

4.N UTILITIES, SERVICE SYSTEMS, AND WATER SUPPLY

4.N.1 INTRODUCTION

This section of the EIR addresses the physical environmental effects of new or expanded facilities to maintain acceptable service levels in relation to utilities and service systems, including water and wastewater utilities, storm drainage, and solid waste management. Because CEQA focuses on physical environmental effects, this section analyzes whether increases in demand that would result from the proposed TOD Plan would result in significant adverse physical environmental effects.

For example, an increase in sewage generation, by itself, would not be considered a physical change in the environment; however, physical changes in the environment resulting from the construction of new facilities or an expansion of existing wastewater facilities could constitute a significant impact. This section also addresses water demand, supply, and reliability for the proposed TOD Plan for Downtown Inglewood and Fairview Heights. Flood management and storm drain facilities are addressed in Section 4.M, *Public Services*. Energy, energy infrastructure, and renewable energy resources are discussed in Section 4.O, *Energy Resources*.

DEFINITIONS

- **100-year flood** is a flood that has a one percent statistical chance of occurring in any given year. The 100-year flood can, however, occur in consecutive years or multiple times within a year.
- **Acre-foot** is the volume of water required to cover 1 acre of land (43,560 square feet) to a depth of 1 foot. It is equal to 43,560 cubic feet or 325,851 gallons.
- **Biofiltration** refers to the use of plants and landscaping to capture and biologically degrade pollutants. Capturing harmful chemicals or silt from surface runoff is a common form of biofiltration.
- **Flooded** refers to any condition in which the soil surface is temporarily covered with flowing water from any source, such as streams overflowing their banks, runoff from adjacent or surrounding slopes, inflow from high tides, or any combination of sources.
- **Frequency (inundation)** refers to the average frequency of flooding by surface water or soil saturation. It is usually expressed as the number of years (e.g. 50 years) the soil is inundated or saturated at least once during a year.
- **Inundation** is the condition in which water from any source temporarily or permanently covers a land surface.
- **Recycled water** is former wastewater (sewage) that is treated to remove solids and impurities to a level that is safe for beneficial uses, such as landscape irrigation. The purpose of water recycling these processes is water conservation, rather than simply discharging treated wastewater.
- **Stormwater** refers to discharges generated by runoff from land and impervious areas, such as paved streets, parking lots, and building rooftops, during rainfall and snow events that often contain pollutants in quantities that could adversely affect water quality. Most stormwater

discharges are considered point sources and require coverage by a National Pollutant Discharge Elimination System (NPDES) permit.

4.N.2 WATER AND WATER SUPPLY

APPLICABLE PLANS, POLICIES, AND PROGRAMS – WATER AND WATER SUPPLY

Implementation of the proposed TOD Plan for Downtown Inglewood and Fairview Heights is subject to a range of federal, state, regional, and local plans, policies, and regulations, which are described below.

Federal Plans, Policies, and Regulations – Water and Water Supply

Safe Drinking Water Act

The United States Environmental Protection Agency (USEPA) administers the Safe Drinking Water Act, which is the primary federal law that regulates the quality of drinking water and establishes standards to protect public health and safety. The Department of Health Services (DHS) implements the requirements of the Act and oversees public water system quality statewide. DHS establishes legal drinking water standards for contaminants that could threaten public health.

State Plans, Policies, and Regulations – Water and Water Supply

California Urban Water Management Planning Act

Section 10610 of the California Water Code established the California Urban Water Management Planning Act (CUWMPA), requires urban water suppliers to initiate planning strategies to ensure an appropriate level of reliability in its water service. CUWMPA states that every urban water supplier that provides water to 3,000 or more customers, or that annually provides more than 3,000 acre-feet of water service, should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple-dry years. The CUWMPA describes the contents of Urban Water Management Plans as well as methods for urban water suppliers to adopt and implement the plans.

Senate Bill 610

Senate Bill (SB) 610 requires public urban water suppliers with 3,000 or more service connections to identify existing and planned sources of water for planned developments of a certain size. It further requires the public water system to prepare a specified water supply assessment (WSA) for projects that meet the following criteria:

- a) A proposed residential development of more than 500 dwelling units;
- b) A proposed shopping center employing more than 1,000 persons or having more than 500,000 square feet of floor space;

- c) A commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- d) A hotel or motel, or both, with more than 500 rooms;
- e) An industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sf of floor area; and
- f) A mixed-use project that includes one or more of the projects above.

The components of a WSA include existing water demand, future water demand by the project, and must ensure that water is available for the project during normal years, a single dry year, and multiple dry years during a 20-year future projection period. The WSA must also describe whether the project's water demand is accounted for in the water supplier's UWMP. Supplies of water for future water supply must be documented in the WSA.

Senate Bill 221

SB 221 requires the local water provider to provide "written verification" of "sufficient water supplies" to serve the project. SB 221 applies only to residential projects of 500 units or more (infill or low-income or very-low-income housing subdivisions are exempt) and requires the land use planning agency to include as a condition of approval of a tentative map, parcel map, or development agreement a requirement that "sufficient water supply" be available. Sufficiency under SB 221 differs from SB 610 in that it is determined by considering the availability of water over the past 20 years; the applicability of any urban water shortage contingency analysis prepared per Water Code Section 10632; the reduction in water supply allocated to a specific use by an adopted ordinance; and the amount of water that can be reasonably relied upon from other water supply projects, such as conjunctive use, reclaimed water, water conservation, and water transfer. In most cases, the WSA prepared under SB 610 meets the requirement for proof of water supply under SB 221.

CalGreen Building Code

California Code of Regulations Title 24, Part 11, establishes the California Green Building Code or CALGreen. The CALGreen Code was recently updated in 2013 and went into effect January 1, 2014. CALGreen sets forth water efficiency standards (i.e., maximum flow rates) for all new federally-regulated plumbing fittings and fixtures.

Governor Brown's Executive Order B-29-15

On April 1, 2015, Governor Brown issued Executive Order B-29-15, finding that, among other things, "...conditions of extreme peril to the safety of persons and property continue to exist in California due to water shortage and drought conditions..." and ordering that, among other things, the "State Water Resources Control Board shall impose restrictions to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016. These restrictions will require water suppliers to California's cities and towns to reduce usage as compared to the amount used in 2013. These restrictions should consider the relative per capita water usage of each water suppliers' service area,

and require that those areas with high per capita use achieve proportionally greater reductions than those with low use.” On July 15, 2015, the State Water Resources Control Board released the water-use-reduction targets that were imposed on each individual urban water supplier. Then based on rainfall the reduction targets were revised and the new targets became effective March 1, 2016. The City of Inglewood’s reduction target reflects the statewide standard.

City of Inglewood Plans, Policies, and Regulations – Water and Water Supply

City of Inglewood Municipal Code

Section 5-112, Water Efficiency in the Landscape, of the City’s Municipal Code establishes procedures and standards for the design, installation, and maintenance of water-efficient landscapes in conjunction with new construction projects in the City. This section of the Municipal Code promotes conservation and efficient use of water in order to prevent the waste of water resources.

Article 19, Water Conservation and Water Supply Shortage Program, of the Municipal Code establishes a water conservation and water supply shortage program to reduce water consumption through conservation, enabling effective water supply planning, assuring reasonable and beneficial use of water, preventing waste of water, and maximizing the efficient use of water within the City. In addition, Article 19 of the Municipal Code establishes permanent water conservation standards and establishes three levels of water supply shortage response actions to be implemented during times of declared water shortage or declared water shortage emergency, with increasing restrictions on water use in response to worsening drought or emergency conditions and decreasing supplies.

ENVIRONMENTAL SETTING – WATER AND WATER SUPPLY

The City of Inglewood’s potable water system consists of 152 miles of pipe varying in diameter from 3-inches to 30-inches, four groundwater wells, two booster pump stations, a groundwater treatment plant, two reservoirs, two imported water connections to the Metropolitan Water District (MWD), and a total of eight emergency interties with the Los Angeles Department of Water and Power and the Golden State Water Company (UWMP, 2010 and Kimley, 2015). The City has two reservoirs: North Inglewood and Morningside. The North Inglewood Reservoir was constructed in 1974 and has a total capacity is 4.6 million gallons. The Morningside Reservoir was constructed in 1954, and has a total capacity of 16 million gallons.

The Sanford M. Anderson Treatment Plant (Anderson Treatment Plant) processes raw groundwater pumped from the City’s wells, and is located on the southwest corner of Eucalyptus Avenue and Beach Avenue, which is within the Downtown TOD Plan area. Currently, the Anderson Treatment Plant has a treatment capacity of 8.64 million gallons per day (MGD). Treated groundwater leaving the Anderson Treatment Plant is pumped into one of the two storage reservoirs. While in route to the reservoirs, treated water supply from the Metropolitan Water District of Southern California (MWD) enters through the two imported water connections and blends with the treated groundwater leaving the Anderson Treatment Plant. Water is then distributed from the City reservoirs to users.

Within the TOD Plan areas, water lines ranging from 4 to 24-inches in diameter are located in the streets and alleys. The existing water lines are generally older pipelines that are made of asbestos cement; however, there are some pipelines that consist of cast iron, PVC, reinforced concrete cylinder, and galvanized steel.

In 2010, 64 percent of the City’s potable water supply (6,551 acre-feet) (AF) came from imported water purchased from MWD through its regional water supplier and MWD member agency WBMWD. The remaining 36 percent of the City’s potable water supply (3,623 AF) came from groundwater pumping from the West Coast Groundwater Basin. The City also purchases recycled water from the West Basin Municipal Water District for non-potable uses and distributes it to 18 recycled water users within Inglewood.

The amount of water the City is permitted to pump from the West Coast Basin (groundwater aquifer) is limited by a 1961 Order of the Los Angeles Superior Court (West Coast Basin Judgment or adjudication) to 4,450 acre-feet per year (AFY). Generally, the City is entitled to pump up to its maximum allowable extraction right along with any carryover or unused water rights from the previous years and any net leases or exchanges of water rights per agreements with other parties owning those rights (UWMP, 2010).

Total groundwater production in the Basin has been declining over the past ten years, from a high of 53,870 AFY in the water year 2000/01 to a low of 36,809 AFY in 2005/06, and 45,246 AFY being pumped in 2009/10 (UWMP 2010). In 2014, the City pumped 1,910.97 AF of water from the West Coast Groundwater Basin, which left 2,538.92 AF (57 percent) of the City’s water pumping rights unused (DWR, 2014). The remainder of the City’s water supply was imported from MWD (8,200.70 AF) and recycled water (827.20 AF) (DWR, 2014).

The City’s UWMP provides projections for water supply and demand for years 2015 through 2035. In 2015, for “Multiple Dry Water Years” (three-year) conditions, it is estimated that the City would have a total water supply (including recycled water) of 18,940 AFY, a total demand of 15,710 AFY, and a surplus of 3,230 AFY. Furthermore, it is forecasted that there would be a water surplus for all years through 2035 with multiple dry year conditions. The City’s projected water supplies and demands shown in Table 4.N-1.

**TABLE 4.N-1
PROJECTED WATER SUPPLY AND DEMAND IN MULTIPLE DRY YEARS (AFY)**

| | 2015 | 2020 | 2025 | 2030 | 2035 |
|----------------|--------------|--------------|--------------|--------------|--------------|
| Total Supply | 16,700 | 18,720 | 19,880 | 19,370 | 18,940 |
| Total Demand | 14,960 | 15,280 | 15,640 | 15,640 | 15,710 |
| Surplus | 1,740 | 3,440 | 4,240 | 3,730 | 3,230 |

Source: City of Inglewood 2010 UWMP

Due to the groundwater basin adjudication, groundwater supplies are actively managed pursuant to regulation that prevent the occurrence of overdraft conditions. Under multiple dry-year conditions,

imported supplies can be purchased to meet an annual increase in demand (UWMP, 2010). As a result, the City's UWMP does not anticipate any water supply shortages under multiple dry year scenarios.

SIGNIFICANCE CRITERIA – WATER AND WATER SUPPLY

Criteria outlined in CEQA Guidelines were used to determine the level of significance of water and water supply impacts. Appendix G of state CEQA Guidelines indicates that a project would have a significant effect if it were to:

- 4.N-1 Not have sufficient water supplies available to serve the project from existing entitlements and resources, and would require new or expanded entitlements; or
- 4.N-2 Result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

PROJECT IMPACTS AND MITIGATION MEASURES – WATER AND WATER SUPPLY

Threshold 4.N-1: Inadequate water supplies.

Impact 4.N-1: Implementation of the proposed TOD Plan for Downtown Inglewood and Fairview Heights would not result in inadequate water supplies, and would not require new or expanded entitlements. The resulting impact would be *less than significant*.

Methodology

The analysis in this section focuses on the nature and magnitude of the change in levels of water use from build out of the TOD Plan. The primary resources used for this analysis include the City's 2010 UWMP and the Draft 2015 Water Master Plan. To determine whether a significant impact would exist, the projected increase in water demand over the 20-year horizon of the TOD Plan was compared to future available supplies from existing entitlements and resources, including projected availability of groundwater supplies and water supply from MWD. If the projected water demand that would result from buildout of the TOD Plan would exceed existing water entitlements and resources, new or expanded water supply entitlements would be required, and a significant impact related to threshold 4.N-1 would occur.

Impact Assessment

Build out of the proposed TOD Plan would result in additional residential, commercial, office, institutional, and industrial uses, which would increase water demand above existing conditions. Based on the water demand factors from the City of Inglewood Draft 2015 Water Master Plan, it is estimated that new land uses anticipated to occur under the proposed TOD Plan would increase water demand by 874.6 AFY (see Table 4.N-2).

**TABLE 4.N-2
PROJECTED INCREASE IN WATER DEMAND FROM BUILD OUT OF THE PROPOSED TOD PLAN**

| Proposed Land Uses | Demand Rate Per Day¹ | Increase in Development at Build out | Increase in Water Demand Per Day |
|--|--|---|---|
| Multi-Family Residential | 160 gallons per dwelling unit | 2,693 units | 430,880 gallons |
| Retail | 205 gallons per 1,000 square feet | 198,935 square feet | 40,782 gallons |
| Office | 60 gallons per 1,000 square feet | 314,944 square feet | 18,897 gallons |
| Hotel Rooms | 125 gallons per room | 235 rooms | 29,375 gallons |
| Institutional | 200 gallons per 1,000 square feet | 341,194 square feet | 68,239 gallons |
| Industrial, Commercial, Creative Space | 220 gallons per 1,000 square feet | 875,550 square feet | 192,621 gallons |
| Total Increased Water Demand | | | 780,794 gallons (874.6 AFY) |

Source: Arroyo Group, 2015, ¹ Draft 2015 Water Master Plan.

As described above, in 2014 the City pumped 1,910.97 acre-feet (AF) of water from the West Coast Groundwater Basin, which left 2,538.92 AF (57 percent) of the City's water pumping rights unused (DWR, 2014). The remainder of the City's water supply was imported from the Metropolitan Water District (MWD) (8,200.70 AF) and recycled water (827.20 AF) (DWR, 2014). In addition, the City's UWMP provides projections for water supply and demand for years 2015 through 2035, and shows a minimum water surplus of 3,230 acre-feet per year (AFY) between 2020 and 2035 in multiple dry year conditions. Based on this information, with implementation of full TOD Plan build out, a surplus of approximately 2,355 AFY of water supplies would remain available under the City's existing pumping and entitled amounts. Therefore, sufficient water supplies would be available to serve the project from existing entitlements and resources, and new or expanded entitlements would not be required. Impacts related to water supplies from build out of the TOD Plan would be less than significant.

Significance Conclusion for Impact 4.N-1

Implementation of the proposed TOD Plan would increase water demand; however, adequate water supplies in multiple dry years are available to meet this increase demand, and new or expanded water supply entitlements would not be needed. As a result, impacts related to water supplies would be less than significant.

Threshold 4.N-2: Construction of new or expanded water facilities that could cause significant environmental effects.

Impact 4.N-2: Implementation of the proposed TOD Plan for Downtown Inglewood and Fairview Heights would not result in construction of new or expanded water facilities that could result in a significant environmental effect. The resulting impact would be *less than significant*.

Methodology

From the estimated increase in water demand, availability of existing water supply entitlements, and existing water infrastructure, an analysis of any infrastructure improvements that would be necessary to provide water service to the project area over the life of the proposed Plan was undertaken. Based on that analysis, if construction or expansion of water facilities would be necessary, an evaluation of the physical environmental effects of such improvements would be undertaken to determine whether those effects would be considered significant in relation to the physical environmental effects being analyzed in this EIR.

Impact Assessment

The existing water lines within the TOD Plan areas range from 4 to 24-inches in diameter, and are generally older pipelines that are made of asbestos cement; however, there are some pipelines that consist of cast iron, PVC, reinforced concrete cylinder, and galvanized steel.

The Existing Infrastructure Baseline Data for the TOD Plan report (JMC, 2015) identifies the existing infrastructure in the TOD Plan areas and did not identify any needs for water infrastructure improvements or expansion to accommodate build out of the proposed TOD Plan. However, implementation of development projects pursuant to the TOD Plan would include installation of onsite water infrastructure and new connections to the water distribution system that could include improvements to the water distribution lines and other connecting infrastructure that would be sized to accommodate the increased water demand of new development. Because the existing lines are generally old and consist of asbestos cement, the increased density of new development could result in the need to improve existing water distribution lines within the alleys and street rights-of-way that connect to these new developments. Water supply design specifications for each future site-specific development project would comply with the City of Inglewood standards (per the California Building Code) regarding requirements for design and operation of water distribution facilities.

Under the City's normal development review procedure for individual projects, the City determines the actual water system design requirements of each site-specific development project, and the needs for any improvements to the existing water supply infrastructure would be identified and required by the City construction permit. The temporary construction of needed water system improvements would occur along existing pipeline alignments and within existing streets, alleys, rights-of-way, and construction sites and would be required to comply with all City standards regarding construction noise, air quality and dust suppression mitigation requirements, erosion control (through the required SWPPP) and temporary construction traffic controls. These standard requirements would ensure that potential construction impacts related to water line improvements remain less than significant. As a result, potential impacts related to build out of the proposed TOD Plan would not result in construction of new or expanded water facilities that would result in a significant environmental effect. Therefore, impacts would be less than significant.

Significance Conclusion for Impact 4.N-2

Implementation of the proposed TOD Plan would not result in construction of new or expanded water facilities that would cause significant environmental effects. As a result, impacts related to water infrastructure would be less than significant.

4.N.3 WASTEWATER

APPLICABLE PLANS, POLICIES, AND PROGRAMS – WASTEWATER

Implementation of the proposed TOD Plan for Downtown Inglewood and Fairview Heights is subject to a range of federal, state, regional, and local plans, policies, and regulations, which are described below.

Federal Plans, Policies, and Regulations – Wastewater

National Pollution Discharge Elimination System Permits

The NPDES permit system was established in the federal Clean Water Act to regulate both point source discharges (a municipal or industrial discharge at a specific location or pipe) and nonpoint source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the United States. For point source discharges, such as sewer outfalls, each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge.

State Plans, Policies, and Regulations – Wastewater

State Water Resources Control Board Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems

The Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SWRCB Order No 2006-0003-DWQ) applies to sanitary sewer systems that are greater than one-mile-long and collect or convey untreated or partially treated wastewater to a publicly owned treatment facility. The goal of Order No. 2006-0003 is to provide a consistent statewide approach for reducing Sanitary Sewer Overflows (SSOs), accidental releases of untreated or partially treated wastewater from sanitary sewer systems, by requiring that:

1. In the event of an SSO, all feasible steps be taken to control the released volume and prevent untreated wastewater from entering storm drains, creeks, etc.
2. If an SSO occurs, it must be reported to the SWRCB using an online reporting system developed by the SWRCB.
3. All publicly owned collection system agencies with more than one mile of sewer pipe in the State must develop a Sewer System Management Plan (SSMP), which must be updated every five years.

The City of Inglewood updated its Sewer System Master Plan in compliance with these requirements in 2015.

Regional Municipal Separate Storm Sewer System (MS4) Permits

The City of Inglewood is subject to the NPDES stormwater permit covering Los Angeles County (NPDES No. CAS614001). The Los Angeles RWQCB completed a revision of the NPDES permit for the Los Angeles region in 1996 and 2001. The MS4 Permit requires permittees to reduce the discharge of storm water pollutants to the maximum extent practicable and ensure MS4 discharges do not cause or contribute to violations of water quality standards. The MS4 Permit also requires implementation of various site design best management practices (BMPs) and treatment control BMPs to reduce the possibility of pollutants stored or produced on-site from entering surface water or sewer system. Requirements of the MS4 Permit would be applicable to development pursuant to the proposed TOD Plan.

City of Inglewood Plans, Policies, and Regulations – Wastewater

Inglewood General Plan

The City of Inglewood General Plan does not contain any policies related to wastewater relevant to the proposed TOD Plan.

Inglewood Municipal Code

Chapter 10 Public Works, Article 7 Sewer Connection

Section 10-89, Determination of Capacity, states that the size and grade of each public sewer must be such as to provide at all times sufficient capacity for peak flow rates of discharge. The Public Works Director shall determine what capacity is necessary in each public sewer to provide for the proper collection of sewage in the City. In the event a lot in the City is to undergo development or redevelopment, and the anticipated sewage from the proposed use is found by the Public Works Director to exceed the capacity available in the public sewer, the building permit for such development or redevelopment shall not be issued until such time as capacity in the public sewer is available or can be made available before the building is occupied. **Table 4.N-3** establishes a basis for computing average daily flow to the sanitary sewer:

All other land uses not included in the Table are classified by the occupancy it most nearly resembles as determined by the Public Works Director or computed by him or her in accordance with the anticipated use. The daily flow to the sanitary sewer for a building containing mixed occupancies is determined by adding the peak flow characteristics of the various occupancies as set forth in the above table. The daily flow from a room or building which is used for different occupancies at different times as determined by the occupancy which gives the largest peak flow.

Section 10-221, General Limitations, Prohibitions, and Requirements on Fats, Oils, and Grease (FOG) Discharges, establishes standards and discharge prohibitions for the release of substances into the

sewer system. Section 10-222, FOG Wastewater Discharge Permits for Food Service Establishments, requires food service establishments to obtain a sewer permit that regulates the discharge of substances into the sewer system.

**TABLE 4.N-3
INGLEWOOD WASTEWATER GENERATION RATES**

| Land Use | Average Daily Flow |
|--|--|
| Apartment | 200 gallons per dwelling unit |
| Assembly Areas | 5 gallons for each 7 square feet of floor area usable for seating occupancy. |
| Auditorium | 5 gallons for each 7 square feet of floor area usable for seating occupancy. |
| Bars and Cocktail Lounges | 20 gallons for each 15 square feet of floor area usable for seating occupancy. |
| Churches | 200 gallons per day per 1,000 square feet of floor area usable for seating occupancy |
| Hospitals | 500 gallons per bed |
| Hotels | 200 gallons per room or apartment unit. |
| Light Industrial | 600 Gallons per 1,000 square feet of floor area. |
| Laundromat | 75 gallons per machine |
| Medical Office | 300 gallons per 1,000 square feet of floor area. |
| Motels | 200 gallons per room |
| Office | 200 gallons per 1,000 square feet of floor area. |
| Restaurant | 50 gallons for each 15 square feet of floor area usable for seating occupancy |
| Schools | |
| Elementary | 9 gallons per capita |
| Others | 25 gallons per capita |
| Stand, for sale of lunches, ice cream, beverages & similar items | 300 gallons per 1,000 square feet of floor area |
| Storage Garages and Warehouses | 25 gallons per 1,000 square feet of floor area |
| Stores, Commercial, & Display | 100 gallons per 1,000 square feet of floor area. |

Source: City of Inglewood Municipal Code Section 10-89

ENVIRONMENTAL SETTING – WASTEWATER

The sewage collection system within the City of Inglewood consists of approximately 145 miles of gravity sewer pipe ranging in size from 4 to 16 inches in diameter and approximately 3,100 manholes. The sewers are primarily constructed of vitrified clay pipe with approximately 95 percent of the pipes sized at 8-inch in diameter. The majority of the existing sewer system was constructed before 1960

(SSMP 2015). Due to the general age of the sewer system, the City is implementing a proactive sewer rehabilitation program that prioritizes and replaces sewer lines that have been identified as deficient, through its sewer inspection program (SSMP 2015). The City inspected 91 miles of sewer lines (62 percent of the system) in 2008, and is initiating a new inspection program for the remaining portion of the sewer system so that needed rehabilitation of sewer lines can be identified. In addition, the City performs video inspection of its entire sewer system every five years.

The general direction of flow is from north to south and east to west. The majority of sewers tie directly into one of the Los Angeles County Sanitation Districts (LACSD) trunk sewers crossing through the City, which convey sewage to LACSD sewage treatment plants. Within the TOD Plan areas, the LACSD trunk sewer lines are located in: Prairie Avenue, Manchester Boulevard, Beach Avenue, Hyde Park Boulevard, North La Brea Avenue, Hill Avenue, and Beach Street (SSMP, 2015).

There are approximately 203 connections to the LACSD system throughout the City, which convey City's wastewater to the LACSD Joint Water Pollution Control Plant located in the City of Carson for treatment and disposal (SSMP, 2015). The JWPCP facility processes both primary and secondary treatment for an average flow of 280 mgd with a design capacity of 400 mgd (LACSD 2016). Prior to discharge, the treated wastewater is disinfected with hypochlorite and sent to the Pacific Ocean through a network of outfalls. These outfalls extend 2 miles off the coast of Southern California into the Palos Verdes Peninsula to a depth of 200 feet.

SIGNIFICANCE CRITERIA – WASTEWATER

Criteria outlined in CEQA Guidelines were used to determine the level of significance of wastewater impacts. Appendix G of state CEQA Guidelines indicates that a project would have a significant effect if it were to:

- 4.N-3 Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- 4.N-4 Result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- 4.N-5 Exceed wastewater treatment requirements of the RWQCB.

PROJECT IMPACTS AND MITIGATION MEASURES - WASTEWATER

Threshold 4.N-3: Inadequate capacity to serve the projected demand from the project as well as existing service commitments.

Impact 4.N-3: Implementation of the proposed TOD Plan for Downtown Inglewood and Fairview Heights would increase sewage generation within the TOD Plan areas, but not result in inadequate capacity to serve

projected demand in addition to existing service commitments. The resulting impact would be *less than significant*.

Methodology

The analysis of the proposed TOD Plan's impact on wastewater facilities identifies the increased amount of wastewater that would be generated by build out of the TOD Plan and the capacity of the wastewater infrastructure serving the TOD Plan areas. The net increase in development that would occur under the TOD Plan was multiplied by the City's wastewater generation rates identified in Municipal Code Section 10-89 to determine the net increase in wastewater generation that would occur as the result of the proposed TOD Plan. The resulting increase in wastewater generation was compared with the available capacity of the infrastructure serving the TOD Plan areas to determine whether the proposed TOD Plan would exceed available capacity to serve increased wastewater service demands. Impacts would be significant if buildout of the TOD Plan would result in inadequate capacity to serve increased wastewater service demands in addition to existing service commitments.

Impact Assessment

The proposed TOD Plan would result in an increase of 2,693 residential units and 1,730,623 square feet of non-residential uses, which as shown in Table 4.N-4 would result in approximately 1.26 mgd of wastewater being generated.

**TABLE 4.N-4
PROJECTED INCREASE IN WASTEWATER GENERATION AT BUILD OUT**

| Proposed Land Uses | Generation Rate Per Day ¹ | Increase in Development at Build out | Increase in Wastewater Generation Per Day |
|--|--------------------------------------|--------------------------------------|---|
| Residential | 200 gallons per dwelling unit | 2,693 units | 538,600 gallons |
| Retail | 100 gallons per 1,000 square feet | 198,935 square feet | 19,894 gallons |
| Office | 200 gallons per 1,000 square feet | 314,944 square feet | 62,988 gallons |
| Hotel Rooms | 200 gallons per room | 235 rooms | 47,000 gallons |
| Institutional | 200 gallons per 1,000 square feet | 341,194 square feet | 68,239 gallons |
| Industrial, Commercial, Creative Space | 600 gallons per 1,000 square feet | 875,550 square feet | 525,330 gallons |
| Total Increased Wastewater Generation | | | 1,262,051 gallons (1.26 mgd) |

Source: Arroyo Group, 2015.

¹ Per Municipal Code Section 10-89.

As noted above, the City's existing sewer system consists of pipelines ranging in size from 4 to 16 inches in diameter, with approximately 95 percent of the pipelines being 8-inch in diameter and constructed before 1960 (SSMP, 2015). Due to the general age of the sewer system, the City is implementing a proactive sewer rehabilitation program that evaluates age and infrastructure and prioritizes and replaces sewer lines as appropriate. The Existing Infrastructure Baseline Data for the TOD Plan report

(JMC, 2015) did not identify any needs for infrastructure improvements or expansions to the City's sewer system to accommodate buildout of the proposed TOD Plan. Thus, the proposed TOD Plan would not result in inadequate capacity to serve the Plan's projected increased wastewater demand. Impacts to the City's sewer system would therefore be less than significant. However, improvements to the City's sewer infrastructure pursuant to the rehabilitation program and development projects within the TOD Plan area are anticipated (as described in Impact 4.N-4, below).

The City's sewers tie into connections to the LACSD trunk line system throughout the TOD Plan areas (including along Prairie Avenue, Manchester Boulevard, Beach Ave, Hyde Park Boulevard, North La Brea Avenue, Hill Avenue, and Beach Street), which convey City's wastewater to the LACSD Joint Water Pollution Control Plant located in the City of Carson for treatment and disposal (SSMP, 2015). The Joint Water Pollution Control Plant facility processes both primary and secondary treatment for an average flow of 280 mgd and a design capacity of 400 mgd (LACSD, 2016). Due to the plant's excess capacity (120 mgd), adequate capacity would be available to accommodate the increase in wastewater flow from buildout of the proposed TOD Plan (1.26 mgd), which represents 1.05 percent of the remaining treatment plant capacity. As a result, implementation of the proposed TOD Plan would not result in inadequate capacity of the wastewater treatment plant to serve the Plans projected demand in addition to existing service commitments.

Significance Conclusion for Impact 4.N-3

Implementation of the proposed TOD Plan would not result in inadequate capacity to serve the Plan's projected increased wastewater demand. As a result, impacts related to wastewater infrastructure would be less than significant.

Threshold 4.N-4: Construction or expansion of wastewater treatment facilities that could cause significant environmental effects.

Impact 4.N-4: Implementation of the proposed TOD Plan for Downtown Inglewood and Fairview Heights would not result in the construction or expansion of wastewater treatment facilities that could cause significant environmental effects. The resulting impact would be *less than significant*.

Methodology

The analysis of the proposed TOD Plan's impact on wastewater facilities identifies the increased amount of wastewater that would be generated by buildout of the TOD Plan and the capacity of the wastewater infrastructure serving the TOD Plan areas. The net increase in development that would occur under the TOD Plan was multiplied by the City's wastewater generation rates identified in Municipal Code Section 10-89 to determine the net increase in wastewater generation that would occur as the result of the proposed TOD Plan. The resulting increase in wastewater generation was compared with the available capacity of the infrastructure serving the TOD Plan areas. If infrastructure capacity would be exceeded, the physical impacts of constructing needed wastewater system improvements would be evaluated in relation to the physical environmental effects analyzed in

this EIR to determine whether construction of wastewater system improvements would have significant environmental effects.

Impact Assessment

The proposed TOD Plan would result in an increase of 2,693 residential units and 1,730,623 square feet of non-residential uses, which as shown in **Table 4.N-4**, would result in an approximate 1.26 mgd increase in wastewater generation. As previously described, the Existing Infrastructure Baseline Data for the TOD Plan report (JMC, 2015) did not identify any needs for infrastructure improvements or expansion to the City's sewer system to accommodate build out of the proposed TOD Plan. However, due to the general age of the sewer system, the City is implementing a proactive sewer rehabilitation program that evaluates age and infrastructure and prioritizes and replaces sewer lines as appropriate.

Implementation of development projects pursuant to the TOD Plan would increase the intensity of land uses within the TOD Plan area, and future site-specific development projects would install onsite sewer infrastructure and new connections to the sewer system that could include improvements to aged sewer pipelines and other connecting infrastructure. Such improvements would be required to be sized to accommodate the wastewater generation of such new development. Because the existing pipelines are generally from the 1960s, new development could result in the need to improve existing sewer lines within streets, alleys, and street rights-of-way that connect to future site-specific development projects.

Under the City's development review procedures for site-specific development projects, the City determines sewer system design requirements and the needs for any improvements to existing infrastructure that would be required by the City's construction permit and referenced directly in the design plans for the proposed development to assure adequate capacity (SSMP, 2015). The sewer design specifications for each site-specific development project would be required to comply with City standards (per the California Building Code) regarding requirements for design and operation of sewer distribution facilities.

The construction of any needed wastewater system improvements as part of future site-specific development projects under the proposed TOD Plan would generally occur along existing pipeline alignments and within existing streets, alleys, rights-of-way, and construction sites, and would be required to comply with all City Municipal Code standards and EIR mitigation measures regarding construction noise, air quality and dust suppression, erosion control (through the required SWPPP), and temporary construction traffic controls. These requirements would ensure that construction related impacts remain less than significant. As a result, potential impacts related to build out of the proposed TOD Plan would not result in construction of new or expanded wastewater facilities that could result in a significant environmental effect.

Significance Conclusion for Impact 4.N-4

Implementation of the proposed TOD Plan would not result in construction of new or expanded wastewater treatment facilities that could cause significant environmental effects. As a result, impacts related to wastewater infrastructure would be less than significant.

Threshold 4.N-5: Exceed applicable wastewater treatment requirements.

Impact 4.N-5: Implementation of the proposed TOD Plan for Downtown Inglewood and Fairview Heights would not result in an exceedance of applicable wastewater treatment requirements. The resulting impact would be less than significant.

Methodology

The analysis related to wastewater treatment requirements identifies the types of wastewater that is anticipated to be generated by implementation of the TOD Plan, and regulations related to wastewater. Impacts would be considered significant if implementation of the TOD Plan would not comply, would be in conflict with, or would exceed regulations related to wastewater, such that an impact on the environment could result.

Impact Assessment

The proposed TOD plan would result in an increase of 2,693 residential units and 1,730,623 square feet of non-residential uses, which would result in increased generation of wastewater. Wastewater generated by the proposed TOD Plan development would be treated at the LACSD Joint Water Pollution Control Plant for which wastewater treatment requirements have been established by the Los Angeles RWQCB NPDES Permit. Waste discharge requirements for the facility are based on all applicable state and federal regulations, policies and guidelines, and include limitations on effluent discharge and receiving water. In general, waste effluent discharge requirements include specifications for adequate disinfection treatment and limitations on radioactivity, pollutant concentrations, sediments, pH, temperature, and toxicity. Receiving water requirements include limitations related to temperature, sediments, pH, dissolved oxygen, fecal coliform and other pollutant concentrations, water clarity and color, turbidity, and toxicity. Additionally, the City has established sewer discharge standards (per Municipal Code Sections 10-221 and 10-222) that are implemented by the City's sewer connection permit program.

The land uses proposed by the TOD Plan include retail, residential, open space, light industrial, office, and mixed use that would not discharge wastewater that contains harmful levels of toxins that are regulated by the LARWQCB (such as large quantities of pesticides, herbicides, oil, grease, and other chemicals that are more typical in agricultural and industrial uses) and all effluent would comply with the wastewater treatment standards of the RWQCB and the City's Municipal Code and permitting process. Furthermore, discussed in Impact 4.N-6 below, wastewater generated by the TOD Plan would not exceed the existing capacity LACSD Joint Water Pollution Control Plant. Therefore, the TOD Plan would result in less than significant impacts related to the wastewater treatment requirements of the RWQCB.

Significance Conclusion for Impact 4.N-5

Implementation of the proposed TOD Plan would not exceed applicable wastewater treatment requirements. As a result, impacts would be less than significant.

4.N.4 STORMWATER DRAINAGE

APPLICABLE PLANS, POLICIES, AND PROGRAMS – STORMWATER DRAINAGE

Implementation of the proposed TOD Plan for Downtown Inglewood and Fairview Heights is subject to a range of federal, state, regional, and local plans, policies, and regulations, which are described below.

FEDERAL PLANS, POLICIES, AND REGULATIONS – STORMWATER DRAINAGE

Clean Water Act

The Clean Water Act established the basic structure for regulating discharges of pollutants into “waters of the U.S.” The act specifies a variety of regulatory and non-regulatory tools to manage stormwater runoff. Clean Water Act Section 402 is relevant to drainage in the proposed TOD Plan.

Section 402 regulates point- and nonpoint-source discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program. In California, the State Water Resources Control Board (SWRCB) oversees the NPDES program, which is administered by the RWQCBs. The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual permits.

National Pollutant Discharge Elimination System

The NPDES permit program under the Clean Water Act controls point and nonpoint water sources that discharge into “waters of the U.S.” California has an approved state NPDES program. The USEPA has delegated authority for NPDES permitting to the California State Water Resources Control Board (SWRCB), which has nine regional boards. The Los Angeles Regional Water Quality Control Board (LARWQCB or RWQCB) area includes the City of Inglewood. Under this system, discharge of stormwater runoff from construction areas of one acre or more requires either an individual permit issued by the RWQCB or coverage under the statewide Construction General Stormwater Permit for stormwater discharges. In addition, operational water discharges from land use operations that have direct stormwater discharges to navigable waters, are also required to obtain either an individual permit or obtain coverage under the statewide General Industrial Stormwater Permit.

STATE PLANS, POLICIES, AND REGULATIONS – STORMWATER DRAINAGE

Construction General Permit

The State of California adopted a Statewide NPDES Permit for General Construction Activity (Construction General Permit) on September 2, 2009 (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). The last Construction General Permit amendment became effective on February 16, 2012. The Construction General Permit regulates construction site storm water management. Dischargers whose projects disturb one or more acres of soil, or whose projects

disturb less than one acre, but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the general permit for discharges of storm water associated with construction activity. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

To obtain coverage under this permit, project operators must electronically file Permit Registration Documents, which include a Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and other compliance-related documents. The SWPPP is required to identify specific BMPs that would be implemented to control drainage from project sites.

California Water Resources Control Board Low Impact Development Policy

The SWRCB adopted the Low Impact Development (LID) Policy which, at its core, promotes the idea of “sustainability” as a key parameter to be prioritized during the design and planning process for future development. The SWRCB has directed its staff to consider sustainability in all future policies, guidelines, and regulatory actions. LID is a proven approach to manage stormwater. The RWQCBs are advancing LID in California in various ways, including provisions for LID requirements in renewed Phase I municipal stormwater NPDES permits.

REGIONAL PLANS, POLICIES, AND REGULATIONS – STORMWATER DRAINAGE

Los Angeles County Standard Urban Storm Water Mitigation Plan

Development in the City of Inglewood is subject to the Los Angeles County Standard Urban Storm Water Mitigation Plan (SUSMP), which provides drainage regulations for specific types of development projects. These types of development projects include:

- Ten or more unit homes (includes single-family homes, multi-family homes, condominiums, and apartments);
- Automotive service facilities (SIC codes 5013, 5014, 5541, 7532-7534, and 7536-7539);
- Restaurants (SIC code 5812);
- 100,000 square feet or more of impervious surface in industrial/commercial
- Retail gasoline outlet;
- Parking lot 5,000 square feet or more of surface area or with 25 or more parking spaces;
- Redevelopment projects in subject categories that meet redevelopment thresholds (SUSWMP 2000).

Development projects, included in the list above would be required to comply with the County SUSMP submittal requirements, as listed below:

- Provide a hydrology analysis to determine the design flow rate (QPM) or Volume (VM) for the first 3/4-inch of rainfall that must be treated.

- Submit site specific hydraulic calculations along with the recommended structural BMP manufacturer's product specifications to verify the BMP will adequately handle the minimum design flow required for treatment.
- Show locations of BMPs on building/drainage plans.
- Determine and provide the pre and post development pervious and impervious areas created by the proposed development.
- Submit Operation and Maintenance Guidelines that include the designated responsible party to manage the SUSMP devices, employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities, copies of resource agency permits. Inspection and servicing of all SUSMP devices must occur on an annual basis at a minimum.

The County lists example BMPs to be implemented on sites that would aid in stormwater drainage; examples of these include using minimum pavement widths and permeable pavement, directing of rooftop runoff to pervious areas, and including vegetated swales and strips and infiltration basins throughout the development (SUSWMP, 2000).

CITY OF INGLEWOOD

City of Inglewood General Plan

The City of Inglewood General Plan does not contain any stormwater drainage related policies that are relevant to the proposed TOD Plans.

City of Inglewood Municipal Code

Section 10-208, Low Impact Development Requirements for New Development and Redevelopment, establishes requirements for construction activities and facility operations of development and redevelopment projects to comply with the current MS4 Permit (Order No. R4-2012-0175), to lessen the water quality impacts of development by using smart growth practices, and integrate LID practices and standards for stormwater pollution mitigation through means of infiltration, evapotranspiration, biofiltration, and rainfall harvest and use. LID is required to be inclusive of new development and/or redevelopment requirements.

ENVIRONMENTAL SETTING – STORMWATER DRAINAGE

The main storm drain lines within the TOD Plan areas are owned and maintained by the Los Angeles County Flood Control District (LACFCD) and the City of Inglewood. The City owns and maintains approximately 12 miles of drainage pipelines and 464 catch basins; and the LACFCD has approximately 42 miles of storm drain pipelines and 889 catch basins within the City of Inglewood.

The storm drain main lines within the TOD Plan areas consist of Reinforced Concrete Pipe that varies from 24 to 96-inches in diameter and Reinforced Concrete Box structures. The general topography of the TOD Plan area slopes from north to south and east to west; therefore, the storm drain pipes gravity

flow generally from the northeast to southwest, and storm drain pipeline sizes generally increase from north to south.

The City of Inglewood drainage system drains into the various tributaries of each watershed discussed above. Typically, these areas are predominately channelized and highly developed with both commercial and residential properties. Most of the drainage networks are controlled by structural flood control measures, including debris basins, storm drains, underground culverts, and open concrete channels (City 2010).

SIGNIFICANCE CRITERIA – STORMWATER DRAINAGE

Criteria outlined in CEQA Guidelines were used to determine the level of significance of stormwater drainage impacts. Appendix G of state CEQA Guidelines indicates that a project would have a significant effect if it were to:

- 4.N-6 Result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

PROJECT IMPACTS AND MITIGATION MEASURES - STORMWATER DRAINAGE

Threshold 4.N-6: Construction of expansion of stormwater drainage facilities that could cause significant environmental damage.

Impact 4.N-6: Implementation of the proposed TOD Plan for Downtown Inglewood and Fairview Heights would not result in construction or expansion of stormwater drainage facilities. No impacts would occur.

Methodology

The analysis of the proposed TOD Plan's impact on storm water drainage facilities discusses changes in the amount of runoff that would be generated from changes in the amount of impervious surface area from build out of the proposed TOD Plan. The analysis also identifies the existing drainage infrastructure that serves the TOD Plan area. Should construction or expansion of existing stormwater drainage facilities be required, the physical impacts of constructing needed wastewater system improvements would be evaluated in relation to the physical environmental effects analyzed in this EIR to determine whether construction of stormwater drainage improvements would have significant environmental effects. Should no improvements to the drainage system be needed from build out of the proposed TOD Plan, then no impacts would result.

Impact Assessment

The TOD Plan area is a developed urban area that is primarily covered with impervious surfaces. No surface streams or rivers pass through the area. Stormwater run-off primarily sheet flows across impervious surfaces, and is collected by curbs and gutters and conveyed to underground storm drains.

The site-specific commercial, residential, industrial, institutional, and mixed-use development projects that would occur pursuant to the TOD Plan would generally have a similar amount of impervious surfaces as the existing uses they would replace and would therefore not generate an increase in the amount of runoff. A small number of currently vacant parcels and sites with pervious surface areas would be developed pursuant to the proposed TOD Plan, which would increase impervious surface areas on those sites and increase stormwater runoff from those sites.

As noted above, the TOD Plan proposes daylighting a portion of Centinela Creek, which is currently contained within an underground stormwater drainage pipeline, in the “Techtown” area (as described in Section 3.0, *Project Description*). This would provide an open stream with pervious surfaces replacing existing impervious surface area along that alignment, and thereby decrease the amount of runoff.

New development pursuant to the proposed TOD Plan would be required to provide for detention and infiltration of stormwater pursuant to SUSMP and LID requirements that are required in the City of Inglewood, which are designed to reduce and manage stormwater drainage. The SUSMP requires site-specific development projects to conduct a drainage hydrologic/hydraulic analysis and details the project’s anticipated runoff. From this analysis, a WQMP is required to ensure that a net increase in peak stormwater flows would not occur. Development projects are also required through implementation of project-specific WQMPs to detain and treat the storm water quality volume generated by the project. In addition, Inglewood Municipal Code Section 10-208 requires LID standards to reduce runoff through smart growth practices, such as stormwater infiltration, evapotranspiration, biofiltration, and rainfall harvest and use.

Site-specific development projects within the Downtown Inglewood and Fairview Heights TOD Plan areas would also be required to install landscaping along streets as part of the proposed Green Boulevards Network, increasing the amount of pervious surface areas within the TOD Plan areas’ roadway rights-of-way. These vegetated areas would help capture, detain, and utilize some surface water runoff for irrigation, which would reduce the amount of surface runoff in the storm drain pipelines.

Impacts of onsite stormwater detention and treatment facilities that would be required from new site-specific development projects pursuant to the proposed TOD Plan are included in the evaluation of site-specific development impacts within each section of this EIR.

Significance Conclusion for Impact 4.N-6)

Implementation of the proposed TOD Plan would not result in construction of new or expanded stormwater drainage facilities that could cause significant environmental effects. As a result, impacts related to stormwater drainage infrastructure would not occur.

4.N.5 NON-HAZARDOUS SOLID WASTE

APPLICABLE PLANS, POLICIES, AND PROGRAMS – NON-HAZARDOUS SOLID WASTE

Implementation of the proposed TOD Plan is subject to a range of federal, state, regional, and local plans, policies, and regulations, which are described below.

Federal Plans, Policies, and Regulations – Non-Hazardous Solid Waste

There are no applicable federal laws, regulations, or policies that pertain to solid waste and related to the proposed TOD Plan.

State Plans, Policies, and Regulations – Non-Hazardous Solid Waste

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (AB 939) redefined solid waste management in terms of both objectives and planning responsibilities for local jurisdictions and the State. The Act was adopted in an effort to reduce the volume and toxicity of solid waste that is land filled and incinerated by requiring local governments to prepare and implement plans to improve the management of waste resources. AB 939 required each of the cities and unincorporated portions of the counties to divert a minimum of 25 percent of the solid waste sent to landfills by 1995, and 50 percent by the year 2000. To attain goals for reductions in disposal, AB 939 established a planning hierarchy utilizing new integrated solid waste management practices. These practices include source reduction, recycling and composting, and environmentally safe landfill disposal and transformation.

Other state statutes pertaining to solid waste include compliance with the California Solid Waste Reuse and Recycling Act of 1991 (AB 1327), which requires adequate areas for collecting and loading recyclable materials within a project site.

California Assembly Bill 341

On October 6, 2011, Governor Brown signed AB 341 establishing a state policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020, and requiring CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. The bill also mandates local jurisdictions to implement commercial recycling by July 1, 2012.

City of Inglewood Plans, Policies, and Regulations – Non-Hazardous Solid Waste

Inglewood Municipal Code

Article 7 of the Inglewood Municipal Code (Construction and Demolition Recycling Program) requires diversion of a minimum of 50 percent of construction and demolition debris.

ENVIRONMENTAL SETTING – NON-HAZARDOUS SOLID WASTE

Consolidated Disposal Service (CDS) provides solid waste collection and recycling services within the City of Inglewood. Solid waste is collected and taken to CDS's American Waste Transfer Station at 1449 W. Rosecrans Ave, in Gardena, and then transported to the Sunshine Canyon Landfill. The Transfer Station has a 4,032-ton per day permitted capacity and a maximum permitted processing of 2,225 tons per day. The transfer station receives an average of 1,600 to 1,800 tons of solid waste per day.

The Sunshine Canyon Landfill has a maximum permitted capacity of 12,100 tons per day takes in an average of 7,582 tons per day (County 2014); the Landfill is projected to remain open until 2037 (CalRecycle 2016). In addition, to this landfill, other facilities that could serve Inglewood, including TOD Plan areas are listed below in Table 4.N-5.

**TABLE 4.N-5
 CAPACITY OF LANDFILLS IN THE REGION**

| Landfill | Distance from Inglewood | Maximum Permitted Daily Tons | Average Daily Tonnage (2014) | Remaining Average Daily Capacity 2014 (Tons) | Expected Closure |
|---|-------------------------|------------------------------|------------------------------|--|------------------|
| Calabasas Landfill | 35 miles | 3,500 | 707 | 2,793 | 2029 |
| Savage Canyon Landfill | 25 miles | 3,350 | 286 | 3,064 | 2055 |
| El Sobrante Landfill | 52 miles | 16,054 | 6,531 | 9,523 | 2045 |
| Simi Valley Landfill & Recycling Center | 40 miles | 6,000 | 2,442 | 3,558 | 2052 |
| Sunshine Canyon Landfill | 30 miles | 12,100 | 7,582 | 4,518 | 2037 |

Source: 2014 Annual Report Los Angeles County Countywide Integrated Waste Management Plan.

SIGNIFICANCE CRITERIA – NON-HAZARDOUS SOLID WASTE

Criteria outlined in CEQA Guidelines were used to determine the level of significance of non-hazardous solid waste impacts. Appendix G of state CEQA Guidelines indicates that a project would have a significant effect if it were to:

- 4.N-7 Be served by a landfill without sufficient permitted capacity to accommodate the project’s solid waste disposal needs; or
- 4.N-8 Not comply with federal, state, or local statutes or regulations related to solid waste.

PROJECT IMPACTS AND MITIGATION MEASURES - NON-HAZARDOUS SOLID WASTE

Threshold 4.N-7: Sufficient landfill capacity to accommodate project’s solid waste disposal needs.

Impact 4.N-7: Implementation of the proposed TOD Plan for Downtown Inglewood and Fairview Heights would increase generation of solid waste from the TOD Plan area, but would not exceed the capacity of landfill facilities. The resulting impact would be *less than significant*.

Methodology

The analysis of the proposed TOD Plan’s impact on landfill facilities identifies changes in the amount of solid waste that would be generated during construction and operation site-specific developments within the TOD Plan areas. The analysis identifies the anticipated amount of non-hazardous construction debris and operational solid waste that would be generated from implementation of the TOD Plan and the amount that would be disposed of in landfills after compliance with applicable

recycling/diversion requirements. It was assumed that demolition and construction activities would occur throughout implementation of the 20-year plan.

Solid waste generation after recycling/diversion was compared with the available capacity of the landfill serving the TOD Plan areas to assess the significance of the TOD Plan's solid waste generation during construction and at build out. Impacts were considered significant if development within the TOD Plan areas would result in a substantial increase in solid waste that would exceed available landfill capacity.

Impact Assessment

Demolition and Construction

The proposed TOD Plan would result in the future demolition of 40 residential units and 987,844 square feet of non-residential uses. In addition, TOD Plan buildout would result in a net increase of 2,693 residential units and 1,730,623 square feet of non-residential uses. Demolition and construction activities would occur over an anticipated 20-year period.

Demolition and construction activities generate solid waste, including cardboard, wood, metals, glass, plastics, concrete, asphalt, and other building materials. The average estimate of overall demolition waste from residential development is 111.3 pounds per square foot and construction waste from new residential development is 4.38 pounds per square foot. Demolition of non-residential uses is estimated to generate 137 pounds per square foot, and construction waste for non-residential is estimated to be 4.02 pounds per square foot (USEPA 1998). As shown in Table 4.N-6, it is estimated that demolition and construction would generate 142,307,979 pounds (71,154 tons) of solid waste over the 20-year build out of the proposed TOD Plan. This equates to approximately 5,694 pounds (2.8 tons) per day of solid waste (based on a 6 day per week landfill schedule).

**TABLE 4.N-6
ESTIMATED DEMOLITION AND CONSTRUCTION SOLID WASTE**

| | Amount of Demolition | Demolition Waste Pounds Per SF | Total Pounds of Demolition Waste | Amount of Construction | Construction Waste Pounds Per SF ¹ | Total Pounds Construction Waste | Total Pounds |
|--|----------------------|--------------------------------|----------------------------------|------------------------|---|---------------------------------|-----------------------------|
| Residential | 40 units | 111.3 | 4,452 | 2,693 | 4.38 | 11,735 | - |
| Non-Residential | 987,844 sf | 137 | 135,334,628 | 1,730,623 | 4.02 | 6,957,104 | - |
| Total Waste | | | 135,339,080 | | | 6,968,899 | 142,307,979 |
| Annual Total Waste | | | 6,766,954 | | | 348,445 | 7,115,399 |
| Daily Waste² | | | 21,689 | | | 1,117 | 22,806 |
| Daily Landfill Disposal Per Current Regulations | | | 10,844 | | | 559 | 11,403 |
| Daily Landfill Disposal in 2020 Per AB 341 | | | 5,415 | | | 279 | 5,694 (2.8 tons) |

Source: USEPA 1998.

SF = Square Feet.

¹ = Average residential square footage of 1,500

² = Based on a 6 day per week landfill schedule

As described above, the Sunshine Canyon Landfill has a maximum permitted capacity of 12,100 tons per day takes in an average of 7,582 tons per day, which results in an average remaining capacity of 4,518 (County, 2014). Thus, the landfill would have the capacity to dispose of the 2.8 tons of solid waste that is anticipated to be generated from demolition and construction activities that would occur by implementation of the proposed TOD Plan, and the proposed TOD Plan would not result in the need to expand the landfill or construct a new landfill. As a result, construction and demolition activities would result in less than significant impacts related to landfill facilities.

Operation

TOD Plan buildout would result in a net increase of 2,693 residential units and 1,730,623 square feet of non-residential use, and increase generation of solid waste. As shown in **Table 4.N-7**, buildout of the proposed TOD Plan would increase solid waste generation by an estimated 45,184 pounds (22.59 tons) per day. Based on the current recycling requirements, this would result in 11.3 tons of solid waste from operation of the proposed TOD Plan at build out. In 2020, when AB 341 becomes effective diversion of 75 percent of solid waste from landfills would be required, and solid waste landfill disposal from operation of the TOD Plan at build out would be reduced to approximately 5.6 tons per day.

**TABLE 4.N-7
INCREASED SOLID WASTE GENERATION AND DISPOSAL
FROM OPERATION OF THE PROPOSED TOD PLAN AT BUILD OUT**

| | Generation Factor ¹ | TOD Plan Increased Development | Increase in Solid Waste Generation |
|---|--------------------------------|--------------------------------|--|
| Residential | 12.23 lbs/du/day | 2,693 | 32,935 lbs/day |
| Non-Residential | 6 lbs/1,000 sf/day | 1,730,623 | 12,249 lbs/day |
| Total | | | 45,184 lbs/day 22.59 tons/day |
| Daily Landfill Disposal Amount Per Current Regulations | | | 11.3 tons/day |
| Daily Landfill Disposal Amount in 2020 Per AB 341 | | | 5.6 tons/day |
| ¹ Derived from a list of generation rates maintained by CalRecycle of a variety of generation rate sources at http://www.calrecycle.ca.gov/WASTECHAR/WasteGenRates/default.htm . CalRecycle does not provide standard solid waste generation rates by land use. | | | |
| ² These factors are estimates prior to recycling, composting or other waste diversion programs. | | | |

Waste generated within the TOD Plan area would continue to be hauled to the American Waste Transfer Station and then transported to the Sunshine Canyon Landfill for disposal. As described above, the Sunshine Canyon Landfill has a maximum permitted capacity of 12,100 tons per day takes in an average of 7,582 tons per day (County, 2014). The additional 5.96 tons of solid waste that would be generated by the TOD Plan would be within the daily tonnage accepted by the landfill. In addition, as shown above in **Table 4.N-5**, there are several other landfills with available capacity to be used for disposal of solid waste that would be generated by the TOD Plan.

Therefore, the increase in solid waste from operation of the proposed TOD Plan would not exceed existing landfill capacity.

Significance Conclusion for Impact 4.N-7

Implementation of the proposed TOD Plan would result in an increase in the generation of solid waste but would not exceed existing landfill capacity. As a result, impacts related to landfill capacity would be less than significant.

Threshold 4.N-8: Conflict with federal, state, or local statutes or regulations related to solid waste.

Impact 4.N-8: Implementation of the proposed TOD Plan for Downtown Inglewood and Fairview Heights would not conflict with federal, state, or local statutes or regulations related to solid waste. *No impact* would occur.

Methodology

The analysis related to solid waste regulations identifies the non-hazardous solid waste that is anticipated to be generated during both construction and operation of the TOD Plan, and how the Plan would implement the regulations related to disposal of that solid waste.

Impacts would be considered significant if implementation of the TOD Plan would not comply or would be in conflict with federal state, or local statutes or regulations related to solid waste, such that an impact on the environment could result.

Impact Assessment

The proposed TOD Plan would result in new site-specific development that would generate an increased amount of solid waste. All solid waste-generating activities within the City of Inglewood are subject to the requirements set forth in AB 939, as well as Article 7 of the Inglewood Municipal Code that requires diversion of a minimum of 50 percent of construction and demolition debris. In addition, after 2020 development projects pursuant to the TOD Plan would be required to divert 75 percent of solid waste pursuant to AB 341. Implementation of the proposed TOD Plan would be consistent with all state regulations as well as the Inglewood Municipal Code. All projects in the City undergo development review, which includes an analysis of project compliance with these programs. Therefore, future development under the proposed TOD Plan would comply with all solid waste policies and objectives; as a result of these development reviews.

Significance Conclusion for Impact 4.N-8

Implementation of the proposed TOD Plan would not conflict with federal, state, or local statutes or regulations related to solid waste that could cause significant environmental effects. As a result, impacts related to solid waste regulations would not occur.

4.N.6 REFERENCES – UTILITIES, SERVICE SYSTEMS, AND WATER SUPPLY

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