUMULATIVE SOLID WASTE GENERATION

Cumulative Project List Number	Land Use	Solid Waste Generation Factor	Unit Contribution	Solid Waste Generation (tons/year)
101	Multi-Family	0.7 tons/unit-year	39 DU	27
102	Commercial	2.5 lb/100 SF/day	4,500 SF	21
103	Multi-Family	0.7 tons/unit-year	57 DU	40
104	Multi-Family	0.7 tons/unit-year	12 DU	8
105	Multi-Family	0.7 tons/unit-year	10 DU	7
107	Multi-Family	0.7 tons/unit-year	36 DU	25
108	Multi-Family	0.7 tons/unit-year	32 DU	22
109	Multi-Family	0.7 tons/unit-year	9 DU	6
110	Multi-Family	0.7 tons/unit-year	4 DU	3
111	Multi-Family	0.7 tons/unit-year	6 DU	4
112	Multi-Family	0.7 tons/unit-year	19 DU	13
114	Automechanic (Commercial)	2.5 lb/100 SF/day	2,858 SF	13
115	Commercial	2.5 lb/100 SF/day	1,640 SF	7
118	Multi-Family	0.7 tons/unit-year	42 DU	29
120	Multi-Family	0.7 tons/unit-year	9 DU	6
121	Gas station(Commercial)	2.5 lb/100 SF/day	2,900 SF	13
122	Church (Commercial)	2.5 lb/100 SF/day	13,316 SF	61
123	Commercial	2.5 lb/100 SF/day	250 SF	1
	Residential	0.7 tons/unit-year	1 DU	1
124	Multi-Family	0.7 tons/unit-year	16 DU	11
126	Multi-Family	0.7 tons/unit-year	126 DU	88
128	Multi-Family	0.7 tons/unit-year	127 DU	89
Total	-	<u>.</u>	-	25,414

SOURCE: Calculated by ESA, 2018 using generation factors from Sacramento Entertainment and Sports Center EIR, 2014. Any land uses not included in the Sacramento Entertainment and Sports Center EIR (including school uses, warehouses) used generation rates from the City of Los Angeles Bureau of Sanitation, Average Solid Waste Generation Rates, 1981

As noted previously, the Sunshine Canyon Landfill currently accepts an average of 3 million tons of waste per year, is permitted to receive a maximum of 4.4 million tons per year. The cumulative projects would represent less than one percent of the average throughput for this landfill. With both the Proposed Project and cumulative projects, there would still be an additional 1.4 million additional tons of throughput allowable before the landfill reaches its maximum allowable throughput. Thus, the Proposed Project and cumulative projects are within planned waste acceptance growth for the landfill, and would not change the lifespan of the landfill, which would

continue to have availability until 2037. Similar to the Proposed Project, cumulative projects would be required to comply with State requirements to divert a minimum of 50 percent of waste to a certified recycling processor to ensure solid waste generation is minimal. As existing capacity at the Sunshine Canyon Landfill exists to serve both the Proposed Project and cumulative projects, a less than significant cumulative impact would occur related to landfill capacity.

Mitigation Measures	
None required.	

Impact 3.15-12: Implementation of the Proposed Project, in combination with other development, would not conflict with federal, state, and local statues and regulations related to solid waste.

As detailed above, the City would be required to maintain the 50 percent diversion rate required by the State through the California Solid Waste Management Act. Similar to the Proposed Project, cumulative projects would contract with CDS for bin removal activities. Compliance with construction and operational debris removal and recycling requirements would occur with the City's Environmental Services Department and CDS' Sunshine Canyon Landfill. As previously detailed, the Proposed Project would also adhere to the LEED Gold standards, committing to recycling construction waste in excess of the minimum requirements of the State. Therefore, as both the Proposed Project and cumulative projects would be required to not conflict with federal, state, and local statues related to solid waste, a less than significant cumulative impact would occur related to solid waste regulations.

Mitigation Measures

None required.