

4. ENVIRONMENTAL IMPACT ANALYSIS

M. UTILITIES AND SERVICE SYSTEMS

2. WASTEWATER

1. INTRODUCTION

This section addresses potential impacts on existing wastewater infrastructure and treatment facilities and analyzes whether sufficient capacity is available to serve Project demand. This section incorporates information from the Los Angeles County 2035 General Plan Update Public Services and Facilities Element (Public Services Element, 2015) and associated EIR (2015), and other County plans and available information available through the Sanitation Districts of Los Angeles County's website.¹

2. ENVIRONMENTAL SETTING

a. Existing Conditions

(1) Wastewater Treatment and Collection Services

The Sanitation Districts of Los Angeles County (LACSDs) are a partnership of 24 independent special districts that serve the wastewater and solid waste management needs of approximately 5.5 million people in Los Angeles County. The LACSDs' service area covers approximately 824 square miles and encompasses 78 cities and unincorporated territory within the County.² Within the LACSDs' service area, there are approximately 9,500 miles of sewers that are owned and operated by the cities and County that are tributary to the Sanitation Districts' wastewater collection system. The LACSDs own, operate, and maintain approximately 1,400 miles of sewers, ranging from 8 to 144 inches in diameter, that convey approximately 500 million gallons per day of wastewater to 11 wastewater treatment plants.³ Included in the LACSDs' wastewater collection system are 48 active pumping plants located throughout the County. The LACSDs' service area includes wastewater collection systems located within the Joint Outfall System, the Santa Clarita Valley, and the Antelope Valley. The Project Site is located within the service area of the Sanitation Districts' Joint Outfall System for wastewater collection and the Joint Water Pollution Control Plan (JWPCP), located in the City of Carson, approximately 1.5 miles south of the Project Site, for wastewater treatment.

Sanitary wastewater is treated in the following three phases:⁴

- Primary Treatment: removal of solids using settling tanks
- Secondary Treatment: reduction of organic matter using bacteria and oxygen; followed by further removal of solids

¹ Sanitation Districts of Los Angeles County. <http://www.lacsd.org/>

² Sanitation Districts of Los Angeles County. *Wastewater Collection Systems.* Available at: <http://www.lacsd.org/wastewater/wwfacilities/wcs.asp>. Accessed February 2016.

³ *Ibid.*

⁴ Sanitation Districts of Los Angeles County. *Wastewater Treatment and Water Reclamation.* Available at: <http://www.lacsd.org/wastewater/wwfacilities/moresanj.asp>. Accessed February 2016.

- Tertiary Treatment: filtration of wastewater to remove any solids remaining after the first two phases of treatment

Most wastewater that undergoes tertiary treatment is disinfected after tertiary treatment. Disinfection methods include chlorine bleach and ultraviolet light. Tertiary-treated wastewater is often reused (i.e. recycled) for landscape and agricultural irrigation, groundwater recharge, and industrial uses.⁵

(2) Wastewater Treatment Facilities

As noted above, the Project Site is served by the Joint Water Pollution Control Plant (JWPCP), which is located at 24501 S. Figueroa Street in the City of Carson, approximately 1.5 miles south of the Project Site. The plant occupies approximately 420 acres to the east of the Harbor (110) Freeway. The JWPCP is one of the largest wastewater treatment plants in the world and is the largest of the LACSDs' wastewater treatment plants. The facility provides both primary and secondary treatment for approximately 280 million gallons of wastewater per day (mgd), and has a total permitted capacity of 400 mgd.⁶

Solids collected in Primary Treatment and Secondary Treatment are processed in anaerobic digestion tanks where bacteria break down organic material and produce methane gas. After digestion, the solids are dewatered at Solids Processing and hauled off-site to composting, land application, and landfill disposal. Methane gas generated in the anaerobic digestion process is used to produce power and digester heating steam in a Total Energy Facility that utilizes gas turbines and waste-heat recovery steam generators. The on-site generation of electricity permits the JWPCP to produce most of its electricity.⁷

The plant serves a population of approximately 3.5 million people throughout Los Angeles County. Prior to discharge, the treated wastewater is disinfected with sodium hypochlorite and sent to the Pacific Ocean through a network of outfalls. These outfalls extend 1.5 miles off the Palos Verdes Peninsula to a depth of 200 feet.⁸

(3) Wastewater Conveyance Facilities

The public sewer system in the Project Site vicinity is owned and maintained by LACSD. Several large trunk sewers exist around the perimeter of the Project Site including a 90-inch and a 63-inch sewer in Normandie Avenue, a 63-inch sewer within the easement at the southern end of the Project Site, a 55-inch sewer that runs through roughly the center of the Campus site within the abandoned Meyler Street Alignment (Joint Outfall D, Unit 8), a 66-inch, 78-inch, and eight-inch sewer in Vermont Avenue, and a 66-inch sewer in Carson which eventually turns to the north just west of Berendo Street.⁹

⁵ County of Los Angeles. *Los Angeles County General Plan Update Draft EIR*. Page 5.17-2.

⁶ Sanitation Districts of Los Angeles County. *Joint Water Pollution Control Plant (JWPCP)*. Available at: <http://www.lacsd.org/wastewater/wwfacilities/jwpcp/default.asp>. Accessed February 2016.

⁷ *Ibid.*

⁸ *Ibid.*

⁹ Perkins+Will. *Harbor-UCLA Campus Master Plan. Engineering Background: Sewer*. Page 66.

Review of the existing on-site sewer plans and conversations with Harbor-UCLA facilities staff indicate that the portion of the site east of Central Drive, approximately 25 percent of the Campus area, including the existing Hospital, Central Plant, and cooling tower is served by sewer mains in Vermont Avenue, 220th Street, and Carson Street.¹⁰ The remaining 75 percent of the Campus area, located west of Central Drive, is served by an on-site sewer network that discharges to the LACSDs' Joint Outfall D, Unit 8 trunk sewer through a single point of connection. Harbor-UCLA facilities staff has indicated that there are currently no capacity issues with the on-site sewer system and that the pipes are in good condition.¹¹ The sizes of the on-site main lines are currently unknown.

However, the LADSDs have a will-serve process which includes published estimated loadings for sanitary sewers based on land uses. In a letter dated August 24, 2011, the District indicated that the Joint Outfall D Unit 8 trunk sewer has a capacity of 28.4 mgd and a measured peak flow rate of 17.0 mgd as of 2008.¹²

(4) Existing Wastewater Generation

Existing uses on the Medical Center Campus currently generate wastewater, which is conveyed by existing sewers in the Project Site vicinity and treated at the JWPCP in the City of Carson. Existing wastewater generation on-site is summarized below in **Table 4.M.2-1, Existing Wastewater Generation**, which is based on sewage generation factors provided by both LACSDs and the City of Los Angeles (where LACSDs generation factors are not provided for specific land uses). As shown in Table 4.M.2-1, existing uses on the Medical Center Campus currently generate approximately 171,646 gallons per day (gpd) or 0.176 mgd of wastewater.

b. Regulatory Framework

(1) Federal

Wastewater treatment before effluent is discharged to Waters of the United States is required by the federal Clean Water Act (CWA), United States Code, Title 33, Sections 1251 et seq. The federal Clean Water Act is described in further detail in Section 4.G., *Hydrology and Water Quality*, of this Draft EIR.

(2) State

In California, State Water Resources Control Board (SWRCB) is responsible for ensuring the highest reasonable quality of waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The 1969 Porter-Cologne Water Quality Control Act, codified in the California Water Code, authorizes the SWRCB to implement programs to control polluted discharges into State waters. This law essentially implements the requirements of the CWA. Pursuant to this law, the local Regional Water Quality Control Board (RWQCB) is required to establish the wastewater concentrations of a number of specific hazardous substances in treated wastewater discharge. The Los Angeles RWQCB regulates wastewater discharges and water quality in the southern/coastal portions of Los Angeles County, including the Project Site.

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² *Ibid.*

Table 4.M.2-1

Existing Wastewater Generation				
Land Use	Generation Factor ^a	Units (beds, s.f.)	Wastewater Generation (gpd)	Wastewater Generation (mgd)
Existing Uses				
Administrative Office	200 gpd/ksf	23,435 s.f.	4,687	0.005
Day-Care Center	200 gpd/ksf	4,360 s.f.	872	0.001
Central Utilities/Industrial /Infrastructure	170 gpd/ksf	112,719 s.f.	19,162	0.019
Hospital/Inpatient	70 gpd/bed	453 beds ^b	26,110	0.026
Library	80 gpd/ksf	22,500 s.f.	1,800	0.002
Medical Office/Outpatient	300 gpd/ksf	327,304 s.f.	98,191	0.098
Biomedical Research & Development	250 gpd/ksf	94,754 s.f.	23,689	0.024
Warehouse/Storage	25 gpd/ksf	45,402 s.f.	1,135	0.001
Retail	150 gpd/ksf	0 s.f.	-	-
Total Existing Wastewater Generation			171,646	0.176

Notes: ksf = thousand square feet s.f. = square feet gpd = gallons per day mgd = million gallons per day

^a Factors provided in Table 1, Loadings for Each Class of Land Use, of the LACSDs' Will Serve Program Instructions, Table 3.15-6 of the LAC+USC Draft Environmental Impact Report, as well as in Table M.2-12, Sewage Generation Factors, of the Los Angeles CEQA Thresholds Guide (2006)..

^b Although the existing Hospital is licensed for 453 beds, only 373 beds are currently staffed, and thus only these beds would count toward existing solid waste generation for hospital/inpatient uses.

Source: PCR Services Corporation, 2016

(3) County

(a) Los Angeles County General Plan

As a County-run facility operated on County-owned land, the proposed Project is subject to the Los Angeles County General Plan Update (2035), including the Public Services and Facilities Element. Applicable goals and polices from this Element are identified below:

- **Policy PS/F 4.1:** Encourage the planning and continued development of efficient countywide sewer conveyance treatment systems.
- **Policy PS/F 4.2:** Support capital improvement plans to improve aging and deficient wastewater systems, particularly in areas where the General Plan encourages development, such as TODs.

(b) Los Angeles County Wastewater Ordinance

The Los Angeles County Wastewater Ordinance was enacted pursuant to authority contained in the County Sanitation District Act, California Health and Safety Code Sections 4700 through 4859, and exercises authority conferred by law including but not limited to Health and Safety Code Sections 5400 through 5474, and California Government Code Sections 54725 through 54740. The purpose of this Ordinance is 1) to

protect the environment and public health; 2) to provide for the maximum possible beneficial public use of the LACSDs' sewerage facilities through adequate regulation of sewer construction, sewer use and industrial wastewater discharges; 3) to provide for equitable distribution of the LACSDs' costs; and 4) to provide procedures for complying with requirements placed upon the LACSDs by other regulatory agencies. The provisions of the Ordinance apply to all direct or indirect discharges, including the discharge of all wastewater, to any part of the sewerage systems of the LACSDs, or to other sewerage systems tributary to the LACSDs' sewerage system. The provisions of the Ordinance also apply to wastewater originating outside the territorial boundaries of the LACSDs or outside the boundaries of Los Angeles County if such wastewater eventually enters the LACSDs' sewerage system. The Ordinance, among other things, regulates sewer construction and provides for the approval of plans for sewer construction and implements federal and state pollution control regulations. The Ordinance also provides for the issuance of permits, including Permits for Industrial Wastewater Discharge, prohibits the discharge of certain wastes, and regulates the quantity and quality of other waste discharges. Further, the Ordinance imposes wastewater pretreatment requirements upon waste dischargers and provides for the regulation of the degree of such pretreatment. Lastly, the Ordinance provides for the filing of Wastewater Treatment Surcharge Statements, imposes fees and charges, and provides for the distribution of revenue. Violations of this Ordinance are subject to criminal fines and penalties, civil liabilities and other penalties in accordance with law.

(c) Los Angeles County Connection Fee Ordinance and Program

Capital improvements to LACSDs' water reclamation plants are funded from connection fees charged to new developments, redevelopments, and expansions of existing land uses. The connection fee is a capital facilities fee used to provide additional conveyance, treatment, and disposal facilities (capital facilities) required by new users connecting to the LACSDs' sewerage system or by existing users that significantly increase the quantity or strength of their wastewater discharge. The Connection Fee Program ensures that all users pay their fair share for any necessary expansion of the system. Estimated wastewater generation factors used in determining connection fees in the LACSDs' 22 member Districts are set forth in the Connection Fee Ordinance for each respective District available on LACSDs' website. The purpose of the Ordinance is to impose fees for the privilege of connecting facilities to the sewerage system or for the privilege of increasing the strength or quantity of wastewater discharged into connected facilities, and to provide for the collection of those fees. Revenue derived under the Ordinance is used for expansion of the LACSDs' capital facilities and to fund loans as provided for in the Ordinance.

The LACSDs are empowered to fix fees or charges for the privilege of connecting directly or indirectly to the sewerage system and to prescribe, revise, and collect fees, tolls, rates, rentals, or other charges for services and facilities furnished by the LACSDs pursuant to California Health & Safety Code Section 5471. The revenue derived under the Ordinance is in addition to all revenue otherwise collected by or on behalf of the LACSDs including, but not limited, to ad valorem taxes, federal and state grants and loans, bond revenue, contract revenue, investment income, annexation fees, service charges, and wastewater treatment surcharges imposed under the Wastewater Ordinance (see discussion above).

3. ENVIRONMENTAL IMPACTS

a. Methodology

The wastewater generation of the proposed Project was estimated using wastewater generation factors contained in Table 1, *Loadings for Each Class of Land Use*, provided by the LACSDs, as well as factors provided

by the City of Los Angeles Bureau of Sanitation (for those land uses for which the LACSDs' table provides no generation factors). The amount of wastewater generated from the existing uses was determined based on these factors. The amount of wastewater generated by the proposed uses was then calculated. The amount of wastewater generated by existing uses was subtracted from the Project's wastewater generation to determine the net increase in wastewater that would occur at the Project Site. The Project's estimated increase in wastewater flow is compared to the existing conditions to assess the capacity of the existing sewer system and the ability of the system to accommodate the additional flows. In order to evaluate treatment capacity, the Project's estimated wastewater generation and projected average dry weather flow is compared with the available treatment capacity at the JWPCP in the City of Carson. Cumulative wastewater generation is also compared with the available capacity of the LACSDs' treatment system using the average dry weather flow.

b. Thresholds of Significance

The potential for wastewater impacts is based on thresholds derived from the County's Initial Study Checklist questions, which are based on Appendix G of the CEQA Guidelines. These questions are as follows:

(XVIII) Utilities and Service Systems. Would the project:

- a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

In consideration of the above factors, the following thresholds are utilized to determine if the Project would result in potentially significant impacts on wastewater services and facilities if it would result in any of the following:

- WW-1:** Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- WW-2:** Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- WW-3:** Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

c. Project Characteristics

As under existing conditions, the LACSDs will continue to be the primary provider of sanitary sewer service to the Medical Center Campus. In addition, it is anticipated the trunk sewers that currently exist around the

perimeter of the Project Site and through the Medical Center Campus will remain throughout and following implementation of the Master Plan Project. The proposed sanitary sewer conveyance system will closely match the existing conveyance system and consist of a network of sewer pipes generally located within the primary vehicular circulation areas. Please see **Figure 4.M.2-1, Proposed Sewer Infrastructure**, below, for an illustration of proposed sewer improvements on the Medical Center Campus.

As with the existing system, it is anticipated that approximately 75 percent of the existing Medical Center Campus, including the New Hospital Tower, LA BioMed Campus, Bioscience Tech Park, and proposed outpatient clinics will continue to be served by an on-site sewer network that discharges to Sanitation District Joint Outfall D, Unit 8 trunk sewer in the old Meyer Street right-of-way through a single point of connection. The existing connection may be used until such time a new connection might be warranted with development of the proposed Central Plant and back-of-house operations at the Medical Center Campus. The remaining 25 percent of the campus area, including the PCDC, existing tower and Surgery and Emergency Room Replacement Project will likely still continue to be served by sewer mains in Vermont Avenue, 220th Street, and Carson Street.

d. Project Impacts

Threshold WW-1: Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Threshold WW-2: Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Threshold WW-3: Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

Impact Statement WW-1: *Although construction and operation of the Project would result in an increase in wastewater generation that would increase the overall demands on wastewater conveyance and treatment facilities in the area, this increase would not exceed the available capacity of affected wastewater facilities and thus would not, directly or indirectly, result in an exceedance of wastewater treatment requirements, require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, or result in a determination by the LACSDs that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Therefore, impacts related to wastewater conveyance and treatment would be less than significant.*

(1) Construction

Construction of the proposed Project would include all necessary on- and off-site sewer pipe improvements and connections to adequately connect to the LACSDs' existing sewer system. Construction relative to the wastewater system for the Project would occur at the Project site and immediate vicinity. The design of these connections would be developed by a professional engineer and approved by the County Department of Public Works (DPW). In the event that, during development, wastewater lines were found to be substandard or in deteriorated condition, the County would be required to make necessary improvements to

achieve adequate service pursuant to applicable County requirements. All necessary improvements would be verified through the permit approval process of obtaining a sewer capacity and connection permit from the LACSDs.

During construction of the proposed Project, which would occur in several phases intermittently through year 2030, a negligible amount of wastewater would be generated by construction workers. It is anticipated that portable toilets would be provided by the construction contractor(s) and the waste disposed of off-site. Wastewater generation from construction activities is not anticipated to cause a measurable increase in wastewater flows at a point where, and at a time when, a sewer's capacity is already constrained or that would cause a sewer's capacity to become constrained. In addition, construction is not anticipated to generate wastewater flows that would substantially or incrementally exceed the future scheduled capacity of any one treatment plant by generating flows greater than those anticipated in the County's General Plan or other wastewater facilities planning documents. Therefore, construction impacts to the wastewater conveyance and treatment system serving the Project Site would be less than significant.

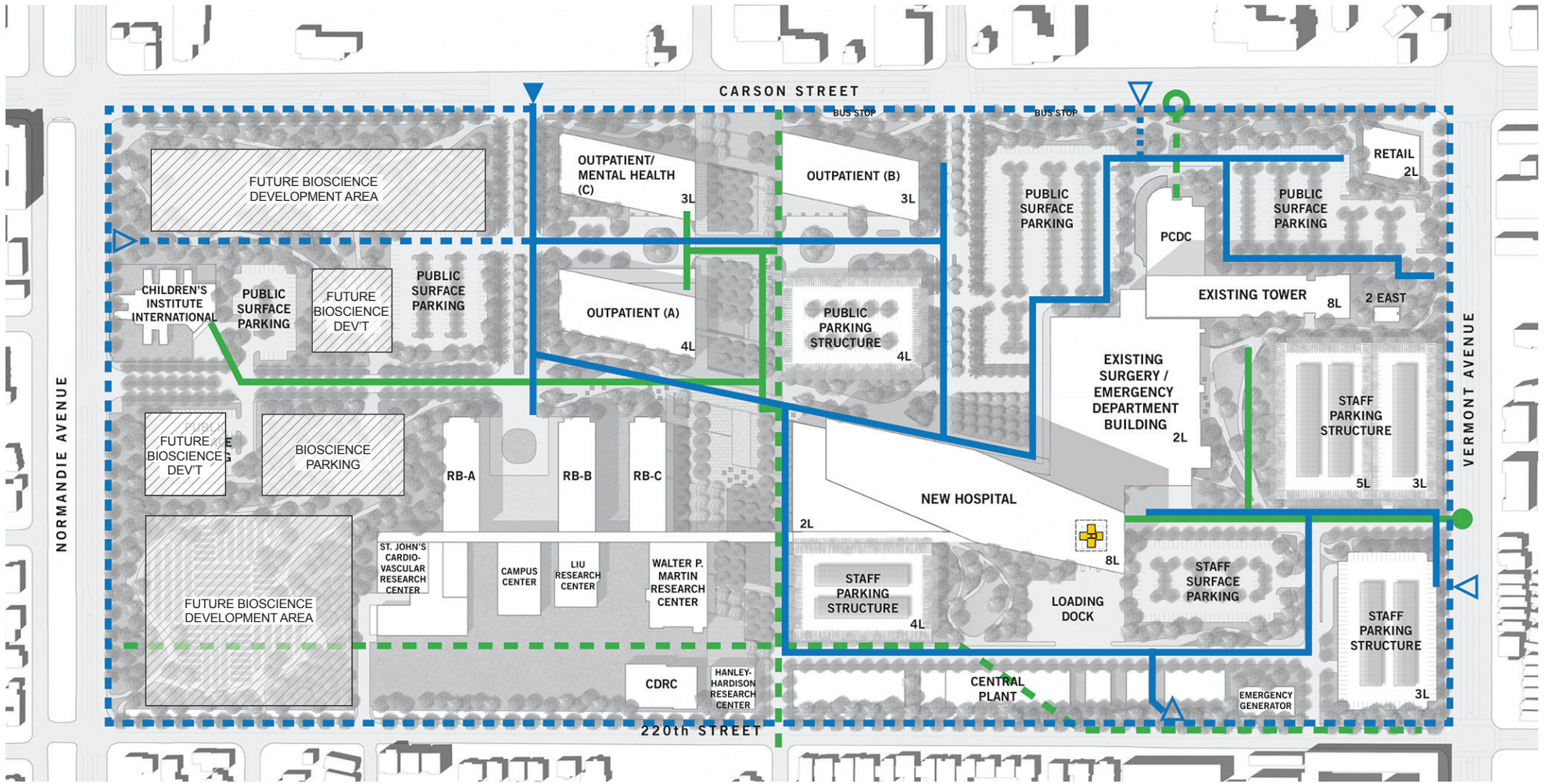
(2) Operation

The Project site would continue to be served by existing County water and utility lines, including sewer lines. As indicated in **Table 4.M.2-2, *Wastewater Generated During Operation***, the proposed Project would result in an estimated average daily wastewater generation of approximately 343,644 gpd (0.344 mgd). However, subtracting the existing generation of 171,646 gpd (0.172 mgd), the Project would result in a net increase of 171,998 gpd (0.172 mgd) of wastewater generation over existing conditions.









The proposed increase of 171,998 gpd that would result from Project implementation would represent 0.143-percent of JWPCP's total remaining capacity of 120 mgd. Thus, given the amount of wastewater generated by the proposed Project and existing wastewater treatment capacity, notwithstanding any future wastewater treatment capacity that may be implemented before Project buildout in year 2030, adequate wastewater capacity would be available to serve the proposed Project. Based on the above, the Project would not result in an increase in wastewater flows that would result in an exceedance of wastewater treatment requirements, require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, or result in a determination by the LACSDs that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Therefore, impacts related to wastewater treatment and infrastructure would be less than significant.

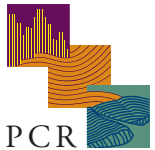
e. Cumulative Impacts

Chapter 3.0, General Description of Environmental Setting, of this Draft EIR identifies 26 related projects located in the vicinity of the Project Site. Although not all the wastewater generated by the various related projects is conveyed to the JWPCP for treatment, all the related projects were included in this cumulative analysis in order to present a conservative estimate of potential cumulative wastewater generation and associated impacts. As shown in **Table 4.M.2-3, *Estimated Cumulative Wastewater Generation***, the estimated wastewater generation associated with related projects on average is approximately 1,041,437 gpd (1.041 mgd). The proposed Project would contribute an additional 171,998 gpd (0.172 mgd). The estimated generation for the proposed Project and the related projects would be a combined total of approximately 1,213,435 gpd (1.214 mgd). As discussed above, the JWPCP has a current treatment capacity of 400 mgd and a current average dry water flow of approximately 280 mgd. The cumulative wastewater generation from



LEGEND

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|--|--|---|
|  EXISTING SEWER SYSTEM |  PROPOSED POINT OF CONNECTION | |
|  PROPOSED SEWER SYSTEM |  EXISTING WATERLINE |  EXISTING WATER POINT OF CONN. |
|  EXIST. POINT OF CONNECTION |  PROPOSED WATERLINE |  PROP. WATER POINT OF CONN |



Proposed Sewer Infrastructure

Harbor-UCLA Medical Center Master Plan
Source: Fehr & Peers, 2016.

FIGURE

4.M.2-1

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Table 4.M.2-2

Wastewater Generated During Operation

Land Use	Generation Factor ^a	Units (beds, s.f.)	Wastewater Generation (gpd)	Wastewater Generation (mgd)
Proposed Uses				
Administrative Office	200 gpd/ksf	130,635 s.f.	26,127	0.026
Day-Care Center	200 gpd/ksf	4,360 s.f.	872	0.001
Central Utilities/Industrial /Infrastructure	170 gpd/ksf	129,205 s.f.	21,965	0.022
Hospital/Inpatient	70 gpd/bed	446 beds ^b	26,530	0.027
Library	80 gpd/ksf	0 s.f.	-	-
Medical Office/Outpatient	300 gpd/ksf	480,500 s.f.	144,150	0.144
Biomedical Research & Development	250 gpd/ksf	475,000 s.f.	118,750	0.119
Warehouse/Storage	25 gpd/ksf	0 s.f.	-	-
Retail	150 gpd/ksf	35,000 s.f.	5,250	0.005
Total Proposed Wastewater Generation			343,644	0.344
Total Existing Wastewater Generation			171,646	0.172
Net Increase			171,998	0.172

Notes: ksf = thousand square feet s.f. = square feet gpd = gallons per day mgd = million gallons per day

^a Factors provided in Table 1, Loadings for Each Class of Land Use, of the LACSDs' Will Serve Program Instructions, Table 3.15-6 of the LAC+USC Draft Environmental Impact Report, as well as in Table M.2-12, Sewage Generation Factors, of Los Angeles CEQA Thresholds Guide (2006).

^b Although the New Hospital would be licensed for 446 beds (as currently proposed), only 379 beds are expected to be staffed, and thus only these beds would count toward future solid waste generation for hospital/inpatient uses.

Source: PCR Services Corporation, 2016

the 26 related projects and the proposed Project, therefore, would represent just over one percent of the current 120 mgd of available treatment capacity at the JWPCP. The average flow projections in conjunction with the cumulative wastewater estimate from related projects represents a conservative analysis as the average dry water flow projections already take into account future population growth, including growth such as that represented by related projects. Furthermore, as with the proposed Project, these estimates do not account for reductions in wastewater generation that would occur with implementation of conservation measures. As the proposed Project, in conjunction with related project development, would not cause an increase in wastewater flows that would result in an exceedance of wastewater treatment requirements, require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, or result in a determination by the LACSDs that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments, cumulative wastewater impacts would be less than significant.

Table 4.M.2-3

Estimated Cumulative Wastewater Generation

Land Uses	Quantity (units/ rooms/ square feet)	Wastewater Generation Factor ^a	Wastewater Generated (gpd)	Wastewater Generated (mgd)
Related Projects				
Multifamily Residential ^b	2,769	195 gpd/unit	539,955	0.540
Single Family Residential	66	260 gpd/unit	17,160	0.017
Retail	1,580,640	150 gpd/ksf	237,096	0.237
Auto Dealer and Service Station ^c	10,198	100 gpd/ksf	1,020	0.001
Office	480	200 gpd/ksf	96	0.001
Medical Office ^d	11,340	300 gpd/ksf	3,402	0.003
Hotel	300	125 gpd/room	37,500	0.038
Restaurant	81,125	1,000 gpd/ksf	81,125	0.081
Other Services ^e	296,800	350 gpd/ksf	103,880	0.104
Manufacturing/Warehouse	84,015	200 gpd/ksf	16,803	0.017
Industrial	17,000	200 gpd/ksf	3,400	0.003
Total Related Projects			1,041,437	1.042
Proposed Project (Net Increase)			171,998	0.172
Cumulative Wastewater Generation			1,213,435	1.214

Notes: ksf = thousand square feet s.f. = square feet gpd = gallons per day mgd = million gallons per day

^a Factors provided in Table 1, Loadings for Each Class of Land Use, of the LACSDs' Will Serve Program Instructions, Table 3.15-6 of the LAC+USC Draft Environmental Impact Report, as well as in Table M.2-12, Sewage Generation Factors, of Los Angeles CEQA Thresholds Guide (2006).

^b Multifamily Residential includes apartments and condos, but higher condominium use factor is applied to be conservative.

^c Auto Dealer and Service Station includes Automated Car Wash and Automobile Care Center.

^d Medical Office uses wastewater generation factors for professional offices.

^e Other services includes Public Venues, Recreation, and a Transit Center – used LACSDs Auditorium/Amusement factor to be conservative.

Source: PCR Services Corporation, 2016.

4. MITIGATION MEASURES

With the implementation of Project wastewater system improvements and compliance with applicable County regulatory requirements regarding wastewater, potential impacts on the wastewater system would be less than significant. Therefore, no mitigation measures are required.

5. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Potential impacts with regard to wastewater as a result of implementation of the Project would be less than significant and no mitigation measures would be required.