IV. Environmental Impact Analysis
G. Hydrology and Water Quality

1. Introduction

This section analyzes the Project's potential impacts with regard to hydrology and water quality. This analysis is based on the *Water Resources Technical Report* prepared by KPFF Consulting Engineers dated February 2021. This report is included as Appendix I of this Draft EIR.

2. Environmental Setting

a. Regulatory Framework

(1) Federal

(a) Clean Water Act

The Clean Water Act was first introduced in 1948 as the Water Pollution Control Act. The Clean Water Act authorizes federal, state, and local entities to cooperatively create comprehensive programs for eliminating or reducing the pollution of state waters and tributaries. The primary goals of the Clean Water Act are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. As such, the Clean Water Act forms the basic national framework for the management of water quality and the control of pollutant discharges. The Clean Water Act sets forth a number of objectives in order to achieve the above-mentioned goals. These objectives include regulating pollutant and toxic pollutant discharges; providing for water quality that protects and fosters the propagation of fish, shellfish and wildlife; developing waste treatment management plans; and developing and implementing programs for the control of non-point sources of pollution.[1] The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) are the primary state agencies responsible for implementing the Clean Water

[1] *Non-point sources of pollution are carried through the environment via elements such as wind, rain, or stormwater and are generated by diffuse land use activities (such as runoff from streets and sidewalks or agricultural activities) rather than from an identifiable or discrete facility.*

Act and regulating the activities and factors that affect or have the potential to affect water quality in the state.

The Clean Water Act provides the legal framework for several water quality regulations including the National Pollutant Discharge Elimination System (NPDES), effluent limitations, water quality standards, pretreatment standards, anti-degradation policy, non-point source discharge programs, and wetlands protection. An NPDES permit is required for all discharges of pollutants to waters of the United States from any point source. Federal regulations issued in November 1990 and revised in 2003 expanded the original scope of the NPDES program to include the permitting of stormwater discharges from construction sites that disturb areas larger than one acre. Stormwater discharges from construction sites with a disturbed area of one or more acres require either an individual NPDES permit or coverage under the Construction General Permit of the state. The latter is accomplished by completing a construction site risk assessment to determine the appropriate coverage level; preparing a Stormwater Pollution Prevention Plan (SWPPP), including site maps, a Construction Site Monitoring Program, and sediment basin design calculations; completing a post-construction water balance calculation for hydromodification controls for projects located outside of a Phase I or Phase II permit area; and completing a Notice of Intent.

The primary objective of the SWPPP is to identify and apply proper construction, implementation, and maintenance of Best Management Practices (BMPs) to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction. The SWPPP also outlines the monitoring and sampling program required for the construction site to verify compliance with discharge Numeric Action Levels set by the Construction General Permit.

In addition to regulating non-stormwater discharges, the Clean Water Act sets forth water quality standards based on a water body's designated beneficial uses (e.g., wildlife habitat, agricultural supply, fishing etc.), along with water quality criteria necessary to support those uses. Water quality criteria are either prescribed concentrations or levels of constituents such as lead, suspended sediment, and fecal coliform bacteria, or narrative statements which represent the quality of water that support a particular use.

When designated beneficial uses of a particular receiving water body are being compromised by water quality, Section 303(d) of the Clean Water Act requires identifying and listing that water body as "impaired." Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be established for the pollutant(s) or flows causing the impairment. A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards. Those facilities and activities that are discharging into the water body, collectively, must not exceed the TMDL. The United States Environmental Protection

Agency (USEPA) oversees the 303(d) program and either the USEPA or the SWRCB establishes the TMDL schedule for individual constituents.

In addition to trash and debris, common pollutants of concern that have the potential to affect water quality generally fall into one of the following seven categories: sediments, nutrients, bacteria/viruses, oil/grease, metals, organic compounds, and pesticides.

(b) Federal Antidegradation Policy

The Federal Antidegradation Policy requires states to develop statewide antidegradation policies and identify methods for implementing them.[2] Pursuant to the Code of Federal Regulations (CFR), state antidegradation policies and implementation methods must, at a minimum, protect and maintain: (1) existing in-stream water uses; (2) existing water quality where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource. State permitting actions must be consistent with the Federal Antidegradation Policy.

(c) Safe Drinking Water Act

The federal Safe Drinking Water Act, established in 1974, sets drinking water standards throughout the country and is administered by the USEPA. The drinking water standards established in the Safe Drinking Water Act, as set forth in the Code of Federal Regulations, are referred to as the National Primary Drinking Water Regulations and the National Secondary Drinking Water Regulations.[3] California passed its own Safe Drinking Water Act in 1986 that authorizes the State's Department of Health Services to protect the public from contaminants in drinking water by establishing maximum contaminants levels, as set forth in the California Code of Regulations, Title 22, Division 4, Chapter 15, that are at least as stringent as those developed by the USEPA, as required by the federal Safe Drinking Water Act.

(2) State

(a) California Water Code

Under the California Water Code, the State of California is divided into nine regions governed by regional boards that, under the guidance and review of the SWRCB,

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[2] *Refer to Code of Federal Regulations, Title 40, Section 131.12.*

[3] *Refer to Code of Federal Regulations, Title 40, Part 141 with regard to the Primary Standards and to Title 40, Part 143 with regard to the Secondary Drinking Standards.*

implement and enforce provisions of the California Water Code and the Clean Water Act. The Project Site is located within Region 4, also known as the Los Angeles Region, and governed by the Los Angeles RWQCB (LARWQCB).

Section 13050 of the California Water Code defines "pollution," "contamination," and "nuisance." Briefly defined, pollution means an alteration of water quality such that it unreasonably affects the beneficial uses of water. Contamination means an impairment of water quality to the degree that it creates a hazard to the public health. Nuisance is defined as anything that is injurious to health, is offensive to the senses, or is an obstruction to property use, and which affects a considerable number of people.

(b) Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (embodied in the California Water Code) established the principal California legal and regulatory framework for water quality control. The Porter-Cologne Water Quality Control Act includes provisions to address the requirements of the Clean Water Act, including NPDES permitting, dredge and fill programs, and civil and administrative penalties. The Porter-Cologne Water Quality Control Act also addresses issues relating to the conservation, control, and utilization of the water resources of the state. Under the Porter-Cologne Water Quality Control Act, the quality of all the waters of the state (including groundwater and surface water) must be protected for the use and enjoyment by the people of the state.

(c) California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the *Statement of Policy with Respect to Maintaining High Quality Water in California* was adopted by the SWRCB (State Board Resolution No. 68-16) in 1968. Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the state, not just surface waters. The policy states that whenever the existing quality of a water body is better than the quality established in individual basin plans, such high quality shall be maintained and discharges to that water body shall not unreasonably affect present or anticipated beneficial use of such water resource.

(d) California Toxics Rule

The California Toxics Rule establishes water quality criteria for certain toxic substances to be applied to waters in the state. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water such as inland surface waters and enclosed bays and estuaries that are designated by the LARWQCB as having beneficial uses protective of aquatic life or human health.

(e) National Pollutant Discharge Elimination System

The LARWQCB issues combined NPDES permits under the Clean Water Act and Waste Discharge Requirements (under the California Water Code) to point dischargers of waste to surface waters. To ensure protection of water quality, NPDES permits may contain effluent limitations for pollutants of concern, pollutant monitoring frequencies, reporting requirements, schedules of compliance (when appropriate), operating conditions, BMPs, and administrative requirements. NPDES permits apply to publicly-owned treatment works discharges; industrial wastewater discharges; and municipal, industrial, and construction site stormwater discharges. Further discussion of the LARWQCB stormwater discharge permitting activities is provided below.

(i) Construction

The Clean Water Act requires coverage under a NPDES construction permit for stormwater discharges to surface waters associated with various construction activities, except activities that result in disturbance of less than one acre of total land area which are not part of a larger common plan of development or sale. The SWRCB has issued a statewide NPDES Construction General Permit for stormwater discharges from construction sites. Any project that disturbs an area more than one acre, as well as linear underground/overhead projects disturbing over one acre, requires a Notice of Intent to discharge under the Construction General Permit. The Construction General Permit includes three levels of risk for construction sites based on calculated project sediment and receiving water risk. The Construction General Permit includes measures to eliminate or reduce pollutant discharges through implementation of a SWPPP, which describes the implementation and maintenance of BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction. The Construction General Permit contains receiving water limitations that require stormwater discharges to not cause or contribute to a violation of any applicable water quality standard. The permit also requires implementation of programs for visual inspections and sampling for specified constituents (e.g., nonvisible pollutants). In addition, based upon particular project risk levels, monitoring is required for stormwater discharges.

(ii) Operation

In accordance with Section 402(p) of the Clean Water Act, municipal NPDES permits prohibit the discharge of non-stormwater except under certain conditions and require controls to reduce pollutants in discharges to the maximum extent practicable. Such controls include BMPs, as well as system, design, and engineering methods. Under the municipal NPDES permit, permittees are required to implement a development planning program to address stormwater pollution. These programs require project applicants for certain types of projects to implement Standard Urban Stormwater Mitigation Plans (SUSMP) throughout the operational life of their projects. The purpose of the

SUSMP is to reduce the discharge of pollutants in stormwater by outlining BMPs which must be incorporated into the design plans of new development and redevelopment. These treatment control BMPs must be sufficiently designed and constructed to treat or filter either the first 0.75 inch of stormwater runoff from a storm event or the runoff associated with the 85th percentile, 24-hour storm event, whichever is greater. A project is subject to SUSMP if it falls under one of the categories listed below:

- Single-family hillside homes;
- Ten or more unit homes (including single-family homes, multi-family homes, condominiums, and apartments);
- Automotive service facilities;
- Restaurants;
- One acre or more of impervious surface in industrial/commercial development;
- Retail gasoline outlet;
- Parking lots with 5,000 square feet or more of surface area or with 25 or more parking spaces; and/or
- Located within or directly adjacent to or discharging directly to an environmentally sensitive area if the discharge is likely to impact a sensitive biological species or habitat and the development creates 2,500 square feet or more of impervious surface.

(f) California Green Building Standards Code

The California Green Building Standards Code (CALGreen Code), Part 11 of the California Building Standards Code (Title 24) is designed to improve public health, safety, and general welfare by utilizing design and construction methods that reduce the negative environmental impact of development and encourage sustainable construction practices.

The CALGreen Code provides mandatory direction to developers of all new construction and renovations of residential and non-residential structures with regard to all aspects of design and construction, including but not limited to site drainage design, stormwater management, and water use efficiency. Required measures are accompanied by a set of voluntary standards designed to encourage developers and cities to aim for a higher standard of development.

(g) California Water Plan

The California Water Plan provides a framework for water managers, legislators, and the public to consider options and make decisions regarding California's water future. The California Water Plan, which is updated every five years, presents basic data and information on California's water resources including water supply evaluations and assessments of agricultural, urban, and environmental water uses to quantify the gap between water supplies and uses. The California Water Plan also identifies and evaluates existing and proposed statewide demand management and water supply augmentation programs and projects to address the state's water needs.

(h) Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act established a new structure for managing California's groundwater resources at a local level by local agencies. The Sustainable Groundwater Management Act requires, by June 30, 2017, the formation of locally controlled groundwater sustainability agencies in the State's high- and medium-priority groundwater basins and subbasins. A groundwater sustainability agency is responsible for developing and implementing a groundwater sustainability plan to meet the sustainability goal of the basin to ensure that it is operated within its sustainable yield, without causing undesirable results. The Groundwater Sustainability Plan Emergency Regulations for evaluating groundwater sustainability plans, the implementation of groundwater sustainability plans, and coordination agreements were adopted by the Department of Water Resources and approved by the California Water Commission on May 18, 2016.

(3) Local

(a) County of Los Angeles Hydrology Manual

The Los Angeles County Department of Public Works' Hydrology Manual (Hydrology Manual) requires that a storm drain conveyance system be designed for a 25-year storm event and that the combined capacity of a storm drain and street flow system accommodate flow from a 50-year storm event. Areas with sump conditions are required to have a storm drain conveyance system capable of conveying flow from a 50-year storm event.[4] The County also limits the allowable discharge into existing storm drain facilities based on the municipal separate stormwater sewer systems permit and is enforced on all new developments that discharge directly into the County's storm drain system. Any proposed drainage improvements of County-owned storm drain facilities such as catch basins and storm drain lines requires the approval/review from the County Flood Control

[4] *Los Angeles County Department of Public Works, Hydrology Manual, January 2006.*

District department. The City of Los Angeles has also adopted the Hydrology Manual as its basis of design for storm drain facilities.

(b) County of Los Angeles Stormwater Quality Management Program

The Los Angeles County NPDES Permit contains provisions for implementation of the Stormwater Quality Management Program by the Co-Permittees (collectively, the 84 Los Angeles County cities, including the City of Los Angeles, and Los Angeles County). The Stormwater Quality Management Program states that Permittees are required to implement the most effective combination of BMPs for stormwater/urban runoff pollution control. The objective of the Stormwater Quality Management Program is to reduce pollutants in urban stormwater discharges to the maximum extent practicable in order to attain water quality objectives and to protect the beneficial uses of receiving waters in Los Angeles County.

(c) Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties

As required by the California Water Code, the LARWQCB has adopted a plan entitled *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). Specifically, the Basin Plan designates beneficial uses for surface waters and groundwater, sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's Antidegradation Policy, and describes implementation programs to protect all waters in the Los Angeles Region.[5] In addition, the Basin Plan incorporates (by reference) all applicable state and RWQCB plans and policies and other pertinent water quality policies and regulations. Those of other agencies are referenced in appropriate sections throughout the Basin Plan. The Basin Plan is a resource for the RWQCB and others who use water and/or discharge wastewater in the Los Angeles Region. Other agencies and organizations involved in environmental permitting and resource management activities also use the Basin Plan. The Basin Plan also provides valuable information to the public about local water quality issues.

(d) Enhanced Watershed Management Program for the Upper Los Angeles River

The Enhanced Watershed Management Program for the Upper Los Angeles River, published in 2015, is an effort by the City, the County of Los Angeles, and

[5] *LARWQCB, LARWQCB Basin Plan, www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/, accessed February 18, 2021.*

16 municipalities[6] to facilitate a comprehensive approach to stormwater management for the Los Angeles River watershed. The effort encompasses 485 square miles of watershed and over 50 miles of mainstream of the Los Angeles River. The objective of the Enhanced Watershed Management Program is to determine the network of BMPs that will achieve required pollutant reductions while also providing multiple benefits to the community and leveraging sustainable green infrastructure practices. To achieve its goals, the Enhanced Watershed Management Program establishes water quality priorities based on whether TMDLs have been developed, identifies watershed control measures including regional BMPs, and sets compliance targets for each of the 18 jurisdictions. The $6 billion plan sets a deadline to achieve final compliance for all adopted TMDL milestones by 2037.

(e) City of Los Angeles Water Quality Compliance Master Plan for Urban Runoff

In 2009, the City of Los Angeles adopted the Water Quality Compliance Master Plan, a 20-year strategy for clean stormwater and urban runoff to reduce the pollution flowing into local rivers, creeks, lakes and beaches. By promoting green infrastructure, the Water Quality Compliance Master Plan seeks a broad watershed-based perspective using green and natural solutions to improve water quality and maintain Los Angeles' compliance with current and emerging watering quality regulations. The Water Quality Compliance Master Plan includes the following:

- Describes the existing status of urban runoff management in Los Angeles and watershed management efforts by Los Angeles and other organizations;
- Identifies key issues for the future of urban runoff management;
- Provides strategic guidelines for improving the quality of Los Angeles' rivers, creeks, lakes, and ocean;
- Identifies opportunities for collaboration among City departments and with non-governmental organizations; and
- Describes how rainwater can be used beneficially to augment our water supply.

(f) City of Los Angeles Proposition O

On November 2, 2004, City of Los Angeles voters passed Proposition O, a $500 million bond authorizing the City to fund projects that protect public health, capture

[6] *Includes Alhambra, Burbank, Calabasas, Glendale, Hidden Hills, La Cañada Flintridge, Montebello, Monterey Park, Pasadena, Rosemead, San Fernando, San Gabriel, San Marino, South El Monte, South Pasadena, and Temple City.*

stormwater for reuse and meet CWA requirements through removal and prevention of pollutants entering regional waterways.[7] A number of projects targeted at improving water quality have been authorized using Proposition O funds, including, but not limited to, the Temescal Canyon Park Stormwater BMP, Los Angeles Zoo Parking Lot, the Westchester Stormwater BMP, and the Echo Park Lake Rehabilitation Project. In addition, Proposition O funds were used for the Catch Basin Screen Cover and Insert Project, which provided for the installation of catch basin inserts and screen covers throughout the City beginning in 2005. Phase IV of the Catch Basin Screen Cover and Insert Project, which will retrofit catch basin inserts and screen covers not replaced in previous phases, as well as all state and county catch basins within the City, is currently under construction.[8]

(g) Los Angeles Municipal Code

Any proposed drainage improvements within the street right-of-way or any other property owned by, to be owned by, or under the control of the City requires the approval of a B-permit (Section 62.105, Los Angeles Municipal Code [LAMC]). Under the B-permit process, storm drain installation plans are subject to review and approval by the City of Los Angeles Department of Public Works Bureau of Engineering. Additionally, any connections to the City's storm drain system from a property line to a catch basin or a storm drain pipe requires a storm drain permit from the City of Los Angeles Department of Public Works, Bureau of Engineering.

Earthwork activities, including grading, are governed by the Los Angeles Building Code, which is contained in Chapter IX, Article 1 in the LAMC. Section 64.70 of the LAMC sets forth the City's Stormwater and Urban Runoff Pollution Control Ordinance. The ordinance prohibits the discharge of the following into any storm drain system:

- Any liquids, solids, or gases, which by reason of their nature or quantity are flammable, reactive, explosive, corrosive, or radioactive, or by interaction with other materials could result in fire, explosion, or injury.
- Any solid or viscous materials, which could cause obstruction to the flow or operation of the storm drain system.

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[7] *LA Stormwater, Proposition O, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-wp/s-lsh-wwd-wp-po?_adf.ctrl-state=xa1t8dcct_447&_afrLoop=18200376298857272#!, accessed February 18, 2021.*

[8] *LA Stormwater, Catch Basin Inserts and Screen Covers, www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-wp/s-lsh-wwd-wp-po/s-lsh-wwd-wp-po-p/s-lsh-wwd-wp-po-p-cb1?_afrLoop=2722853658301310&_afrWindowMode=0&_afrWindowId=flt0p4in5&_adf.ctrl-state=enel459jt_78#!%40%40%3F_afrWindowId%3Dflt0p4in5%26_afrLoop%3D2722853658301310%26_afrWindowMode%3D0%26_adf.ctrl-state%3Denel459jt_82, accessed February 18, 2021.*

- Any pollutant that injures or constitutes a hazard to human, animal, plant, or fish life, or creates a public nuisance.

- Any noxious or malodorous liquid, gas, or solid in sufficient quantity, either singly or by interaction with other materials, which creates a public nuisance, hazard to life, or inhibits authorized entry of any person into the storm drain system.

- Any medical, infectious, toxic, or hazardous material or waste.

In addition, unless otherwise permitted by a NPDES permit, the ordinance prohibits industrial and commercial developments from discharging untreated wastewater or untreated runoff into the storm drain system. Furthermore, the ordinance prohibits trash or any other abandoned objects/materials from being deposited, such that they could be carried into the storm drains. Lastly, the ordinance not only makes it a crime to discharge pollutants into the storm drain system and imposes fines on violators but also gives City public officers the authority to issue citations to or arrest business owners or residents who deliberately and knowingly dump or discharge hazardous chemicals or debris into the storm drain system.

(h) Low Impact Development

In October 2011, the City of Los Angeles passed its Low Impact Development (LID) Ordinance (Ordinance No. 181,899), amending Chapter VI, Article 4.4, Sections 64.70.01 and 64.72 of the LAMC to expand the applicability of the existing SUSMP requirements by imposing rainwater LID strategies on projects that require building permits. The City's LID Ordinance was adopted in November 2011 and officially became effective on May 12, 2012.[9] The goal of LID practices is to remove nutrients, bacteria, and metals from stormwater while also reducing the quantity and intensity of stormwater flows. The City's LID Ordinance requires rainwater from either a 0.75-inch rainstorm or runoff from the 85th percentile, 24-hour storm event (whichever is greater) to be captured, infiltrated, and/or used on-site at most developments and redevelopments where more than 500 square feet of hardscape is added.

[9] *LA Stormwater, Low Impact Development (LID) 2-Sided Brochure.*

b. Existing Conditions

(1) Surface Water Quality

(a) Regional

The Project Site is located within the Los Angeles River Watershed Reach 2. According to the State Water Resources Control Board, water quality in the middle and lower portion of the Los Angeles River Watershed has been impaired by pollutants from dense clusters of residential, industrial, and other urban activities. Constituents of concern listed for Los Angeles River Watershed Reach 2 under California's Clean Water Act Section 303(d) List include Ammonia, Coliform Bacteria, Copper, Lead, Nutrients (Algae), Oil and Trash.

Pursuant to Section 303(d) of the federal Clean Water Act, the state and RWQCBs identify impaired bodies of water that do not meet water quality standards and prioritizes and schedules them for development of Total Maximum Daily Loads (TMDLs). A TMDL specifies the maximum amount of a pollutant that a water body can receive and still meet water quality standards. Those facilities and activities that are discharging into the water body, collectively, must not exceed the TMDL. No Total Maximum Daily Load data have been recorded by USEPA for this waterbody.[10]

(b) Local

In general, urban stormwater runoff occurs following precipitation events. The volume of runoff flowing into the drainage system depends on the intensity and duration of the rain event. Contaminants that may be found in stormwater from developed areas include sediments, trash, bacteria, metals, nutrients, organics and pesticides. The source of contaminants includes surface areas where precipitation falls, as well as the air it falls through. Contaminants on surfaces such as roads, maintenance areas, parking lots, and buildings, which are usually contained in dry weather conditions, may be carried by rainfall runoff into drainage systems. As discussed above, as part of Proposition O, the City has installed catch basins with screens to capture debris before entering the storm drain system. In addition, the City conducts routine street cleaning operations as well as periodic cleaning and maintenance of catch basins to reduce stormwater pollution within the City.[11]

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[10] *1111 Sunset Water Resources Technical Report, KPFF Consulting Engineers, February 2021.*

[11] *1111 Sunset Water Resources Technical Report, KPFF Consulting Engineers, February 2021.*

(c) On-Site

The Project Site currently does not have structural BMPs for the treatment of stormwater runoff from existing impervious surfaces such as building roof areas and pavements. As described in Section II, Project Description, of this Draft EIR, most of the existing buildings on the Project Site are currently vacant. Therefore, there are limited activities that currently occur on the Project Site that would have the potential to contribute pollutants in stormwater runoff. With regard to the Elysian apartment building, which is currently operational but not part of the Project, there are a range of non-structural BMPs and environmental water quality measures that are currently utilized to minimize the impact of pollutant sources. These include general housekeeping practices such as regular trash collection, spill prevention and response activities where applicable; proper storage of hazardous materials and wastes; and substituting environmentally friendly products for environmentally hazardous products, such as soaps, solvents, and pesticides. In addition, stormwater runoff from the minimal existing pervious surfaces such as the landscaped areas and lawns is naturally treated to some extent by existing vegetation and the absorptive properties of the existing soils. Based on the existing operations within the Project Site, the on-site runoff likely contains the following pollutants of concern: sediment, nutrients, pesticides, metals, pathogens, and oil and grease.[12]

(2) Surface Water Hydrology

(a) Regional

As previously noted, the Project Site is located within the Los Angeles River Watershed Reach 2 in the Los Angeles Central Basin. The Los Angeles River Watershed encompasses a land area of approximately 834 square miles. The eastern portion of the Los Angeles River Watershed spans from the Santa Monica Mountains to Simi Hills and in the west from the Santa Susana Mountains to the San Gabriel Mountains. The Los Angeles River Watershed is shaped by the path of the Los Angeles River, which flows from its headwaters in the mountains eastward toward the northern corner of Griffith Park. There the channel turns southward through Glendale Narrows before it flows across the coastal plan and into San Pedro near Long Beach. Approximately 324 square miles of the Los Angeles River Watershed are covered by forest or open space, while the remainder of the Los Angeles River Watershed is highly urbanized. The Los Angeles River Watershed covers over 44 cities and unincorporated communities and is composed of the following

[12] *1111 Sunset Water Resources Technical Report, KPFF Consulting Engineers, February 2021.*

land uses: 44 percent open space, 37 percent residential, 11 percent industrial, and 8 percent commercial.[13]

(b) Local

Stormwater runoff is collected from the Project Site and conveyed through offsite storm drain facilities under the public streets surrounding the Project Site. Underground storm drainage facilities along Sunset Boulevard are owned and maintained by Los Angeles County. Based on City of Los Angeles record data, there is an existing 48-inch reinforced concrete pipe on Sunset Boulevard.

(c) On-Site

The Project Site is approximately 72 percent impervious and is not crossed by any water courses or rivers. Stormwater from the Project Site is conveyed by sheet flow in all directions given the grade difference across the Project Site. Based on the existing contours of stormwater runoff, from a hydrological perspective, the Project Site is divided into five drainage areas (referred to herein as drainage subareas 1 through 5). Stormwater runoff is ultimately directed to the catch basins at the Sunset Boulevard and Beaudry Avenue intersection and the Beaudry Avenue and Bartlett Street intersection. As shown in Table IV.G-1 on page IV.G-30 in the analysis below, the 50-year frequency storm event peak flow rate within the existing Project Site is 22.82 cubic feet per second.[14]

(3) Groundwater Quality

(a) Regional

In general, due to historical activities and practices, groundwater quality in the City has been substantially degraded. The degradation of regional groundwater is a result of seepage into the subsurface of fertilizers and pesticides from agricultural uses, nitrogen and pathogenic bacteria from septic tanks, and various hazardous substances from leaking aboveground and underground storage tanks and industrial-type operations.

The City overlies the Los Angeles Coastal Plain Groundwater Basin. This basin falls under the jurisdiction of the LARWQCB. According to LARWQCB's Basin Plan, water quality objectives applying to all ground waters of the region include those concerning bacteria, chemical constituents and radioactivity, mineral quality, nitrogen (nitrate and nitrite), and taste and odor.

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[13] *Los Angeles County Department of Public Works, Watershed Management Division, Los Angeles River Watershed, http://dpw.lacounty.gov/wmd/watershed/LA, accessed February 18, 2021.*

[14] *1111 Sunset Water Resources Technical Report, KPFF Consulting Engineers, February 2021.*

(b) Local

The Project Site specifically overlies the Central Subbasin within the Los Angeles Coastal Plain Groundwater Basin. Based upon LARWQCB's Basin Plan, constituents of concern listed for the Central Subbasin include boron, chloride, sulfate, and Total Dissolved Solids (TDS).

(c) On-Site

Though it is possible for surface water borne contaminants to percolate into groundwater and affect groundwater quality, as the Project Site is 72-percent impervious in the existing condition, no appreciable infiltration of potential contaminants described above is expected to occur. As most of the existing buildings on the Project Site are currently vacant, groundwater quality is not impacted by existing activities at the Project Site.

Other types of risk such as underground storage tanks (USTs) have a greater potential to impact groundwater. As discussed in Section IV.F, Hazards and Hazardous Materials, of this Draft EIR, while no evidence of existing USTs was observed on the Project Site, SCAQMD and Los Angeles Fire Department (LAFD) records indicate the permitting and installation of a 500-gallon diesel-fuel UST associated with the Project Site's former use as the MWD headquarters. Based on SCAQMD and LAFD records, the UST appears to be located near the northern perimeter of the Project Site, as part of the Elysian apartment building. Records also indicate that a 500-gallon UST is used by the Elysian apartment building for a backup generator.

(4) Groundwater Hydrology

(a) Regional

Groundwater use for domestic water supply is a major beneficial use of groundwater basins in Los Angeles County. The City of Los Angeles overlies the Los Angeles Coastal Plain Groundwater Basin. The Los Angeles Coastal Plain Groundwater Basin is comprised of the Hollywood, Santa Monica, Central, and West Coast Groundwater Subbasins. Groundwater flow in the Los Angeles Coastal Plain Groundwater Basin is generally south-southwesterly and may be restricted by natural geological features. Replenishment of groundwater basins occurs mainly by percolation of precipitation throughout the region via permeable surfaces, spreading grounds, and groundwater migration from adjacent basins, as well as injection wells designed to pump freshwater along specific seawater barriers to prevent the intrusion of salt water.

(b) Local

The Project Site is located in the Elysian Hills, which is north of the Los Angeles Coastal Plain Groundwater Basin. Within the Los Angeles Coastal Plain Groundwater Basin, the Project Site specifically overlies the Central Subbasin. The Central Subbasin is bounded on the north by the La Brea high surface divide, on the northeast and east by the less permeable rocks of the Elysian, Repetto, Merced, and Puente Hills, on the southeast by the drainage boundary Coyote Creek, and the southwest by the Newport-Inglewood fault. The Los Angeles and San Gabriel Rivers pass across the surface of the Central Subbasin on their way to the Pacific Ocean. The Central Subbasin encompasses a surface area of approximately 277 square miles and is estimated to have a total storage capacity of approximately 13.8 million acre-feet. Groundwater in the Central Subbasin is replenished by percolation of precipitation and stream flow from the Santa Monica Mountains to the north. Urbanization in this area has decreased the amount of pervious surface area allowing direct percolation. Therefore, natural recharge is somewhat limited. The natural safe yield of the Central Subbasin is estimated to be approximately 3,000 acre-feet per year.[15]

(c) On-Site

As previously noted, the Project Site overlies the Central Subbasin of the Coastal Plain of the Los Angeles Groundwater Basin. The Project Site slopes generally in a 10:1 gradient with a total elevation difference of 51 feet. Specifically, the current ground surface ranges from 381 feet above mean sea level on the southwestern corner of the Project Site to approximately 432 feet along White Knoll Drive. Due to the elevation differences across the Project Site, a singular groundwater elevation does not apply to the Project Site. Rather, groundwater can be found at various elevations within the Project Site while it may not be encountered in other portions of the Project Site. Data from the California Division of Mines and Geology indicate the historic high groundwater level on the Project Site is approximately 20 feet below ground surface with the nearest water contour approximately 0.7 mile to the south indicating the soil is not fully saturated. As part of the Geotechnical Investigation included in Appendix G.1 of this Draft EIR, four borings were drilled at ground surface elevations between 400.5 feet and 422.5 feet. The four borings encountered water seepage at depths ranging between 16 feet and 62 feet below ground surface. Fluctuations on the level of groundwater may occur due to variations in rainfall and temperature.

As discussed above, the Project Site is 72-percent impervious in the existing condition. Accordingly, there is currently limited groundwater recharge potential within the

[15] *1111 Sunset Water Resources Technical Report, KPFF Consulting Engineers, February 2021.*

Project Site. There are no groundwater production wells or public water supply wells within the Project Site or in the vicinity of the Project Site.

(5) Flood Zone

Based on the Federal Emergency Management Agency Flood Insurance Rate Maps for the Project Site, the Project Site is not located within a 100-year flood zone.

3. Project Impacts

a. Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, a project would have a significant impact related to hydrology and water quality if it would:

Threshold (a): ***Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;***

Threshold (b): ***Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;***

Threshold (c): ***Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

(i) result in substantial erosion or siltation on- or off-site;

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

(iv) Impede or redirect flood flows?

Threshold (d): ***In a flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?***

Threshold (e): ***Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?***

Threshold (f): Require or result in the relocation or construction of new or expanded storm water drainage facilities, the construction or relocation of which could cause significant environmental effects.

For this analysis, the Appendix G Thresholds listed above are relied upon. The analysis utilizes factors and considerations identified in the City's 2006 L.A. CEQA Thresholds Guide, as appropriate, to assist in answering the Appendix G Threshold questions.

The L.A. City CEQA Thresholds Guide identifies the following criteria to evaluate hydrology and water quality impacts:

(1) Surface Water Hydrology

- Would the project cause flooding during the projected 50-year developed storm event, which would have the potential to harm people or damage property or sensitive biological resources?

- Would the project substantially reduce or increase the amount of surface water in a water body?

- Would the project result in a permanent, adverse change to the movement of surface water sufficient to produce a substantial change in the current or direction of water flow?

(2) Surface Water Quality

- Would the project result in discharges that would create pollution, contamination or nuisance as defined in Section 13050 of the California Water Code or that cause regulatory standards to be violated, as defined in the applicable NPDES stormwater permit or Water Quality Control Plan for the receiving water body.

As defined in the California Water Code:

- "Pollution" means an alteration of the quality of the waters of the state to a degree which unreasonably affects either of the following: (1) the waters for beneficial uses; or (2) facilities which serve these beneficial uses. Pollution may include contamination.

- "Contamination" means an impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of diseases. Contamination includes any equivalent effect resulting from the disposal of waste whether or not waters of the state are affected.

- "Nuisance" means anything which meets all of the following requirements: (1) is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property so as to interfere with the comfortable enjoyment of life or property; (2) affects at the same time an entire community or neighborhood, or any considerable number of persons although the extent of the annoyance or damage inflicted upon individuals may be unequal; and (3) occurs during or as a result of the treatment or disposal of wastes.

(3) Groundwater

- Change potable water levels sufficiently to:
  - Reduce the ability of a water utility to use the groundwater basin for public water supplies, conjunctive use purposes, storage of imported water, summer/winter peaking, or to respond to emergencies and drought;
  - Reduce yields of adjacent wells or well fields (public or private); or
  - Adversely change the rate or direction of flow of groundwater;
- Result in demonstrable and sustained reduction of groundwater recharge capacity;
- Affect the rate or change direction of movement of existing contaminants;
- Expand the area affected by contaminants;
- Result in an increased level of groundwater contamination (including that from direct percolation, injection or salt water intrusion); or
- Cause regulatory water quality standards at an existing production well to be violated, as defined in the CCR, Title 22, Division 4, Chapter 15 and in the Safe Drinking Water Act.

b. Methodology

The analysis is based on the *Water Resources Technical Report* prepared by KPFF Consulting Engineers dated February 2021. This report is included as Appendix I of this Draft EIR.

(1) Surface Water Quality

The analysis of surface water quality impacts identifies the types of pollutants associated with construction and operation of the Project and considers their potential effects on surface water quality.

(2) Surface Water Hydrology

The surface water hydrology analysis evaluates the change in surface water runoff patterns and quantity for the Project Site due to the construction and operation of the Project, and the impact of these changes on the existing downstream stormwater system. As discussed in the Regulatory Framework Section above, the City has adopted the Los Angeles County Department of Public Works Hydrology Manual as its basis of design for storm drainage facilities. The Hydrology Manual requires that a storm drain conveyance system be designed for a 25-year storm event and that the combined capacity of a storm drain and street flow system accommodate flow from a 50-year storm event. The City's L.A. City CEQA Thresholds Guide establishes the 50-year frequency design storm event as the threshold to evaluate potential impacts on surface water hydrology. Thus, to determine the ability of the existing storm drain infrastructure to accommodate any changes in runoff flows associated with the Project, potential flows from each drainage area during a 50-year frequency design storm event was evaluated.

As part of the surface water hydrologic analysis, stormwater runoff generated from the Project Site was quantified using the Modified Rational Method.[16] The Modified Rational Method assumes that a steady, uniform rainfall rate will produce maximum runoff when all parts of the basin area are contributing to outflow. This occurs when the storm event lasts longer than the time of concentration. The time of concentration (Tc) is the time it takes for rain in the most hydrologically remote part of the basin area to reach the outlet.

As part of its Hydrology Manual, the Los Angeles County Department of Public Works developed a time of concentration calculator, HydroCalc, to automate time of concentration, peak runoff rate, and total volume calculations. HydroCalc was used to calculate the stormwater peak runoff flow rate for the Project Site with implementation of the Project by evaluating the changes within the individual drainage areas.

(3) Groundwater Quality and Hydrology

The analysis of the Project's potential impacts associated with groundwater was based on a review of existing groundwater conditions and groundwater uses and an evaluation of the potential impacts for construction and operation of the Project to affect

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[16] *The equation used in the Modified Rational Method is Q=C x I x A, where "Q" equals the volumetric flow, "C" equals the runoff coefficient, "I" equals the rainfall intensity, and "A" equals the tributary drainage area. The Modified Rational Method assumes that the runoff coefficient (C) remains constant during a storm. The runoff coefficient is a function of both the soil characteristics and the percentage of impervious surfaces in the drainage area. The rainfall intensity was determined using isohyets rainfall values according to the Los Angeles County Department of Public Works Hydrology Manual. The tributary drainage area was determined by delineating high points to create drainage boundaries and any subareas.*

those uses and groundwater quality. Construction and operational activities evaluated include any potential dewatering activities during construction; changes in groundwater recharge based on proposed land use changes; infiltration capacity of the underlying soil; permanent dewatering; potential soil or shallow groundwater exposure to construction materials, wastes, or spilled materials, handling and storage of hazardous materials; and any potential groundwater remediation activities.

c. Project Design Features

No specific project design features are proposed with regard to hydrology and water quality.

d. Analysis of Project Impacts

As set forth in Section II, Project Description, of this Draft EIR, the Project proposes two development scenarios—the Mixed Use Development Scenario and the No-Hotel Development Scenario. Under the Mixed Use Development Scenario, up to 737 residential units, up to 180 hotel rooms, up to 48,000 square feet of office space, and up to 95,000 square feet of general commercial floor area are proposed. Under the No-Hotel Development Scenario, a maximum of up to 827 residential units would be constructed along with up to 48,000 square feet of office space, and up to 95,000 square feet of general commercial floor area. The additional residential units (under the No-Hotel Development Scenario) would be located in the Sunset Building and would replace the 180 hotel rooms proposed by the Mixed Use Development Scenario. Regardless of the removal of the hotel, the Project design would remain as proposed. Specifically, the total floor area, building heights, massing, and footprint would be the same under both development scenarios. In addition, construction activities including depth of excavation, overall amount of grading, and the types of equipment to be used would be the same under both development scenarios. The sources of potential pollutants generated during operation of the Project would also be the same under both development scenarios. As the differences in the land use mix under the two development scenarios do not affect the analytics related to hydrology and water quality, the analysis of potential impacts associated with hydrology and water quality provided below accounts for both development scenarios and the term “Project” is used.

Threshold (a): Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

(1) Impact Analysis

(a) Surface Water Quality

(i) Construction

During Project construction, particularly during the grading phase, stormwater runoff from precipitation events could cause exposed and stockpiled soils to be subject to erosion and convey sediments into municipal storm drain systems. In addition, on-site watering activities to reduce airborne dust could contribute to pollutant loading in runoff. Pollutant discharges relating to the storage, handling, use and disposal of chemicals, adhesives, coatings, lubricants, and fuel could also occur. However, as Project construction would disturb more than one acre of soil, the Project would be required to obtain coverage under the NPDES Construction General Permit. In accordance with the requirements of the NPDES Construction General Permit, the Project would prepare and implement a site-specific SWPPP adhering to the California Stormwater Quality Association BMP Handbook. The SWPPP would specify BMPs to be used during construction to manage stormwater and non-stormwater discharges. BMPs would include but not be limited to: erosion control, sediment control, non-stormwater management, and materials management BMPs. In addition, Project construction activities would occur in accordance with City grading permit regulations (Chapter IX, Division 70 of the LAMC), such as the preparation of an erosion control plan, to reduce the effects of sedimentation and erosion.

As discussed in Section II, Project Description, of this Draft EIR, below grade parking would extend to a maximum depth of 64 feet. Data from the California Division of Mines and Geology indicate the historic high groundwater level on the Project Site is approximately 20 feet below ground surface. In addition, borings drilled within the Project Site as part of the Geotechnical Investigation included in Appendix G.1 of this Draft EIR encountered water seepage at depths ranging between 16 feet and 62 feet below ground surface. Therefore, Project construction activities could encounter groundwater and dewatering may be required. Dewatering operations are practices that discharge non-stormwater from a work location into a drainage system to proceed with construction. Discharges from dewatering operations can contain high levels of fine sediments, which, if not properly treated, could lead to exceedance of the NPDES requirements. During construction, temporary dewatering systems such as dewatering tanks, sand media particulate, pressurized bag filters, and cartridge filters would be utilized in compliance with the NPDES permit. These temporary systems would comply with all relevant NPDES requirements related to construction and discharges from dewatering operations.

With the implementation of site-specific BMPs included as part of the SWPPP and implementation of an erosion control plan as required by the LAMC, the Project would reduce or eliminate the discharge of potential pollutants from stormwater runoff. **Therefore, with compliance with NPDES requirements and City of Los Angeles**

grading permit regulations, construction of the Project would not result in discharges that would violate any surface water quality standard or waste discharge requirements or otherwise substantially degrade surface water quality. Thus, temporary construction-related impacts on surface water quality would be less than significant.

(ii) Operation

Under the City's LID Ordinance, post-construction stormwater runoff from new projects must be infiltrated, evapotranspirated, captured and used, and/or treated through high efficiency BMPs on site for the volume of water produced by the 85th percentile storm event. Consistent with LID requirements to reduce the quantity and improve the quality of rainfall runoff that leaves the Project Site, the Project would include the installation of capture and use or biofiltration planter BMPs as established by the LID Manual. The installed BMP systems would be designed with an internal bypass overflow system to prevent upstream flooding during major storm events. As the majority of potential contaminants are anticipated to be contained within the "first flush" 85th percentile storm event, major storms are not anticipated to cause an exceedance of regulatory standards.

As is typical of most urban developments, stormwater runoff from the Project Site has the potential to introduce pollutants into the stormwater system. Anticipated and potential pollutants generated by the Project include sediment, nutrients, pesticides, metals, pathogens, and oil and grease. The implementation of BMPs required by the City's LID Ordinance would target these pollutants that could potentially be carried in stormwater runoff. **Therefore, with the incorporation of LID BMPs, operation of the Project would not result in discharges that would violate any surface water quality standards or waste discharge requirements, and impacts to surface water quality during operation of the Project would be less than significant.**

(b) Groundwater Quality

(i) Construction

As discussed above, Project construction activities could encounter groundwater and temporary dewatering may be required. In the event dewatering is required during Project construction, a temporary dewatering system would be installed and operated in accordance with NPDES requirements. Any discharge of groundwater during construction of the Project would occur pursuant to, and comply with, the applicable NPDES permit or industrial user sewer discharge permit requirements. Pursuant to such requirements, the groundwater extracted would be chemically analyzed to determine the appropriate treatment and/or disposal methods. As such, groundwater quality would not be impacted from these potential dewatering activities.

Other potential effects to groundwater quality could result from the presence of an underground storage tank or during the removal of an underground storage tank. As previously described, there is an existing UST within the footprint of the property occupied by the Elysian apartment building, which is part of the Project Site, but not part of the Project. The Project would not involve the demolition of the Elysian apartment building and thus, would not involve construction activities that could disturb the UST beneath the Elysian apartment building. Therefore, the existing on-site UST would not pose a significant hazard on groundwater quality.

There are also risks associated with oil wells impacting groundwater quality. As discussed in detail in Section IV.F, Hazards and Hazardous Materials, of this Draft EIR, according to the California Geologic Energy Management Division—Southern District (CalGEM) Online Mapping System, there are six former oil and gas production wells located at, or adjacent to, the Project Site. Based on the Project's Construction Site Well Review Letter and communication with the CalGEM, the six buried wells are likely to not be abandoned in accordance with CalGEM's current abandonment standards. In addition, previous soil and soil vapor testing at the Project Site identified concentrations of petroleum hydrocarbons and methane which may be indicative of historical oil production activities that occurred within the L.A. City Oil Field area. As such, construction activities could encounter contaminated soil and groundwater that would require proper handling and disposal. Where construction is proposed in the area of potentially existing oil wells, applicable CalGEM requirements would be followed. A geophysical survey performed by GeoVision in October 2020 did not identify oil wells located at the Project Site. While the geophysical survey did not locate any oil wells, the Project would include implementation of Mitigation Measures HAZ-MM-1 and HAZ-MM-2, provided in Section IV.F, Hazards and Hazardous Materials, of this Draft EIR, to ensure potential impacts associated with the discovery of buried wells is less than significant. Specifically, Mitigation Measure HAZ-MM-1 may require an additional surface geophysical survey be conducted to attempt to locate the oil wells on the Project Site following demolition of existing structures (as the prior survey did not locate any existing oil wells and existing structures can potentially limit geophysical survey capabilities and/or access in some areas of the site). If located, as per HAZ-MM-2, the wells would be unearthed and inspected by a licensed Petroleum Engineer and would be reported to CalGEM to assess and prescribe abandonment procedures based on their observed condition, as well as the Petroleum Administrator, the Los Angeles City Certified Unified Program Agency (LACUPA), and Los Angeles Department of City Planning. Therefore, a soil and site management plan would be developed and implemented pursuant to Mitigation Measure HAZ-MM-3 to address the potential identification and abandonment of the oil wells, if encountered during earthwork activities. Furthermore, in the event contaminated soils are encountered during construction, or construction occurs in areas of known or potential contamination, the nature and extent of the contamination would be determined and appropriate handling, off-site disposal, and/or treatment would be implemented in accordance with applicable regulatory requirements, including SCAQMD

Rule 1166.[17] Additionally, as discussed in Section IV.F, Hazards and Hazardous Materials, of this Draft EIR, pursuant to Project Design Feature HAZ-PDF-1, Project buildings would be placed in a manner so as to not significantly impede future access to the locations of the existing wells as depicted in CalGEM's maps. Therefore, compliance with existing regulations and implementation of mitigation measures would ensure the Project would not create a significant hazard to groundwater quality associated with the existing on-site oil wells.

As discussed in Section IV.F, Hazards and Hazardous Materials, of this Draft EIR, the Project Site is located within a City-designated Methane Zone as defined by the Los Angeles Department of Building and Safety. In addition, hydrogen sulfide is found across the L.A. City Oil Field, in which the Project Site is located. As evaluated in the Methane Report prepared for the Project and updated in February 2021 (Updated Methane Report), included in Appendix H.4, of this Draft EIR, excavation and construction activities within the Project Site that involve work in confined spaces on-site could pose a potential for methane and hydrogen sulfide build-up, resulting in a possible hazardous condition. Adherence to the construction safety measures, as well as compliance with California Occupational Safety and Health Act safety requirements, would serve to reduce the risk in the event that elevated levels of these soil gases are encountered during grading and construction. In addition, as provided in the Updated Methane Report, the Project would include implementation of Mitigation Measures HAZ-MM-4 and HAZ-MM-5, to ensure potential impacts related to subsurface gases and associated potential impacts to soil and groundwater is less than significant. Specifically, Mitigation Measure HAZ-MM-4 would install controls during construction at the Project Site to mitigate the effects of subsurface gases on workers and the public and Mitigation Measure HAZ-MM-5 would require the Applicant install a Passive System that would include a standard de-watering system or a reinforced concrete mat slab to accommodate hydrostatic pressure, as well as a sub-slap vapor collection and ventilation system.

As discussed in Section IV.F, Hazards and Hazardous Materials, of this Draft EIR, during on-site grading and building construction, hazardous materials, such as fuels, oils, paints, solvents, and concrete additives, could be used and would therefore require proper management and, in some cases, disposal. The management of any resultant hazardous wastes could increase the potential for hazardous materials to be released into groundwater. Compliance with all applicable federal, state, and local requirements concerning the handling, storage and disposal of hazardous waste, would reduce the potential for the construction of the Project to release contaminants into groundwater. In addition, as there are no existing groundwater production wells or public water supply wells

[17] *South Coast Air Quality Management District. Rules and Compliance, Rule 1166.*

within 1 mile of the Project Site, construction activities would not be anticipated to affect existing wells.

Based on the above, with implementation of regulatory requirements and implementation of Project Design Feature HAZ-PDF-1 and Mitigation Measures MM-HAZ-1 through HAZ-MM-5, construction of the Project would not result in discharges that would violate any groundwater quality standard or waste discharge requirements or otherwise substantially degrade groundwater quality. Therefore, construction-related impacts on groundwater quality would be less than significant.

(ii) Operation

Operational activities which could affect groundwater quality include spills of hazardous materials and leaking underground storage tanks. Surface spills from the handling of hazardous materials most often involve small quantities and are cleaned up in a timely manner, thereby resulting in little threat to groundwater. Other types of risks such as leaking underground storage tanks have a greater potential to affect groundwater. As discussed in Section IV.F, Hazards and Hazardous Materials, of this Draft EIR, the Project would not introduce any new USTs that would have the potential to expose groundwater to contaminants. In addition, the Project would comply with all applicable existing regulations that would prevent the Project from affecting or expanding any potential areas of contamination, increasing the level of contamination, or causing regulatory water quality standards at an existing production well to be violated, as defined in the California Code of Regulations, Title 22, Division 4, Chapter 15 and the Safe Drinking Water Act. **Therefore, operation of the Project would not result in discharges that would violate any groundwater quality standard or waste discharge requirements or otherwise substantially degrade groundwater quality. The Project's potential impact on groundwater quality during operation would be less than significant.**

(2) Mitigation Measures

Implementation of Mitigation Measures MM-HAZ-1 through HAZ-MM-5 included in Section IV.F, Hazards and Hazardous Materials, of this Draft EIR would address potential water quality impacts associated with construction of the Project. Project-level operational impacts related to water quality would be less than significant.

(3) Level of Significance After Mitigation

Project-level impacts related to water quality would be less than significant with implementation of Mitigation Measures MM-HAZ-1 through HAZ-MM-5 included in Section IV.F, Hazards and Hazardous Materials, of this Draft EIR.

Threshold (b): Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

(1) Impact Analysis

(a) Construction

As previously noted, below grade parking would extend to a maximum depth of 64 feet. Data from the California Division of Mines and Geology indicate the historic high groundwater level on the Project Site is approximately 20 feet below ground surface. In addition, borings drilled within the Project Site as part of the Geotechnical Investigation included in Appendix G.1 of this Draft EIR encountered water seepage at depths ranging between 16 feet and 62 feet below ground surface. Therefore, dewatering operations are expected during construction. However, due to the limited and temporary nature of temporary dewatering operations, regional impacts to groundwater level are not considered to be significant. Furthermore, no water supply wells are located at the Project Site or within 1 mile of the Project Site that could be impacted by construction. **Thus, construction activities for the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project would impede sustainable groundwater management of the basin. Impacts on groundwater supplies during construction of the Project would be less than significant.**

(b) Operation

As discussed above, the Project Site is currently comprised of approximately 72 percent impervious surfaces, and as such, limited groundwater recharge occurs. With implementation of the Project, the Project Site would be comprised of 87 percent impervious surfaces. While the Project would increase impervious surfaces, consistent with LID requirements to reduce the quantity and improve the quality of rainfall runoff that leaves the Project Site, the Project would include the installation of capture and use or biofiltration planter BMPs as established by the LID Manual. In addition, as discussed in the Water Resources Technical Report included as Appendix I of this Draft EIR, the subterranean levels of the Project would be designed to withstand hydrostatic forces and incorporate comprehensive waterproofing systems in accordance with current industry standards and construction methods such that permanent dewatering operations would not be required. **Therefore, the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management. Impacts on groundwater supplies during operation of the Project would be less than significant.**

(2) Mitigation Measures

Project-level impacts related to groundwater supplies and groundwater recharge would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to groundwater supplies and groundwater recharge were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold (c): Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or thorough the addition of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or off-site?

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

(1) Impact Analysis

(a) Construction

There are no streams or rivers within or immediately surrounding the Project Site. Construction activities for the Project would include demolition of the existing buildings (except for the Elysian apartment building) and associated hardscape and the excavation and removal of soil. These activities have the potential to temporarily alter existing drainage patterns on the Project Site by exposing the underlying soils, modifying flow direction, and making the Project Site temporarily more permeable. Exposed and stockpiled soils could also be subject to erosion and conveyance into nearby storm drains during storm events. In addition, on-site watering activities to reduce airborne dust could contribute to pollutant loading in runoff. However, as the construction site would be greater than one acre, the Project would be required to obtain coverage under the NPDES Construction General Permit. In accordance with the requirements of this permit, the Project would implement a SWPPP that specifies BMPs and erosion control measures to be used during construction to manage runoff flows. These BMPs are designed to contain stormwater or construction watering on the Project Site such that runoff does not impact off-site drainage facilities or receiving waters. In addition, Project construction activities would occur in accordance with City grading permit regulations (Chapter IX, Division 70 of the LAMC), such as the preparation of an erosion control plan, to reduce the effects of sedimentation and erosion. **Thus, through compliance with all NPDES Construction General Permit requirements, including preparation of a SWPPP and implementation**

of BMPs, as well as compliance with applicable City grading permit regulations, construction activities for the Project would not substantially alter the Project Site drainage patterns in a manner that would result in substantial erosion, siltation, or flooding on- or off-site. As such, construction impacts related to erosion and flooding on- or off-site would be less than significant.

(b) Operation

As discussed above, the Project Site is currently comprised of approximately 72 percent impervious surfaces. With implementation of the Project, the Project Site would be comprised of 87 percent impervious surfaces. As such, similar to existing conditions, there would be a limited potential for erosion or siltation to occur from exposed soils or large expanses of pervious areas. In addition, as determined in the Water Resources Report, and as summarized in Table IV.G-1 on page IV.G-30, the overall flow rate would not change with implementation of the Project. Specifically, existing runoff flows during a 50-year storm event[18] are 22.82 cubic feet per second. As shown in Table IV.G-1, post-development runoff flows would remain the same at 22.82 cubic feet per second during a 50-year storm event. Accordingly, there would be no increase in runoff volumes into the existing storm drain system. **Therefore, the Project would not substantially alter the existing drainage pattern of the Project Site or surrounding area such that substantial erosion, siltation, or on-site or off-site flooding would occur. Operational impacts related to erosion and flooding on- or off-site would be less than significant.**

(2) Mitigation Measures

Project-level impacts related to erosion and flooding on- or off-site would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to erosion and flooding on- and off-site were determined to be less than significant. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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[18] *Per the City's Special Order No. 007-1299, the City has adopted the Los Angeles County Department of Public Works (LACDPW) Hydrology Manual as its basis of design for storm drainage facilities. The Hydrology Manual requires projects to have drainage facilities to meet the Urban Flood level of protection, which is defined as runoff from a 25-year frequency storm falling on a saturated watershed. The L.A. CEQA Thresholds Guide, however, establishes the 50-year frequency design storm event as the threshold to evaluate potential impacts on surface water hydrology. Therefore, to provide a more conservative analysis of the ability of storm drain infrastructure to accommodate the demand generated by the Project, the higher 50-year storm event threshold was used.*

Table IV.G-1
Proposed Drainage Stormwater Runoff Calculations Summary

Drainage Area	Area (acres)		Q50 (cfs)	
	Existing	Proposed	Existing	Proposed
Sub-Area 1	1.89	1.53	6.19	5.01
Sub-Area 2	1.42	1.39	4.65	4.55
Sub-Area 3	2.33	2.72	7.63	8.91
Sub-Area 4	0.04	0.04	0.13	0.13
Sub-Area 5	0.59	0.59	1.93	1.93
Street[a]	(0.92)	(0.92)	2.29	2.29
Site Total	**6.27**	**6.27**	**22.82**	**22.82**

cfs = volumetric flow rate measured in cubic feet per second

[a] *Not part of Project Site; therefore, not summated into Site Total quantities for area.*

Source: KPFF Consulting Engineers, 2021.

Threshold (c): Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

(1) Impact Analysis

Under existing conditions, stormwater sheet flows from the Project Site without infiltration or capturing. In accordance with LID requirements, the Project BMPs would control stormwater runoff, with no increase in runoff resulting from the Project, as shown in Table IV.G-1. Specifically, the existing flow rate of 22.82 cubic feet per second would remain with implementation of the Project. Therefore, stormwater flows from the Project Site would not increase due to the Project. In terms of polluted runoff, the Project's proposed uses would be typical of residential, office, and commercial operations and would not introduce substantial sources of polluted water. As discussed above under Threshold (a), anticipated and potential pollutants generated by the Project include sediment, nutrients, pesticides, metals, pathogens, and oil and grease. The implementation of BMPs required by the City's LID Ordinance would target these pollutants that could potentially be carried in stormwater runoff. **As such, the Project would not create or contribute additional runoff water that would exceed the capacity of the existing stormwater system or provide substantial sources of polluted runoff. Therefore, potential**

impacts to the capacity of existing stormwater drainage systems would be less than significant.

(2) Mitigation Measures

Project-level impacts related to stormwater drainage systems would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to stormwater drainage systems were determined to be less than significant. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold (c): Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

iv. impede or redirect flood flows?

(1) Impact Analysis

As discussed above, the Project Site is not located within a 100-year flood plain as mapped by the Federal Emergency Management Agency (FEMA) or the City of Los Angeles. **As such, the Project would not alter the existing drainage pattern of the Project Site in a manner that would impede or redirect flood flows, and no impacts would occur.**

(2) Mitigation Measures

No Project-level impacts related to flood flows would occur. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

No Project-level impacts related to flood flows would occur. Therefore, no mitigation measures are required or included, and the impact level remains less than significant.

Threshold (d): In flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to project inundation?

(1) Impact Analysis

As discussed in Section VI, Other CEQA Considerations, of this Draft EIR, and evaluated in the Initial Study prepared for the Project, included as Appendix A of this Draft EIR, the Project Site is not located adjacent to or in proximity to the Pacific Ocean and the Safety Element of the General Plan does not map the Project Site as being located within an area potentially affected by a tsunami.[19] The Los Angeles River located approximately 1.2 miles to the east, but includes a sunken concrete lined channel; therefore, inundation as a result of seiche is unlikely, particularly given the Project Site's elevation above mean sea level. **As such, as determined in the Initial Study, the Project would not be located in flood hazard, tsunami, or seiche zones, the Project would not risk release of pollutants due to project inundation. Therefore, impacts to Threshold (d) would not occur. No further analysis is required.**

(2) Mitigation Measures

No Project-level impacts related to the release of pollutants in flood hazard, tsunami, or seiche zones would occur. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

No Project-level impacts related to the release of pollutants in flood hazard, tsunami, or seiche zones would occur. Therefore, no mitigation measures were required or included.

Threshold (e): Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

(1) Impact Analysis

Under Section 303(d) of the Clean Water Act, states are required to identify water bodies that do not meet their water quality standards. Biennially, the Los Angeles Regional Water Quality Control Board prepares a list of impaired waterbodies in the region, referred to as the 303(d) list. The 303(d) list outlines the impaired waterbody and the specific pollutant(s) for which it is impaired. All waterbodies on the 303(d) list are subject to the development of a Total Maximum Daily Load (TMDL). As discussed above, the Project Site is located within the Los Angeles River Watershed. According to the State Water Resources Control Board, water quality in the middle and lower portion of the Los Angeles River Watershed has been impaired by pollutants from dense clusters of residential,

[19] *City of Los Angeles, Safety Element of the Los Angeles City General Plan, Exhibit G, November 26, 1996, p. 59.*

industrial, and other urban activities. Reach 2 of the Los Angeles River is classified as impaired and listed as category 5 of the Section 303(d) List of Water Quality Limited Segments, which signifies that standards are not met and that TMDLs are needed for at least one of the pollutants identified. Pollutants contributing to this classification for Reach 2 are as follows: (1) ammonia; (2) coliforms; (3) copper; (4) lead; (5) nutrients—algae; (6) oil; and (7) trash.

The County of Los Angeles, the City of Los Angeles, and all other cities in the Los Angeles Watershed are responsible for the implementation of watershed improvement plans or Enhanced Watershed Management Programs (EWMP) to improve water quality and assist in meeting the TMDL milestones. The EWMP for the Upper Los Angeles River Watershed was approved by the LARWQCB in April 2016. The EWMP for the Upper Los Angeles River Watershed provides a customized compliance pathway that participating agencies will follow to address the pollutant reduction requirements of the 2012 Municipal Separate Storm Sewer System (MS4) Permit. The EWMP utilizes a multi-pollutant approach that maximizes the retention and use of urban runoff as a resource for groundwater recharge and irrigation, while also creating additional benefits for the communities in the Upper Los Angeles River Watershed. The EWMP presents a range of watershed control measures to address applicable stormwater quality regulations.

Potential pollutants generated by the Project would be typical of residential, commercial, office, and hotel land uses and may include sediment, nutrients, pesticides, pathogens, trash and debris, oil and grease, and metals. The implementation of BMPs required by the City's LID Ordinance would target these pollutants that could potentially be carried in stormwater runoff. While the existing Project Site does not have any structural or LID BMPs to treat or infiltrate stormwater, implementation of the LID features proposed as part of the Project would result in an improvement in surface water quality runoff as compared to existing conditions. As such, the Project would not introduce new pollutants or an increase in pollutants that could conflict with or obstruct any water quality control plans for the Upper Los Angeles River Watershed.

With regard to conflicting or obstructing any sustainable groundwater management plans, as discussed above, the Project Site is currently 72-percent impervious, and as such, limited groundwater recharge occurs. With implementation of the Project, the Project Site would be comprised of 87 percent impervious surfaces. While the Project would increase impervious surfaces, consistent with LID requirements to reduce the quantity and improve the quality of rainfall runoff that leaves the Project Site, the Project would include the installation of capture and use or biofiltration planter BMPs as established by the LID Manual. The Project's increase in pervious as well as the installation of the capture and use or biofiltration system would improve the groundwater recharge capacity of the Project Site compared to existing conditions.

With compliance with existing regulatory requirements and implementation of LID BMPs, the Project would not conflict with or obstruct implementation of a water quality control plan or a sustainable groundwater management plan. Impacts would be less than significant.

(2) Mitigation Measures

Project-level impacts related to conflict with a water quality control plan or sustainable groundwater management plan would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to conflict with a water quality control plan or sustainable groundwater management plan were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold (f): Require or result in the relocation or construction of new or expanded storm water drainage facilities, the construction or relocation of which could cause significant environmental effects.

(1) Impact Analysis

As shown in Table IV.G-1 on page IV.G-30, the proposed 50-year frequency design storm event peak flow rate within the Project Site would be 22.82 cubic feet per second after adjusting for the detention rate resulting from the proposed LID plan and BMPs. A comparison of the pre- and post-peak flow rates indicates that stormwater flows from the Project Site would not increase due to the Project. Therefore, the Project would not impact existing storm drain infrastructure serving the Project Site and runoff would continue to follow the same discharge paths and drain to the same storm systems. **Consequently, the Project would not require or result in the construction of new or expanded off-site storm water drainage facilities, the construction of which could cause significant environmental effects. Impacts would be less than significant.**

(2) Mitigation Measures

Project-level impacts related to storm water drainage facilities would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to storm water drainage facilities were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

e. Cumulative Impacts

(1) Impact Analysis

(a) Surface Water Quality

As detailed in Section III, Environmental Setting, of this Draft EIR, a total of 89 potential related development projects have been identified in the vicinity of the Project Site. These related projects reflect the diverse range of land uses in the vicinity of the Project Site. Specifically, the related projects comprise a variety of uses, including apartments, condominiums, restaurants, hotels, office, and retail uses, as well as mixed use developments incorporating some or all of these elements. As discussed above, stormwater runoff from most urban development sites has the potential to introduce pollutants into the stormwater system. Given the similar types of land uses proposed by the related projects, anticipated and potential pollutants generated by the related projects could also include sediment, nutrients, pesticides, metals, pathogens, and oil and grease. As with the Project, related projects would also be subject to NPDES requirements relating to water quality for both construction and operation. In particular, related projects would be required, pursuant to the City's LID Ordinance, to implement BMPs that would target potential pollutants that could be carried in stormwater runoff. **Therefore, the Project and related projects would not result in significant cumulative impacts associated with surface water quality. As such, the Project's contribution would not be cumulatively considerable, and cumulative impacts to surface water quality would be less than significant.**

(b) Groundwater Quality

As noted above, the related projects comprise a variety of uses, including apartments, condominiums, restaurants, hotels, office, and retail uses, as well as mixed use developments incorporating some or all of these elements. These proposed uses are similar to the types of land uses proposed by the Project. As such, these related projects would be anticipated to involve the use, handling, storage, and disposal of similar potentially hazardous materials and wastes that could be released into the groundwater. However, as with the Project, the related projects would be required to comply with all applicable federal, state, and local requirements concerning the handling, storage and disposal of hazardous waste, which would reduce the potential for the release of contaminants into groundwater. Other potential effects to groundwater quality, including

from USTs and oil wells, are site specific and would be addressed by each individual related project. As discussed above, with implementation of regulatory requirements and Mitigation Measures MM-HAZ-1 through HAZ-MM-5, potential groundwater quality impacts during construction of the Project would be reduced to a less than significant level. Like the Project, related projects would also comply with applicable regulations during construction as discussed above for the Project and would implement site-specific measures where needed. **Therefore, the Project and related projects would not result in significant cumulative impacts associated with groundwater quality. As such, the Project's contribution would not be cumulatively considerable, and cumulative impacts to groundwater quality would be less than significant.**

(c) Surface Water Hydrology

The geographic context for the cumulative impact analysis on surface water hydrology is the Los Angeles River Watershed. In accordance with City requirements, related projects and other future development projects would be required to implement BMPs to manage stormwater in accordance with LID guidelines. Furthermore, the City of Los Angeles Department of Public Works would review each future development project on a case-by-case basis to ensure sufficient local and regional storm water drainage infrastructure is available to accommodate stormwater runoff. **Therefore, the Project and related projects would not result in significant cumulative impacts associated with surface water hydrology. As such, the Project's contribution would not be cumulatively considerable, and cumulative impacts to surface water hydrology would be less than significant.**

(d) Groundwater Hydrology

Cumulative groundwater hydrology impacts could result from the overall utilization of groundwater basins located in proximity to the Project Site and other related projects in the vicinity of the Project Site. In addition, interruptions to existing hydrology flow by dewatering operations would have the potential to affect groundwater levels. However, no water supply wells, spreading grounds, or injection wells are located within a 1-mile radius of the Project Site. As with the Project, any related project would be required to evaluate its individual impacts to groundwater hydrology due to temporary or permanent dewatering operations. Similar to the Project, other proposed projects within the groundwater basin would likely incorporate structural designs for subterranean levels that are able to withstand hydrostatic forces and incorporate comprehensive waterproofing systems in accordance with current industry standards and construction methods. If any related project requires permanent dewatering systems, such systems would be regulated by the SWRCB. Should excavation for other related projects extend beneath the groundwater level, temporary groundwater dewatering systems would be designed and implemented in accordance with NPDES permit requirements. Additionally, as with the Project, related projects would be required to implement BMPs to capture stormwater runoff onsite, thereby minimizing

effects on groundwater recharge. **Therefore, the Project and related projects would not result in significant cumulative impacts associated with groundwater hydrology. As such, the Project's contribution would not be cumulatively considerable, and cumulative impacts to groundwater hydrology would be less than significant.**

(2) Mitigation Measures

Cumulative impacts related to hydrology and surface water quality would be less than significant. Therefore, no mitigation measures are required. As discussed above, with implementation of Mitigation Measures MM-HAZ-1 through HAZ-MM-5 and compliance with regulatory requirements, potential groundwater quality impacts associated with the Project would be less than significant. Such impacts are site specific and would not be cumulatively considerable. Thus, no additional mitigation is necessary.

(3) Level of Significance After Mitigation

Cumulative impacts related to hydrology and surface water quality were determined to be less than significant without mitigation. In addition, with implementation of regulatory requirements and Mitigation Measures MM-HAZ-1 through HAZ-MM-5, cumulative impacts associated with groundwater quality would not be cumulatively considerable. Therefore, no additional mitigation measures are required or included.