Draft

SAN GABRIEL RIVER WATERSHED PROJECT TO REDUCE RIVER DISCHARGE IN SUPPORT OF INCREASED RECYCLED WATER REUSE

Environmental Impact Report

Prepared for
Sanitation Districts of Los Angeles County

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626 Wilshire Boulevard
Suite 1100
Los Angeles, CA 90017
213.599.4300
www.esassoc.com

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EXECUTIVE SUMMARY

ES.1 Introduction

The Sanitation Districts of Los Angeles County (Sanitation Districts), as the Lead Agency pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines (CEQA Guidelines), has prepared this Draft Environmental Impact Report (Draft EIR) to provide the public and pertinent agencies with information about the potential effects on the local and regional environment associated with the San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse (proposed project). The Sanitation Districts are proposing to incrementally reduce surface water discharges of recycled water from five water reclamation plants (WRPs), including the San Jose Creek WRP, the Pomona WRP, the Whittier Narrows WRP, the Los Coyotes WRP, and the Long Beach WRP, each of which currently discharges into the San Gabriel River or its tributaries: San Jose Creek and/or Coyote Creek. The diverted water would supply recycled water programs implemented by other agencies. The proposed reduction in surface water discharges would occur over time and would not involve any construction activities or other physical changes to the environment other than the decreased volume of discharge.

As described in Section 15121(a) of the CEQA Guidelines, this Draft EIR is intended to serve as an informational document for pertinent public agency decision makers. Accordingly, this Draft EIR has been prepared to identify the significant environmental effects of the proposed project, identify mitigation measures to minimize significant effects, and consider reasonable project alternatives. The environmental impact analyses in this Draft EIR are based on a variety of sources, including agency consultation, technical studies, and field surveys.

ES.2 Background

Sanitation Districts of Los Angeles County

The Sanitation Districts are a public agency created under state law to manage wastewater and solid waste on a regional scale and consist of 24 independent special districts serving approximately 5.6 million people in Los Angeles County. The Sanitation Districts' service area covers approximately 850 square miles and encompasses 78 cities and unincorporated territory within Los Angeles County. The Sanitation Districts operate 10 WRPs and the Joint Water Pollution Control Plant. Seventeen sanitation districts provide sewerage services in the metropolitan Los Angeles area are signatory to a Joint Outfall Agreement that provides for the regional, interconnected systems of facilities known as the Joint Outfall System (JOS).

The service area of the JOS encompasses 73 cities and unincorporated territory, providing sewage treatment, reuse, and ocean disposal for residential, commercial, and industrial wastewater. Under the Joint Outfall Agreement, Sanitation District No. 2 of Los Angeles County has been appointed managing authority over the JOS.

The three major rivers in the JOS service area are the Rio Hondo, Los Angeles, and San Gabriel. The Rio Hondo flows southwest from its headwaters at the Sawpit Dam into the Los Angeles River, which discharges into the Pacific Ocean. The San Gabriel River flows southwesterly from its headwaters in the San Gabriel Mountains and forms a tidal prism before discharging into the Pacific Ocean at Seal Beach. The tidal prism of the San Gabriel River is the area within the river where freshwater from upstream sources mixes with salt water from the Pacific Ocean.

These three rivers are part of Los Angeles County's flood control system and are thus highly modified to ensure adequate capacity to manage flood risk. In addition to flood control, the rivers are also operated for the purpose of conserving as much of the storm and other waters as practicable. The use of water conservation facilities or spreading grounds adjacent to river channels and in soft-bottom channels permits water to be captured and percolate into groundwater basins for later pumping. These groundwater recharge facilities are located in areas where the underlying soils are composed of permeable formations and in hydraulic connection with the underlying aquifer.

Despite the highly modified nature of the rivers, wildlife habitat does exist in some areas. This habitat has been supported in part by discharges of treated effluent from the Sanitation Districts' water reclamation facilities. Reductions in treated effluent discharges could affect these habitats by reducing water available to plants and animals in or near the river.

Water Reclamation Facilities

The Sanitation Districts operate five water reclamation plants (WRPs) in the San Gabriel River watershed, including the San Jose Creek WRP, the Pomona WRP, the Whittier Narrows WRP, the Los Coyotes WRP, and the Long Beach WRP, each of which currently discharges into the San Gabriel River or its tributaries: San Jose Creek and/or Coyote Creek. The WRPs produce recycled water for beneficial reuse and are permitted to discharge recycled water into the San Gabriel River and its tributaries. The WRPs were constructed primarily to intercept domestic sewage, treat it to tertiary standards and make it available for reuse in close proximity to demands. Discharges are used for either incidental groundwater percolation, conveyance to downstream groundwater recharge facilities, or to dispose of excess treated water to the ocean via concrete lined channel. Because the WRPs were built before infrastructure needed to convey and distribute the recycled water existed, there has always been a need to discharge excess treated water to receiving waters. Excess treated water that does not percolate to groundwater flows to the Pacific Ocean.

San Jose Creek Water Reclamation Plant

The San Jose Creek WRP is located at 1965 Workman Mill Road, in unincorporated Los Angeles County, adjacent to the City of Whittier at the confluence of San Jose Creek and the San Gabriel

River. The San Jose Creek WRP consists of two independently operated treatment plants: San Jose Creek East (SJCE) on the east side of the Interstate 605 Freeway and San Jose Creek West (SJCW) on the west side of I-605 near the intersection of California State Route 60 Freeway (CA-60). The SJCE and SJCW facilities have a design capacity of 62.50 million gallons per day (MGD) and 37.50 MGD, respectively, resulting in a combined treatment capacity of 100.00 MGD for the San Jose Creek WRP.

The San Jose Creek WRP serves a large residential population of approximately one million people. In 2018, the San Jose Creek WRP generated approximately 51.00 MGD of disinfected tertiary recycled water, most of which was beneficially reused. The facility supplied approximately 50.40 MGD of recycled water to over 170 different sites, including for reuse at groundwater recharge sites, industrial facilities, and irrigation at parks, schools, and greenbelts. The San Jose Creek WRP discharges an average of approximately 9.48 MGD of recycled water to the San Jose Creek and an average of approximately 25.10 MGD to the San Gabriel River.

Pomona Water Reclamation Plant

The Pomona WRP is located at 295 Humane Way in the City of Pomona. The plant occupies 14 acres northeast of the intersection of CA-60 and the California State Route 57 Freeway (CA-57). The original plant, known as the Tri-City Plant, was owned by the cities of Pomona, Claremont, and La Verne. It was placed into operation in July 1926, with reuse beginning in 1927. The Sanitation Districts took over operations in 1966. Today, the Pomona WRP provides primary, secondary and tertiary treatment for up to 15.00 MGD and serves a population of approximately 130,000 people. The Pomona WRP discharges an average of approximately 3.27 MGD of recycled water to the South Fork of the San Jose Creek.

Whittier Narrows Water Reclamation Plant

The Whittier Narrows WRP is located at 301 North Rosemead Boulevard in the City of El Monte. The plant occupies 27 acres south of the CA-60. The plant was originally constructed for the purpose of demonstrating the feasibility of large-scale water reclamation and recycled water use for groundwater recharge. The original plant was placed in operation on July 26, 1962 and consisted of primary sedimentation and secondary treatment with activated sludge. Today, the Whittier Narrows WRP provides primary, secondary and tertiary treatment for up to 15.00 MGD and serves a population of approximately 150,000 people. The Whittier Narrows WRP discharges to both the Rio Hondo/Los Angeles River watershed and the San Gabriel River watershed. The Whittier Narrows WRP discharges an average of approximately 1.19 MGD to the San Gabriel River. The Whittier Narrows WRP discharges approximately 4.60 MGD to the Rio Hondo and its tributaries.

The State Water Resources Control Board's (SWRCB) 1211 Order WW0098 for the change in place of use, purpose of use and quantity of treated wastewater currently discharged to the Rio Hondo and the San Gabriel River was approved in December 2018. The Whittier Narrows WRP is included in this Draft EIR for evaluation of cumulative impacts of reduced discharges of recycled water to the San Gabriel River Watershed. Reductions to the Rio Hondo/Los Angeles River watershed, if proposed, would be a separate and distinct project and the environmental

impacts of those reductions would be considered in a separate CEQA document. However, the Sanitation Districts do not anticipate reductions to the Rio Hondo/Los Angeles River watershed.

Los Coyotes Water Reclamation Plant

The Los Coyotes WRP is located at 16515 Piuma Avenue in the City of Cerritos and occupies 34 acres at the northwest junction of the I-605 and the California State Route 91 Freeway (CA-91). Of the 34 acres, 20 are occupied by the Iron Wood Nine Golf Course, which is built on adjoining Sanitation Districts' property. The plant was placed in operation on May 25, 1970, with an initial capacity of 12.50 MGD, and consisted of primary treatment and secondary treatment with activated sludge. Today, the Los Coyotes WRP provides primary, secondary and tertiary treatment for up to 37.50 MGD and serves a population of approximately 370,000 people. An average of approximately 17.00 MGD is discharged to the San Gabriel River.

Long Beach Water Reclamation Plant

The Long Beach WRP is located at 7400 E. Willow Street in the City of Long Beach. The plant occupies 17 acres west of the I-605 and began operation in 1973. The Long Beach WRP provides primary, secondary and tertiary treatment for up to 25.00 MGD and serves a population of approximately 250,000 people. An average of approximately 6.72 MGD is discharged to the Coyote Creek.

Montebello Forebay

The Los Angeles County Department of Public Works owns and operates an extensive system of flood control and groundwater recharge facilities along the San Gabriel River and Rio Hondo that make up the Montebello Forebay Groundwater Recharge Project. The Montebello Forebay, located just south of Whittier Narrows and an area in the northern part of the Central Groundwater Basin (Central Basin), is a valuable area for groundwater recharge due to its highly permeable soils which allow deep percolation of surface waters. The Rio Hondo Coastal Spreading Grounds (RHSG) and the San Gabriel Coastal Spreading Grounds (SGSG), which comprise the Montebello Forebay, and the lower San Gabriel River spreading area comprise the Montebello Forebay recharge facilities. Both spreading grounds use Sanitation Districts' recycled water, water imported from the State Water Project, and rainwater to recharge the groundwater basin through percolation. The Los Angeles County Department of Public Works notes that operations at these facilities recharge an average of approximately 150,000 acre-feet (AF) (134.00 MGD) of water annually.

The RHSG, the largest spreading facility of Los Angeles County, covers approximately 570 acres. Water is diverted from the Rio Hondo by use of three large radial gates. The Los Angeles County Department of Public Works operates a connection channel between the San Gabriel River and the Rio Hondo within the Whittier Narrows Recreational Area known as the Zone 1 Ditch. This channel can convey San Gabriel River water to the RHSG.

The SGSG are approximately 128 acres. Recycled water is conveyed to the spreading grounds via the San Jose Creek Outfall Pipeline (SJC Outfall Pipeline). The SJC Outfall Pipeline has a discharge point at the head of the SGSG facility that is capable of discharging treated recycled

water to the San Gabriel river or the spreading grounds, or diverting water from the San Gabriel River into the spreading grounds.

The Interconnection Pipeline is used to allow for gravity flow of water from the RHSG to the SGSG or pumping of water from the SGSGs to the RHSGs. The operation of the Interconnection Pipeline optimizes the flows into each spreading facility and maximizes groundwater recharge.

The lower San Gabriel River, from Whittier Narrows Dam to North of Firestone Boulevard, also allows spreading by percolation through its unlined bottom. Seven inflatable rubber dams have been installed to increase spreading capacity along this portion of the river.

ES.3 Project Objectives

The objectives of the proposed project are as follows:

- Consistent with State law and policy, support increased recycled water use through maximizing the availability of treated effluent that would otherwise be discharged to flood control channels within the San Gabriel River watershed; and
- Sustain or, if feasible, enhance sensitive habitats that have benefitted from historical treated effluent discharges to the San Gabriel River watershed through more efficient discharges from Sanitation Districts' WRPs.

ES.4 Project Description

Relationship of Project to Recycled Water Programs

The proposed project would facilitate the increased use of recycled water consistent with state law and policy, including Water Code Sections 461, 13500 *et seq*., and 13575 *et seq*.; Government Code Section 65601 *et seq*.; the SWRCB's Policy for Water Quality Control for Recycled Water (Recycled Water Policy); and the Executive Order issued by the Governor on April 25, 2014. The Executive Order promotes the development of recycled water to serve areas in need and encourages the SWRCB to expedite requests to change water permits to enable those deliveries. The Sanitation Districts are proposing to submit one Wastewater Change Petition per WRP pursuant to California Water Code Section 1211 to change the place and purpose of use of recycled water, while maintaining sensitive habitat supported by historic effluent discharges. A total of four petitions will be submitted, one each for the San Jose Creek WRP, the Pomona WRP, the Los Coyotes WRP, and the Long Beach WRP.

In its Recycled Water Policy, the SWRCB has set a goal of increasing the use of recycled water to 1.5 million acre-feet (MAF) per year by 2020 and to 2.50 MAF per year by 2030. One of the SWRCB's goals is to substitute as much recycled water for potable water as possible by 2030. "The purpose of the [Board's Recycled Water Policy] is to encourage the safe use of recycled water from wastewater sources…." (SWRCB 2018).

Discharge Operation Modifications

The Sanitation Districts are proposing to incrementally reduce surface water discharges of recycled water from the San Jose Creek WRP, the Pomona WRP, the Whittier Narrows WRP, the Los Coyotes WRP, and the Long Beach WRP. The Sanitation Districts are not proposing to construct any new facilities, and the incremental reductions in surface water discharges can be accomplished without modification to the existing discharge facilities. The proposed use of the recycled water would be implemented by water agencies that distribute recycled water and other recycled water users over time and would depend on future needs for recycled water produced by the Sanitation Districts. Construction of future facilities, if applicable, would be provided by proponents of other projects and is not a part of the proposed project. The Sanitation Districts will continue to maintain the ability to discharge treated water at the same surface water points but anticipates lower quantities.

Table ES-1 below summarizes the existing and proposed future annual daily average discharges for each treatment plant. A brief description of this information is provided below Table ES-1. The locations of the five WRPs are shown in **Figure 2-1**, of Chapter 2, *Project Description,* of this Draft EIR.

- The San Jose Creek WRP surface water discharge is currently rotated between five discharge locations within the San Gabriel River Watershed. The use of the discharge locations is irregular throughout the year and varies year-to-year, depending on the availability of groundwater recharge facilities, channel maintenance activities, and other operational activities. Under the proposed project, discharges from the San Jose Creek WRP at discharge point SJC002 would be reduced from an annual average of approximately 9.48 MGD to a minimum monthly average of approximately 5.00 MGD. Although the total annual volume would be reduced, discharges would be timed more efficiently to support sensitive habitats. The new discharge regime could vary from a consistent 5.00 MGD discharge to a pulsing of flows. The larger pulses could be needed to move water further downstream than could be accomplished with consistent flows. The diverted water would be conveyed for beneficial reuse to groundwater recharge basins or other reuse facilities.
- The Pomona WRP discharges into a concrete-lined portion of San Jose Creek that contains no sensitive habitat. As San Jose Creek nears the San Gabriel River, the concrete lining gives way to a soft-bottom reach. Current and historic groundwater upwelling occurs within the lined portion of San Jose Creek upstream of the transition location between lined and unlined. The proposed project would result in zero discharge from the Pomona WRP. As shown in Table ES-1, an average of approximately 3.27 MGD is discharged to the South Fork San Jose Creek.
- The Whittier Narrows WRP has three discharge locations, two tributary to the Rio Hondo in the Los Angeles River watershed, and one tributary to the San Gabriel River. A recently approved modification to discharge from the Whittier Narrows WRP (SWRCB Order WW0098) will reduce discharges to the San Gabriel River by approximately one percent (0.01 MGD). This modification was covered by a separate environmental document (Sanitation Districts 2018). As shown in Table ES-1, an average of approximately 1.19 MGD is discharged to the San Gabriel River.

TABLE ES-1
EXISTING AND PROPOSED FUTURE ANNUAL DAILY AVERAGE DISCHARGES

Treatment Plant	NPDES Annual Average Daily Discharge (MGD) (Water Years[1] 2014-2018)	Proposed Future Annual Daily Average Discharge (MGD)	New Purpose of Use
San Jose Creek WRP (discharge point SJC001)	5.44	0.00	Recycled Water Uses Allowed by Title 22
San Jose Creek WRP (discharge point SJC001A)	7.30	Variable[3]	Recycled Water Uses Allowed by Title 22
San Jose Creek WRP (discharge point SJC001B)	4.90[2]	Variable[3]	Recycled Water Uses Allowed by Title 22
San Jose Creek WRP (discharge point SJC002)	9.48	5.00	Recycled Water Uses Allowed by Title 22
San Jose Creek WRP (discharge point SJC003)	0.04	0.00	Recycled Water Uses Allowed by Title 22
Pomona WRP (discharge point POM001)	3.27	0.00	Recycled Water Uses Allowed by Title 22
Whittier Narrows WRP[4] (discharge point WN001)	1.19	1.18[5]	Recycled Water Uses Allowed by Title 22
Los Coyotes WRP (discharge point LC001)	17.00	2.00	Recycled Water Uses Allowed by Title 22
Long Beach WRP (discharge point LB001)	6.72	0.00	Recycled Water Uses Allowed by Title 22
TOTAL	53.53[6]	8.18[7]	

1 Based on average flow data from Water Years 2014-2018.

2 Discharge from SJC001B began in March 2016; therefore, Annual Average shown is for Water Years 2017-2018.

3 Discharge point is used in conjunction with SGSG as part of the Montebello Forebay Groundwater Recharge Project. Actual discharge from this location may vary with the overall recharge volume consisting of the current volume of approximately 39.50 MGD (44,200 acre-feet per year [AFY]), plus an additional amount diverted from SJC002 as part of the proposed project.

4 As explained above, the Whittier Narrows WRP discharges to both the Rio Hondo/LA River watershed and the San Gabriel River watershed. The proposed project and table only assesses changes in discharges to the San Gabriel River watershed. Proposed reductions to the Rio Hondo/LA River watershed would be a separate and distinct project and the environmental impacts of those reductions will be considered in a separate CEQA document.

5 SWRCB's 1211 Order WW0098 for the change in place of use, purpose of use and quantity of treated wastewater currently discharged to the Rio Hondo and the San Gabriel River was approved in December 2018. It is included to evaluate cumulative impacts.

6 The total existing annual daily average surface water discharge to all San Jose Creek WRP discharge locations for WY 2014-2018 is 25.35 MGD, which was used for this calculation. Please note that because SJC001B (see Footnote 2 above) has a different averaging period, the numbers in the table for SJC are not additive.

7 The proposed future annual daily average surface water discharge is a minimum as the proposed discharge from SJC001A and SJC001B are not specified in this table. Refer to notes 2 and 3 above.

SOURCE: Sanitation Districts 2019.

- The Los Coyotes WRP discharges into a concrete-lined portion of the San Gabriel River. Discharge flow is contained within the low-flow channel of the river under typical dry-weather conditions. The project proposes to maintain a minimum discharge flow of 2 MGD to prevent the low-flow channel from going completely dry downstream of the plant. As shown in Table ES-1, an average of approximately 17.00 MGD is discharged to the San Gabriel River.

- The Long Beach WRP discharges into the concrete-lined Coyote Creek approximately 3,000 feet before the start of the San Gabriel River estuary. Urban runoff and natural flows in Coyote Creek upstream of the Long Beach WRP maintain a consistent flow in the creek at the discharge location. The project proposes a minimum discharge flow of zero from the Long Beach WRP. As shown in Table ES-1, an average of approximately 6.72 MGD is discharged to Coyote Creek.

ES.5 Summary of Impacts

Table ES-2 presents a summary of the impacts and mitigation measures identified for the Draft EIR. The complete impact statements and mitigation measures are presented in Chapter 3, *Environmental Setting, Impacts and Mitigation Measures*, of this Draft EIR. The level of significance for each impact was determined using significance criteria (thresholds) developed for each category of impacts; these criteria are presented in the appropriate sections of Chapter 3 of this Draft EIR. Significant impacts are those adverse environmental impacts that meet or exceed the significance thresholds; less than significant impacts do not exceed the thresholds. Table ES-2 indicates the measures that will avoid, minimize, or otherwise reduce significant impacts to a less than significant level.

The proposed project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Potentially significant impacts to biological resources have been identified at the project level. Mitigation measures have been incorporated in this Draft EIR to avoid or minimize impacts associated with these resources to less than significant levels.

TABLE ES-2
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PROPOSED PROJECT

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.1 Biological Resources			
Impact BIO 3.1-1: The proposed projects could have a significant impact if they would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS).	Potentially Significant	**BIO-1:** The Sanitation Districts shall implement a discharge operational scenario that maintains downstream habitat conditions. The District shall implement the Adaptive Management Plan (AMP) (refer to Appendix H) to ensure that the quantity and quality of riparian and wetland habitat currently supported by wastewater discharges is maintained at or above baseline levels, recognizing that the habitat in the channel may change naturally in response to long-term changes in surface flows and high flood events. The District shall coordinate with the USFWS and CDFW in implementing the AMP. As part of the AMP, data collected during monitoring will be submitted to USFWS and CDFW for review and comment. The AMP identifies parameters that would trigger actions to remedy any effects attributable to the proposed reduced discharges. Monitored parameters shall include a combination of water stress, vegetation cover, and structural diversity of vegetation based on richness, canopy and understory cover, and recruitment. The specific trigger levels for each parameter shall be included in a Habitat Monitoring Plan developed in consultation with USFWS and CDFW. If triggers are reached, specific remedial actions will include resumed discharges into the river channel sufficient to support the acreage of habitat sustained by historical discharges. **BIO-2:** The Sanitation Districts shall conduct brown-headed cowbird trapping adjacent to the San Gabriel River channel in areas that are accessible to Sanitation Districts staff. The trapping shall occur during the first three years of the initiation of reduced discharges. Additional cowbird trapping activities shall be implemented subject to need based on AMP annual reporting.	Less than Significant
Impact BIO 3.1-2: The proposed projects could have a significant impact if they would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or USFWS.	Potentially Significant	Implementation of Mitigation Measure BIO- 1 is required.	Less than Significant
Impact BIO 3.1-3: The proposed projects could have a significant impact if they would have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Potentially Significant	Implementation of Mitigation Measure BIO- 1 is required.	Less than Significant

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact BIO 3.1-4: The proposed projects could have a significant impact if they would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Less than Significant	No mitigation measures are required.	Less than Significant
Impact BIO 3.1-5: The proposed projects could have a significant impact if they would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	No Impact	No mitigation measures are required.	No Impact
Impact BIO 3.1-6: The proposed projects could have a significant impact if they would conflict with provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.	No Impact	No mitigation measures are required.	No Impact
3.2 Hydrology and Water Quality			
Impact HYDRO 3.2-1: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	Less than Significant	No mitigation measures are required.	Less than Significant
Impact HYDRO 3.2-2: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	Less than Significant	No mitigation measures are required.	Less than Significant
Impact HYDRO 3.2-3: The proposed project would not 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 imperious surfaces, in a manner which would: • result in substantial erosion or siltation on- or off-site; • substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; • create or contribute runoff water that would exceed the capacity of existing or planned	Less than Significant; Less than Significant; Less than Significant; and No Impact	No mitigation measures are required.	Less than Significant; Less than Significant; Less than Significant; and No Impact

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
stormwater drainage systems or provide substantial additional sources of polluted runoff; or • impede or redirect flood flows.			
Impact HYDRO 3.2-4: The proposed project would not result in flood hazard, tsunami, or seiche zones, risk or release of pollutants due to project inundation.	No Impact	No mitigation measures are required.	No Impact
Impact HYDRO 3.2-5: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Less than Significant	No mitigation measures are required.	Less than Significant
3.3 Recreation			
Impact REC 3.3-1: The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	Less than Significant	No mitigation measures are required.	Less than Significant
Impact REC 3.3-2: The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	No Impact	No mitigation measures are required.	No Impact
Impact REC 3.3-3: The proposed project would not substantially or negatively impact recreational facilities or interfere with existing recreational activities (e.g., boating, fishing, hiking).	No Impact	No mitigation measures are required.	No Impact

ES.6 Areas of Known Controversy

Pursuant to Section 15123(b)(2) of the CEQA Guidelines, a lead agency is required to include areas of controversies raised by agencies and the public during the public scoping process in the EIR. Areas of controversy have been identified for the Draft EIR based on comments made during the 30-day public review period in response to information published in the NOP. Commenting parties have expressed concern for biological, hydrological and recreational impacts. These issues have been considered during preparation of this Draft EIR.

ES.7 Significant Irreversible Environmental Changes

Public Resources Code Section 21100(b)(2) and CEQA Guidelines Section 15126.2(b) require that an EIR identify any significant effect on the environment that would be irreversible if the proposed project is implemented. A project would generally result in a significant irreversible impact if:

- Primary and secondary impacts (such as roadway improvements that provide access to previously inaccessible areas, etc.) would commit future generations to similar uses.
- The project would involve a large commitment of nonrenewable resources.
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project.

Nonrenewable resources such as steel and other metals cannot be regenerated over time and therefore, construction projects can often involve a large commitment of nonrenewable resources. The proposed project does not include the construction of any built facilities that require building materials; therefore, the implementation of the proposed project would not require the use or consumption of nonrenewable resources. No impact to nonrenewable sources within the proposed project region would occur.

In addition, the proposed project would not involve an increase in the commitment of nonrenewable energy resources. The project proposes to incrementally reduce surface water discharges of recycled water from five WRPs, each of which currently discharges into the San Gabriel River or its tributaries: San Jose Creek and/or Coyote Creek. The Sanitation Districts will continue to maintain the ability to discharge treated water at the same points but anticipate lower quantities. Energy will continue to be consumed during operation of the proposed project. However, compared to the existing use of energy by the Sanitation Districts' facilities, the incremental reduction in discharge would not require any more energy than baseline operations. As no construction activities or significant changes in current operations are considered by the proposed project, project implementation would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Potential impacts due to these irretrievable and irreversible commitments of resources would not occur.

ES.8 Project Alternatives

In accordance with CEQA Guidelines Section 15126.6, an EIR must describe and compare a range of reasonable alternatives to a project, or alternative locations for a project, that could feasibly attain most of the basic project objectives but avoid or substantially lessen any significant environmental impacts associated with the project. An EIR must consider a reasonable range of feasible alternatives to facilitate informed decision making and public participation. An EIR need not consider every conceivable alternative to a project and is not required to consider alternatives which are infeasible. The lead agency shall select a range of project alternatives and disclose its reasoning for selecting those alternatives.

Alternatives Selected for Analysis

Two project alternatives were selected for detailed analysis. As concluded in Chapter 3 of this Draft EIR, the proposed project would not result in any significant impacts. Nonetheless, this alternatives analysis has been prepared to evaluate other alternatives to compare with the proposed project to further lessen or avoid environmental impacts of the proposed project. The alternatives were developed as operational scenarios that could be implemented to address concerns over reduced availability of water in the river channel and soils.

The following sections provide a general description of each identified alternative, its ability to meet the project objectives, and a discussion of its comparative environmental impacts. As provided in Section 15126.6(d) of the CEQA Guidelines, the significant effects of these alternatives are identified in less detail than the analysis of the proposed project in Chapter 3 of this Draft EIR. **Table ES-3** provides a comparison of the alternatives with the proposed project. **Table ES-4** compares the alternatives with the project objectives.

Alternative 1: No Project Alternative

An analysis of the No Project Alternative is required under CEQA Guidelines Section 15126.6(e). According to Section 15126.6(e)(2) of the CEQA Guidelines, the "no project" analysis shall discuss:

> *What is reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.*

The No Project Alternative represents a "no build" scenario in which the proposed project would not be implemented. It assumes that all five WRPs would continue to discharge water at current volumes into the San Gabriel River and its tributaries: San Jose Creek and/or Coyote Creek. There would be no diverted water from the discharges to supply recycled water programs implemented by other agencies. The reduction in recycled water flow to surface water discharges would not occur.

Alternative 2: Discharge Reduction Phasing

Alternative 2 would involve the same level of reductions in surface water discharges as the proposed project, but would phase the proposed discharge reductions into the San Gabriel River above Whittier Narrows Dam over time. As summarized above in Table ES-1, current discharges from San Jose Creek WRP's discharge point SJC002 and SJC003 are approximately 9.48 MGD and 0.04 MGD, respectively, and Pomona WRP's discharge point POM001 is approximately 3.27 MGD, totaling an annual average flow of 12.80 MGD that currently reaches the San Gabriel River upstream of the Whittier Narrows Dam. Under Alternative 2, discharge volumes from these discharge points would be reduced to approximately 9.00 MGD for Years 1 and 2, and would then be reduced to 5.00 MGD beginning in Year 3. This phased approach ultimately would meet the proposed project's flow objectives after two years. The other proposed WRP discharge reductions under Alternative 2 would be similar to the proposed project.

TABLE ES-3
SUMMARY OF IMPACTS OF ALTERNATIVES COMPARED TO THE PROJECT

Environmental Topic	Proposed Project	Alternative 1: No Project	Alternative 2: Discharge Reduction Phasing
Biological Resources	Less than Significant with Mitigation	Less	Similar
Hydrology and Water Quality	Less than Significant	Greater	Similar
Recreation	Less than Significant	Greater	Similar

TABLE ES-4
ABILITY OF ALTERNATIVES TO MEET PROJECT OBJECTIVES

Project Objectives	Proposed Project	Alternative 1: No Project	Alternative 2: Discharge Reduction Phasing
Consistent with State law and policy, support increased recycled water use through maximizing the availability of treated effluent that would otherwise be discharged to flood control channels within the San Gabriel River watershed.	Yes	No	Yes
Sustain or, if feasible, enhance sensitive habitats that have benefitted from historical treated effluent discharges to the San Gabriel River watershed through more efficient discharges from Sanitation Districts' WRPs.	Yes	No	Yes

Environmentally Superior Alternative

CEQA requires that an EIR identify an environmentally superior alternative of a project other than the No Project Alternative (CEQA Guidelines Section 15126.6[e][2]). Table ES-3 shows an impact determination comparison for potentially significant impacts of the proposed project to all the proposed alternatives. Neither the proposed project, the No Project Alternative, nor Alternative 2 has any significant, unmitigable impacts. Thus, the comparison of effects considers the relationship among varying degrees of less-than-significant impacts across the alternatives.

The No Project Alternative (Alternative 1) would reduce or eliminate Project impacts to biological resources, but would not provide the benefits of the proposed project to recycled water users or to long-term biological resources management in the San Gabriel River Channel.

Alternative 2 would implement surface water discharge reduction in phases, allowing for the Adaptive Management Plan to confirm effects to vegetation. The phasing may increase assurances that monitoring and adaptive management can effectively protect (and possibly improve) vegetation and instream habitat conditions at targeted river segments and seasons. Implementation of Mitigation Measures BIO-1 and BIO-2 (applicable to both the proposed project and Alternative 2) would ensure that biological resources are monitored and maintained at current levels. As a result, Alternative 2 would result in similar effects as the proposed project, though implemented more slowly.

Both the proposed project and Alternative 2 would equally maintain biological and recreational values in the river channels, subject to Mitigation Measures BIO-1 and BIO-2. The proposed project would result in additional benefits because it would supply more recycled water to users sooner than Alternative 2, reducing needs for imported water or pumped groundwater currently meeting these demands. As a result, the proposed project would be considered the Environmentally Superior Alternative.

ES.9 Organization of this EIR

This Draft EIR has been organized into the following chapters:

ES. Executive Summary. This chapter summarizes the contents of the Draft EIR.

1. **Introduction.** This chapter discusses the CEQA process and the purpose of the Draft EIR.
2. **Project Description.** This chapter provides an overview of the proposed project, describes the need for and objectives of the proposed project, and provides detail on the characteristics of the proposed project.
3. **Environmental Setting, Impacts and Mitigation Measures.** This chapter describes the environmental setting and identifies impacts of the proposed project for each of the following environmental resource areas: Biological Resources; Hydrology and Water Quality; and Recreation. Measures to mitigate the impacts of the proposed project are presented for each resource area.
4. **References.** This chapter provides all references for this Draft EIR.
5. **Alternatives.** This chapter presents an overview of the alternatives process and describes the alternatives to the proposed project that were considered.
6. **Other CEQA Considerations.** This chapter describes the effects that were found not to be significant and those that were found to be significant and unavoidable. In addition, this section discusses the significant irreversible environmental changes and growth-inducing impacts associated with the project.
7. **List of Preparers.** This chapter identifies the key staff at Sanitation Districts and the authors involved in preparing this Draft EIR.

CHAPTER 1
Introduction

1.1 Purpose of the Draft EIR

The Sanitation Districts of Los Angeles County (Sanitation Districts), as the Lead Agency pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines (CEQA Guidelines), has prepared this Draft Environmental Impact Report (Draft EIR) to provide the public and pertinent agencies with information about the potential effects on the local and regional environment associated with the San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse (proposed project). The Sanitation Districts are proposing to incrementally reduce surface water discharges of recycled water from five water reclamation plants (WRPs), including the San Jose Creek WRP, the Pomona WRP, the Whittier Narrows WRP, the Los Coyotes WRP, and the Long Beach WRP, each of which currently discharges into the San Gabriel River or its tributaries; San Jose Creek or Coyote Creek. The diverted water would supply recycled water programs implemented by other agencies. The proposed reduction in surface water discharges would occur over time and would not involve any construction activities or other physical changes to the environment other than the decreased volume of discharge.

As described in Section 15121(a) of the CEQA Guidelines, this Draft EIR is intended to serve as an informational document for pertinent public agency decision makers. Accordingly, this Draft EIR has been prepared to identify the significant environmental effects of the proposed project, identify mitigation measures to minimize significant effects, and consider reasonable project alternatives. The environmental impact analyses in this Draft EIR are based on a variety of sources, including agency consultation, technical studies, and field surveys.

1.2 Intended Use of the Draft EIR

The purpose of this Draft EIR is to evaluate the proposed project in accordance with CEQA and the CEQA Guidelines. The proposed project would be implemented by the Sanitation Districts, as the CEQA Lead Agency. The decision-making body of a lead agency is required to prepare an EIR and the decision-making bodies of responsible agencies are required to consider the lead agency's EIR prior to acting upon or approving the proposed project (CEQA Guidelines Section15050 (a), (b)). After the Sanitation Districts certify the Final EIR, the Sanitation Districts and, to the extent needed, the responsible agencies, may proceed with approving and implementing the proposed project. The CEQA process is further described below in Section 1.3.

1.3 CEQA Environmental Review Process

1.3.1 CEQA Process Overview

This Draft EIR has been prepared in compliance with CEQA (as amended), codified as California Public Resources Code Sections 21000 et seq. and the CEQA Guidelines in the California Code of Regulations, Title 14, Division 6, Chapter 3. The basic purposes of CEQA are to: (1) inform decision makers and the public about the potential, significant environmental effects of proposed activities, (2) identify the ways that environmental effects can be avoided or significantly reduced, (3) prevent significant, avoidable environmental effects by requiring changes in projects through the use of alternatives or mitigation measures when feasible, and (4) disclose to the public the reasons why an implementing agency may approve a project even if significant unavoidable environmental effects are involved (CEQA Guidelines Section 15002).

An EIR uses a multidisciplinary approach, applying social and natural sciences to make a qualitative and quantitative analysis of all the foreseeable environmental impacts that a proposed project would exert on the surrounding area. As stated in CEQA Guidelines Section 15151:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible.*

This Draft EIR has been prepared in compliance with CEQA and the CEQA Guidelines and is to be used by local regulators and the public in their review of the potential significant adverse environmental impacts of the proposed project and alternatives, and mitigation measures that would minimize or avoid those potential environmental effects. The Sanitation Districts will consider the information presented in this Draft EIR, along with other factors, prior to considering and making any final decisions regarding the proposed project.

1.3.2 Notice of Intent to Adopt Draft Initial Study/Mitigated Negative Declaration

The Sanitation Districts had previously published an Initial Study and a Notice of Intent to adopt a Mitigated Negative Declaration (MND) for the same project in July 2018, which concluded that the proposed project would result in no significant impacts to the environment. Following public review of the MND and accompanying Initial Study, the Sanitation Districts decided to prepare a Draft EIR.

1.3.3 Notice of Preparation and Public Scoping

Pursuant to Section 15082 of the CEQA Guidelines, the lead agency is required to send a Notice of Preparation (NOP) stating that a Draft EIR will be prepared to the State Office of Planning and Research (OPR), responsible and trustee agencies, and federal agencies involved in funding or approving the project, and file the NOP with the county clerk in each county the project will be located. The NOP must provide sufficient information for responsible agencies to make a

meaningful response. At a minimum, the NOP must include a description of the project, location of the project, and probable environmental effects of the project (CEQA Guidelines Section 15082(a)(1)). Within 30 days after receiving the NOP, responsible and trustee agencies and the OPR shall provide the lead agency with specific detail about the scope and content of the environmental information related to that agency's area of statutory responsibility that must be included in the Draft EIR (CEQA Guidelines Section 15082(b)).

On February 6, 2019, a NOP for the proposed project was submitted to the California OPR, and distributed to responsible and trustee agencies and other interested parties for a 30-day review period that ended on March 9, 2019. The NOP was mailed to local, state, and federal agencies and groups or individuals who had expressed interest in the proposed project. Copies of the NOP were made available for public review on the Sanitation Districts' website (http://www.lacsd.org/residents/documents_for_public_review.asp) and at the office of the Sanitation Districts, 1955 Workman Mill Road, Whittier, CA 90601. The NOP requested comments on the scope of the Draft EIR and asked that those agencies with regulatory authority over any aspect of the proposed project to describe that authority. The NOP provided a description of the proposed project, a description of the project location, project background, project objectives, and a preliminary list of potential environmental impacts.

On February 20, 2019, in accordance with CEQA Section 21083.9,[1] the Sanitation Districts held a public scoping meeting to obtain public comments and suggestions from interested parties on the scope of the Draft EIR. The public scoping meeting was held at the office of the Sanitation Districts, 1955 Workman Mill Road, Whittier, CA 90601. Sanitation Districts' staff and ten members of the local community attended the scoping meeting. At the public scoping meeting, a brief presentation and overview of the proposed project was provided. After the presentation, oral and written comments on the scope of the environmental issues to be addressed in the Draft EIR were accepted.

Appendix A**,** *Initial Study/Notice of Preparation*, includes a copy of the NOP and written and oral comments submitted on the NOP. **Table 1-1** below presents a summary of comments relevant to the environmental analyses to be included in this Draft EIR.

TABLE 1-1
SUMMARY OF NOP COMMENTS

Commenter/Date	Summary of Environmental Issues Raised in Comment Letters	Applicable Draft EIR Sections
Notice of Preparation – February 6, 2019		
Agencies		
South Coast Air Quality Management District (February 21, 2019)	SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the EIR. The commenter also requests a copy of the EIR upon its completion, sent directly to SCAQMD.	Chapter 6, *Other CEQA Considerations* Appendix A, *Initial Study/Notice of Preparation*

[1] CEQA Section 21083.9 requires that a lead agency call at least one scoping meeting for a project of statewide, regional, or areawide significance.

Commenter/Date	Summary of Environmental Issues Raised in Comment Letters	Applicable Draft EIR Sections
Orange County Water District (February 26, 2019)	The Orange County Water District is requesting to be placed on the distribution for all CEQA-related projects for the proposed project.	Chapter 1, *Introduction*
California Department of Transportation (Caltrans) (February 27, 2019)	The commenter does not expect project approval to result in a direct adverse impact to the existing State transportation facilities.	Chapter 1, *Introduction*
County of Los Angeles Department of Parks and Recreation (March 7, 2019)	Project may have adverse impacts on wildlife habitat in Whittier Narrows Recreation and Natural Areas. Reduced discharges into the San Jose Creek, San Gabriel and Rio Hondo Rivers could adversely affect aesthetics of Los Angeles County multi-use trails.	Section 3.1, *Biological Resources* Section 3.3, *Recreation* Chapter 6, *Other CEQA Considerations* Appendix A, *Initial Study/Notice of Preparation*
State Water Resources Control Board (State Water Board) (March 7, 2019)[1]	The commenter states that a wastewater change petition is required to be submitted to the State Water Board Division of Water Rights and approved pursuant to Water Code Section 1211 prior to reducing discharges associated with the proposed project. The commenter requests continued coordination with the State Water Board during the CEQA process. The commenter suggests the project EIR should include an evaluation of the impacts of reduced discharges to other beneficial uses of the water, including fish and wildlife resources and the environment.	Chapter 1, *Introduction* Chapter 2, *Project Description* Section 3.1, *Biological Resources* Section 3.2, *Hydrology and Water Quality* Section 3.3, *Recreation*
State of California – Natural Resources Agency – Department of Fish and Wildlife (March 8, 2019)[2]	The commenter provides specific comments regarding vegetation and habitat communities; focused aquatic surveys; bat, bird and raptor surveys; baseline conditions; and the Adaptive Management Plan.	Section 3.1, *Biological Resources* Section 3.2, *Hydrology and Water Quality*
Organizations		
San Gabriel & Lower Los Angeles Rivers and Mountains Conservancy (March 5, 2019)	The commenter requests the EIR to analyze biological resource impacts to existing riparian habitat; current native avian and amphibian use and habitat along and in channel; movement of native resident or migratory wildlife; impediment of channel as use as native wildlife nesting sites; and in-channel aquatic invertebrate and fish abundance, used by wildlife as a food source. The commenter requests the EIR to discuss impacts to the soft bottom habitat just north of the I-605 and I-405 interchange. The commenter requests in the event that mitigation is required, for the EIR to consider habitat enhancements with native plants in San Gabriel River tributaries not affected by the proposed project, such as Avocado Creek, or at the Los Cerritos Wetlands.	Section 3.1, *Biological Resources* Section 3.2, *Hydrology and Water Quality*
Sierra Club (San Gabriel Valley Task Force) (March, 7, 2019)	The commenter requests a complete evaluation of the cycling of water including the variable precipitation, variations in surface flow, infiltration and percolation, impacts to groundwater quality and amounts in this area must be completed to determine impacts of the proposed project. The commenter agrees there could be a potentially significant impacts to sensitive or listed species and requests a full evaluation in the EIR.	Section 3.1, *Biological Resources* Section 3.2, *Hydrology and Water Quality* Section 3.3, *Recreation*

Commenter/Date	Summary of Environmental Issues Raised in Comment Letters	Applicable Draft EIR Sections
	The commenter provides a list of questions regarding groundwater resources in aquifers, potential impacts to Duck Farm, redirection of recycled water flow, impacts to water use, impacts downstream to Long Beach and into coastal waters, and what other alternative uses are there for high quality treated water?	
Los Angeles WaterKeeper, Heal the Bay, Nature For All, Amigos De Los Rios Emerald Necklace (March 8, 2019)	The commenter states strong support for LACSD's decisions to reverse the previously proposed MND and instead to prepare an EIR for the proposed project. The commenter provides comments and areas of concern for consideration in the EIR which include evaluation of various diversion levels on beneficial uses such as rare species habitat, recreation (both in Whitter Narrows Recreation Area and the River more generally), wildlife habitat, and an assessment of cumulative impacts.	Section 3.1, *Biological Resources* Section 3.2, *Hydrology and Water Quality* Section 3.3, *Recreation*
Citizens for Open and Public Participation (March 11, 2019)	The commenter has provided examples for projects for CBMWD, City of Montebello, and SGVWCO. The commenter summarizes these projects and issues they have with each project.	Not applicable.
Individuals		
Bruce A Lazenby, Executive Director Business Development, Rose Hills Memorial Park and Mortuaries (February 26, 2019)	Rose Hills is supportive of the project objectives.	Not applicable.
Tom Williams (February 26, 2019)	The commenter provides thoughts about the scoping meeting and presentation. The commenter suggests the EIR should show a full quantitative water flow model/diagram for basin, including recharges/evaporations, Low Impact Development, and "reject/brine sources" and their outfall piping/outlets. Who gets more water and when...to 2045 based on SCAG projects for population, households, and employment within and by the service areas The Project objectives are not quantified. The EIR should include alternatives of 50% of the proposed project; 200% of the proposed project; and, 100% proposed with Direct Potable Reuse. Provide MMRP in the EIR. Would the proposed project be growth inducing?	Chapter 1, *Introduction* Chapter 2, *Project Description* Section 3.2, *Hydrology and Water Quality*
Scoping Meeting – February 20, 2019		
Organizations		
Arthur Pugsley, Los Angeles WaterKeeper,	Supports the proposed project; however, recommends modifying project objective 3. Would like to see reductions implemented downstream first since there is less impacts to habitat. Would like to see analysis of reduction in flows versus beneficial uses, namely recreation uses. Would like the AMP to be proactive rather than reactive. Would also like the AMP to look at habitat restoration opportunities.	Chapter 1, *Introduction* Chapter 2, *Project Description* Section 3.1, *Biological Resources* Section 3.2, *Hydrology and Water Quality* Section 3.3, *Recreation*

Commenter/Date	Summary of Environmental Issues Raised in Comment Letters	Applicable Draft EIR Sections
	Would like to see an accounting of all water sources in the San Gabriel River basin.	
Individuals		
Jim Flournoy (Save Our Community)	No issues were raised directly related to the preparation of the EIR.	Not applicable.
Michael Popoff	Requests an environmental justice component in the EIR.	Not applicable.
	Would like to see water used to refill the wetlands east of Rosemead Boulevard.	
	Would like to see the Sanitation Districts have a policy to who the water agencies give the water.	
	Supports groundwater recharge and believes the spreading basins are being underutilized.	
	Would like to see stormwater stored and reused as grey water.	

[1] Responsible Agency.
[2] Trustee Agency.

1.3.4 Draft EIR

This Draft EIR has been prepared pursuant to the requirements of the CEQA Guidelines Section 15126. The environmental issues addressed in this Draft EIR were established through review of environmental documentation developed for the proposed project, environmental documentation for nearby projects, and public and agency responses to the NOP. As discussed above, the proposed reduction in water discharges of the proposed project would occur over time, and would not involve any construction activities or other physical changes to the environment other than the decreased volume of discharge. As such, this Draft EIR provides an analysis of reasonably foreseeable impacts associated with the operation of the proposed project. The environmental baseline for determining potential impacts is the date of publication of the NOP for the proposed project, unless otherwise indicated (CEQA Guidelines Section 15125(a)(1)). The baseline environmental setting for each resource assessed in this Draft EIR describes the existing conditions as of February 2019. The impact analysis is based on changes to existing conditions that will result due to implementation of the proposed project.

In accordance with the CEQA Guidelines Section 15126, this Draft EIR describes the proposed project and the baseline environmental setting, identifies short-term, long-term, and cumulative adverse environmental impacts associated with project implementation, identifies mitigation measures for significant adverse impacts, analyzes potential growth-inducing impacts, and provides an analysis of alternatives. Significance criteria has been developed for each environmental resource analyzed in this Draft EIR. The significance criteria are defined at the beginning of each impact analysis section.

1.3.5 Public Review

In accordance with CEQA Guidelines Section 15105, this Draft EIR is being circulated and made available to local, state, and federal agencies, and to interested organizations and individuals who may wish to review and comment on the Draft EIR during the 45-day review period. All written comments should be directed to:

Jodie Lanza, Supervising Engineer
Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

Comments on the Draft EIR must be received by close of business on the last day of the 45-day review period unless the Sanitation Districts grants an extension. All written and oral comments received on this Draft EIR will be responded to and included in the Final EIR.

1.3.6 Final EIR Publication and Certification

Once the Draft EIR public review period has ended, the Sanitation Districts will prepare written responses to all written and oral comments received in response to the Draft EIR. The Final EIR will be comprised of this Draft EIR, response to comments received on this Draft EIR, and any changes or corrections to this Draft EIR that are made as part of the response to comments. As the Lead Agency, the Sanitation Districts will make the Final EIR available for public review prior to it considering any final decision regarding approval of the proposed project (CEQA Guidelines Section 15089(b)). The Final EIR must be available to commenting agencies at least 10 days prior to certification (CEQA Guidelines Section 15088(b)).

Prior to considering the proposed project for approval, the Sanitation Districts will review and consider the information presented in the Final EIR and will certify that the Final EIR has been adequately prepared in accordance with CEQA. Once the Final EIR is certified, the Sanitation Districts' Board of Directors may proceed to consider any final decisions regarding the proposed project (CEQA Guidelines Section 15090 and Section 15096(f)). Prior to approving the proposed project, the Sanitation Districts must make written Findings in accordance with Section 15091 of the CEQA Guidelines. In addition, the Sanitation Districts must adopt a Statement of Overriding Considerations (SOC) concerning each significant environmental effect identified in the Final EIR (if any) that cannot be fully mitigated to a less than significant level. If one is needed, then the SOC will be included in the record of the proposed project's approval and mentioned in the Notice of Determination (NOD) following CEQA Guidelines Section 15093(c). Pursuant to Section 15094 of the CEQA Guidelines, the Sanitation Districts will file an NOD with State Clearinghouse and the Los Angeles County Clerk within five working days, if the proposed project is approved.

1.3.7 Mitigation Monitoring and Reporting Program

CEQA requires lead agencies to "adopt a reporting and mitigation monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment" (CEQA Guidelines Section 15097). The mitigation measures, if any, adopted as part of the Final EIR will be included in the Mitigation Monitoring and Reporting Program (MMRP) and implemented by the Sanitation Districts. The MMRP will be available to the public at the same time as the Final EIR.

1.4 Organization of the Draft EIR

This Draft EIR is organized into the following chapters and appendices:

- **ES, Executive Summary.** The executive summary provides a synopsis of the proposed project's potential impacts. It identifies, in an overview fashion, the proposed project under consideration and its objectives. The section also summarizes the proposed project's impacts and mitigation measures and contains a summary analysis of the alternatives to the proposed project.
- **Chapter 1, Introduction.** This chapter provides an overview of the proposed project, the purpose of an EIR, and procedural information.
- **Chapter 2, Project Description.** This chapter provides an introduction of the proposed project, location and setting, background, site characteristics, objectives, construction, and the necessary permits and approvals for the proposed project.
- **Chapter 3, Environmental Setting, Impacts, and Mitigation Measures.** This chapter describes the environmental setting and identifies impacts of the proposed project for each of the following environmental resource areas: Biological Resources, Hydrology and Water Quality, and Recreation. If necessary, then mitigation measures to reduce significant impacts of the proposed project to the lowest level feasible are presented for each resource area. This chapter also provides an analysis of the cumulative impacts for each issue area analyzed in the Draft EIR.
- **Chapter 4, References.** This chapter provides the reference information for documents used for the environmental analysis.
- **Chapter 5, Alternatives.** This chapter presents an overview of the alternatives development process and describes and analyzes the alternatives to the proposed project, including the No Project Alternative.
- **Chapter 6, Other CEQA Considerations.** This chapter provides an analysis of the extent to which the proposed project's primary and secondary effects would commit resources to uses that future generations would probably be unable to reverse. This chapter also discusses the resource areas determined to have no impact with implementation of the proposed project. Further, this chapter describes the potential for the proposed project to induce growth.
- **Chapter 7, List of Preparers.** This chapter provides a list of the individuals who contributed to the preparation of the Draft EIR.
- **Appendices.** The appendices contain important information used to support the analyses and conclusions made in the Draft EIR. Appendices are provided documenting the scoping process, the biological resources assessment, and the hydrology assessments.

CHAPTER 2
Project Description

2.1 Introduction

In anticipation of increased future recycled water demands, the Sanitation Districts of Los Angeles County (Sanitation Districts), as the Lead Agency pursuant to the California Environmental Quality Act (CEQA), are proposing the San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse (proposed project) to incrementally reduce surface water discharges of recycled water from five water reclamation plants (WRPs), including the San Jose Creek WRP, the Pomona WRP, the Whittier Narrows WRP, the Los Coyotes WRP, and the Long Beach WRP, each of which currently discharges into the San Gabriel River or its tributaries: San Jose Creek and/or Coyote Creek. The diverted water would supply recycled water programs implemented by other agencies. The proposed reduction in surface water discharges would occur over time and would not involve any construction activities or other physical changes to the environment other than the decreased volume of discharge.

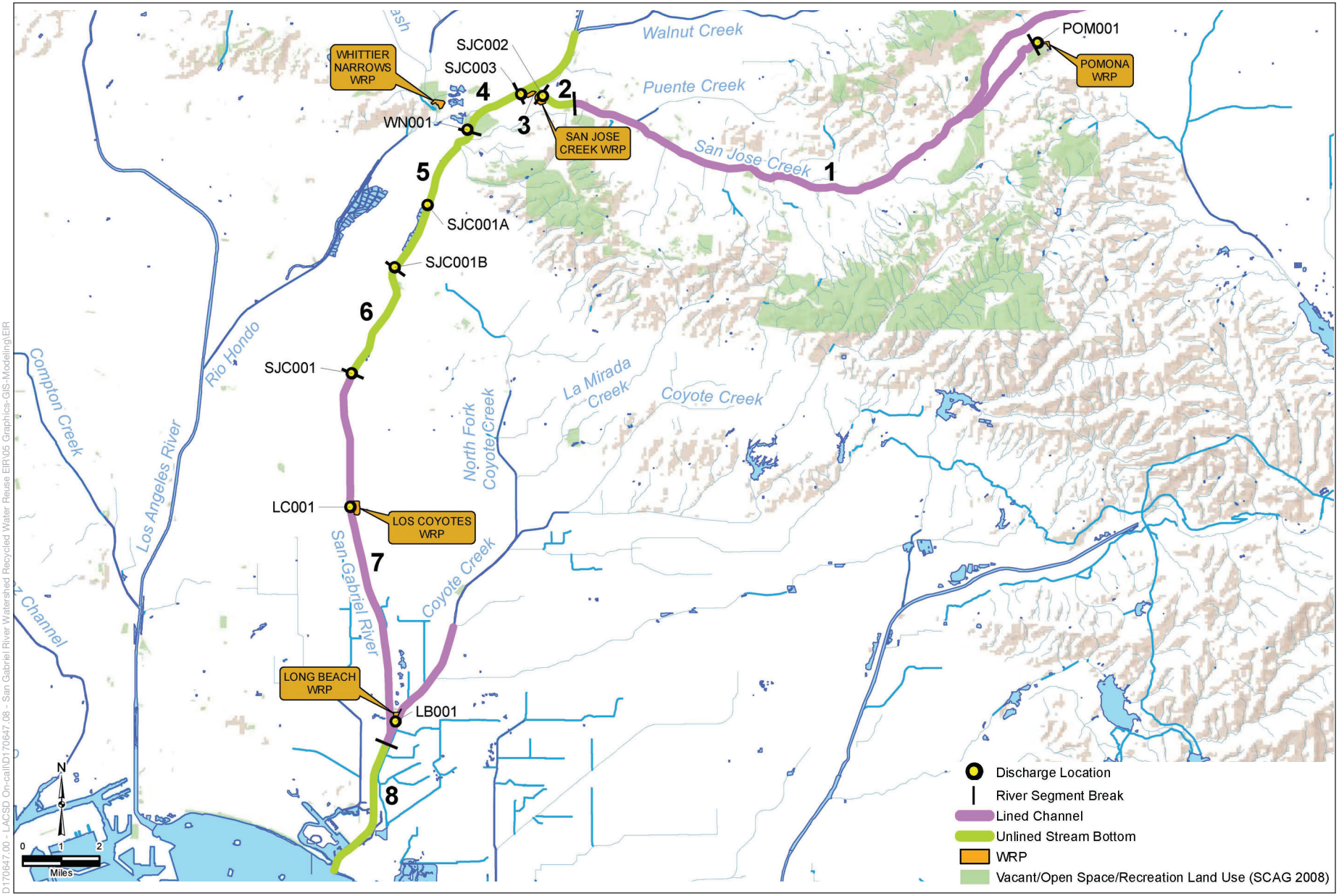
2.2 Project Location

The locations of the five WRPs are shown in **Figure 2-1**. The Pomona WRP and San Jose Creek WRP currently discharge recycled water to San Jose Creek. The San Jose Creek WRP, Whittier Narrows WRP, and Los Coyotes WRP each discharge to the San Gabriel River.[1] The Long Beach WRP discharges to Coyote Creek at the confluence with the San Gabriel River. The project study area includes the San Gabriel River, San Jose Creek, and Coyote Creek.

2.3 Project Background

The Sanitation Districts are a public agency created under state law to manage wastewater and solid waste on a regional scale and consist of 24 independent special districts serving approximately 5.6 million people in Los Angeles County. The Sanitation Districts' service area covers approximately 850 square miles and encompasses 78 cities and unincorporated territory within the Los Angeles County. The Sanitation Districts operate 10 WRPs and the Joint Water Pollution Control Plant. Seventeen sanitation districts provide sewerage services in the metropolitan Los Angeles area are signatory to a Joint Outfall Agreement that provides for the regional, interconnected systems of facilities known as the Joint Outfall System (JOS).

[1] The Whittier Narrows WRP also discharges to the Rio Hondo.



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SOURCE: Sanitation Districts of Los Angeles County

San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse

Figure 2-1

Sanitation Districts Discharges to the San Gabriel River Watershed System

ESA

The service area of the JOS encompasses 73 cities and unincorporated territory, providing sewage treatment, reuse, and ocean disposal for residential, commercial, and industrial wastewater. Under the Joint Outfall Agreement, Sanitation District No. 2 of Los Angeles County has been appointed managing authority over the JOS.

The three major rivers in the JOS service area are the Rio Hondo, Los Angeles, and San Gabriel. The Rio Hondo flows southwest from its headwaters at the Sawpit Dam into the Los Angeles River, which discharges into the Pacific Ocean. The San Gabriel River flows southwesterly from its headwaters in the San Gabriel Mountains and forms a tidal prism before discharging into the Pacific Ocean at Seal Beach. The tidal prism of the San Gabriel River is the area within the river where freshwater from upstream sources mixes with salt water from the Pacific Ocean.

These three rivers are part of Los Angeles County's flood control system and are thus highly modified to ensure adequate capacity to manage flood risk. In addition to flood control, the rivers are also operated for the purpose of conserving as much of the storm and other waters as practicable. The use of water conservation facilities or spreading grounds adjacent to river channels and in soft-bottom channels permits water to be captured and percolate into groundwater basins for later pumping. These groundwater recharge facilities are located in areas where the underlying soils are composed of permeable formations and in hydraulic connection with the underlying aquifer.

Despite the highly modified nature of the rivers, wildlife habitat does exist in some areas. This habitat has been supported in part by discharges of treated effluent from the Sanitation Districts' water reclamation facilities. Reductions in treated effluent discharges could affect these habitats by reducing water available to plants and animals in or near the river.

2.4 Project Objectives

The objectives of the proposed project are as follows:

- Consistent with State law and policy, support increased recycled water use through maximizing the availability of treated effluent that would otherwise be discharged to flood control channels within the San Gabriel River watershed; and
- Sustain or, if feasible, enhance sensitive habitats that have benefitted from historical treated effluent discharges to the San Gabriel River watershed through more efficient discharges from Sanitation Districts' WRPs.

2.5 Water Reclamation Facilities

The WRPs produce recycled water for beneficial reuse and are permitted to discharge recycled water into the San Gabriel River or its tributaries. The WRPs were constructed primarily to intercept domestic sewage, treat it to tertiary standards, and make it available for reuse in close proximity to demands. Discharges are used for either incidental groundwater percolation, conveyance to downstream groundwater recharge facilities, or to dispose of excess treated water through conveyance to the ocean via concrete lined channel.

2.5.1 San Jose Creek Water Reclamation Plant

The San Jose Creek WRP is located at 1965 Workman Mill Road, in unincorporated Los Angeles County, adjacent to the City of Whittier at the confluence of San Jose Creek and the San Gabriel River. The San Jose Creek WRP consists of two independently operated treatment plants: San Jose Creek East (SJCE) on the east side of the Interstate 605 Freeway and San Jose Creek West (SJCW) on the west side of I-605 near the intersection of California State Route 60 Freeway (CA-60). The SJCE and SJCW facilities have a design capacity of 62.50 million gallons per day (MGD) and 37.50 MGD, respectively, resulting in a combined treatment capacity of 100.00 MGD for the San Jose Creek WRP.

The San Jose Creek WRP serves a large residential population of approximately one million people. In 2018, the San Jose Creek WRP generated approximately 51.00 MGD of disinfected tertiary recycled water, most of which was beneficially reused. The facility supplied approximately 50.40 MGD of recycled water to over 170 different reuse sites, including for reuse at groundwater recharge sites, industrial facilities, and irrigation at parks, schools, and greenbelts. An average of approximately 9.48 MGD of recycled water is discharged to San Jose Creek and an average of approximately 25.10 MGD to the San Gabriel River.

The San Jose Creek WRP is permitted to discharge at seven distinct surface water points; however, only five are currently constructed: Discharge Points SJC001A, SJC001B, SJC001, SJC002, and SJC003, are each shown on **Figure 2-2**. Three of these discharge points (SJC001, SJC001A, and SJC001B) are downstream of Whittier Narrows Dam on the San Gabriel River, and are supplied by the 8-mile-long San Jose Creek Outfall Pipeline that conveys recycled water from the San Jose Creek WRP to these downstream discharge points. The other two discharge points (SJC002 and SJC003) discharge to San Jose Creek and the San Gabriel River, respectively, above the Whitter Narrows Dam (refer to **Table 2-1**).

Discharge Point No. SJC001A is located in the unlined portion of the San Gabriel River near the headworks of the San Gabriel Spreading Grounds (SGSG) and just upstream of Rubber Dam No. 2 (RD02). Discharge Point No. SJC001B is located in the unlined portion of the San Gabriel River downstream of Rubber Dam No. 4 (RD04). Discharge Point No. SJC001 is located in the concrete-lined portion of the San Gabriel River near Firestone Boulevard. Flow from the SJC Outfall Pipeline can also be diverted for recycled water use by pump stations to purveyors' distribution line or into the SGSG via two diversion points (SGSG B1 and SGSG B2).

Historical and Current Operations

The San Jose Creek WRP discharges at various points depending on the recharge facility availability, maintenance activities, or other factors. The Sanitation Districts endeavors to maximize recharge of recycled water using the array of groundwater recharge facilities within the Montebello Forebay, as described in Section 2.6.

Recycled water from the San Jose Creek WRP can be recharged within the SGSG, the Rio Hondo Spreading Grounds (RHSG), or unlined portions of the San Gabriel River via Discharge Point Nos. SJC001A, SJC001B, SJC002, and SJC003. Discharge into San Jose Creek or the San

Gabriel River above the Whittier Narrows Dam (Discharge Points No. SJC002 and SJC003) recharge groundwater above the Whittier Narrows Dam, which is in the southwestern edge of the Main San Gabriel Groundwater Water Basin. The Sanitation Districts has the ability to divert surface water from the San Gabriel River to the Rio Hondo and RHSG via the Zone 1 Ditch (refer to Figure 2-2). Discharges to Discharge Point Nos. SJC001A and SJC001B, accessed via the San Jose Creek Outfall Pipeline, recharge the Central Groundwater Water Basin via the unlined San Gabriel River channel.

TABLE 2-1
LOS ANGELES COUNTY SANITATION DISTRICTS WRP SAN GABRIEL WATERSHED DISCHARGE POINTS

Discharge Point	Receiving Water	Channel Type	NPDES Annual Average Daily Discharge (MGD) (Water Years[1] 2014–2018)	Percentage of Total NPDES Annual Average Daily Discharge	Annual Average Discharge Days (Water Years[1] 2014–2018)
San Jose Creek WRP					
SJC001	San Gabriel River	Concrete-lined	5.44	21.5	77
SJC001A	San Gabriel River	Soft-bottomed	7.30	41.0 [3]	74
SJC001B	San Gabriel River	Soft-bottomed	4.90 [2]		83 [2]
SJC002	San Jose Creek	Soft-bottomed	9.48	37.4	169
SJC003	San Gabriel River above Whittier Narrows Dam	Soft-bottomed	0.04	0.15	2
Pomona WRP					
POM001	South Fork San Jose Creek	Concrete-lined	3.27	100	361
Los Coyotes Creek WRP					
LC001	San Gabriel River	Concrete-lined	17.00	100	365
Long Beach WRP					
LB001	Coyote Creek	Concrete-lined	6.72	100	348
Whitter Narrows WRP					
WN001	San Gabriel River	Soft-bottomed	1.19	20.6 [4]	72

[1] The water year runs from October 1 of the previous year to September 30 of the labeled year.
[2] Discharge from SJC001B began in March 2016; therefore, the annual average shown is for Water Years 2017-2018.
[3] This percentage combines both SJC001A and SJC001B.
[4] The Whittier Narrows WRP discharges to both the Rio Hondo/LA River watershed and the San Gabriel River watershed. The proposed project and table only assesses changes in discharges to the San Gabriel River watershed.

SOURCE: Sanitation Districts 2019.

Table 2-1 summarizes a 5-water year average from 2014 through 2018 of discharge volumes at each point. These various discharge points are historically used interchangeably throughout the year depending on the availability of recharge facilities, maintenance activities, or other factors, with the objective of maximizing groundwater recharge. As shown in Table 2-1, Discharge Point No. SJC003 is rarely used.

Existing Permits

The San Jose Creek WRP is currently covered by three permits issued by the Los Angeles Regional Water Quality Control Board (LARWQCB): one for groundwater recharge in the Montebello Forebay (Order No. 91-100), one for the National Pollutant Discharge Elimination System (NPDES) discharge into surface waters (Order No. R4-2015-0070 and NPDES No. CA0053911), and one for use of recycled water for non-potable purposes (Order No. 87-50 and readopted under Order No. 97-072). The San Jose Creek WRP is permitted to discharge to the San Gabriel River and San Jose Creek pursuant to the NPDES Order. Implementation of the proposed project would not require changes to these existing permits.

2.5.2 Pomona Water Reclamation Plant

The Pomona WRP is located at 295 Humane Way in the City of Pomona. The plant occupies 14 acres northeast of the intersection of CA-60 and the California State Route 57 Freeway (CA-57). The original plant, known as the Tri-City Plant, was owned by the cities of Pomona, Claremont, and La Verne. It was placed into operation in July 1926, with reuse beginning in 1927. The Sanitation Districts took over operations in 1966.

Current Operations

The Pomona WRP provides primary, secondary, and tertiary treatment for up to 15.00 MGD. The plant serves a population of approximately 130,000 persons. Approximately 2.60 MGD of the recycled water during water year 2018 was used at over 210 different sites. Reuse applications include landscape irrigation of parks, schools, golf courses, and greenbelts; irrigation and dust control at the Spadra Landfill; and industrial use by local manufacturers. The remainder of the recycled water is discharged into San Jose Creek, where it flows through a concrete-lined portion for 16 miles until it reaches the unlined portions of the San Gabriel River, where it percolates into the groundwater. Table 2-1 summarizes a 5-water-year average from 2014 through 2018 of discharge volumes. As shown in Table 2-1, an average of approximately 3.27 MGD is discharged to the South Fork San Jose Creek.

Existing Permits

The Pomona WRP is currently covered by three LARWQCB permits: an NPDES permit to discharge into surface waters (Order No. R4-2014-0212-A01 and NPDES No. CA0053619), a permit for groundwater recharge in the Montebello Forebay (Order No. 91-100), and a recycled water use permit for non-potable purposes (Order No. 81-34 and readopted under Order No. 97-072). Implementation of the proposed project would not require changes to these existing permits.

2.5.3 Whittier Narrows Water Reclamation Plant

The Whittier Narrows WRP is located at 301 North Rosemead Boulevard in the City of El Monte. The plant occupies 27 acres south of the CA-60. The plant was originally constructed for the purpose of demonstrating the feasibility of large-scale water reclamation and recycled water use for groundwater recharge. The original plant was placed in operation on July 26, 1962 and

consisted of primary sedimentation and secondary treatment with activated sludge. The Whittier Narrows WRP provides treatment for up to 15.00 MGD.

Current Operations

The Whitter Narrows WRP was the first reclamation plant built by the Sanitation Districts. The plant serves a population of approximately 150,000 persons. Reclaimed water produced by the WRP is reused for irrigation and groundwater recharge at the RSGS and SGSG. Table 2-1 summarizes a 5-water-year average from 2014 through 2018 of discharge volumes. As shown in Table 2-1, an average of approximately 1.19 MGD is discharged to the San Gabriel River. The Whittier Narrows WRP discharges to both the Rio Hondo watershed and the San Gabriel River watershed. The Whittier Narrows WRP Discharges approximately 4.60 MGD to the Rio Hondo and its tributaries.

Existing Permits

The Whitter Narrows WRP is currently covered by four permits: an NPDES Permit to discharge into surface waters (Order No. R4-2014-0213-A01 and NPDES No. CA0053716), a permit for groundwater recharge in the Montebello Forebay (Order No. 91-100), a recycled water use permit for non-potable purposes (Order No. WQ 2016-0068-DDW, File No. 88-040, CI No. 6844), and a State Water Resources Control Board's (SWRCB's) 1211 Order for the change in place of use, purpose of use and quantity of treated wastewater currently discharged to the Rio Hondo and the San Gabriel River (Order WW0098). Implementation of the proposed project would not require changes to these existing permits.

The SWRCB 1211 Order WW0098 was approved in December 2018. The Whittier Narrows WRP is included in this Draft Environmental Impact Report (EIR) for evaluation of cumulative impacts of reduced discharges of recycled water to the San Gabriel River Watershed. Further reductions to the Rio Hondo/Los Angeles River watershed, if proposed, would be a separate and distinct project and the environmental impacts of those reductions would be considered in a separate CEQA document.

2.5.4 Los Coyotes Water Reclamation Plant

The Los Coyotes WRP is located at 16515 Piuma Avenue in the City of Cerritos and occupies 34 acres at the northwest junction of the I-605 and the California State Route 91 Freeway (CA-91). Of the 34 acres, 20 are occupied by the Iron Wood Nine Golf Course, which is built on adjoining Sanitation Districts' property. The plant was placed in operation on May 25, 1970, with an initial capacity of 12.50 MGD, and consisted of primary treatment and secondary treatment with activated sludge.

Current Operations

The Los Coyotes WRP provides primary, secondary, and tertiary treatment for up to 37.50 MGD. The plant serves a population of approximately 370,000 persons. Approximately 3.20 MGD of the recycled water is used at over 310 sites. Uses of recycled water include landscape irrigation of schools, golf courses, parks, nurseries, and greenbelts and industrial use at local companies for

carpet dying and concrete mixing. The remainder of the recycled water is discharged to the San Gabriel River. Table 2-1 summarizes a 5-water-year average from 2014 through 2018 of discharge volumes. As shown in Table 2-1, an average of approximately 17.00 MGD is discharged to the San Gabriel River.

Existing Permits

The Los Coyotes WRP is covered by an NPDES Permit to discharge into surface waters (Order No. R4-2015-0124 and NPDES No. CA0054011) and a recycled water use permit for non-potable purposes (Order No. 87-51 and readopted under Order No. 97-072). Implementation of the proposed project would not require changes to these existing permits.

2.5.5 Long Beach Water Reclamation Plant

The Long Beach WRP is located at 7400 E. Willow Street in the City of Long Beach. The plant occupies 17 acres west of the I-605 and began operation in 1973.

Current Operations

The Long Beach WRP provides primary, secondary, and tertiary treatment for up to 25.00 MGD. The plant serves a population of approximately 250,000 persons. Approximately 3.90 MGD of the recycled water is used at over 60 sites. Uses of recycled water include landscape irrigation of schools, golf courses, parks, and greenbelts by the City of Long Beach, the repressurization of oil-bearing strata off the coast of Long Beach, and the replenishment of the Central Basin groundwater supply from water processed at the Leo J. Vander Lans Advanced Water Treatment Facility (owned and operated by the Water Replenishment District of Southern California). The remainder is discharged to the Coyote Creek. The Leo J. Vander Lans Advanced Water Treatment Facility uses microfiltration, reverse osmosis, and ultraviolet disinfection advanced oxidation process to produce near distilled quality water, and is blended with imported water and pumped into the Alamitos Seawater Barrier to protect the groundwater basin from seawater intrusion. Table 2-1 summarizes a 5-water-year average from 2014 through 2018 of discharge volumes. As shown in Table 2-1, an average of approximately 6.72 MGD is discharged to the Coyote Creek.

Existing Permits

The Long Beach WRP is covered by an NPDES Permit to discharge into surface waters (Order No. R4-2015-0123 and NPDES No. CA0054119) and two recycled water use permits for non-potable purposes (Order No. 87-47, readopted under Order No. 97-072; and Order No. R4-2009-0049). Implementation of the proposed project would not require changes to these existing permits.

2.6 Montebello Forebay

The Los Angeles County Department of Public Works owns and operates an extensive system of flood control and groundwater recharge facilities along the San Gabriel and Rio Hondo Rivers that make up the Montebello Forebay Groundwater Recharge Project. The Montebello Forebay,

located just south of Whittier Narrows and an area in the northern part of the Central Basin, is a valuable area for groundwater recharge due to its highly permeable soils which allow deep percolation of surface waters. The RHSG, the SGSG, which comprise the Montebello Forebay, and the lower San Gabriel River spreading area comprise the Montebello Forebay recharge facilities. Both spreading grounds use Sanitation Districts' recycled water, water imported from the State Water Project, and rainwater to recharge the groundwater basin through percolation. The Los Angeles County Department of Public Works notes that operations at these facilities recharge an average of approximately 150,000 acre-feet (AF) (.00 MGD) of water annually.

The RHSG, the largest spreading facility of Los Angeles County, covers approximately 570 acres. Water is diverted from the Rio Hondo Channel by use of three large radial gates. The Los Angeles County Department of Public Works operates a connection channel between the San Gabriel River and the Rio Hondo within the Whittier Narrows Recreational Area known as the Zone 1 Ditch (refer to Figure 2-2). This channel can convey San Gabriel River water to the RHSG.

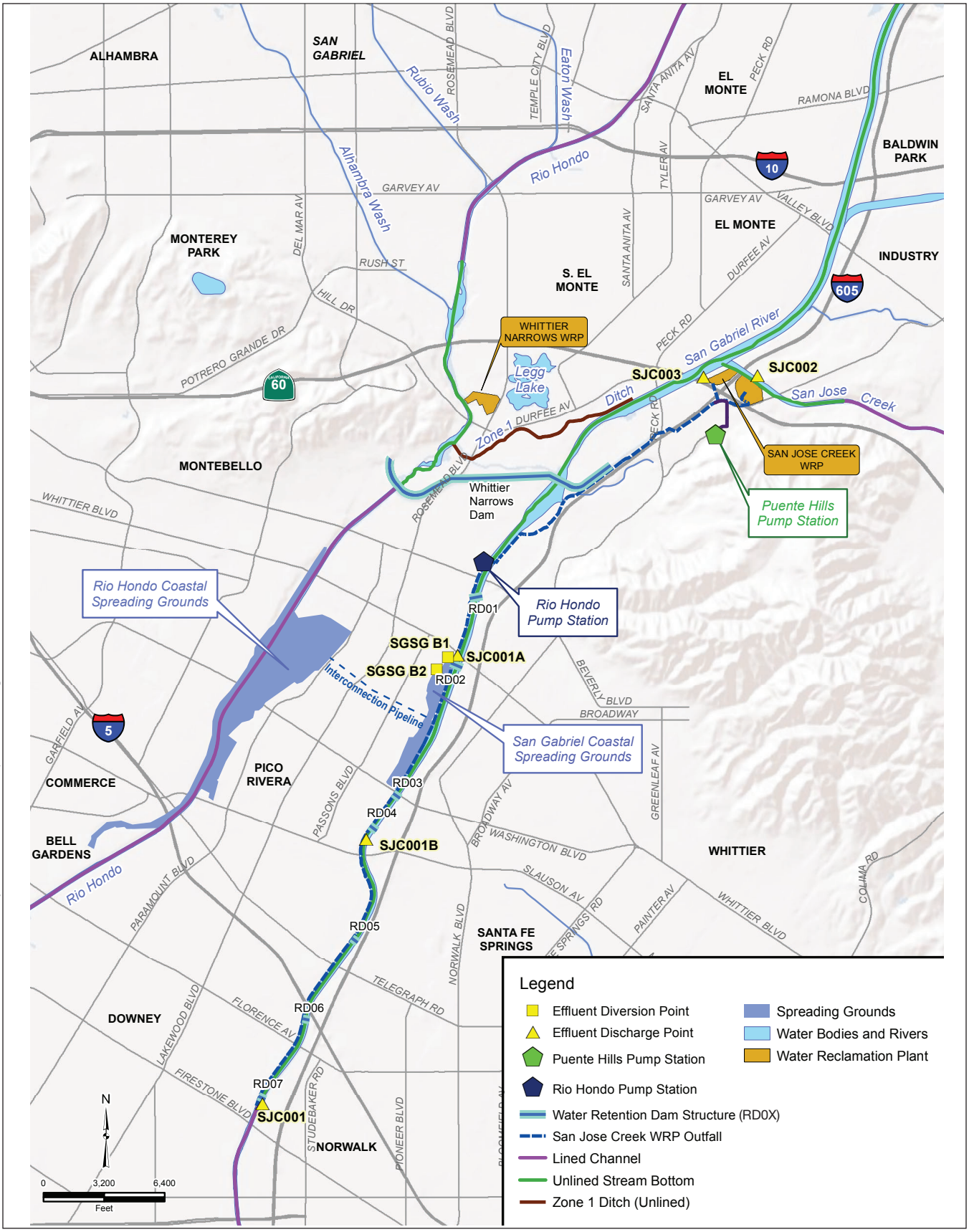
The SGSG are approximately 128 acres. Recycled water is conveyed to the spreading grounds via the San Jose Creek Outfall Pipeline (SJC Outfall Pipeline). The SJC Outfall Pipeline has a discharge point at the head of the SGSG facility that is capable of discharging treated recycled water to the San Gabriel River or the spreading grounds, or diverting water from the San Gabriel River into the spreading grounds.

The Interconnection Pipeline is used to allow for gravity flow of water from the RHSG to the SGSG or pumping of water from the SGSG to the RHSG. The operation of the Interconnection Pipeline optimizes the flows into each spreading facility and maximizes groundwater recharge.

The lower San Gabriel River, from Whittier Narrows Dam to North of Firestone Boulevard, also allows spreading by percolation through its unlined bottom. Seven inflatable rubber dams have been installed to increase spreading capacity along this portion of the river, replacing sand levees that washed out when high flows occurred.

2.7 Relationship of Project to Recycled Water Programs

The proposed project would facilitate the increased use of recycled water consistent with state law and policy, including Water Code Sections 461, 13500 et seq., and 13575 et seq.; Government Code Section 65601 et seq.; the State Water Resources Control Board (SWRCB) Policy for Water Quality Control for Recycled Water (Recycled Water Policy); and the Executive Order issued by the Governor on April 25, 2014. The Executive Order promotes the development of recycled water to serve areas in need and encourages the SWRCB to expedite requests to change water permits to enable those deliveries. The Sanitation Districts are proposing to submit a total of four Wastewater Change Petitions pursuant to California Water Code Section 1211 to change the place and purpose of use of recycled water, while maintaining sensitive habitat supported by historic effluent discharges. A petition will be submitted for the San Jose Creek WRP, the Pomona WRP, the Los Coyotes WRP, and the Long Beach WRP.



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SOURCE: Sanitation Districts of Los Angeles County

San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse

Figure 2-2
San Jose Creek WRP Discharge Points

ESA

In its Recycled Water Policy, the SWRCB has set a goal of increasing the use of recycled water to 1.5 million acre-feet (MAF) per year by 2020 and to 2.50 MAF per year by 2030. One of the SWRCB's goals is to substitute as much recycled water for potable water as possible by 2030. "The purpose of the [Board's Recycled Water Policy] is to encourage the safe use of recycled water from wastewater sources…." (SWRCB 2019).

Table 2-2 summarizes the new purpose-of-use for each diversion that primarily includes recycled water distribution expansions to landscape irrigation, industrial use, and increased groundwater recharge subject to California Code of Regulations Title 22 water quality requirements for recycled water use. The reduced discharges from the San Jose Creek WRP would facilitate a more efficient delivery of recycled water to reuse projects including the recently completed Albert Robles Center (ARC) by the Water Replenishment District of Southern California (WRD) and increase recycled water available for non-potable projects.

TABLE 2-2
EXISTING AND PROPOSED FUTURE ANNUAL DAILY AVERAGE DISCHARGES

Treatment Plant	NPDES Annual Average Daily Discharge (MGD) (Water Years[1] 2014-2018)	Proposed Future Annual Daily Average Discharge (MGD)	New Purpose of Use
San Jose Creek WRP (SJC001)	5.44	0.00	Recycled Water Uses Allowed by Title 22
San Jose Creek WRP (SJC001A)	7.30	Variable[3]	Recycled Water Uses Allowed by Title 22
San Jose Creek WRP (SJC001B)	4.90[2]	Variable[3]	Recycled Water Uses Allowed by Title 22
San Jose Creek WRP (SJC002)	9.48	5.00	Recycled Water Uses Allowed by Title 22
San Jose Creek WRP (SJC003)	0.04	0.00	Recycled Water Uses Allowed by Title 22
Pomona WRP	3.27	0.00	Recycled Water Uses Allowed by Title 22
Whittier Narrows WRP[4]	1.19	1.18[5]	Recycled Water Uses Allowed by Title 22
Los Coyotes WRP	17.00	2.00	Recycled Water Uses Allowed by Title 22
Long Beach WRP	6.72	0.00	Recycled Water Uses Allowed by Title 22
TOTAL	53.53[6]	8.18[7]	

1 Based on average flow data from Water Years (WY) 2014-2018.

2 Discharge from SJC001B began in March 2016; therefore, Annual Average shown is for WY 2017-2018.

3 Discharge point is used in conjunction with SGSG as part of the Montebello Forebay Groundwater Recharge Project. Actual discharge from this location may vary with the overall recharge volume consisting of the current volume of approximately 39.50 MGD (44,200 acre-feet per year [AFY]), plus an additional amount diverted from SJC002 as part of the proposed project.

4 As explained above, the Whittier Narrows WRP discharges to both the Rio Hondo/LA River watershed and the San Gabriel River watershed. The proposed project and table only assesses changes in discharges to the San Gabriel River watershed. Proposed reductions to the Rio Hondo/LA River watershed would be a separate and distinct project and the environmental impacts of those reductions will be considered in a separate CEQA document.

5 SWRCB's 1211 Order WW0098 for the change in place of use, purpose of use and quantity of treated wastewater currently discharged to the Rio Hondo and the San Gabriel River was approved in December 2018. It is included to evaluate cumulative impacts.

6 The total existing annual daily average surface water discharge to all San Jose Creek WRP discharge locations for WY 2014-2018 is 25.35 MGD, which was used for this calculation. Please note that because SJC001B (see Footnote 2 above) has a different averaging period, the numbers in the table for SJC are not additive.

7 The proposed future annual daily average surface water discharge is a minimum as the proposed discharge from SJC001A and SJC001B are not specified in this table. Refer to notes 2 and 3 above.

SOURCE: Sanitation Districts 2019.

The ARC project includes a new advanced water treatment plant designed to provide additional treatment to tertiary-treated recycled water from the San Jose Creek WRP. The advanced-treated ARC effluent will be directly injected into the underlying groundwater aquifer or conveyed to the SGSG, to the RHSG via the Interconnection Pipeline, or San Gabriel River to replenish the Central Groundwater Basin.

In addition, the Long Beach WRP would increase contributions to the Alamitos Seawater Intrusion Barrier injection well system and may increase recycled water available for other non-potable reuse projects such as landscape irrigation or industrial uses. Los Coyotes, Pomona, and Whittier Narrows WRPs would also increase contributions to recycled water use projects.

2.8 Discharge Operation Modifications

The Sanitation Districts are proposing to incrementally reduce surface water discharges of recycled water from the San Jose Creek WRP, the Pomona WRP, the Whittier Narrows WRP, the Los Coyotes WRP, and the Long Beach WRP. The Sanitation Districts are not proposing to construct any new facilities, and the incremental reductions in surface water discharges can be accomplished without modification to the existing discharge facilities. The proposed use of the recycled water would be implemented by water agencies that distribute recycled water and other recycled water users over time and would depend on future needs for recycled water produced by the Sanitation Districts. Construction of future facilities, if applicable, would be provided by proponents of other projects and is not a part of the proposed project. The Sanitation Districts will continue to maintain the ability to discharge treated water at the same surface water points but anticipates lower quantities.

Table 2-2 above summarizes the existing and proposed future annual daily average discharges for each treatment plant. A brief description of this information is provided below:

- The San Jose Creek WRP surface water discharge is currently rotated between five discharge locations within the San Gabriel River watershed as shown in Figure 2-1. The use of the discharge locations is irregular throughout the year and varies year-to-year, depending on the availability of groundwater recharge facilities, channel maintenance activities, and other operational activities. Under the proposed project, discharges from the San Jose Creek WRP at discharge point SJC002 would be reduced from an annual average of approximately 9.48 MGD to a minimum monthly average of approximately 5.00 MGD. Although the total annual volume would be reduced, discharges would be timed more efficiently to support sensitive habitats. The new discharge regime could vary from a consistent 5.00 MGD discharge to a pulsing of flows. The larger pulses could be needed to move water further downstream than could be accomplished with consistent flows. The diverted water would be conveyed for beneficial reuse to groundwater recharge basins or other reuse facilities.
- The Pomona WRP discharges into a concrete-lined portion of San Jose Creek that contains no sensitive habitat. As San Jose Creek nears the San Gabriel River, the concrete lining gives way to a soft-bottom reach. Current and historic groundwater upwelling occurs within the lined portion of San Jose Creek upstream of the transition location between lined and unlined. The proposed project would result in zero discharge from the Pomona WRP. As shown in Table 2-2, an average of approximately 3.27 MGD is discharged to the South Fork San Jose Creek.

- The Whittier Narrows WRP has three discharge locations, two tributary to the Rio Hondo in the Los Angeles River watershed, and one tributary to the San Gabriel River. A recently approved modification to discharge from the Whittier Narrows WRP (SWRCB Order WW0098) will reduce discharges to the San Gabriel River by approximately 1 percent (0.01 MGD). This modification was covered by a separate environmental document (Sanitation Districts 2018). As shown in Table 2-2, an average of approximately 1.19 MGD is discharged to the San Gabriel River.
- The Los Coyotes WRP discharges into a concrete-lined portion of the San Gabriel River. Discharge flow is contained within the low-flow channel of the river under typical dry-weather conditions. The project proposes to maintain a minimum discharge flow of 2.00 MGD to prevent the low-flow channel from going completely dry downstream of the plant. As shown in Table 2-2, an average of approximately 17.0 MGD is discharged to the San Gabriel River.
- The Long Beach WRP discharges into the concrete-lined Coyote Creek approximately 3,000 feet before the start of the San Gabriel River estuary. Urban runoff and natural flows in Coyote Creek upstream of the Long Beach WRP maintain a consistent flow in the creek at the discharge location. The project proposes a minimum discharge flow of zero from the Long Beach WRP. As shown in Table 2-2, an average of approximately 6.72 MGD is discharged to Coyote Creek.

2.9 Project Construction

No construction activities would be associated with the proposed project, as the project entails reductions in the rate and volume of recycled water discharged into the San Gabriel River or its tributaries: San Jose Creek and/or Coyote Creek. As such, no construction would occur and no physical changes to the environment, aside from reduced discharges to the San Gabriel River or its tributaries: San Jose Creek and/or Coyote Creek, would occur under the proposed project.

2.10 Uses of Recycled Water and Reuse Customers

The goal of the Sanitation Districts is to make available as much recycled water from its treatment plants as possible to support the water resource planning needs of the region's water agencies. Recycled water is used at more than 795 sites throughout the Sanitation Districts' proposed project area and is conveyed and distributed through the local water agencies' systems. As summarized below, recycled water uses generally include landscape irrigation, agricultural irrigation, industrial processing, recreational impoundments,[2] and groundwater replenishment. The amount of water reused and the percentages for specific applications vary from year to year depending on annual climate, rainfall levels, and other factors (Sanitation Districts July 2017). The amount of recycled water produced and reused at each of the Sanitation Districts' WRPs is summarized in **Table 2-3** below.

[2] An open body of recycled water located on a reuse site that may be used for unrestricted body contact (e.g., swimming, wading) or restricted non-body contact (e.g., boating, fishing) recreation (2008).

TABLE 2-3
RECYCLED WATER PRODUCED AND REUSED AT WATER RECLAMATION PLANTS (FISCAL YEAR 2017-2018)

Water Reclamation Plant	Nominal Treatment Capacity (AFY)	Quantity Recycled Water Produced (AFY)	Quantity Reused (AFY)	Percent of Recycled Water Used
Long Beach	28,015	11,109	5,669	51.0
Los Coyotes	42,020	23,356	6,664	28.5
Pomona[2]	16,810	7,249	7,867[1]	100
San Jose Creek[2]	112,055	58,330	54,261	93.0
Whittier Narrows[2]	16,810	7,886	7,840	99.4
TOTAL	**215,710**	**107,930**	**82,301**	**76.3**

[1] Recycled Water Produced and Quantity Reused do not match due to different flow meters being used and inherent meter error.

[2] Effluent discharged to the unlined channels is counted as incidental groundwater recharge and is considered as reused. The proposed project would redirect some of this effluent towards more direct and efficient reuse.

SOURCE: Sanitation Districts 2019.

Recycled Water Uses

Recycled water has been proven to be a safe source of water for many different kinds of reuse applications because of its high level of treatment (Sanitation Districts July 2017). Various reuse applications are listed below.

Approved Uses of Tertiary Recycled Water in California Irrigation

- Food crops
- Parks and playgrounds
- School yards
- Residential landscaping
- Vineyards
- Fodder and fiber crops
- Orchards
- Cemeteries
- Pasture for milk animals
- Ornamental nurseries
- Freeway landscaping
- Golf courses

Supply for Impoundments

- Recreational impoundments
- Landscape impoundments

Supply for Cooling and Air Conditioning

- Industrial cooling towers and evaporative condensers
- Commercial cooling towers and evaporative condensers

Other Uses

- Groundwater recharge (case-by-case basis)
- Flushing toilets and urinals
- Priming drain traps
- Industrial processing
- Flushing sanitary sewers
- Industrial boiler feed
- Firefighting
- Decorative fountains
- Commercial laundries
- Cleaning roads, sidewalks, and outdoor work areas
- Consolidation of backfill material around pipelines
- Artificial snow making
- Dust control on roads and streets
- Commercial car washes
- Mixing concrete
- Soil Compaction

Table 2-4, below lists the number of sites in each category of use, along with total acreage and average daily usage that was documented in fiscal year 2017-2018.

TABLE 2-4
CATEGORIES OF RECYCLED WATER USAGE YEAR (FISCAL YEAR 2017-2018)

Reuse Application	No. of Sites	Area Applied (acres)	Usage (AFY)
Parks	122	3,574.6	5,371
Golf Courses	22	2,540.8	4,735
Schools	122	1,344.7	2,404
Roadway Greenbelts	127	698.3	948
Public Facilities[1]	33	498.9	1,930
Commercial Buildings[2]	262	550.4	1,371
Nurseries	19	111.5	180
Cemeteries	9	1,101.4	2,343
Residential Developments	24	185.9	337
Churches	14	18.5	62
Industrial[3]	32	377.5	3,623
Agriculture[4]	5	716.0	730
SUBTOTAL	*791*	*11,718.5*	*24,034*
Groundwater Recharge	4	646	58,226
TOTAL	**795**	**12,364.5**	**82,260**

NOTES:
1 "Public Facilities" includes police stations, libraries, post offices, city halls, government offices, landfills, etc.
2 "Commercial Buildings" includes offices, warehouses, retail, car dealerships, hotels, restaurants, etc.
3 Industrial processes receiving recycled water include carpet dyeing, concrete mixing, cooling towers, metal finishing, oil field injection, toilet flushing, and construction applications such as soil compaction and dust control.
4 California Polytechnic University, Pomona, while technically a school, uses most of its recycled water for agricultural purposes and is thus included in this category.

SOURCE: Sanitation Districts 2019.

Existing and Future Customers

The Sanitations Districts have prepared a *Recycled Water Users Handbook* (Handbook) to provide existing and future customers with information about general rules, regulations, and guidelines regarding the safe use of tertiary recycled water produced by the Sanitation Districts for projects within the Los Angeles Basin and the Santa Clarita Valley (Sanitation Districts July 2017). The Handbook includes: general information about the Sanitations Districts' recycled water program; state and local standards, regulations, and guidelines for the use of recycled water; information on the duties and responsibilities of recycled water purveyors and users; information on operational requirements at reuse sites; and information on notification requirements. The Sanitation Districts recommend using the Handbook in conjunctions with the Los Angeles Chapter of the California Water Reuse Association's *Recycled Water Urban Irrigation User's Manual* (Manual) which includes more detailed information on water recycling (Water Reuse Association 2014).

Existing and future customers of recycled water include water purveyors that service local cities and unincorporated Los Angeles County are listed below.

- Bellflower
- Bell Gardens
- Cerritos
- Compton
- Cudahy
- Cypress
- Diamond Bar
- Downey
- El Monte
- Huntington Park
- Industry
- La Canada
- Lakewood
- Lancaster
- Long Beach
- Lynwood
- Montebello
- Norwalk
- Palmdale
- Paramount
- Pico Rivera
- Pomona
- Rowland Heights
- Santa Clarita
- Santa Fe Springs
- Signal Hill
- South El Monte
- South Gate
- Vernon
- Walnut
- West Covina
- Whittier

In each of those cities and Los Angeles County areas, private entities and specific departments manage various sites that use recycled water such as construction sites, athletic fields, agriculture, environmental enhancement, industrial, landscape irrigation, ornamental plant irrigation, groundwater replenishment and impoundment.

Existing Recycled Water Projects

By the end of Fiscal Year 2018, there were a total of 795 reuse sites on approximately 12,365 acres, served by approximately 1.2 million linear feet (230 miles) of transmission pipelines in 34 cities, as well as unincorporated Los Angeles County areas (Sanitation Districts 2019). **Table 2-5** below, summarizes the amount of recycled water used by each of the most recent (2018) water recycling projects over the past fiscal year (Sanitation Districts 2019).

TABLE 2-5
WATER RECYCLING PROJECT USAGE (FISCAL YEAR 2017-2018)

Project Name[1]	Recycled Water Used (AFY)
Long Beach Water Department	5,154
Alamitos Seawater Barrier	515
City of Bellflower	50
City of Cerritos	1,762
City of Lakewood	489
Cities of Cypress and La Palma	2
Forest Lawn Memorial Park, Cypress	228
Central Basin MWD (Century)	4,133
Pomona Water Department	2,038
Spadra Landfill	216
Walnut Valley Water District	1,201
Water Replenishment District	57,694
City of Industry	1,077
Rowland Water District	691
California Country Club	490
Jose Munoz Nursery	13

Project Name[1]	Recycled Water Used (AFY)
Bruce Kolstad site	2
Central Basin MWD (Rio Hondo)	757
Puente Hills/Rose Hills	3,521
USGVMWD Phase I Extension (SJC)	51
USGVMWD Phase II-B Extension (SJC)	725
USGVMWD Phase II-A Extension (WN)	1,492
TOTALS	**82,301**

SOURCE: Sanitation Districts 2019.

Future Recycled Water Projects

A number of recycled water distribution projects throughout the Sanitation Districts' service area are in various stages of development, as listed in **Tables 2-6** through **2-9** below. **Table 2-6** includes projects with completed CEQA review waiting for approval from the California SWRCB for the Wastewater Change Petition pursuant to California Water Code Section 1211. **Table 2-7** includes projects in master plan, management plan, or strategic plan documents. **Table 2-8** includes projects with feasibility studies. **Table 2-9** includes other known projects. Various regulatory and administrative processes make the anticipated completion dates for several projects uncertain. The projects listed in these tables identify projected recycled water needs based on studies conducted by other agencies and are not based on actual or current recycled water availability. Absent recycled water, these demands would be met by groundwater pumping or imported water delivery.

Potential environmental effects of recycled water projects such as pipeline implementation, expanded recharge basins, groundwater wells, and conveyance facility implementation (ancillary facilities such as pump stations, meters, electrical, disinfection and strainer facilities, etc.) could result in physical environmental effects (direct or indirect), including impacts to: local water supplies, energy; air quality; noise; biological resources; cultural resources; recreation; and more. As further described in the Sanitation Districts' Handbook, recycled water customers must meet all requirements of CEQA before implementation of projects. The agency responsible for completing the CEQA process will typically be the recycled water purveyor. Existing and future proposed recycled water projects planning to use recycled water produced by the Sanitation Districts will be analyzed under individual CEQA documents, as both the final scope and schedule for such projects are speculative at this point, and thus are not analyzed within this Draft EIR.

TABLE 2-6
PROJECTS[1] WITH COMPLETED CEQA WAITING 1211 APPROVAL

Recycled Water Source	Quantity Requested (AFY)	Lead Agency	Project Name	CEQA Document Type	Date of CEQA Document	Project Completion Date
San Jose Creek & Los Coyotes	236	Central Basin Municipal Water District (CBMWD)	Gateway Cities Recycled Water Expansion	MND [2,3,4]	May 2017	TBD
San Jose Creek	21,000	Water Replenishment District of Southern California (WRD)	Albert Robles Center for Water Recycling & Environmental Learning (ARC)	EIR[5]	June 2015	August 2019
San Jose Creek	359	Upper San Gabriel Valley Municipal Water District (USGVMWD)	La Puente Valley County Water District (LPVCWD) Recycled Water Project	MND[6]	June 2015	TBD
San Jose Creek	662	USGVMWD	San Gabriel Valley Water Company (SGVWC) South El Monte Recycled Water Expansion Project	MND[6]	June 2015	TBD
Pomona	6,000	Inland Empire Utilities Agency (IEUA)	Pomona Intertie Project	MND[7]	May 2016	TBD

1 The projects listed in Table 2-6 identify projected recycled water needs based on studies conducted by other agencies and are not based on actual or current recycled water availability.

2 K.S. Dunbar & Associates, Inc., Initial Study and Mitigated Negative Declaration for the Gateway Water Management Authority Recycled Water Pipelines Project in the City of Bell Gardens, Los Angeles County, California, May 2017. Prepared for the Central Basin Municipal Water District.

3 K.S. Dunbar & Associates, Inc., Initial Study and Mitigated Negative Declaration for the Gateway Water Management Authority Recycled Water Pipelines Project in the City of Lynwood, Los Angeles County, California, May 2017. Prepared for the Central Basin Municipal Water District.

4 K.S. Dunbar & Associates, Inc., Initial Study and Mitigated Negative Declaration for the Gateway Water Management Authority Recycled Water Pipelines Project in the City of Southgate, Los Angeles County, California, May 2017. Prepared for the Central Basin Municipal Water District.

5 AECOM, Final Environmental Impact Report, Groundwater Reliability Improvement Program (GRIP) Recycled Water Project, Los Angeles County, California, June 2015. Prepared for the Water Replenishment District of Southern California.

6 Stetson Engineers, Inc., Mitigated Negative Declaration for the Upper San Gabriel Valley Municipal Water District Recycled Water Program Expansion, Los Angeles County, California, June 2015. Prepared for the Upper San Gabriel Valley Municipal Water District.

7 ESA, Mitigated Negative Declaration for the Pomona Intertie Project, Los Angeles and Riverside County, California, May 2016. Prepared for the Inland Empire Utilities Agency.

SOURCE: Sanitation Districts 2019.

TABLE 2-7
PROJECTS[1] INCLUDED IN MASTER PLAN, MANAGEMENT PLAN, OR STRATEGIC PLAN DOCUMENTS

Recycled Water Source	Quantity Requested (AFY)	Lead Agency	Document Name(s)	Date of Document	Project Completion Date
Long Beach	4,510	Long Beach Water Department and Water Replenishment District of Southern California	2015 Urban Water Management Plan[2]	June 2016	TBD
			2010 Recycled Water Master Plan[3]	November 2010	TBD
Pomona	1,500	City of Pomona	2009 City of Pomona Recycled Water Master Plan[4]	November 2009	TBD
			2011 City of Pomona Integrated Water Supply Plan[5]	November 2011	TBD
Pomona and/or San Jose Creek	4,550	Walnut Valley Water District (WVWD)	2015 WVWD Urban Water Management Plan[6]	June 2016	TBD
Pomona	3,500	Six Basins Watermaster	2017 Final Strategic Plan for the Six Basins[7]	November 2017	TBD
Whittier Narrows	740	City of Arcadia/USGVMWD Phase III Extension	2015 Urban Water Management Plan[8]	June 2016	TBD

1 The projects listed in Table 2-7 identify projected recycled water needs based on studies conducted by other agencies and are not based on actual or current recycled water availability.

2 Long Beach Water Department, *2015 Urban Water Management Plan*, Los Angeles County, California, June 2016.

3 MWH, *2010 Long Beach Water Department and Water Replenishment District of Southern California Recycled Water Master Plan – Final Report*, Los Angeles County, California, November 2010. Prepared for the Long Beach Water Department and Water Replenishment District of Southern California.

4 Corollo Engineers, *2009 City of Pomona Recycled Water Master Plan,* Los Angeles County, California, November 2009. Prepared for the City of Pomona.

5 RMC, *2011 City of Pomona Integrated Water Supply Plan*, Los Angeles County, California, November 2009. Prepared for the City of Pomona.

6 Civiltec Engineering, Inc., *Walnut Valley Water District 2015 Urban Water Management Plan,* Los Angeles County, California, June 2016. Prepared for the Walnut Valley Water District.

7 Wildermuth Environmental, Inc., *2017 Final Strategic Plan for the Six Basins,* Los Angeles County, California, November 2017. Prepared for the Six Basins Watermaster.

8 Stetson Engineers, Inc., *2015 Urban Water Management Plan*, Los Angeles County, California, June 2016. Prepared for the City of Arcadia.

SOURCE: Sanitation Districts 2019.

TABLE 2-8
PROJECTS[1] WITH FEASIBILITY STUDIES

Recycled Water Source	Quantity Requested (AFY)	Lead Agency	Document Name	Date of Document	Project Completion Date
Long Beach or Los Coyotes (through Lakewood)	180	City of Signal Hill	2012 City of Signal Hill Recycled Water Feasibility Study[2]	May 2015	TBD
Los Coyotes	160	City of Lakewood	2010 Feasibility Study for the Proposed Expansion of the Lakewood Recycled Water System[3]	July 2010	TBD

1 The projects listed in Table 2-8 identify projected recycled water needs based on studies conducted by other agencies and are not based on actual or current recycled water availability.

2 John Robinson Consulting, Inc., *City of Signal Hill Technical Memorandum to Supplement the Recycled Water Feasibility Study*, Los Angeles County, California, May 2015. Prepared for the City of Signal Hill.

3 Willdan Engineering, *2010 Feasibility Study for the Proposed Expansion of the Lakewood Recycled Water System*, Los Angeles County, California, July 2010. Prepared for the City of Lakewood.

SOURCE: Sanitation Districts 2019.

TABLE 2-9
OTHER KNOWN PROJECTS[1]

Recycled Water Source	Quantity Requested (AFY)	Lead Agency	Project Name	Project Completion Date
San Jose Creek	1,900	Rose Hills Memorial Park	Rose Hills Memorial Park	TBD
Los Coyotes	TBD	WRD	LVL Facility: Los Coyotes Direct Connect (6.6-miles)[2]	TBD
Los Coyotes	10,000	WRD	ARC Facility: Los Coyotes WRP Direct Connect to ARC or Montebello Forebay	TBD

1 The projects listed in Table 2-9 identify projected recycled water needs based on studies conducted by other agencies and are not based on actual or current recycled water availability.

2 WRD, Adoption of Five Year Capital Improvement Plan Update and Authorization to file a Notice of Exemption (NOE) at the Meeting of the Board of Directors held on October 17, 2018.

SOURCE: Sanitation Districts 2019.

2.11 Project Approvals

The proposed project would require approval from the California SWRCB for one Wastewater Change Petition per WRP pursuant to California Water Code Section 1211. A total of four petitions will be submitted, one each for the San Jose Creek WRP, the Pomona WRP, the Los Coyotes Creeks WRP, and the Long Beach WRP. No other approvals would be required.

CHAPTER 3
Environmental Setting, Impacts and Mitigation Measures

3.0 Introduction

This Draft Environmental Impact Report (EIR) is prepared in accordance with California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 *et seq.*), the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 *et seq.*), and applicable rules and regulations of regional and local entities. This Draft EIR evaluates the potential environmental impacts associated with the implementation of the proposed project. This Draft EIR is intended to serve as an informational document for the public agency decision-makers and the public regarding the proposed project. All information sources used are included as citations within the text; sources are listed in Chapter 4, *References*, of this Draft EIR.

3.0.1 Scope of Environmental Impact Analysis

In accordance with Section 15126 of the CEQA Guidelines, this chapter provides an analysis of the direct and indirect environmental effects associated with the proposed project. These impacts are evaluated with respect to existing conditions at the time the Notice of Preparation (NOP) was published on February 5, 2019 (refer to Appendix A, *Initial Study/Notice of Preparation*). The determination of whether an impact is significant is based on the significance thresholds and methodology identified for each environmental issue. In accordance with Appendix G of the CEQA Guidelines, this chapter assesses the project's potential effects on the following environmental resources:

- Biological Resources
- Hydrology and Water Quality
- Recreation

Approach to Environmental Analysis

Sections 3.1 through 3.3 of this Draft EIR contain discussions of the regulatory framework, existing conditions, and potential impacts related to the implementation of the proposed project. The project-level and cumulative analyses will estimate the impacts to each resource category before the implementation of mitigation measures. The analyses will then estimate the impacts to each resource category after the implementation of mitigation measures.

Cumulative Analysis

CEQA requires that a Draft EIR assess the cumulative impacts of a project with respect to past, current, and probable future projects within the region. The California Environmental Quality Act (CEQA) Guidelines Section 15355, *Cumulative Impacts*, provides the following definition of cumulative impacts:

> *"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.*
>
> *(a) The individual effects may be changes resulting from a single project or a number of separate projects.*
>
> *(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

CEQA Guidelines Section 15130, *Discussion of Cumulative Impacts*, further addresses the discussion of cumulative impacts, as follows:

(1) An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR;

(2) If the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR should briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR.

(3) If the combined cumulative impact associated with the project's incremental effect and the effects of other projects is significant, the EIR must determine whether the project's contribution is cumulatively considerable.

(4) The EIR may conclude the project's contribution to a significant cumulative impact is less than cumulatively considerable and thus is not significant, if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

This chapter assesses the cumulative impacts for each applicable environmental issue, and does so to a degree that reflects each impact's severity and likelihood of occurrence.

Pursuant to CEQA Guidelines Section 15130(b), the discussion of cumulative impacts shall be guided by the standards of practicality and reasonableness, and should include the following elements:

> *1. Either:*
>
> *A. A list of past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the Agency, or*
>
> *B. A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or*

evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projects may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.

2. *When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.*
3. *Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.*
4. *A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and*
5. *A reasonable analysis of the cumulative impacts of the relevant projects, including examination of reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.*

Where the analysis of cumulative impacts focuses on the effects of concurrent implementation of the proposed project with other spatially and temporally proximate projects, the analysis relies on a list of projects that have the potential to contribute to cumulative impacts in the proposed project area, that would include surrounding jurisdictions within the San Gabriel River Watershed that are in close proximity to the river channel and water reclamation plants (WRPs).

Related Projects

This analysis considers the impacts of the proposed project in combination with potential environmental effects of other projects in the project area. "Other projects," also referred to as "cumulative projects," includes recently completed projects, projects currently under construction, and future projects currently in development. The potential for projects to have a cumulative impact depends on both geographic location and project schedule.

Project Geographic Scope and Timing

Cumulative impacts are assessed for related projects within a similar geographic area. This geographic area may vary, depending upon the issue area discussed and the geographic extent of the potential impact. The proposed project is located in Los Angeles County within the San Gabriel River Watershed, underlain by the Main San Gabriel and Central Groundwater Basins. The Sanitation Districts' WRPs, San Jose Creek, Coyote Creek, and the San Gabriel River, are located throughout unincorporated areas of the Los Angeles County and 13 incorporated cities.

As noted, projects considered in this analysis include those that have recently been completed, are currently being implemented, or are in the planning stages. However, for probable future projects, schedules are often broadly estimated and can be subject to change. Although the timing of the probable future projects are likely to fluctuate because of schedule changes or other unknown factors, this analysis assumes these projects would be implemented concurrently with implementation of the proposed project's reduced discharges.

Type of Projects Considered

As further described in Sections 3.1 through 3.3 of this Draft EIR, the majority of impacts associated with implementation of the proposed project are related to operations as no construction of facilities is contemplated as part of the project. Therefore, the proposed project could contribute to cumulative effects when considered in combination with impacts of other recycled water conveyance and storage projects, watershed wide projects involving increased surface flows/recharge, and stormwater projects and programs. For this analysis, other past, present, and reasonably-foreseeable future projects, particularly other recycled water projects and groundwater projects, in the area have been identified. Long-term cumulative impacts of the proposed project in conjunction with the other projects in the area are assessed as well.

Description of Cumulative Projects

Table 3-1 lists current and proposed projects that could potentially contribute to similar cumulative impacts within the project area. The projects consist of stormwater projects, recycled water projects, and streambed maintenance projects proposed by local groundwater management agencies, water districts, Los Angeles County Department of Public Works, and local cities. The list compiles cumulative projects in the project area that are relevant to the proposed project in that they either expand recycled water use, propose work in the streambed, or alter stream flows. In addition to the projects listed in Table 3-1, additional recycled water infrastructure development/planning efforts and programs that have not been identified as of this time could occur within the project area.

TABLE 3-1
PLANNED AND APPROVED PROJECTS IN THE PROJECT AREA

Planning Jurisdiction	Project Name	Project Summary	Project Status/Timing
US Army Corps of Engineers (USACE)			
	Los Angeles County Drainage Area Whittier Narrows Dam Flood Control Project Dam Safety Modification Study Final EIS	The Army Corps of Engineers (Corps) is proposing alternatives or risk management plans (RMPs) to reduce the potential for and consequences of catastrophic flooding resulting from failure of the Whittier Narrows Dam during rare to extremely rare flood events. The RMPs include structural modifications to the Whittier Narrows Dam to eliminate or minimize the probability of Dam failure, and non-structural measures to reduce the consequences of these flood events. The purpose of this project is to reduce the incremental risk to the downstream public to tolerable levels.	Planning
Metropolitan Water District of Southern California			
	Regional Recycled Water Program (RRWP)	The RRWP would produce up to 150 million gallons per day (MGD) or 168 thousand acre-feet per year (TAFY) of purified water in partnership with the Sanitation Districts. A new advanced water treatment facility would be located at the Sanitation Districts' Joint Water Pollution Control Plant in Carson and a new regional conveyance system would deliver a reliable source of indirect potable reuse (IPR) water to recharge four regional groundwater basins: Central, West Coast, Main San Gabriel, and Orange County.	Planning
Los Angeles County Department of Public Works (LADPW)			
	Enhanced Watershed Management Plans	The Los Angeles County Flood Control District and 84 incorporated cities within Los Angeles County are covered under a Municipal Separate Storm Sewer System (MS4) Permit (Order No. R4-2012-0175; National Pollutant Discharge Elimination System [NPDES] Permit No. CAS004001) for the discharge of urban runoff to waters of the United States. The purpose of the MS4 Permit is to achieve and maintain water quality objectives to protect beneficial uses of the receiving waters in the Los Angeles region. Each of the Permittees identified in the MS4 permit is responsible for meeting the conditions of the permit for MS4 discharges occurring within their jurisdiction. Los Angeles County and Permittees have prepared Enhanced Watershed Management Plans (EWMPs) or Watershed Management Plans (WMPs) that identify potential and priority structural and non-structural Best Management Practices (BMPs) within the region's stormwater collection system to improve runoff water quality. Implementation of these BMPs throughout Los Angeles County is ongoing, led by both Los Angeles County and other Permittees.	Ongoing
Water Replenishment District of Southern California (Central and West Basins)			
	Albert Robles Center (ARC) Advanced Water Treatment Facility, Advanced Water Treatment Facility	The ARC AWTF has been constructed on a 5.2-acre site in the City of Pico Rivera, adjacent to the San Gabriel River, allowing for direct delivery of purified recycled water via an existing pipeline leading into the San Gabriel Coastal Spreading Grounds where it will percolate in to the Central Basin. The ARC AWTF will purify approximately 10,000 acre feet (3.25 billion gallons) of tertiary treated (recycled) water annually to near distilled levels. Together with up to another 11,000 acre feet (3.6 billion gallons) of recycled water, WRD will deliver up to 21,000 acre feet of water to the spreading grounds for groundwater recharge. Once the facility is constructed, the ARC AWTF will include an approximately 25,000 square foot operations and learning center, a 48,000 square foot process building, and an 8,000 square foot chemical storage area.	August 2019

Planning Jurisdiction	Project Name	Project Summary	Project Status/Timing
	Recycled Water Program	The Water Replenishment District continues to closely coordinate with the Sanitation Districts, which produces the recycled water used for surface spreading in the Montebello Forebay, on permit compliance activities, including groundwater monitoring, assessment, and reporting. A 2014 amendment will allow WRD to continue to utilize recycled water even when storm water and imported water become scare or unavailable.	Ongoing
San Gabriel Valley Municipal Water District			
	Water Conservation Pilot Projects	The SGVMWD has planned more than 25 water conservation pilot projects in four member cities since 2009. The goal of the Pilot Project Program is to both save water (stormwater capture) and to provide information to help residents, schools, businesses and other organizations adopt water saving technology, materials and procedures for the long-term.	Ongoing
Central Basin Municipal Water District			
	Capital Improvement Projects	Central Basin is actively pursuing grant funding to develop capital improvements along its Recycled Water Program. Currently, the CBMWD delivers 1.6 billion gallons of recycled water to over 300 sites. Sites use recycled water for non-drinking purposes, such as irrigation, industrial processes and construction activities.	Planning
	Gateway Cities Recycled Water Expansion	CBMWD and the Cities of Bell Gardens, Lynwood, and South Gate, are looking into partnering to expand CBMWD's existing system into their cities to supply more sites with recycled water. A bundled project named the Gateway Cities Project has been submitted for Proposition 84 funding. This project will provide 455 AFY of recycled water to irrigate nine parks and schools.	Planning
	Southeast Water Reliability Project (SWRP)	The SWRP includes a recycled water pipeline in the northern portion of Central District's service area. The SWRP enhances recycled water deliveries and reliability within Central District's service area. The SWRP includes the cities of Montebello and Pico Rivera. San Gabriel and Central District are also working in concert to construct joint recycled water facilities (pipelines, reservoirs, and booster pumps) to serve recycled water for landscape irrigation to the Montebello Hills Specific Plan, Resurrection Cemetery, Potrero Heights Elementary School and Park, and Don Bosco Technical High School in Rosemead. The proposed Central District recycled water projects will provide up to 441 AFY of recycled water service for landscape irrigation.	2020
	La Mirada Extension	CBMWD is planning to expand the existing recycled water system in south Santa Fe Springs into the City of La Mirada in order to serve recycled water to several large landscaped facilities including La Mirada Park, La Mirada Golf Course, La Mirada High School, Olive View Cemetery, Biola University, La Mirada City -87-Buildings, Behringer Park, with a total number of potential recycled water customer connections being estimated a 40 with an estimated cumulative total of approximately 700 AFY. Facilities needed consist of a pump station and approximately 28,675 linear feet of 20-inch to 6-inch diameter piping. The estimated cost of this project is approximately $17 million and will utilize several sources of funding, including Proposition 1 and the California Revolving Fund. Construction will not commence until all funding sources are identified and there is no current schedule for completion.	Planning

Planning Jurisdiction	Project Name	Project Summary	Project Status/Timing
	Montebello City Hall Project	This project expands the recycled water system south of Lincoln Avenue into the City of Montebello. The water purveyor for this site is the Montebello Land and Water Company. This expansion is estimated to provide an additional 9 AFY with an estimated completion of design and construction of June 2021. The proposed alignment would connect to the existing 12-inch steel recycled water pipeline at the intersection of Lincoln and Maple Avenue, then go south on Maple. At the intersection of Maple and Victoria Avenue, the pipeline would go west on Victoria to the point of connection for Montebello City Hall. A second possible alignment option would go west on Beverly Boulevard instead of Victoria to the point of connection with City Hall; however this would increase the length of the pipeline by 500 linear feet.	June 2021
	Santa Fe Springs Park Project	This project is estimated to provide an additional 30 AFY, with an estimated completion of design and construction of June 2019. The expansion consists of approximately 2,100 linear feet of pipeline in the City of Santa Fe Springs. The alignment would connect into the existing 20-inch steel recycled water pipeline at the intersection of Florence Avenue and the San Gabriel River mid-trail, and go north along the San Gabriel River mid-trail to the point of connection for Santa Fe Springs City Park.	June 2019
	Los Nietos Schools Project	This project is estimated to provide an additional 51 AFY if all sites are connected, with an estimated completion of design and construction of December 2020. The project is split into three recycled water pipeline lateral extensions	December 2020
	Downey Project	This project expands the recycled water system to serve the Los Amigos Rehabilitation Center and the surrounding parks in the City of Downey. This three phase expansion is estimated to provide an additional 65 AFY with an estimated completion of design and construction of June 2020.	June 2020
	Pico Rivera-Mines Ave. Extension	CBMWD is looking to extend the recycled water pipeline from its existing 12-inch and 8-inch recycled water lateral located on Mines Avenue to sites located within the City of Pico Rivera. Several potential sites with an estimated recycled water usage of approximately 50 AFY require extending the previous Mines Avenue Phase 1B Project. The project is split into two distinct 4-inch recycled water pipeline extensions. The estimated completion of design and construction is June 2021.	June 2021
	Pico Rivera North Recycled Water Expansion Project	This project expands the recycled water system into north of Pico Rivera. Water services within the City of Pico Rivera is served by three water purveyors: 1) City of Pico Rivera; 2) Pico Water District; and, 3) The San Gabriel Valley Water Company. Water is additionally conveyed to the Rio Hondo Spreading Grounds and San Gabriel Spreading Grounds in Pico Rivera. Approximately 150 AFY demand. The expansion on the Northern portion of the service area consists of approximately 3,000 linear feet of pipeline construction.	Planning
	Pico Rivera South Recycled Water Expansion Project	This project expands the recycled water system into south Pico Rivera. The expansion on the Southern portion of the service area consists of approximately 7,000 linear feet of pipeline construction. This project will meet approximately 200 AFY of recycled water demands	Planning
	Distribution System Storage Project	To ensure a reliable regional recycled water supply to offset potable water demands, CBMWD is looking to implement storage in the form of storage tanks. The number, type, size, and locations for storage tanks, as well as piping and pumping needs, have yet to be determined.	Planning

Planning Jurisdiction	Project Name	Project Summary	Project Status/Timing
Upper San Gabriel Valley Municipal Water District			
	South El Monte Recycled Water Project	The proposed South El Monte Recycled Water Expansion Project will provide up to 661.4 AFY of recycled water service to 48 customers within the Cities of South El Monte, El Monte, Industry, and Pico Rivera for landscape irrigation. San Gabriel Valley Water Company will be a project partner and eventual system operator of the South El Monte Recycled Water Expansion Project.	2020
	La Puente Valley County Water District, Recycled Water Project	The proposed La Puente Valley County Water District Recycled Water Project is estimated to supply 360 AFY of recycled water to approximately 27 customers in the Cities of Industry and La Puente. The La Puente Valley County Water District Recycled Water Project is divided into three phases; the first phase is expected to be completed prior to 2020 and will deliver 130 AFY. La Puente Valley County Water District will be a project partner and eventual system operator of the LPVCWD Recycled Water Project.	2020
	Rose Hills Expansion	The proposed Rose Hills Expansion is estimated to supply 600 AFY of recycled water to the Rose Hills Memorial Park. It is anticipated to be completed prior to 2020.	2020
Local Cities			
City of Long Beach	Long Beach Water Department, Recycled Water System Expansion Program	The Recycled Water System Expansion Program is primarily intended to connect the recycled water system to new customers, as well as increase the reliability of the distribution system through the completion of looped transmission corridors. The primary elements of the program include the construction of recycled water pipeline, new pump stations, augmentation of water system storage, and the completion of new service connections. When complete, the expansion program will increase citywide recycled water consumption to approximately 9,000 acre-feet annually, eventually meeting 15 percent of the city's total water demand.	Planning
City of Long Beach	Long Beach Water Department Master Plan	In August 2010, the LBWD Recycled Water Master Plan identified irrigation and industrial water demand of approximately 4,510 AFY that could be converted to recycled water, including the Haynes and AES power plants and the Southeast Resource Recovery Facility (SERRF), a number of residential developments, several industrial users and commercial laundries, and numerous greenbelts (schools, parks, golf courses, commercial nurseries, etc.). The revised Master Plan also took into consideration the expansion of the LVLAWTF for increased seawater intrusion barrier injection and recommended the construction of two, 3.3 MG storage tanks at the Alamitos Reservoir site. LBWD currently does not plan on implementing the projects in the foreseeable future, as there is insufficient recycled water available at the Long Beach WRP during the summer months to support these customers.	Planning
City of Pomona	City of Pomona Recycled Water Master Plan (recommended projects)	The City completed a master plan for expanding their recycled water distribution system in November 2009. The additional demand for their entire potential customer base was estimated at 6,150 AFY. However, the estimated maximum daily demand would be 11.6 MGD, which is not available to the City from the Pomona WRP. Therefore, additional sources of water would be required if all the potential reuse sites were connected. The Master Plan also recommended replacing the existing pumps at the Pomona WRP with variable frequency drives so that more of the WRP's production could be beneficially reused with less discharge to the San Jose Creek channel.	2030

Planning Jurisdiction	Project Name	Project Summary	Project Status/Timing
City of Pomona	Walnut Valley Water District	WVWD contracts directly with the Sanitation Districts for the purchase of recycled water, instead of receiving recycled water through the City of Pomona. In conjunction with the Sanitation Districts, WVWD has essentially completed repairing/replacing the gravity line that serves both it and the Sanitation Districts' Spadra Landfill. WVWD and the Sanitation Districts are also investigating the construction of an up to 3-million-gallon storage reservoir at or near the Spadra site to serve both agencies and make use of Pomona WRP recycled water that is currently discharged to the river. According to staff of WVWD, both of these capital improvement projects are necessary to increase WVWD's use of recycled water from the Pomona WRP.	Planning
City of Arcadia	City of Arcadia (Upper San Gabriel Valley MWD Phase III Expansion)	The City of Arcadia, along with Upper San Gabriel Valley MWD examined feasibility of supplying recycled water to various sites within the City. A draft report was completed in December 2006 identifying an extension of distribution system from the Whittier Narrows WRP as the most feasible alternative compared with obtaining recycled water from the San Jose Creek WRP or LADWP's LA-Glendale WRP. This study did not include any potential reuse sites that might be located along the pipeline route outside of the City of Acadia. This project, designated Phase III by Upper San Gabriel Valley MWD, has no specific timetable for implementation.	Planning
City of Azusa	Citrus Avenue And Foothill Boulevard 830 Tie-In Project No. W-347	The work consists of the construction of approximately 100 linear feet of 12-inch ductile iron pipe water main, all in City of Azusa including valves, fire hydrants, connections, abandonments, appurtenances, and more.	Planning
City of Industry	La Puente Valley County Water District Master Plan	The La Puente Valley County Water District's (LPVCWD's) potable water source is groundwater. The City of Industry has developed a recycled water project that would supply a total of approximately 400 AFY. This project will connect to the City of Industry's main transmission system, and will supply recycled water from the City of Industry's contractual allotment.	Planning
City of Lakewood	City of Lakewood Master Plan	The City of Lakewood determined the feasibility of expanding its recycled water distribution system westward. This potential expansion could serve an additional 159 AFY to city parks (e.g., Bolivar and Biscailuz Parks), numerous medians and parkways, and a number of public and private schools (e.g., Craig William and Lakewood Elementary Schools, the Intensive Learning Center, St. Pancratius School, and Hoover Junior High School).	Planning
City of Norwalk	Planned Water Supply Projects and Programs	The City of Norwalk has developed a recycled water distribution system in six phases. The system would distribute recycled water throughout the City.	Planning
City of Signal Hill	Recycled Water Feasibility Study	The City of Signal Hill completed a Recycled Water Feasibility Study in March 2012, the purpose of which was to identify potential customers, pipeline alignments, pump station and reservoir locations and possible connection points. The original point of connection was to have been with the LBWD, but lack of available water from that system prompted a 2015 investigation into connecting to the CBMWD system through the City of Lakewood. Signal Hill's anticipated Phase 1 system would serve approximately 180 AFY to 39 customers through 25,000 feet of pipe at a total estimated cost of $6.6 million. There is no current schedule for this project, as it requires coordination with several agencies, purchase of land for a storage reservoir and successfully obtaining funding.	Planning

Planning Jurisdiction	Project Name	Project Summary	Project Status/Timing
City of Carson	West Basin Municipal Water District	The WBMWD's June 2009 Master Plan outlined the expansion of its recycled water system deliveries to a potential of 70,000 AFY by 2020 and to 83,000 AFY by 2030, including expansion of their Carson Regional Water Recycling Facility from 6 to 20 MGD. Their study of the options found that both their pump station at the City of Los Angeles' Hyperion treatment plant, which supplies its effluent for recycling and its distribution system would require extensive expansion in order to accommodate the additional flows from its El Segundo water recycling facility to serve reuse sites in the Carson and Palos Verdes areas Currently, plans for a major expansion of demands in the Carson and Harbor Area are being re-evaluated by WBMWD, along with the feasibility of a new treatment plant at the JWPCP. According to the Master Plan's recommended CIP, construction of the new treatment facilities is not scheduled until 2020-25.	2020-2025
Various	Golden State Water Company, Southwest Infrastructure Projects	Golden State Water continually invests to maintain and improve the local water systems to ensure the delivery of reliable, quality water is not compromised. Various recycled water pipelines and other infrastructure such as hydrants, valves, and service provided throughout various cities in Los Angeles county.	September 2018-April 2019

3.0.2 Organization of Environmental Issue Area

The proposed project is expected to achieve the objectives outlined in Section 2.4, of the *Project Description*. Environmental resources that are addressed in Chapter 3, *Environmental Setting, Impacts and Mitigation Measures,* of this Draft EIR (Sections 3.1 through 3.3) contain the following components.

Environmental Setting

Regulatory Framework

The Regulatory Framework section provides a summary of the regulatory environment as it currently exists. The regulatory framework used in this Draft EIR included federal, state, regional, and local regulations and policies applicable to the proposed project.

Existing Conditions

This section identifies and describes the existing physical environmental conditions of the project area as it pertains to each impact section. Pursuant to Section 15125(a)(1) of the CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of the proposed project from both a local and regional perspective. This description provides the "baseline condition" against which project-related impacts are compared. Normally, the baseline condition is the physical condition that exists when the NOP is published. The NOP for the proposed project was published in February 2019, so February 2019 will serve as the baseline for the environmental impact analysis contained in this Draft EIR.

Impacts and Mitigation Measures

This section describes the significance thresholds and methodology used for the analysis. The section discusses the changes that may occur to existing physical conditions if the proposed project is implemented, and evaluates these changes based upon the identified significance criteria. This section also includes a project-level impact analysis and a cumulative impact analysis. The analysis estimates the magnitude of each impact without the adoption of any mitigation measures, but also identifies feasible mitigation measures for any potentially significant project-level or cumulative impacts. Mitigation measures are those measures that could avoid, minimize, or reduce an environmental impact. This section also analyzes the expected significance of impact if the identified mitigation measures are implemented.

Significance Criteria

In accordance with Appendix G of the CEQA Guidelines, significance criteria have been developed for each environmental resource and are defined at the beginning of each impact analysis section. The significance of potential impacts is categorized as follows:

Significant and Unavoidable: mitigation might be recommended but impacts are still significant;

Potentially Significant: mitigation might be recommended but impacts are potentially significant at the project level;

Less than Significant with Mitigation: potentially significant impact but mitigated to a less-than-significant level;

Less than Significant: mitigation is not required under CEQA but may be recommended; or

No Impact.

3.1 Biological Resources

This section addresses the potential impacts of the proposed project to biological resources. The section includes a description of the environmental setting within San Jose Creek below the Pomona WRP discharge and within the San Gabriel River downstream of the San Jose Creek WRP discharge all the way to the ocean. Baseline conditions are established for biological resources; a summary of the regulations related to biological resources is provided; and an evaluation of the proposed project's potential effects on biological resources is included.

3.1.1 Environmental Setting

Regulatory Framework

Federal

Federal Endangered Species Act

The United States Fish and Wildlife (USFWS) in the Department of the Interior, and the National Marine Fisheries Service (NMFS), in the Department of Commerce, have responsibility for administration of the Federal Engendered Species Act (FESA). USFWS has authority over terrestrial and freshwater species, while NMFS has authority over marine and anadromous species, such as the Southern California steelhead, which spends part of its life in freshwater and part of its life at sea.

The Federal Endangered Species Act (FESA) provides a process for listing species as either threatened or endangered, and methods of protecting listed species. FESA has four major components: 1) provisions for listing species; 2) requirements for federal agency consultation with USFWS or NMFS; 3) prohibitions against "taking" of listed species; and 4) provisions for permits that allow incidental "take" of listed species for otherwise lawful activities. FESA also requires the preparation of recovery plans and the designation of critical habitat for listed species.

Species are listed as either endangered or threatened under Section 4 of the FESA that defines as "endangered" any plant or animal species that is in danger of extinction throughout all or a significant portion of its range and "threatened" if a species is likely to become endangered in the foreseeable future. Section 9 of the FESA prohibits "take" of listed endangered species, and may be extended to threatened species by rule. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. Harm under the definition of "take" includes disturbance or loss of habitats used by a threatened or endangered species during any portion of its life history. Under the regulations of the FESA, "take" may be authorized when it is incidental to, but not the purpose of, an otherwise lawful act.

The Migratory Bird Treaty Act of 1918

The Migratory Bird Treaty Act (MBTA) (U.S. Code Title 16 Section 703–711), first enacted in 1918, domestically implements a series of treaties between the United States and Great Britain (on behalf of Canada), Mexico, Japan, and the former Soviet Union that provide for international migratory bird protection. The MBTA prohibits, except as permitted by regulations, "to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird…" The MBTA protects

over 800 species, including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species. Permits for take of nongame migratory birds can be issued only for specific activities, such as scientific collecting, rehabilitation, propagation, education, taxidermy, and protection of human health and safety and personal property.

Clean Water Act Section 404

Section 404 of the Clean Water Act (CWA) (33 USC 1251 et seq., 33 CFR §§320 and 323) gives the United States Army Corps of Engineers (USACE) authority to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. The USACE (Federal Register 1982) and the Environmental Protection Agency (EPA) (Federal Register 1980) jointly define wetlands as: "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Wetlands have the following general diagnostic environmental characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology (Environmental Laboratory 1987). Examples of wetlands may include freshwater marsh, seasonal wetlands, and vernal pool complexes that are adjacent to perennial waters of the U.S.

"Other waters of the U.S." refers to those hydric features that are regulated by the CWA but are not defined as wetlands (33 CFR 328.4). Examples of other waters of the U.S. may include rivers, creeks, ponds, and lakes.

In California, before the USACE can issue a Section 404 CWA permit, an applicant must apply for and receive a Section 401 water quality certification or waiver from one of the nine Regional Water Quality Control Boards (RWQCBs) or the State Water Resources Control Board (SWRCB).

National Pollutant Discharge Elimination System Section 402

The National Pollutant Discharge Elimination System (NPDES) permit program under Section 402 of the CWA is one of the primary mechanisms for controlling water pollution. Under the NPDES permit program, discharges into navigable waters are prohibited except in compliance with specified requirements and authorizations. In order to discharge to waters of the United States, municipal and industrial facilities are required to obtain a NPDES permit that specifies allowable limits, based on available wastewater treatment technologies, for pollutant levels in their effluent.

The United States Environmental Protection Agency (USEPA) has delegated authority of issuing NPDES permits in California to the State Water Resources Control Board (SWRQB) and its nine Regional Water Quality Control Boards (RWQCBs). The Regional Water Quality Control Board (RWQCB) regulates water quality in the project area.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act, as amended in 1964, requires that all federal agencies consult with NMFS, USFWS, and state wildlife agencies (i.e., California Department of Fish and

Wildlife [CDFW]) when proposed actions might result in modification of a natural stream or body of water. Federal agencies must consider effects that projects would have on fish and wildlife development and provide for improvement of these resources. The Fish and Wildlife Coordination Act allows NMFS, USFWS, and CDFW to provide comments to USACE during review of projects under Section 404 of the CWA (concerning the discharge of dredged materials into navigable waters of the United States) and Section 10 of the Rivers and Harbors Act (obstructions in navigable waterways). NMFS comments provided under the Fish and Wildlife Coordination Act are intended to reduce environmental impacts to migratory, estuarine, and marine fisheries and their habitats.

State and Regional

California Endangered Species Act

The California Endangered Species Act (CESA) and implementing regulations in the Fish and Game Code, Section 2050 through Section 2089, include provisions for the protection and management of plant and animal species listed as endangered or threatened, or designated as candidates for such listing.

Pursuant to Section 2081 of the Code, the CDFW may authorize incidental take of state-listed endangered, threatened, or candidate species if: (1) the take is incidental to an otherwise lawful activity; (2) impacts of the authorized take are minimized and fully mitigated; (3) the permit is consistent with any regulations adopted pursuant to any recovery plan for the species; and (4) the applicant ensures adequate funding to implement the measures required by CDFW. The CDFW makes this determination based on available scientific information and considers the ability of the species to survive and reproduce.

Clean Water Act Section 401

Under Section 401 of the CWA, the local RWQCB (RWQCB) or SWRCB regulates the discharge of dredged or fill material into waters of the State. For this project, the Los Angeles RWQCB is the appropriate agency that must certify, through issuance of a Section 401 water quality certification, that actions receiving authorization under Section 404 of the CWA also meet state water quality standards.

Porter-Cologne Water Quality Control Act

The RWQCB also regulates waters of the State under the Porter-Cologne Water Quality Control Act (Porter Cologne Act). The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. The dredging, filling, or excavation of isolated waters constitutes a discharge of waste to waters of the State and prospective dischargers are required to obtain authorization through an Order of Waste Discharge or waiver thereof from the RWQCB and comply with other requirements of Porter-Cologne Act.

Projects that affect wetlands or waters must meet waste discharge requirements of the RWQCB, which may be issued in addition to a water quality certification or waiver under Section 401 of the CWA.

California Department of Fish and Wildlife Streambed Alteration Agreement Program

Under Fish and Game Code Section 1602, no entity shall substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake without first providing notification to CDFW. If, upon notification, CDFW determines that the activity may substantially adversely affect an existing fish or wildlife resource, it may require the entity to enter into a streambed alteration agreement with reasonable measures to protect the resource.

A stream is defined as a body of water that flows at least periodically or intermittently through a bed or channel that has banks and supports fish or other aquatic life. This definition includes watercourses with a surface or subsurface flow that supports or has supported riparian vegetation.

Protection of Wildlife Species and Populations (California Fish and Game Code §§ 1801-1802 and 2000-2021.5)

Sections 1801-1802 of the California Fish and Game Code state that CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species, and it is state policy to maintain sufficient populations of all species of wildlife and the habitat necessary to achieve the objectives stated in the subdivisions identified in this code.

Sections 2000-2021.5 of the California Fish and Game Code state that it is unlawful to take or possess any bird, mammal, fish, reptile, amphibian, or parts thereof, except as provided in this code or regulations made under it.

Protection of Birds, Nests and Eggs (California Fish and Game Code §§ 3503, 3503.5 and 3800)

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders *Falconiformes* and *Strigiformes*), including its nests or eggs. Typical violations of these codes include destruction of active nests resulting from removal of vegetation in which the nests are located. Violation of Section 3503.5 could also include failure of active raptor nests resulting from disturbance of nesting pairs by nearby project construction. This statute does not provide for the issuance of any type of incidental take permit.

Section 3800 of the California Fish and Game Code affords certain protections to all nongame birds, which are all birds occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds. Section 3513 of the California Fish and Game Code upholds the MBTA by prohibiting any take or possession of birds that are designated by the MBTA as migratory nongame birds except as allowed by federal rules and regulations promulgated pursuant to the MBTA.

California Fully Protected Species (California Fish and Game Code §§ 3511, 4700 and 5515)

California fully protected species are described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected

species. CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species except under very limited circumstances (e.g., for scientific research or under a Natural Communities Conservation Plan).

Native Plant Protection Act (California Fish and Game Code §§ 1900 through 1913)

The Native Plant Protection Act includes measures to preserve, protect, and enhance rare and endangered native plants. The list of native plants afforded protection pursuant to the Native Plant Protection Act includes those listed as rare and endangered under the CESA. The Native Plant Protection Act provides limitations on take as follows: "No person will import into this state, or take, possess, or sell within this state" any rare or endangered native plant, except in compliance with provisions of the act. Individual landowners are required to notify the CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material.

California Environmental Quality Act (CEQA)

If a project would substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of an endangered, rare, or threatened species, CEQA defines the impact as significant (14 Cal. Code Regs. § 15065(a)(1).)

CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either USFWS or CDFW. Thus, CEQA provides a lead agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted.

CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not at present have legal protection of any kind, CEQA calls for an assessment of whether any such resources would be affected, and requires findings of significance if there would be substantial losses. Natural communities listed by the California Natural Diversity Database (CNDDB) as sensitive are considered by CDFW to be significant resources and fall under the CEQA Guidelines for addressing impacts. Local planning documents such as general plans often identify these resources as well.

Local

Los Angeles County Significant Ecological Areas

The Los Angeles County Board of Supervisors designated Significant Ecological Areas (SEAs) in 1981 with the adoption of the Los Angeles County General Plan (County of Los Angeles 1980). The collection of SEAs together was intended to designate critical components of the biodiversity of Los Angeles County as it was known and understood at that time. The project area is located adjacent to SEA 15 (i.e., Puente Hills SEA).

The intent of the SEA regulations is not to preclude development, but to allow controlled development without jeopardizing the biotic diversity of Los Angeles County. SEAs are important for preserving and documenting the geographical variability of vegetation and wildlife that formerly occurred throughout the region. They serve as areas of native species that could be of scientific and economic value in the future. In addition, waterfowl rely on these waterways for areas to rest and feed along their north-south migration routes. In the case of the project area, this function is made even greater than might be expected because it serves as a corridor for any gene flow and species movement that may still take place between the San Gabriel Mountains, Puente Hills, and the project area.

3.1.2 Biological Resources Data Sources

Field Surveys

Wildlife

At the recommendation of CDFW, four focused special-status species surveys were conducted within the San Gabriel River channel below the San Jose Creek WRP point of discharge. Focused surveys for tri-colored blackbird (*Agelaius tricolor*, January 22, 23, and 25, 2019) and fish (February 19 and 20, 2019) were conducted within Segments 2, 3, and 4 (survey area) within the San Gabriel River and San Jose Creek. An emergence survey for bats (*Chiropter* sp.) was conducted on March 27, 2019. Passive acoustic monitoring was performed for bats from March 27, 2019 through April 2, 2019. Focused surveys for western pond turtle (*Emys marmorata*) were conducted from May 1, 2019 through May 4, 2019.CDFW did not recommend for any other species surveys to be conducted.

General Habitat Assessment and Vegetation Mapping

The plant communities that occur along the Zone 1 Ditch, Segments 2-4, and the upstream portion of Segment 5 (approximately 0.6 miles from San Gabriel River Parkway upstream to the Whittier Narrows Dam), and the Whittier Narrows Recreational Area (WNRA), were characterized and mapped by Wood Environment & Infrastructure Solutions, Inc. (Wood, Inc.) in June 2018. The remainder of the project area that includes the limited vegetation present in Segments 5 and 6 downstream from the San Gabriel Coastal Basin Spreading Grounds was assessed from aerial imagery by Wood, Inc. at the time of its assessment.

A general habitat assessment and additional vegetation mapping was conducted in February and July 2018 by Environmental Science Associates (ESA) to assess the conditions of the project area that are capable of supporting special-status species and to confirm the vegetation types and habitat quality within the soft-bottom segments of San Gabriel River and San Jose Creek that are upstream and downstream of the Whittier Narrows Dam, primarily where riparian vegetation is present. Specifically, the assessment included Segments 2 through 5 (upper portion of Segment 5 just below Whittier Narrows Dam to San Gabriel River Parkway), the "backwater" area of the Rio Hondo known as the Bosque Del Rio Hondo, and the adjacent portion of the WNRA where the Zone 1 Ditch passes through that area; and the area containing the "Crossover Channel" that connects San Gabriel River to the Rio Hondo during extreme conditions, including the Bosque Del Rio Hondo, just upstream from the Whittier Narrows Dam (refer to **Figure 3.1-1**).

Project Area Boundary
Zone 1 Ditch
Segment 2
Segment 3
Segment 4

Lexington-Gallatin Rd
60
San Gabriel River
San Jose Creek
San Gabriel River Fwy / I-605
Pellissier Pl
Union P
Durfee Ave
Siphon Rd
605
Rooks Rd
Capitol Ave

0 1,000 Feet

WHITTIER NARROWS WRP
SJC002
WN001
4
2
3
SAN JOSE CREEK WRP
Walnut Creek
Puente Creek
San Jose Creek
1
POM001
POMONA WRP
5
SJC001A
SJC001B
6
Rio Hondo
SJC001
La Mirada Creek
Coyote Creek
North Fork Coyote Creek
Los Angeles River
LC001
LOS COYOTES WRP
7
San Gabriel River
Coyote Creek
LONG BEACH WRP
LB001
8

Discharge Location
River Segment Break
Lined Channel

Path: U:\GIS\GIS\Projects\17xxxxD170647_08 San Gabriel River Watershed\03 MXDs Projects\EIR\Fig3.1-1 ProjectArea.mxd, spiessler 7/11/2019

SOURCE: ESRI

San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse

Figure 3.1-1
Project Area

ESA

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Segment 6 was not assessed because the area is primarily devoid of vegetation and regularly maintained by Los Angeles County Department of Public Works for water retention and percolation. Segments 1 and 7 were also not assessed, because the channel bottoms of these segments are concrete-lined and do not support habitats capable of supporting endemic or migratory wildlife or native plant populations.

Literature Review

ESA reviewed recent documents and accessed standard reference sources and databases to gather information on the natural resources and special-status species known or likely to occur in the survey area.

The literature that was reviewed included the following:

- Assessing the Effects of the San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse on Downstream Hydrology, Hydrology Report. ESA. July 2018 (herein referred to as Hydrology Report 2018 and included in Appendix E2).
- California Native Plant Society (CNPS). 2019. Inventory of Rare and Endangered Vascular Plants of California. Database was queried for special status species records within the nine (9) United States Geological Survey (USGS) topographic quadrants within and adjacent to the project area. These nine (9) quadrants include: Pasadena, Mt. Wilson, Azusa, Los Angeles, El Monte, Baldwin Park, South Gate, Whittier, and La Habra.
- CNDDB. Accessed February 26, 2019. Database was queried for special status species records within the nine (9) United States Geological Survey (USGS) topographic quadrants within and adjacent to the project area. These nine (9) quadrants include: Pasadena, Mt. Wilson, Azusa, Los Angeles, El Monte, Baldwin Park, South Gate, Whittier, and La Habra.
- San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse Biological Resources Technical Memorandum. ESA. Letter Report dated July 2018 (herein referred to as Biological Report 2018 and included in Appendix B2).
- San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse Updated Biological Resources Technical Memorandum. ESA. Letter Report dated July 2019 (herein referred to as Updated Biological Report 2019 and included in Appendix B1).
- San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse Draft Initial Study / Mitigated Negative Declaration. (ESA). July 2018.
- Los Angeles County Sanitation Districts San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse Draft Adaptive Management Plan. (Wood Environment & Infrastructure Solutions, Inc.) July 2019 (refer to Appendix H).
- SJC002 Discharge Observations and Monitoring Study. Planning Section, Facilities Planning Department, County Sanitation Districts of Los Angeles County. January 11, 2019 (refer to Appendix E4).

- Using an Environmental Hydrology Model of the San Gabriel River to Assess Water Reclamation Plant Flow Reductions, Hydrology Report. (ESA.) June 2019 (herein referred to as Hydrology Report 2019) (refer to Appendix E1).

- USFWS Information for Planning and Conservation (IPac) Environmental Conservation Online System (ECOS). Accessed March 9, 2018.

3.1.3 Existing Conditions

Regional

The proposed project is located in southeast Los Angeles County, California. Los Angeles County contains varied topography, exposed geological formations, vegetation, built communities, beaches and waterways. Natural resources within Los Angeles County include lakes, beaches, dunes, rivers, creeks, bluffs, mountains, ridgelines, hillsides, native habitat (e.g., wetlands, oak woodlands, and coastal sage chaparral habitat), and rock outcroppings.

Local

The locations of the five WRPs are shown in Chapter 2, Figure 2-1, of this Draft Environmental Impact Report (EIR). The Pomona WRP and San Jose Creek WRP currently discharge recycled water to the San Jose Creek; the San Jose Creek WRP, Whittier Narrows WRP, and Los Coyotes WRP each discharge to the San Gabriel River; and the Long Beach WRP discharges into the Coyote Creek at the confluence with the San Gabriel River. As such, the project area includes portions of the San Gabriel River and the San Jose Creek.

Project Area

The hydrology of the San Gabriel River system has been altered, primarily for flood control and storm runoff conveyance, following a series of devastating floods in the early part of the 20th century. The portions of the San Gabriel River and the San Jose Creek in the project area are confined between concrete banks or vertical concrete walls. Some of the channel sections are also concrete-lined across the channel bottom but some segments are unlined.

Adjacent to the project area are highly urbanized residential, commercial, and industrial developments that border the San Gabriel River and the San Jose Creek. The Whittier Narrows Recreational Area (WNRA), on the west-side of San Gabriel River, above the Whittier Narrows Dam, lies directly adjacent to the San Gabriel River, some of which occurs within the project area. The WNRA is a significant natural area and constitutes the western perimeter of the Los Angeles County Puente Hills SEA. The WNRA is managed by the Los Angeles County Department of Parks and Recreation. However, the river channels and dam are maintained and managed by the US Army Corps of Engineers (USACE) through the Whittier Narrows Master Plan (USACE 2011).

Hiking and riding trails exist along the banks of the San Gabriel River in the vicinity of the WNRA and elsewhere along the waterways where access is permitted. A substantial amount of trash and foreign debris occurs throughout the San Gabriel River, which is transported from upstream storm flows, wind dispersal, and from vehicles traveling over nearby bridges and

roadways, as well as, pedestrians that frequent the banks of the river. In addition, invasive plant species occur in several areas, particularly in the Crossover Channel and the Bosque Del Rio Hondo on the upstream side of the Whittier Narrows Dam.

The following sections describe the habitat values and quality of each segment of the Gabriel River downstream of the WRP discharges. The river segments are illustrated in Figure 3.1-1.

Segment 1

Segment 1 is the concrete-lined vertical walled channel section of the San Jose Creek downstream from the Pomona WRP and provides limited biological resource value to wildlife other than as a water source and for some common avian and terrestrial species that typically forage in urban areas and along concrete channels, such as ravens, rodents, and raccoons. Foraging opportunities are limited to algae, decaying vegetation, and trash. Vertical concrete walls may reduce its use by wildlife. The channel conveys nuisance runoff, stormwater, groundwater upwelling, and reclaimed water from the Pomona WRP downstream to Segment 2.

Segment 2

Segment 2 is an unlined, soft or earthen-bottomed section in San Jose Creek and extends upstream about one-mile from the confluence with San Gabriel River. This segment receives stormwater and urban runoff, as well as discharge from the Pomona WRP. This area also exhibits considerable upwelling from local groundwater as indicated by flow measurements collected in the San Jose Creek when there was no discharge from the Pomona WRP upstream.

Surface water is typically present within this channel segment as a result of upstream flows, groundwater upwelling and the ponding effect of the downstream drop structure. The channel is dominated by black willow thickets and non-native invasive vegetation such as castor bean. This area provides both foraging and nesting habitat for avian species and the presence of surface water for long periods supports aquatic habitat for non-native fish species. No native fish species are known to occupy Segment 2, as suitable instream habitat does not exist.

Segment 3

Segment 3 is approximately 4,000 feet in length extending from near the San Gabriel River -San Jose Creek confluence to just upstream from the State Route (SR)-60 Bridge. Segment 3 also includes a small portion of the San Gabriel River upstream from the confluence with San Jose Creek. This segment receives water from nuisance flows and stormwater, San Jose Creek groundwater upwelling contributions, Pomona and San Jose Creek WRP discharges, and occasionally when water is released from the Morris and San Gabriel Dams, or from imported water sources upstream. The San Gabriel River is generally dry upstream from the first drop structure above the confluence and supports little riparian vegetation. Water in this segment is impounded by the weirs and generally covers a wide area of the channel bottom. Vegetation in this area includes black willow thicket habitats at the water's edge, sand bars, and areas where non-native weed species are established on the channel edges. The quality of the riparian habitat is generally disturbed due to the prevalence of invasive species and trash. A perennial aquatic habitat is supported by in-stream flows and groundwater upwelling, which is impounded by a

series of drop structures. No native fish species are known to occupy Segment 3, as suitable instream habitat does not exist.

Segment 4

Segment 4 extends downstream in the San Gabriel River, just north of the SR-60 Bridge, to upstream from the Whittier Narrows Dam. There are three drop structures (or weirs) in this segment. The last weir, located just downstream from the head works for the Zone 1 Ditch, divides this segment into two different hydrologic regimes.

The upstream regime of Segment 4 receives water from the same sources as Segment 3. Riparian black willow thicket habitat occurs adjacent to water ponded from behind the drop structures. The quality of the riparian habitat is somewhat poor due to the prevalence of invasive species and trash. Aquatic habitat is also supported by ponded water that occurs due to in-stream flows, WRP discharges, and groundwater upwelling.

The downstream portion of Segment 4 below the last (downstream) drop structure is usually dry, except after storm events, or during deliveries of imported water from tributaries feeding into San Gabriel River upstream. The vegetation is mostly disturbed scrub habitat dominated primarily by ruderal (weedy) vegetation, non-native grasslands, and dry river bottom. According to the Hydrology Report 2019, this is likely due to the reduced influence of groundwater upwelling in the lower portion of the segment, and less consistent ponded water. Typically, the water in the upstream regime of Segment 4, including WRP discharges, infiltrates into the ground due to the high permeability of the riverbed soil and does not contribute to the downstream regime. Near the dam, mature stands of riparian vegetation, including large willow and cottonwood trees, occur in the center of the channel.

Groundwater plays a role in sustaining the existing habitat upstream of the Whittier Narrows Dam. Groundwater elevations vary according to hydrologic and seasonal variations, but at times appear to be high enough to support older vegetation in the channel. At other times, depths to groundwater exceed 20 feet below the ground surface and isolate riparian vegetation for years at a time. This fluctuating groundwater condition likely adds to the stress of the existing habitat. In addition, percolating surface flows contribute to sub-surface flows within the channel that may support riparian/wetland habitat within the channel. The extent to which subsurface flows contribute to the existing vegetation is unknown, but the irregular surface flows have contributed irregular subsurface-flow that has not provided a perennial groundwater source for vegetation. The areas exhibiting the healthiest riparian/wetland habitat are also areas with more regular access to surface flows such as near the ponded areas, just above the dam, and just below the dam. No native fish species are known to occupy Segment 4, as suitable instream habitat does not exist.

Whittier Narrows Recreation Area and Zone 1 Ditch

The WNRA lies adjacent to the west-side of the San Gabriel River between Peck Road and the Whittier Narrows Dam. The WNRA in this area is comprised of natural open space used primarily for passive recreation, and also contains flood control facilities, extraction wells, and is crossed by Southern California Edison (SCE) transmission lines. Zone 1 Ditch is an artificial

channel through the WNRA that conveys water drawn from the San Gabriel River to the Rio Hondo. Zone 1 Ditch is operated and maintained by the Los Angeles County Department of Public Works. Periodically, water deliveries are conveyed from the San Gabriel River to the Rio Hondo. For most of its length, Zone 1 Ditch exhibits a soft bottom and earthen banks. However, some sections exhibit grouted riprap along the banks and riprap on the bottom. Some of the water that is conveyed through the channel may percolate into the ground and may support vegetation that is adjacent to the channel. Vegetation around the channel is dominated by blue elderberry stands and the backwash area nearer the dam within the WNRA, which feeds into Bosque Del Rio Hondo, exhibits patches of black willow thickets, some non-native woodland, giant reed breaks, and upland areas dominated by mustard and other disturbed scrub dominated by non-native weed species and non-native grasslands.

Bosque Del Rio Hondo appears to have some standing water for a long duration and saturated conditions may persist through much of the dry season. However, these areas exhibit predominantly non-native vegetation, including the exotic and invasive giant reed (*Arundo donax*), although some willow woodland patches occur along the stream in the southern section of this area.

Segments 5 and 6

Segment 5 is soft-bottomed and continues downstream within the San Gabriel River from the Whittier Narrows Dam and past the San Gabriel Coastal Basin Spreading Grounds (SGSG). Just below the dam, for a stretch of approximately two miles, the river channel appears to receive local runoff conveyed into the area via the Peck Road Channel, which enters near the upstream end of the segment from the northeast. Segment 5 does not receive surface flows from the San Gabriel River upstream of the dam except during large storm events. However, in this area just below the dam, the channel supports healthy stands of black willow.

Downstream of this portion, the San Jose Creek WRP can discharge into Segment 5 at two points: SJC001A, which is located at the head works for the SGSG; and, SJC001B, located at the downstream end of Segment 5. The drop structure at the SGSG head works functions to retain flows that are then diverted into the spreading grounds.

Segment 6 is similar to Segment 5 in that it does not contain native habitat. The unlined channel areas in Segments 5 and 6 of the San Gabriel River are part of the overall Montebello Forebay recharge area, which also includes both the Rio Hondo and SGSG. There are a total of 7 inflatable rubber dams in Segments 5 and 6 that are used to detain flows within this area for groundwater recharge. Vegetation is periodically cleared within the channel by the Los Angeles County Department of Public Works. Patches of riparian shrubs and some trees are left in place on the channel side slopes. The channel bottom is highly disturbed and exhibits predominantly ruderal herbaceous vegetation and barren areas.

Segment 7

Segment 7 consists of a concrete-lined channel from just north of Firestone Blvd. Bridge, to the San Gabriel River estuary "mixing zone" at the interface of the concrete-lined San Gabriel River channel (and Coyote Creek confluence), and the estuarine waters upstream from the power plants.

Shore birds and local wildlife utilize the freshwater for loafing, but foraging habitat values are marginal due to a lack of vegetation and soils that would otherwise provide a food source.

Segment 8 "Mixing Zone"

Within the San Gabriel River estuary mixing zone, freshwater mixes with the seawater in a small apron area beyond the concrete lined channel. The freshwater initially stays on the surface until wind and currents promote more thorough mixing. Waterfowl and shore birds are seen in this area loafing and foraging. The freshwater influence may attract aquatic species that waterfowl prey on.

Vegetation Communities

Plant communities and non-vegetated areas were characterized and mapped within the project area, specifically for the Zone 1 Ditch, Segments 2, 3, and 4, a portion of Segment 5, and the Bosque Del Rio Hondo (ESA 2019) (**Figures 3.1-2 and 3.1-3)**. **Table 3.1-1A** summarizes acreage of vegetation communities within Segments 2, 3, 4, and Zone 1 Ditch survey areas. **Table 3.1-1B** compiles acreages of vegetation communities within the Bosque Del Rio Hondo. Vegetation communities were characterized using *A Manual of California Vegetation, 2nd Ed*. (Sawyer et al. 2009). The system of attributing classifications based typically on single or dual species dominance used in the *Manual* does not always provide specific nomenclature for communities dominated by non-native or exotic species, or for ruderal (weedy) vegetation where several species are co-dominant or where dominance varies considerably in small patches. Therefore, as a practical consideration, unique vegetation communities were described based on species dominance**.** Plant communities and disturbed areas land use located within the project area are described in detail below.

TABLE 3.1-1A
ACREAGES OF VEGETATION COMMUNITIES WITHIN SEGMENTS 2, 3, 4, AND ZONE 1 DITCH STUDY AREA, 2018

Vegetation	Acres
Annual brome grassland	23.5
Arroyo willow thickets	1.6
Arroyo willow thickets - Disturbed	2.5
Barren	10.9
Basket bush patches	4.1
Black cottonwood forest	0.8
Black willow thickets	75.2
Blue elderberry stands	41.1
Box-elder forest	0.1
California buckwheat scrub	0.1
California coffee berry scrub	0.2
California sycamore woodlands	0.4
California walnut groves	1.6
California yerba santa scrub	0.1
Cattail marshes	2.3
Coast prickly pear scrub	0.2

Vegetation	Acres
Developed	44.5
Eucalyptus semi-natural stands	3.2
Giant reed breaks	12.7
Mulefat thickets	7.0
Mulefat thickets - Disturbed	12.8
Non-native woodland	15.5
Open Water	24.1
Perennial pepper weed patches	2.5
Poison hemlock patches	0.8
Poison oak scrub	0.2
Sandbar willow thickets	1.0
Sandbar willow thickets - Disturbed	3.2
Scalebroom scrub	0.0
Smartweed - cocklebur patches	12.0
Sugarbush chaparral	0.1
Unvegetated streambed	49.7
Upland mustards	70.5
White alder groves	0.1
Wild grape shrubland	0.1
Total:	**424.7**

SOURCE: Appendix B2, *Biological Resources Technical Memorandum, 2018.*

TABLE 3.1-1B
ACREAGES OF VEGETATION COMMUNITIES WITHIN THE BOSQUE DEL RIO HONDO, 2018

Vegetation	Acres
Cattail Marsh	0.3
Disturbed	12.9
Giant Reed (Arundo)	66.1
Non-Native Woodland (Eucalyptus)	23.2
Non-Native Woodland (Ricinis)	3.0
Open Water, Streambed	9.4
Upland (Brassica, Mixed Non-Native Species – Ricinis, Nicotiana, etc.)	78.6
Willow Woodland	25.2
Total:	**218.7**

SOURCE: Appendix B2, *Biological Resources Technical Memorandum, 2018.*

Aquatic / Riverine

Open Water

Areas identified as "open water" consist of standing or flowing water. Open water was observed in Segments 2 through 4, which represents the extent of surface water in the project area. Open water generally includes areas where emergent vegetation was absent.

Cattail Marsh - *Typha (angustifolia, domingensis, latifolia)* Herbaceous Alliance

A small patch of cattail marsh occurs within the floodplain of the Bosque Del Rio Hondo, upstream from the dam near State Route 19 (Rosemead Blvd). This community consisted entirely of broadleaf cattail (*Typha sp.*), submerged in open water, with hydric soils. Cattail marsh is also present within the San Gabriel River and San Jose Creek.

Unvegetated Streambed

Areas characterized as unvegetated streambed include the soft-bottom channel bed where vegetation is very sparse or entirely lacking. These areas are typically result from scour or silt/sand deposition during high flows and storm events in the San Gabriel River. Unvegetated streambed areas also represent those areas where standing or flowing water was not apparent based on review of aerial imagery or during field inspections.

Native Riparian Communities

Arroyo Willow Thickets - *Salix lasiolepis* Shrubland Alliance

This community is present throughout San Jose Creek, the San Gabriel River, and Zone 1 Ditch. Arroyo willow thickets (*Salix lasiolepis*) are generally dominant or co-dominant in the tall shrub or low tree canopy with Bigleaf maple (*Acer macrophyllum*), coyote brush (*Baccharis pilularis*), mule fat (*Baccharis salicifolia*), buttonbush *(Cephalanthus occidentalis*), red osier dogwood (*Cornus sericea*), Pacific wax myrtle (*Morella californica*), western sycamore (Platanus racemose), Fremont cottonwood (*Populus fremontii*), black cottonwood (*Populus trichocarpa*), willow (*Salix* spp), and elder *(Sambucus nigra*). This community has a NatureServe rank of S4G4 and is designated by CDFW as a Sensitive Natural Community.

Arroyo Willow Thickets – Disturbed - *Salix lasiolepis* Shrubland Alliance (Disturbed)

This community occurs along the San Gabriel River and San Jose Creek. While this community is generally very similar to the arroyo willow thickets, it is disturbed from human presence, such as from homeless encampments, previous construction activities, concrete weirs (San Gabriel River), and an asphalt bike trail along the north side of the San Gabriel River.

Black Willow Thickets - *Salix gooddingii* Woodland Alliance

Black willow thickets are present both upstream and immediately downstream of the Whittier Narrows Dam and along the Rio Hondo and San Gabriel River, respectively. This community is characterized as supporting a tree layer dominated by Goodding's black willow (*Salix gooddingii*]. In some portions of this community there is are mature willow trees, such as along the San Gabriel River, whereas immature, successional trees were observed along the Rio Hondo, with many trees remaining less than three meters in height. The black willow stands are interspersed with various native and non-native grass, palm and tree species such as giant reed, mulefat, Shamel ash (*Fraxinus uhdei*), blue elderberry (*Sambucus nigra* ssp. *caerulea*), sandbar willow (*S. exigua*), arroyo willow (*S. lasiolepis*), Brazilian pepper tree (*Schinus terebinthifolia*) and Mexican fan palm (*Washingtonia filifera*).

Significant Ecological Areas
Coastal California gnatcatcher Critical Habitat
Annual brome grassland
Arroyo willow thickets
Arroyo willow thickets - Disturbed
Barren
Basket bush patches
Black cottonwood forest
Black willow thickets
Blue elderberry stands
Box-elder forest
California buckwheat scrub
California coffee berry scrub
California sycamore woodlands
California walnut groves
California yerba santa scrub
Cattail marshes
Coast prickly pear scrub
Developed
Eucalyptus semi-natural stands
Giant reed breaks
Mulefat thickets
Mulefat thickets - Disturbed
Non-native woodland
Open Water
Perennial pepper weed patches
Poison hemlock patches
Poison oak scrub
Sandbar willow thickets
Sandbar willow thickets - Disturbed
Scalebroom scrub
Smartweed - cocklebur patches
Sugarbush chaparral
Unvegetated streambed
Mustard semi-natural stands
White alder groves
Wild grape shrubland

SEA: WHITTIER NARROWS DAM COUNTY RECREATION AREA
SEA: RIO HONDO COLLEGE WILDLIFE SANCTUARY
Segment 2
Segment 3
Segment 4
Zone 1 Ditch
San Gabriel River
San Jose Creek
I- 605 San Gabriel River Fwy
Union Pacific RR
State Rte 60
Crossroads Pkwy S
Durfee Ave
Siphon Rd
Rooks Rd
Capitol Ave
Workman Mill Rd
Pellissier Pl
Peck Rd
60
605
0 1,000 Feet
N

Discharge Location
River Segment Break
Lined Channel
Unlined Stream Bottom

Path: U:\GIS\GIS\Projects\17xxx\D170647_08_San_Gabriel_River_Watershed\03_MXDs_Projects\EIR\Fig3.1-2_alveq.mxd_Janderson_3/19/2019

SOURCE: ESRI; Wood; Los Angeles County; Clearwater EIR Segment Map

San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse

Figure 3.1-2
Vegetation Communities - Overview

ESA

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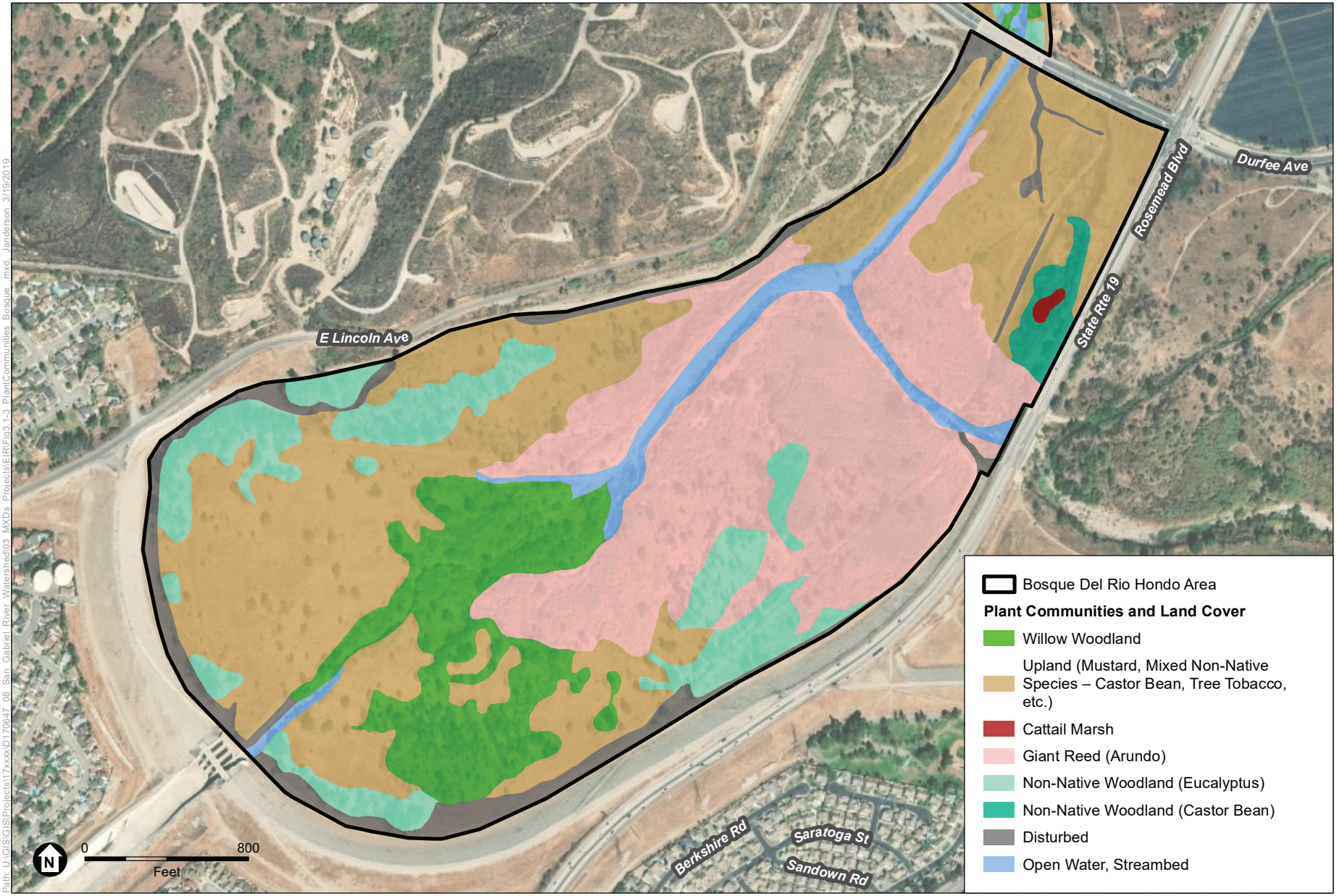


SOURCE: ESRI; ESA

San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse

Figure 3.1-3

Bosque Del Rio Hondo Area - Plant Communities and Land Cover

ESA

This community also supports a robust herbaceous understory layer dominated by various grasses and forbs, including Bermuda grass (*Cynodon dactylon*), prickly lettuce (*Lactuca serriola*), sweetclover (*Melilotus albus*), seep monkey flower (*Mimulus guttatus*), London rocket (*Sysimbrium irio*), spiny cow thistle (*Sonchus asper*) and saltmarsh aster (*Symphyotrichum subulatum* var. *parviflorum*). This community has a NatureServe rank of S3G4 and is designated by CDFW as a Sensitive Natural Community.

Sandbar Willow Thickets - *Salix exigua* Shrubland Alliance

A patch of sandbar willow thicket, dominated primarily by sandbar willow, occurs upstream from the San Gabriel River / San Jose Creek confluence and below the drop structure that appears to represent the upstream extent of upwelling influence from San Jose Creek.

Sandbar Willow Thickets – Disturbed - *Salix exigua* Shrubland Alliance (Disturbed)

Two patches of disturbed sandbar willow thickets exist within the San Gabriel River. While this community is generally similar to the sand bar willow thickets community, more areas are disturbed. The disturbed areas are most likely attributed to human presence, such as, but not limited to homeless encampments, concrete weirs in the San Gabriel River, and an asphalt bike trail along the north side of the San Gabriel River.

California Walnut Groves - *Juglans californica* Woodland Alliance

This community occurs within the Zone 1 Ditch and the San Gabriel River. California walnut (*Juglans californica*) is generally dominant or co-dominant in the tree canopy with white alder (*Alnus rhombifolia*), California ash (*Fraxinus dipetala*), toyon (*Heteromeles arbutifolia*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), elder (*Sambucus nigra*) and California bay (*Umbellularia californica*). This community has a NatureServe rank of S3G3 and is designated by CDFW as a Sensitive Natural Community.

Mulefat Thickets - *Baccharis salicifolia* Shrubland Alliance

Mulefat thickets are present along the San Gabriel River, downstream of the Whittier Narrows Dam, and along a portion of the bed and banks of the Zone 1 Ditch. This community is dominated with mulefat, interspersed with various tree species, such as arroyo willow, black willow, Shamel ash and red river gum. The mulefat and trees that comprise this community are dense and therefore a formative shrub or herbaceous layer is not visibly present; however, various ruderal vegetation occur along the margins that includes shortpod mustard, tall cyperus (*Cyperus eragrostis*) and annual nettle (*Urtica urens*).

Mulefat Thickets – Disturbed - *Baccharis salicifolia* Shrubland Alliance (Disturbed)

Disturbed mulefat thickets are present along the San Gabriel River. While this community is generally very similar to the mulefat thickets community, more areas are disturbed. The disturbed areas are most likely attributed to human presence; such as, but not limited to homeless encampments, concrete weirs in the San Gabriel River, and an asphalt bike trail along the north side of the San Gabriel River.

Black Cottonwood Forest - *Populus trichocarpa* Forest Alliance

Black cottonwood forest occurs within the Zone 1 Ditch. Black cottonwood forest is generally dominant or co-dominant in the tree canopy with black cottonwood (*Populus trichocarpa*), white fir (*Abies concolor*), bigleaf maple (*Acer macrophyllum*), box-elder maple (*Acer negundo*), grey alder (*Alnus incana*), white alder, red alder (Alnus rubra), Oregon ash (Fraxinus latifolia), western juniper (*Juniperus occidentalis*), Pacific wax myrtle (*Morella californica*), lodgepole pine (*Pinus contorta* ssp. *murrayana*), Jeffery pine (Pinus jeffreyi), western sycamore (*Platanus racemose*), Fremont cottonwood (*Populus fremontii*), quaking aspen (*Populus tremuloides*), coast live oak, sandbar willow (Salix exigua), dune willow (Salix hookeriana), red willow, arroyo willow, shining willow (*Salix lucida* ssp. *lasiandra*), yellow willow *(Salix lutea*) and Scouler's willow (*Salix scouleriana*).This community has a NatureServe rank of S3G5 and is designated by CDFW as a Sensitive Natural Community.

White Alder Groves - *Alnus rhombifolia* Forest Alliance

White alder groves occur in a small area in the San Gabriel River below the Whittier Narrows Dam. White alder (*Alnus rhombifolia*) is generally dominant or co-dominant in the tree canopy with bigleaf maple, Port Orfors cedar (*Chamaecyparis lawsoniana*), Oregon ash, tanbark-oak (*Notholithocarpus densiflorus*), western sycamore, Fremont cottonwood, black cottonwood (*Populus trichocarpa*), Douglas fir (*Pseudotsuga menziesii*), valley oak and willow spp. This habitat is designated by CDFW as a Sensitive Natural Community.

Poison Oak Scrub - *Toxicodendron diversilobum* Shrubland Alliance

Poison oak scrub is present within the Zone 1 Ditch. Poison oak (*Toxicodendron diversilobum*) is generally dominant in the shrub canopy with California sagebrush (*Artemisia californica*), chaparral broom (*Baccharis pilularis*), sticky monkey-flower (Diplacus aurantiacus), toyon, heartleaf keckiella (*Keckiella cordifolia*), laurel sumac (*Malosma l*aurina), Lweis' mock-orange (*Philadelphus lewisii*), hollyleaf redberry (*Rhamnus ilicifolia*), thimbleberry (*Rubus parviflorus*), purple sage (*Salvia leucophylla*), black sage (*Salvia mellifera*) and black elder (*Sambucus nigra*). Emergent trees may be present at low cover, including California walnut or coast live oak.

Wild Grape Shrubland - *Vitis arizonica - Vitis girdiana* Shrubland Alliance

Wild grape shrubland (*Vitis arizonica*) is located within the San Gabriel River, above the Whittier Narrows Dam. Wild grape shrublands are generally dominant or co-dominant in the shrub canopy with fourwing saltbush (Atriplex canescens), buttonbush (*Cephalanthus occidentalis*), Old-man's beard (*Clematis ligusticifolia*), common fig (*Ficus carica*), arrowweed (Pluchea sericea), Himalayan blackberry (*Rubus armeniacus*), California blackberry (*Rubus ursinus*), sandbar willow, black elder and chairmaker's bulrush (*Schoenoplectus americanus*). Emergent trees may be present at low cover including box elder (*Acer negundo*), Hind's black walnut (*Juglans hindsii*) and Fremont cottonwood. This habitat is designated by CDFW as a Sensitive Natural Community.

Box-Elder Forest - *Acer negundo* Forest Alliance

This community is present within the San Gabriel River. Box-elder forest is generally dominant or co-dominant in the tree canopy with white alder (*Alnus rhombifolia*), Oregon ash, Hind's black walnut, western sycamore, Fremont cottonwood, black cottonwood, valley oak, Gooding's

willow (*Salix gooddingii*) and other willow species. This community has a NatureServe rank of S2G5 and is designated by CDFW as a Sensitive Natural Community.

Non-native Riparian Community

Giant Reed Breaks - *Arundo donax* Semi-Natural Herbaceous Stands

Giant reed breaks occur 7.0 List of Preparers throughout much of the floodplain surrounding the Rio Hondo, upstream of the Whittier Narrows Dam. This community supports a dense layer of giant reed, dominating both the overstory and understory, interspersed throughout with various native and non-native tree species such as black willow, bluegum (*E. globulus*), mulefat and red river gum. This community supports very few shrub or herbaceous species, except along its margins. Such species include horehound, poison hemlock and shortpod mustard.

Native Upland/Transitional Community

Scale Broom Scrub - *Lepidospartum squamatum* Shrubland Alliance

This community is present within San Gabriel River. Scale broom scrub (*Lepidospartum squamatum*) is generally dominant, co-dominant, or conspicuous in the shrub canopy with ragweed (*Ambrosia salsola*), California sagebrush, mulefat, bladderpod (*Cleome isomeris*), California cholla (*Cylindropuntia californica*), brittlebush, thickleaf yerba santa (*Eriodictyon crassifolium*), hairy yerba santa (*Eriodictyon trichocalyx*), California buckwheat, our Lorde's candle, deerweed, laurel sumac, coast prickly pear (*Opuntia littoralis*), lemonade berry (*Rhus integrifolia*), sugar sumac (*Rhus ovata*), skunkbush sumac (*Rhus trilobata*) and poison oak. This habitat is designated by CDFW as a Sensitive Natural Community.

California Yerba Santa Scrub - *Eriodictyon californicum* Shrubland Alliance

This community occurs in a small area in the Zone 1 Ditch. California yerba santa scrub (*Eriodictyon californicum*) is generally dominant in the shrub canopy with chamise (*Adenostoma fasciculatum*), buckbrush (*Ceanothus cuneatus*), sticky monkey-flower, our Lord's candle, deerweed, silver lupine (*Lupinus albifrons*), black elder (*Sambucus nigra*) and poison oak.

Coast Prickly Pear Scrub - *Opuntia littoralis - Opuntia oricola - Cylindropuntia prolifera* Shrubland Alliance

This community occurs within the San Gabriel River. Coast prickly pear scrub (*Opuntia littoralis*) and/or other cacti are generally dominant or co-dominant in the shrub canopy with California sagebrush, bladderpod (*Cleome isomeris*), bushrue (*Cneoridium dumosum*), California cholla (*Cylindropuntia californica*), Coastal cholla (*Cylindropuntia prolifera*), California brittlebush (*Encelia californica*), California buckwheat, cliff spurge (*Euphorbia misera*), our Lord's candle (*Hesperoyucca whipplei*), laurel sumac, desert wishbone-bush (Mirabilis laevis), chaparral prickly pear (*Opuntia oricola*), tulip prickly pear (*Opuntia phaeacantha*), lemonade berry, black sage and black elder. This habitat is designated by CDFW as a Sensitive Natural Community.

Basket Bush Patches - *Rhus trilobata* Shrubland Alliance

This community is located within the San Gabriel River and Zone 1 Ditch. Basket bush (*Rhus trilobata*) is generally dominant or co-dominant in the shrub canopy with fourwing saltbush, willow baccharis (*Baccharis emoryi*), desert baccharis (*Baccharis sergiloides*), narrowleaf

goldenbush (*Ericameria linearifolia*), broomweed (*Gutierrezia sarothrae*), wild almond (*Prunus fasciculate*), sandbar willow, black elder, and desert wild grape (*Vitis girdiana*). This habitat is designated by CDFW as a Sensitive Natural Community.

California Coffeeberry Scrub - *Frangula californica* Shrubland Alliance

California coffeeberry scrub (*Frangula californica*) is present within the San Gabriel River. This community is generally dominant or co-dominant in the shrub canopy with coyote brush, sweetshrub (*Calycanthus occidentalis*), pinebush (*Ericameria pinifolia*), bastardsage (*Eriogonum wrightii*), Veatch silktassel (*Garrya veatchii*), large leather-root (*Hoita macrostachya*), chokeberry (*Prunus virginiana*), Sierra gooseberry (*Ribes roezlii*), Brewer's willow (*Salix breweri*), black elder and poison oak.

Smartweed – Cocklebur Patches - *Polygonum lapathifolium - Xanthium strumarium* Herbaceous Alliance

This community occurs within San Jose Creek and the San Gabriel River. This community is generally dominant or co-dominant in the herbaceous layer with devil's-pitchfork (*Bidens frondosa*), fiveangled dodder (*Cuscuta pentagona*), pale spikerush (*Eleocharis macrostachya*), western goldenrod (*Euthamia occidentalis*), common sunflower (*Helianthus annuus*), and frog fruit (*Phyla nodiflora*).

California Buckwheat Scrub - *Eriogonum fasciculatum* Shrubland Alliance

This community is present within the Zone 1 Ditch. California buckwheat scrub (*Eriogonum fasciculatum*) is generally dominant or co-dominant in the shrub canopy in cismontane stands with California sagebrush, coyote brush, sticky monkey-flower, California brittlebush (*Encelia californica*), brittlebush (*Encelia farinose*), menzie's goldenbush (*Isocoma menziesii*), deerweed (*Lotus scoparius*), chaparral mallow (*Malacothamnus fasciculatus*), white sage or black sage.

Blue Elderberry Stands - *Sambucus nigra* Shrubland Alliance

Blue elderberry stands were identified throughout upland areas adjacent to the Zone 1 Ditch. This community is characterized as having a moderately dense, small tree layer of blue elderberry, interspersed with various species of trees and shrubs including River red gum (*Eucalyptus camaldulensis*), Southern black walnut (*Juglans californica*), western sycamore (*Platanus racemosa*), golden current (*Ribes aureum*), coast live oak (*Quercus agrifolia*) and Shamel ash. This community, within the boundaries of the Whittier Narrows Nature Preserve, tend to support more native tree species as well as a dense shrub layer dominated by the native golden current (*Ribes aureum* var. *gracillimum*). It is likely that this area has been restored/maintained to preserve native species and eradicate non-natives. Portions along the Zone 1 Ditch, outside the preserve support fewer native shrub and tree species with a pronounced herbaceous layer dominated by non-native species; much of this area was heavily choked with the passion flower (*Passiflora caerulea*), an escaped cultivated vine species.

As mentioned above, the herbaceous layer is composed predominantly of non-native grasses and forbs, overwhelmingly dominated by red brome (*Bromus rubens* ssp. *madritensis*), poison hemlock (*Conium maculatum*), sweet fennel (*Foeniculum vulgare*), shortpod mustard (*Hirschfeldia incana*), horehound (*Marrubium vulgare*) and Johnson grass (*Sorghum halepense*).

This community has a NatureServe rank of S3G3 and is designated by CDFW as a Sensitive Natural Community.

Annual Brome Grassland - *Bromus* (*diandrus, hordeaceus*) - *Brachypodium distachyon* Herbaceous Semi-Natural Alliance

This community is present within San Jose Creek and the San Gabriel River. Brome (*Bromus hordeaceus*) is generally dominant or co-dominant with nonnatives in the herbaceous layer. Emergent trees and shrubs may be present at low cover.

Non-native Communities

Disturbed/Developed

Disturbed/developed areas exist throughout the project area. Developed land use consists of paved and unpaved roadways, boulder rip-rap, and various other forms of infrastructure either completely or largely devoid of vegetative cover. Disturbed areas are represented by the dominance of weedy, non-native herbaceous species in areas that appeared to have been cleared or may have been subject to scouring within the main San Gabriel River channel, which include tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*) and other ruderal (non-native) species.

Non-native Tree Woodland (including Eucalyptus Semi-Natural Stands [*Eucalyptus* spp. Woodland Semi-Natural Alliance])

Non-native tree woodland occurs throughout much of the floodplain surrounding the Rio Hondo, upstream of the Whittier Narrows Dam, intermittently within the San Gabriel River, and along the Zone 1 Ditch. This community supports a tree layer dominated by non-native species such as bluegum, edible fig, red river gum, Shamel ash and Chinese elm (*Ulmus parvifolia*) that is interspersed with native species such as black and sandbar willow. This community supports a herbaceous layer identical in character to the adjacent, disturbed, weed-dominated plant community and includes such species as castor bean, poison sumac, shortpod mustard and sweet clover.

Ruderal Forbland (including Mustard Semi-Natural Stands [*Brassica nigra - Raphanus* spp. Herbaceous Semi-Natural Alliance] and Poison Hemlock Patches [*Conium maculatum* Herbaceous Semi-Natural Alliance)

Ruderal vegetation, dominated by common non-native forbs established in historically disturbed areas, was present throughout much of the Rio Hondo floodplain, along the San Gabriel River and along the Zone 1 Ditch. This community consists almost entirely of non-native, herbaceous forbs and some shrub species such as castor bean, cheeseweed mallow (*Malva parviflora*), shortpod mustard, sweet clover, poison hemlock, and Himalayan blackberry (*Rubus armeniacus*). Native species, such as annual burrweed (*Ambrosia acanthicarpa*), ragweed (*A. psilostachya*) and annual sunflower (*Helianthus annuus*) may also occur and may be co-dominant in some areas. A few native and non-native tree species are also scattered throughout this community, such as blue gum, edible fig (*Ficus carica*), red river gum and Shamel ash.

Non-Native Grassland

This community occurs within the upland portions of the Zone 1 Ditch and is characterized by a dominance of non-native grass species with some forbs present. These common ruderal grasses include red brome (*Bromus rubens* ssp. *madritensis*), ripgut brome (*Bromus diandrus*) shortpod mustard (*Hirschfeldia incana*), black mustard (*Brassica nigra*), horehound (*Marrubium vulgare*), and Johnson grass (*Sorghum halepense*). Poison hemlock (*Conium maculatum*) and sweet fennel (*Foeniculum vulgare*) are also present and may be dominant in small patch areas.

Perennial Pepper weed Patches - *Lepidium latifolium* Herbaceous Semi-Natural Alliance

This community is present within the San Gabriel River. Perennial pepperweed patches (*Lepidium latifolium*) are generally dominant in the herbaceous layer with pepper weed.

Common Wildlife

The plant communities described above provide habitat to wildlife within the project area. These communities provide food and water sources upon which wildlife depend, along with nesting and denning sites, movement cover, and protection from predators and adverse weather. Some species are habitat-specific due to their life history requirements, while many terrestrial wildlife species that occur in the area are adapted to more diverse habitats and the surrounding urban interface.

Several common wildlife species were observed within the survey area during biological surveys, including birds such as black necked stilt (*Himantopus mexicanus*), American coot (*Fulica Americana*), great blue heron (*Ardea herodias*), great egret (*Ardea alba*), green heron (*Butorides virescens*), killdeer (*Charadrius vociferous*), least sandpiper (*Calidris minutilla*), mallard (*Anas platyrhynchos*), ring-billed gull (*Larus delawarensis*), snowy egret (*Egretta thula*), and spotted sandpiper (*Actitis macularius*); as well as migratory waterfowl species using the open water of the San Gabriel River, such as gadwall (*Mareca strepera*), cinnamon teal (*Spatula cyanoptera*), and northern shoveler (*Spatula clypeata*). Mammal species observed include desert cottontail (*Sylvilagus audubonii*) and California ground squirrel (*Otospermophilus beecheyi*); reptiles include western fence lizard (*Sceloporus occidentalis*) and red-eared slider (*Trachemys scripta elegans*); and other common wildlife species expected to forage and/or breed within the habitats that occur within the project area, include deer mice (*Peromyscus* sp,), side-blotched lizard (*Uta* sp.), Allen's hummingbird (*Selasphorus sasin*), tree swallow (*Tachycineta bicolor*), house sparrow (*Passer domesticus*), and house finch (*Haemorhous mexicanus*), to name a few.

Special-Status Biological Resources

Special-status biological resources include vegetation communities that are unique, of relatively limited distribution, or of particular value to wildlife; as well as, plant and wildlife species that have been given special recognition by federal or state agencies, or are included in regional conservation plans due to limited, declining, or threatened populations. The determination of biological resources as special-status is based on listing status and/or ranking conducted by federal, state, and local agencies.

Through its CNDDB program, CDFW maintains a computerized inventory of information on the location and condition of all animal taxa, sensitive plants species, and California's vegetation alliances (regardless of their legal or protection status). CNDDB element ranks range from 1 through 5 (Global and State) according to their degree of imperilment (as measured by rarity, trends, and threats). Species and vegetation alliances with state ranks of S1, S2, or S3 are considered to be critically imperiled, imperiled, or vulnerable to extinction or extirpation, respectively, and thus considered by CDFW to be rare or sensitive. A question mark (?) after the rank denotes an inexact numeric rank due to insufficient samples over the full expected range of the type, but existing information points to this rank.

The following discussion describes special-status plant and wildlife that have the potential to be present within the survey area. Special-status species include those that have been afforded special recognition by federal, state, or local resource agencies and/or organizations. These species have declining or limited population sizes, usually resulting from habitat loss. Also discussed are Sensitive Natural Communities that consist of habitats that are unique, of relatively limited distribution, or of particular value to wildlife. Sensitive Natural Communities are listed by CDFW on their List of Vegetation Alliances and Associations (CDFW 2018). Communities on this list are given a Global (G) and State (S) rarity ranking (also referred to as NatureServe rank) on a scale of 1 to 5, where communities with a ranking of 5 are the most common and communities with a ranking of 1 are the rarest and of the highest priority to preserve. Sensitive Natural Communities are those communities that have a state ranking of S3 or rarer, and are generally those that are considered by the CDFW to be imperiled due to their decline in the region and/or the habitat they provide to rare and endemic wildlife species. Continued degradation and destruction of these ecologically important communities could threaten the regional distribution and viability of the community and possibly the sensitive species they support.

The CNDDB lists historical and recently recorded occurrences of both special-status plant and wildlife species and the California Native Plant Society (CNPS) database lists historical and recent occurrences of special-status plant species. A review of the most recent CNDDB records revealed one sensitive natural community currently occurs within the survey area: willow woodland. Sensitive Natural Communities that are present within the project area include arroyo willow thickets, black cottonwood forest, black willow thickets, blue elderberry, box-elder forest, California sycamore woodlands, California walnut groves, white alder groves, wild grape shrubland, coast prickly pear scrub, scale broom scrub, and basket bush patches.

Special-Status Plants

Special-status plants are defined as those plants that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies as under threat from human-associated developments. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as special-status on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. Special-status plants are defined as follows:

- Plants listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the federal Endangered Species Act or the California Endangered Species Act;
- Plants that meet the definitions of rare or endangered under State CEQA Guidelines Section 15380;
- Plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered (Rank 1A, 1B, 2A and 2B plants) in California; or
- Plants listed by the CNPS as plants in which more information is needed to determine their status and plants of limited distribution (List 3 and 4 plants); and plants listed as rare under the California Native Plant Protection Act (Fish and Game Code 1900 et seq.).

No special-status plants are expected to occur in the project area due to the high level of habitat degradation that has occurred from pre-existing streambed alterations (i.e., cement-lined and accelerated flows), ground disturbance, extensive populations of exotic plant species that outcompete natives, homeless encampments, and trash. CNDDB records for the area include several special-status plants, most of which are not expected to occur within the project area for the reason listed above. However, five plant species have a low potential to occur based on the native habitats that are present in the project area that include smooth tarplant (*Centromadia pungens* ssp. *laevis*), mesa horkelia (*Horkelia cuneata* var. *puberula*), Robinson's pepperplant (*Lepidium virginicum* var. *robinsonii*), white rabbit-tobacco (*Pseudognaphalium leucocephalum*), and San Bernardino aster (*Symphyotrichum defoliatum*). **Table 3.1-2, Special-Status Plants With Potential to Occur in Project Area**. The "Potential for Occurrence" as described in Table 3.1-2 is defined as follows:

- **Not Expected:** The project area and/or immediate vicinity does not provide suitable habitat for a particular species.
- **Low Potential:** The project area and/or immediate vicinity only provide limited habitat for a particular species. In addition, the project area may lie outside the known range for a particular species.

Special-Status Wildlife

The potential for special-status wildlife species to occur in the project area was determined through the habitat assessments performed during the field surveys, as well as review of recent or past occurrences within the project area as reported to the CNDDB. A summary of the listing status for each of these species, as well as their likelihood of occurrence in the project area is presented in **Table 3.1-3, Special-Status Wildlife with Potential to Occur in Project Area**. The "Potential for Occurrence" as described in Table 3.1-3 is defined as follows:

- **Not Expected:** The project area and/or immediate vicinity does not support suitable habitat for a particular species or 2018/2019 survey findings were negative.

TABLE 3.1-2
SPECIAL-STATUS PLANTS WITH POTENTIAL TO OCCUR IN PROJECT AREA

Species	Federal/State/ CRPR[1]	Preferred Habitat	Probability of Occurrence in Project Area
aphanisma *Aphanisma blitoides*	—/—/1B.2	Coastal bluff scrub, coastal dunes, coastal scrub. On bluffs and slopes near the ocean in sandy or clay soils. 3-305 m.	**Not Expected:** No suitable habitat for the species present in the project area.
Braunton's milk-vetch *Astragalus brauntonii*	FE/—/1B.1	Chaparral, coastal scrub, valley and foothill grassland. Recent burns or disturbed areas; usually on sandstone with carbonate layers. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 3-640 m.	**Not Expected:** No suitable habitat for the species present in the project area.
Ventura Marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	FE/SE/1B.1	Marshes and swamps, coastal dunes, coastal scrub. Within reach of high tide or protected by barrier beaches, more rarely near seeps on sandy bluffs. 1-35 m.	**Not Expected:** No suitable habitat for the species present in the project area.
Coulter's saltbush *Atriplex coulteri*	—/—/1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. 2-460 m.	**Not Expected:** No suitable habitat for the species present in the project area.
south coast saltscale *Atriplex pacifica*	—/—/1B.2	Coastal scrub, coastal bluff scrub, playas, coastal dunes. Alkali soils. 1-400 m.	**Not Expected:** No suitable habitat for the species present in the project area.
Parish's brittlescale *Atriplex parishii*	—/—/1B.1	Vernal pools, chenopod scrub, playas. Usually on drying alkali flats with fine soils. 5-1420 m.	**Not Expected:** No suitable habitat for the species present in the project area.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	—/—/1B.2	Coastal bluff scrub, coastal scrub. Alkaline soil. 0-460 m.	**Not Expected:** No suitable habitat for the species present in the project area.
Nevin's barberry *Berberis nevinii*	FE/SE/1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub. On steep, N-facing slopes or in low grade sandy washes. 290-1575 m.	**Not Expected:** The one specimen from near the project area is believed to planted by the Whittier Narrows Nature Center; otherwise, the project area is outside of the current range of the species.
slender mariposa-lily *Calochortus* clavatus var. *gracilis*	—/—/1B.2	Chaparral, coastal scrub, valley and foothill grassland. Shaded foothill canyons; often on grassy slopes within other habitat. 210-1815 m.	**Not Expected:** No suitable habitat for the species present in the project area.
Plummer's mariposa-lily *Calochortus plummerae*	—/—/4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	**Not Expected:** No suitable habitat for the species present in the project area.
intermediate mariposa-lily *Calochortus weedii* var. *intermedius*	—/—/1B.2	Coastal scrub, chaparral, valley and foothill grassland. Dry, rocky open slopes and rock outcrops. 60-1575 m.	**Not Expected:** No suitable habitat for the species present in the project area.

Species	Federal/State/ CRPR[1]	Preferred Habitat	Probability of Occurrence in Project Area
lucky morning-glory *Calystegia felix*	—/—/1B.1	Meadows and seeps, riparian scrub. Sometimes alkaline, alluvial. 30-215 m.	**Not Expected:** No suitable habitat for the species present in the project area.
southern tarplant *Centromadia parryi* ssp. *australis*	—/—/1B.1	Marshes and swamps (margins), valley and foothill grassland, vernal pools. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-975 m.	**Not Expected:** No suitable habitat for the species present in the project area.
smooth tarplant *Centromadia pungens* ssp. *laevis*	—/—/1B.1	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. Alkali meadow, alkali scrub; also in disturbed places. 5-1170 m.	**Low Potential:** There is marginal habitat for the species present in the project area; however, most records for the species are from San Bernardino, Riverside and San Diego counties.
salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	FE/SE/1B.2	Marshes and swamps, coastal dunes. Limited to the higher zones of salt marsh habitat. 0-10 m.	**Not Expected:** No suitable habitat for the species present in the project area.
Parry's spineflower *Chorizanthe parryi* var. *parryi*	—/—/1B.1	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	**Not Expected:** No suitable habitat for the species present in the project area.
California saw-grass *Cladium californicum*	—/—/2B.2	Meadows and seeps, marshes and swamps (alkaline or freshwater). Freshwater or alkaline moist habitats. -20-2135 m.	**Not Expected:** No suitable habitat for the species present in the project area. There is only one historical (1861) record from Los Angeles County.
Peruvian dodder *Cuscuta obtusiflora* var. *glandulosa*	—/—/2B.2	Marshes and swamps (freshwater). Freshwater marsh. 15-280 m.	**Not Expected:** No suitable habitat for the species present in the project area. There are no herbarium records from Los Angeles County.
slender-horned spineflower *Dodecahema leptoceras*	FE/SE/1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes; associated species include *Encelia*, *Dalea*, *Lepidospartum*, etc. *Sandy* soils. 200-765 m.	**Not Expected:** There is marginal habitat for the species present in the project area; however, most of the herbarium records in Los Angeles County are located near the foothills of the San Gabriel Mountains.
many-stemmed dudleya *Dudleya multicaulis*	—/—/1B.2	Chaparral, coastal scrub, valley and foothill grassland. In heavy, often clayey soils or grassy slopes. 15-790 m.	**Not Expected:** No suitable habitat for the species present in the project area.
San Diego button-celery *Eryngium aristulatum* var. *parishii*	FE/SE/1B.1	Vernal pools, coastal scrub, valley and foothill grassland. San Diego mesa hardpan & claypan vernal pools & southern interior basalt flow vernal pools; usually surrounded by scrub. 15-880 m.	**Not Expected:** No suitable habitat for the species present in the project area.
San Gabriel bedstraw *Galium grande*	—/—/1B.2	Cismontane woodland, chaparral, broadleafed upland forest, lower montane coniferous forest. Open chaparral and low, open oak forest; on rocky slopes; probably undercollected due to inaccessible habitat. 425-1450 m.	**Not Expected:** No suitable habitat for the species present in the project area.

Species	Federal/State/ CRPR[1]	Preferred Habitat	Probability of Occurrence in Project Area
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	—/—/1A	Marshes and swamps (coastal salt and freshwater). 35-1525 m.	**Not Expected:** The species is believed to be extinct.
mesa horkelia *Horkelia cuneata* var. *puberula*	—/—/1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 15-1645 m.	**Low Potential:** There is marginal habitat for the species present in the project area.
decumbent goldenbush *Isocoma menziesii* var. *decumbens*	—/—/1B.2	Coastal scrub, chaparral. Sandy soils; often in disturbed sites. 1-915 m.	**Not Expected:** There is marginal habitat for the species present in the project area; however, the project area is at the northern limits of the range of the species, with most of the herbarium records for the species being from San Diego County.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	—/—/1B.1	Coastal salt marshes, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-1375 m.	**Not Expected:** No suitable habitat for the species present in the project area.
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	—/—/4.3	Chaparral, coastal scrub. Dry soils, shrubland. 4-1435 m.	**Low Potential:** There is marginal habitat for the species present in the project area and records of the species upstream.
California muhly *Muhlenbergia californica*	—/—/4.3	Coastal scrub, chaparral, lower montane coniferous forest, meadows and seeps. Usually found near streams or seeps. 100-2000 m.	**Not Expected:** There is marginal habitat for the species present in the project area; however, most of the herbarium records in Los Angeles County are in the San Gabriel Mountains.
mud nama *Nama stenocarpa*	—/—/2B.2	Marshes and swamps. Lake shores, river banks, intermittently wet areas. 5-500 m.	**Not Expected:** No suitable habitat for the species present in the project area.
Gambel's water cress *Nasturtium gambelii*	FE/ST/1B.1	Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-330 m.	**Not Expected:** No suitable habitat for the species present in the project area.
prostrate vernal pool navarretia *Navarretia prostrata*	—/—/1B.1	Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps. Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 3-1235 m.	**Not Expected:** No suitable habitat for the species present in the project area.
coast woolly-heads *Nemacaulis denudata* var. *denudate*	—/—/1B.2	Coastal dunes. 0-100 m.	**Not Expected:** No suitable habitat for the species present in the project area.
California Orcutt grass *Orcuttia californica*	FE/SE/1B.1	Vernal pools. 10-660 m.	**Not Expected:** No suitable habitat for the species present in the project area.
Lyon's pentachaeta *Pentachaeta lyonii*	FE/SE/1B.1	Chaparral, valley and foothill grassland, coastal scrub. Edges of clearings in chaparral, usually at the ecotone between grassland and chaparral or edges of firebreaks. 30-630 m.	**Not Expected:** No suitable habitat for the species present in the project area.
Brand's star phacelia *Phacelia stellaris*	—/—/1B.1	Coastal scrub, coastal dunes. Open areas. 3-370 m.	**Not Expected:** There is marginal habitat for the species present in the project area; however, the project area is at the northern limits of the

Species	Federal/State/ CRPR[1]	Preferred Habitat	Probability of Occurrence in Project Area
			range of the species, with most of the herbarium records for the species being from San Diego County.
white rabbit-tobacco *Pseudognaphalium leucocephalum*	—/—/2B.2	Riparian woodland, cismontane woodland, coastal scrub, chaparral. Sandy, gravelly sites. 35-515 m.	**Low Potential:** There is marginal habitat for the species present in the project area.
Parish's gooseberry *Ribes divaricatum* var. *parishii*	—/—/1A	Riparian woodland. *Salix* swales in riparian habitats. 65-300 m.	**Not Expected:** The species is believed to be extinct.
salt spring checkerbloom *Sidalcea neomexicana*	—/—/2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 3-2380 m.	**Not Expected:** No suitable habitat for the species present in the project area.
estuary seablite *Suaeda esteroa*	—/—/1B.2	Marshes and swamps. Coastal salt marshes in clay, silt, and sand substrates. 0-80 m.	**Not Expected:** No suitable habitat for the species present in the project area.
San Bernardino aster *Symphyotrichum defoliatum*	—/—/1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 2-2040 m.	**Low Potential:** There is marginal habitat for the species present in the project area.

Federal
FE = Endangered
FT = Threatened

State
SE = Endangered
ST = Threatened

California Rare Plant Rank
1A. Presumed extinct in California
1B. Rare or Endangered in California and elsewhere
2A. Presumed extinct in California, extant and more common elsewhere
2B. Rare or Endangered in California, more common elsewhere
3. Plants for which we need more information - Review list
4. Plants of limited distribution - Watch list

Threat Ranks
.1 - Seriously endangered in California
.2 – Fairly endangered in California
.3 – Not very endangered in California

TABLE 3.1-3
SPECIAL-STATUS WILDLIFE WITH POTENTIAL TO OCCUR IN PROJECT AREA

Species	Federal/ State/ CDFW Status	Preferred Habitat	Probability of Occurrence in Project Area
Invertebrates			
Crotch bumblebee *Bombus crotchii*	—/—/S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*.	**High Potential:** Food plants are present in the project area and there are nearby records.
western tidal-flat tiger beetle *Cicindela gabbii*	—/—/S1	Inhabits estuaries and mudflats along the coast of Southern California. Generally found on dark-colored mud in the lower zone; occasionally found on dry saline flats of estuaries.	**Not Expected:** No suitable habitat for the species present in the project area.
sandy beach tiger beetle *Cicindela hirticollis gravida*	—/—/S2	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico. Clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.	**Not Expected:** No suitable habitat for the species present in the project area.
western beach tiger beetle *Cicindela latesignata latesignata*	—/—/S1	Mudflats and beaches in coastal Southern California.	**Not Expected:** No suitable habitat for the species present in the project area.
senile tiger beetle *Cicindela senilis frosti*	—/—/S1	Inhabits marine shoreline, from Central California coast south to salt marshes of San Diego. Also found at Lake Elsinore Inhabits dark-colored mud in the lower zone and dried salt pans in the upper zone.	**Not Expected:** No suitable habitat for the species present in the project area.
globose dune beetle *Coelus globosus*	—/—/S1S2	Inhabitant of coastal sand dune habitat; erratically distributed from Ten Mile Creek in Mendocino County south to Ensenada, Mexico. Inhabits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation.	**Not Expected:** No suitable habitat for the species present in the project area.
monarch - California overwintering population *Danaus plexippus* pop. 1	—/—/S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**Not Expected:** No suitable habitat for the species present in the project area.
wandering (=saltmarsh) skipper *Panoquina errans*	—/—/S2	Southern California coastal salt marshes. Requires moist saltgrass for larval development.	**Not Expected:** No suitable habitat for the species present in the project area.
Dorothy's El Segundo Dune weevil *Trigonoscuta dorothea dorothea*	—/—/S1	Coastal sand dunes in Los Angeles County.	**Not Expected:** No suitable habitat for the species present in the project area.

Species	Federal/ State/ CDFW Status	Preferred Habitat	Probability of Occurrence in Project Area
San Diego fairy shrimp *Branchinecta sandiegonensis*	FE/—/S2	Endemic to San Diego and Orange County mesas. Vernal pools.	**Not Expected:** No suitable habitat for the species present in the project area.
Fish			
Santa Ana sucker *Catostomus santaanae*	FT/—/S1	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	**Not Expected:** No suitable habitat for the species present in the project area. The species is known to occur upstream, but numerous barriers are present between the project area and these populations. Species not observed during 2019 surveys.
arroyo chub *Gila orcuttii*	—/—/SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	**Not Expected:** No suitable habitat for the species present in the project area. The species is known to occur upstream, but numerous barriers are present between the project area and these populations. Species not observed during 2019 surveys.
Santa Ana speckled dace *Rhinichthys osculus* ssp. 3	—/—/SSC	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temps of 17-20° Celsius. Usually inhabits shallow cobble and gravel riffles.	**Not Expected:** No suitable habitat for the species present in the project area. The species is known to occur upstream, but numerous barriers are present between the project area and these populations. Species not observed during 2019 surveys.
Amphibians			
arroyo toad *Anaxyrus californicus*	FE/—/SSC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	**Not Expected:** No suitable habitat for the species present in the project area. The species has been extirpated from most of Los Angeles County.
southern mountain yellow-legged frog *Rana muscosa*	FE/SE/WL	Always encountered within a few feet of water. Tadpoles may require 2 - 4 years to complete their aquatic development.	**Not Expected:** No suitable habitat for the species present in the project area.
western spadefoot *Spea hammondii*	—/—/SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	**Not Expected:** No suitable habitat for the species present in the project area.
Coast Range newt *Taricha torosa*	—/—/SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats and will migrate over 1 kilometer to breed in ponds, reservoirs and slow-moving streams.	**Not Expected:** No suitable habitat for the species present in the project area. The species is known to occur upstream, but numerous barriers are present between the project area and these populations.

Species	Federal/ State/ CDFW Status	Preferred Habitat	Probability of Occurrence in Project Area
Reptiles			
California glossy snake *Arizona elegans occidentalis*	—/—/SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	**Low Potential:** Marginal habitat for the species occurs in the project area.
orange-throated whiptail *Aspidoscelis hyperythra*	—/—/WL	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	**Not Expected:** The project area is outside of the range of the species.
coastal whiptail *Aspidoscelis tigris stejnegeri*	—/—/SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	**Medium Potential.** Marginal habitat for the species is found in the project area.
green sea turtle *Chelonia mydas*	FT/—/S1	Marine. Completely herbivorous; needs adequate supply of seagrasses and algae.	**Present:** This species has been observed in the San Gabriel River estuary area in Segment 8 in recent years. It is possible individual may occur anywhere in this segment subject to tidal influence and could occasionally occur in or near the "mixing zone" where Segment 7 meets Segment 8. This species is Not Expected in any other part of the Study Area because no suitable habitat is present and numerous barriers separate Segment 8 from upstream areas.
western pond turtle *Emys marmorata*	—/—/SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 feet elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	**Not Expected:** Limited amount of potentially suitable egg-laying habitat near areas where surface water occurs. The CNDDB includes two records in the near vicinity of the project area from the 1980's, one near the Zone 1 Ditch (east of the project area) and one in the San Gabriel River. Also, introduced predators (e.g., bullfrog, African clawed frog, carp, bass) are prevalent and storm events occasionally result in extremely high flows in these segments that would put estivating turtles at risk. These factors reduce the chances that a viable breeding population could persist. This species was not observed during 2019 focused surveys.
coast horned lizard *Phrynosoma blainvillii*	—/—/SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	**Low Potential:** Marginal habitat for the species occurs in the project area.
two-striped garter snake *Thamnophis hammondii*	—/—/SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 feet elevation. Highly aquatic, found in or near permanent fresh water.	**Medium Potential:** Marginal habitat for the species occurs in the project area.

Species	Federal/ State/ CDFW Status	Preferred Habitat	Probability of Occurrence in Project Area
Birds			
Cooper's hawk *Accipiter cooperii*	—/—/WL	Habitat includes mature forest, open woodlands, wood edges, river groves. Typically nests in woodlands with tall trees and openings or edge habitat nearby. Increasingly found in cities where some tall trees exist.	**Present:** The species has been observed year-round in the project area and is expected to nest and forage there.
tricolored blackbird *Agelaius tricolor*	—/CE/SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	**Not Expected:** No suitable nesting habitat for the species present in the project area. May pass through the area during migration. Species was not observed during 2019 surveys.
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	—/—/WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
grasshopper sparrow *Ammodramus savannarum*	—/—/SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
burrowing owl *Athene cunicularia*	—/—/SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**Low Potential.** The species is not expected to breed in the project area, but individuals could occur during winter and migration.
ferruginous hawk *Buteo regalis*	—/—/WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	**Not Expected:** Outside of the breeding range of the species. May pass through the project area during migration.
Swainson's hawk *Buteo swainsoni*	—/ST/S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**Not Expected:** Outside of the breeding range of the species. May pass through the project area during migration.
coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	—/—/SSC	Southern California coastal sage scrub. Wrens require tall *Opuntia* cactus for nesting and roosting.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
western snowy plover *Charadrius alexandrinus nivosus*	FT/—/SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	**Not Expected:** Outside of the breeding range of the species. May pass through the area during migration.

Species	Federal/ State/ CDFW Status	Preferred Habitat	Probability of Occurrence in Project Area
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT/SE/S1	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
yellow rail *Coturnicops noveboracensis*	—/—/SSC	Summer resident in eastern Sierra Nevada in Mono County. Freshwater marshlands.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
black swift *Cypseloides niger*	—/—/SSC	Coastal belt of Santa Cruz and Monterey counties; central and southern Sierra Nevada; San Bernardino and San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
white-tailed kite *Elanus leucurus*	—/—/FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
southwestern willow flycatcher *Empidonax traillii extimus*	FE/FE/S1	Prefers dense vegetation throughout all vegetation layers present in riparian areas. Prefers nesting over or in the immediate vicinity of standing water.	**Low Potential:** Marginal habitat for the species occurs in the project area.
American peregrine falcon *Falco peregrinus anatum*	D/D/FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	**Not Expected:** No suitable nesting habitat for the species present in the project area. May forage in the project area.
yellow-breasted chat *Icteria virens*	—/—/SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	**Present:** The willow woodland and arundo habitat in the project area provides suitable habitat for this species. The species has been observed and is expected to use the project area for nesting and foraging.
California black rail *Laterallus jamaicensis coturniculus*	—/ST/FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
osprey *Pandion haliaetus*	—/—/WL	Ocean shore, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	**Not Expected:** No suitable nesting or foraging habitat for the species present in the project area.
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	—/SE/S3	Inhabits coastal salt marshes, from Santa Barbara south through San Diego County. Nests in Salicornia on and about margins of tidal flats.	**Not Expected:** No suitable nesting habitat for the species present in the project area.

Species	Federal/ State/ CDFW Status	Preferred Habitat	Probability of Occurrence in Project Area
California brown pelican *Pelecanus occidentalis californicus*	D/D/FP	Colonial nester on coastal islands just outside the surf line. Nests on coastal islands of small to moderate size which afford immunity from attack by ground-dwelling predators. Roosts communally.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
coastal California gnatcatcher *Polioptila californica californica*	FT/—/SSC	Obligate, permanent resident of coastal sage scrub below 2500 feet in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	**High Potential:** No suitable nesting habitat for the species present in the project area. However, the project area is within designated critical habitat for the species. The species is known to occur adjacent to the project area in the Montebello Hills and may occur in the project area as a transient. The species is not expected to occur within the river channel or upland habits within the project area since suitable habitat for this species is not present.
light-footed Ridgway's rail *Rallus obsoletus levipes*	FE/SE/FP	Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover; feeds on mollusks and crustaceans.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
bank swallow *Riparia riparia*	—/ST/S2	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
black skimmer *Rynchops niger*	—/—/SSC	Nests on gravel bars, low islets, and sandy beaches, in unvegetated sites. Nesting colonies usually less than 200 pairs.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
yellow warbler *Setophaga petechial*	—/—/SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	**Present:** The species has been observed and is expected to use the project area for nesting and foraging.
California least tern *Sternula antillarum browni*	FE/SE/FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	**Not Expected:** No suitable nesting habitat for the species present in the project area.
least Bell's vireo *Vireo bellii pusillus*	FE/SE/S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 feet. Nests placed along margins of bushes or on twigs studying into pathways, usually willow, Baccharis, mesquite.	**Present:** The willow woodland and arundo habitat in the project area provides suitable habitat for this species. This species is known to occur along the reach of the San Gabriel River in Segments 2, 3, 4, and the upstream part of Segment 5.
Mammals			
pallid bat *Antrozous pallidus*	—/—/SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Not Expected:** No suitable roosting habitat for the species present in the project area. May forage in the project area.

Species	Federal/ State/ CDFW Status	Preferred Habitat	Probability of Occurrence in Project Area
Townsend's big-eared bat *Corynorhinus townsendii*	—/—/SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**Not Expected:** No suitable roosting habitat for the species present in the project area.
western mastiff bat *Eumops perotis californicus*	—/—/SSC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	**Low. Potential:** Species was not observed or detected during bat emergence survey and acoustic monitoring conducted in 2019; however, species could potentially forage within the project area.
silver-haired bat *Lasionycteris noctivagans*	—/—/S3S4	Primarily a coastal and montane forest dweller, feeding over streams, ponds and open brushy areas. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	**Low Potential:** Species was not observed or detected during bat emergence survey and acoustic monitoring conducted in 2019; however, species could potentially forage within the project area.
western red bat *Lasiurus blossevillii*	—/—/SSC	Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests. Roosts in the foliage of trees and shrubs in forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	**Present:** This species was detected during bat emergence surveys and acoustic monitoring conducted in 2019.
hoary bat *Lasiurus cinereus*	—/—/S4	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	**Low Potential:** Species was not observed or detected during bat emergence survey and acoustic monitoring conducted in 2019; however, species could roost and forage seasonally during the winter, spring, and fall migration.
western yellow bat *Lasiurus xanthinus*	—/—/SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	**Low Potential:** Species was not observed or detected during bat emergence survey and acoustic monitoring conducted in 2019; however, species could potentially roost and forage year-round within the project area.
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	—/—/SSC	Intermediate canopy stages of shrub habitats and open shrub / herbaceous and tree / herbaceous edges. Coastal sage scrub habitats in Southern California.	**Low Potential:** The species may be extirpated from the project area due to the loss of suitable habitat.
south coast marsh vole *Microtus californicus stephensi*	—/—/SSC	Tidal marshes in Los Angeles, Orange and southern Ventura counties.	**Not Expected:** No suitable habitat for the species present in the project area.
pocketed free-tailed bat *Nyctinomops femorosaccus*	—/—/SSC	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. Rocky areas with high cliffs.	**Not Expected:** No suitable roosting habitat for the species present in the project area. May forage in the project area.
big free-tailed bat *Nyctinomops macrotis*	—/—/SSC	A migratory species that forms maternity colonies in rock crevices and caves that are typically used long term. Roost mainly in crevices and rocks in cliff situations, with occasional roosts occurring in buildings, caves, and tree cavities.	**Not Expected:** No suitable roosting habitat for the species present in the project area. May forage in the project area.

Species	Federal/ State/ CDFW Status	Preferred Habitat	Probability of Occurrence in Project Area
southern grasshopper mouse *Onychomys torridus Ramona*	—/—/SSC	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	**Not Expected:** No suitable habitat for the species present in the project area.
Pacific pocket mouse *Perognathus longimembris pacificus*	FE/—/SSC	Inhabits the narrow coastal plains from the Mexican border north to El Segundo, Los Angeles County. Seems to prefer soils of fine alluvial sands near the ocean, but much remains to be learned.	**Not Expected:** No suitable habitat for the species present in the project area.
southern California saltmarsh shrew *Sorex ornatus salicornicus*	—/—/SSC	Coastal marshes in Los Angeles, Orange and Ventura counties. Requires dense vegetation and woody debris for cover.	**Not Expected:** No suitable habitat for the species present in the project area.
American badger *Taxidea taxus*	—/—/SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Not Expected:** The species is extirpated within the project area.

Definitions:

Federal
FE = Endangered
FT = Threatened
D = Delisted

State
SE = Endangered
CE = Candidate Endangered
ST = Threatened
SSC = Species of Special Concern
CFP = Fully Protected Species
WL= California Watchlist (formerly a Species of Special Concern; limited protection)

Other

Note: The California Natural Diversity Database (CNDDB) uses the same ranking methodology originally developed by The Nature Conservancy and now maintained and recently revised by NatureServe. The state rank (S-rank) refers to the imperilment status only within California's state boundaries. It is a reflection of the overall status of an element through its state range. The state rank represents a letter + number score that reflects a combination of Rarity, Threat, and Trend factors, with weighting being heavier on Rarity than the other two.

S1 = Critically Imperiled - Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.
S2 = Imperiled - Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.
S3 = Vulnerable - Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state.
S4 = Apparently Secure - Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.
S5 = Secure - Common, widespread, and abundant in the state.
SH = All sites are historical; the element has not been seen for at least 20 years, but suitable habitat still exists.
SX = All sites are extirpated.

- **Low Potential:** The project area and/or immediate vicinity provide limited habitat for a particular species, due to manmade disturbances or fragmentation from urbanization, and/or the project areas is outside of the known range of the species.
- **Medium Potential:** The project area and/or immediate vicinity provide moderate- to good-quality habitat, such as vegetation complexity and density, proper soils, and habitat needed for a species to complete its life cycle or migration period.
- **High Potential:** The project area and/or immediate vicinity provide ideal habitat conditions for a particular species and/or known populations have been recorded in the immediate area.
- **Present:** The species was observed on the site during a field survey conducted by ESA in 2018 or 2019, or is presumed to be present based on recent survey data.

Based on the vegetation and habitats that were characterized during the field surveys, 10 wildlife species have a medium- to high-potential to occur within the project area or the species is present within the project area that include: crotch bumblebee, coastal whiptail, green sea turtle, two-striped garter snake, Cooper's hawk, yellow-breasted chat, coastal California gnatcatcher, yellow warbler, least Bell's Vireo, and western red bat. Species with a low potential to occur within the project area are also identified in Table 3.1-3, including those species that are not expected to occur.

Fish

Fish surveys were conducted by ESA in 2019 to determine relative abundance of fish species within the San Gabriel River and San Jose Creek (Segments 2, 3 and 4) (ESA 2019). Eleven (11) locations within the San Gabriel River and San Jose Creek each were surveyed, including the confluence of the San Gabriel River and San Jose Creek.

Eleven sites within Segments 2, 3, and 4 were sampled for fish using the seining method, and a total of 30 non-native fish were detected that included 25 western mosquitofish (*Gambusia affinis*), two Mozambique tilapia (*Oreochromis mossambicus*), and one common carp (*Cyprinus carpio*).

Reptiles

Two reptile species have a low potential to occur in the project area that include California glossy snake and coast horned lizard. Two reptile species have a medium potential to occur, which include two-striped garter snake and coastal whiptail based on marginal habitat characteristics for these species within the project area. There are two CNDDB records for western pond turtle in the near vicinity of the project area from the 1980's, one near the Zone 1 Ditch (east of the project area) and one in the San Gabriel River. Focused surveys conducted in 2019 within Segment 3 of the San Gabriel River found no western pond turtles present. However, 25 non-native red-eared sliders (*Trachemys scripta elegans*) were observed or captured in the project area during the surveys. Although there are no local records for two-striped garter snake and coastal whiptail, two-striped garter snake may be present within areas that are perennially inundated and coastal whiptail can occur within the margins of the upland habitats. Green sea turtles have been observed within the San Gabriel River Estuary (Segment 8) as recently as 2017 (Los Angeles Times 2017); however, this species would not occur in any portion of the project that is upstream

from Segment 8 due to manmade features such as the concrete-lined channel, freshwater influence, and movement impediments (e.g., dams and weirs).

Birds

Burrowing owl and southwestern willow flycatcher have low potential based on poor habitat suitability for these species. In contrast, yellow-breasted chat, yellow warbler, and least Bell's vireo have been known to occur within the riparian shrub/tree habitats located within the project area. The riparian and upland scrub habitats located in the project area provide suitable habitat for yellow warbler, Cooper's hawk and coastal California gnatcatcher, respectively, and yellow warbler has been previously recorded in the Montebello Hills according to the CNDDB. Critical Habitat for least Bell's vireo is located approximately 20 miles to the east of the project area in the Prado Basin upstream from Prado Dam in the Santa Ana River. The Prado Basin is located north of SR-91 and east of SR-71 in the Chino area. Based on the presence of suitable habitat and documented occurrences, least Bell's vireo are known to occur along the reach of the San Gabriel River in Segments 2, 3, 4, and the upstream portion of Segment 5 (USACE 2016). There are also historical occurrences reported within the WNRA (CNDDB 2019). Most of the areas that support native riparian woodland and riparian scrub (e.g., black willow and mule fat), in the study area provide suitable breeding habitat, excluding small, fragmented and isolated patches as shown on Figure 3.1-2 and 3.1-3. Blue elderberry stands in the WNRA provide additional foraging habitat and may offer suitable nesting opportunities for least Bell's vireo as well. Lastly, no tri-colored blackbirds were observed or heard vocalizing during the three focused surveys conducted in 2019 (ESA 2019). The habitat that is present within the project area is considered marginal for supporting breeding populations and there are limited occurrences of this species that have been documented in southern California. As such, this species is not expected to occur in the project area.

Mammals

San Diego black-tailed jackrabbit has a low potential to occur within the project area, while four bat species also have a low potential to roost within mature trees or under bridges in the vicinity of the project, including western mastiff bat, silver-haired bat, hoary bat, and western yellow-bat. Freeway and road overpasses, trees, and other small crevices throughout the project area provide suitable habitat for the five bat species.

A field survey and acoustic monitoring were conducted at the SR-60 overpass areas to determine whether bats are present in the vicinity of the river channel. The bridge area was selected to survey because it has the highest potential for roosting bats due to the presence of expansion gaps and staining along the underside of the bridge. During the survey, Mexican free-tailed bat and Yuma myotis were observed (ESA 2019).

During passive acoustic monitoring, a total of five bat species were detected. These species include: western red bat, hoary bat, California myotis, Yuma myotis, and Mexican free-tailed bat (ESA 2019). Western red bat is a CDFW SSC species and listed as high on the Western Bat Working Group (WBWG) list. The hoary bat and Yuma myotis are listed as medium and low, respectively, on the WBWG list.

Critical Habitat

As shown in Figure 3.1-2, the lower portion of Segment 4 and the majority of the Zone 1 Ditch area are located within USFWS designated critical habitat for the coastal California gnatcatcher. A Recovery Plan for the coastal California gnatcatcher for this designated capital habitat area has not yet been prepared. A Recovery Plan is required in accordance with Section 4(f) of FESA that delineates reasonable actions that are believed to be required to recover and/or provide future protections for a listed species.

Jurisdictional Waters and Wetlands

Jurisdictional wetlands and waters are subject to the regulatory authority of the USACE, RWQCB, and CDFW. Jurisdictional waters include rivers, streams, creeks, ponds, and lakes. Jurisdictional wetlands are typically areas that are inundated or saturated either periodically or permanently, and often include features such as marshes, mudflats, swamps, and vernal pools. The majority of the project area is within the jurisdiction of the USACE, RWQCB, and CDFW.

Wildlife Movement Corridors

Wildlife movement corridors are areas where regional wildlife populations regularly and predictably move during dispersal or migration. Movement corridors in California are typically associated with ridgelines, valleys, rivers and creeks supporting riparian vegetation. With increasing encroachment of humans on wildlife habitats, it has become important to establish and maintain linkages, or movement corridors, for animals to be able to access locations containing different biotic resources that are essential to maintaining their life cycles.

The importance of an area as a movement corridor depends on the species in question and its consistent use patterns. Animal movements generally can be divided into three major behavioral categories: (1) Movements within a home range or territory; (2) Movements during migration; and (3) Movements during dispersal. While no detailed study of wildlife movements was for the project, knowledge of the site, its habitats, and the ecology of the species potentially occurring onsite and in adjacent areas permits sufficient predictions about the types of movements occurring in the region and whether or not proposed construction could constitute an impact to wildlife movements.

The San Gabriel River and San Jose Creek are utilized by fish and terrestrial wildlife for foraging, breeding, movement and dispersal. While these waterways have been historically altered and fragmented, they do provide relatively unrestricted movement for terrestrial wildlife species that occur in the area. In addition, these waterways provide continuity between various upland and riparian habitats throughout the region, including the San Gabriel Mountain Range located approximately 10 miles to the north of the project area. Mammal species that could use the San Gabriel River and San Jose Creek as a movement corridor include such species as gray fox (*Urocyon cinereoargenteus*), coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), rabbit (*Procyon lotor*), bobcat (*Lynx canadensis*), ring-tailed cat (*Bassariscus astutus*), and mule deer (*Odocoileus hemionus*).

Utilization of the reach of the San Gabriel River and San Jose Creek within the project area as a migratory corridor for fish species is unlikely due to the historical alteration of the river and several impediments including dams, concrete/rip rap and weirs, and seasonal variations in water flow impede fish passage as well.

3.1.4 Project Impacts

Methodology

The analysis below is based on compilation of data collected during species surveys and vegetation mapping. In addition, two hydrology studies were used to better understand the relationship of surface water flows to the habitat in the channel.

Focused Surveys

At the request of CDFW, focused surveys for potentially present sensitive species were conducted as follows:

- Tri-colored blackbird surveys (*Agelaius tricolor*, January 22, 23, and 25, 2019);
- Fish (February 19 and 20, 2019);
- Bats (*Chiropter* sp.) (emergence survey March 27, 2019; passive acoustic monitoring March 27, 2019 through April 2, 2019);
- Western pond turtle *(Emys marmorata)* (May 1, 2019 through May 4, 2019).

Vegetation Mapping

The plant communities that occur along the Zone 1 Ditch, Segments 2-4, and the upstream portion of Segment 5 (approximately 0.6 miles from San Gabriel River Parkway upstream to the Whittier Narrows Dam), and WNRA, were characterized and mapped by Wood Inc. in June 2018. The remainder of the project area that includes the limited vegetation present in Segments 5 and 6 downstream from the San Gabriel Coastal Basin Spreading Grounds was assessed from aerial imagery by Wood, Inc. during their assessment.

A general habitat assessment and additional vegetation mapping was conducted in February and July 2018 by ESA to assess the conditions of the project area that are capable of supporting special-status species and to confirm the vegetation types and habitat quality within the soft-bottom segments of San Gabriel River and San Jose Creek that are upstream and downstream of the Whittier Narrows Dam, primarily where riparian vegetation is present.

Hydrology Report 2018

An overview of the existing hydrology of the river was conducted by ESA in 2018 (refer to Appendix E2, Hydrology Report 2018). The report compiles river gage data and compares flow with and without the proposed project. The report includes an assessment of depth to groundwater in the area and provides an assessment of impacts to flow depth in the lower segments of the river.

Hydrology Report 2019

An assessment of the relationship of river flow to channel ecology was conducted by ESA in 2019 (refer to Appendix E1, Hydrology Report 2019). The hydrology report estimates the project's effects to wetted channel area and uses this data to identify existing mapped vegetation that may be affected by reduced flow.

Significance Thresholds and Criteria

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to biological resources. The issues presented in the Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, the proposed project would have a significant adverse environmental impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or USFWS (refer to Impact BIO 3.1-1).
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or USFWS (refer to Impact BIO 3.1-2).
- Has a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (refer to Impact BIO 3.1-3).
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (refer to Impact BIO 3.1-4).
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (refer to Impact BIO 3.1-5).
- Conflict with provisions of an adopted HCP, Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan (refer to Impact BIO 3.1-6).

Analysis of Project Impacts

Impact BIO 3.1-1: The proposed projects could have a significant impact if they would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or USFWS.

The reduction of discharge into the San Jose Creek and San Gabriel River would reduce the amount of water available to support certain segments of habitat used by sensitive species. The following sections assess potential impacts to sensitive species along each of the affected river segments (refer to Figure 3.1-1 to reference river segment locations).

Segment 1

Segment 1 consists of the concrete channel of San Jose Creek downstream of the Pomona WRP. The surface water flow within Segment 1 provides some foraging and loafing habitat value to birds. However, the segment's concrete-lined bottom hinders the establishment of habitat that can be used by wildlife. Reduced discharges from Pomona WRP could result in drying up the concrete channel, assuming all other urban runoff sources and groundwater upwelling are eliminated. This would eliminate the freshwater accessibility to local birds. The loss of freshwater in the concrete-lined portion of San Jose Creek would be insignificant, since no riparian vegetation exists, which limits creeks attractiveness or usefulness to resident and migratory birds. Furthermore, before reaching the confluence with the San Gabriel River, groundwater upwelling is common within the creek channel. This upwelling in addition to urban runoff provides freshwater in the channel when discharges from Pomona WRP are discontinued, which further minimizes the impact of a reduced discharge into the river. Moreover, bird species in the area have sufficient fresh water resources at other locations in the vicinity of the project, such as at Legg Lake in the WNRA, as well as, at other regional public parks, including golf courses.

Segment 2

Segment 2 consists of the soft-bottomed portion of San Jose Creek at the confluence with the San Gabriel River. The San Jose Creek WRP discharges into San Jose Creek just upstream of the confluence with the San Gabriel River. This area supports dense riparian habitat of varying quality that includes native willow scrub intermixed with invasive species (e.g., giant reed and castor bean). This segment of San Jose Creek normally exhibits ponding water, backed up by the drop structures in the creek, which supports the riparian habitat. The source of the water is a combination of groundwater upwelling, urban runoff, storm flows, Pomona WRP discharges, and San Jose Creek WRP discharges. When both the San Jose Creek WRP and Pomona WRP discharges are discontinued, ponded water will remain in this segment due to perennial groundwater upwelling. As a result, reduced discharge from the San Jose Creek WRP would not impact riparian or aquatic habitats within San Jose Creek at the confluence with the San Gabriel River, and thus, there would be no measurable impact to special-status species that may use this portion of the creek for foraging, breeding, refuge, and dispersal.

Segments 3 and 4

Segment 3 is a 1,300-foot segment of the San Gabriel River that exhibits perennial ponding of water from groundwater upwelling impounded by concrete/rip rap drop structures. Segment 4 consists of the remaining San Gabriel River channel from the drop structure to Whitter Narrows Dam. In Segments 3 and 4, riparian habitat, upland scrub, and aquatic habitats are present and sustained from the groundwater upwelling and surface water flows that include urban runoff, stormwater, imported water deliveries, and wastewater discharges. The riparian and aquatic habitats in the river support a diverse group of wildlife, including the federally- and state-endangered least Bell's vireo, which has been documented to occur within the stands of willow along the riparian corridor within Segments 3 and 4 and in the WNRA near the Zone 1 Ditch. The proposed project would reduce the annual average volume of water in the river that may result in portions of the river that are below the second drop structure going dry more often than under current conditions. If the reduced discharges result in any substantial reduction in the acreage or

quality of habitat used by sensitive species within Segments 3 and 4, it would be considered a significant impact of the project.

To better understand the ecological reaction to reduced river discharges, the Sanitation Districts conducted two hydrology studies, one that characterized existing and historical flows in the river (refer to Appendix E2, Hydrology Report 2018) and one that evaluated the relationships of existing surface water flows and ecological values exhibited in the channel and estimated potential effects to the ecology that may result from reduced discharges (refer to Appendix E1, Hydrology Report, 2019). The report results are summarized below.

Surface Flows

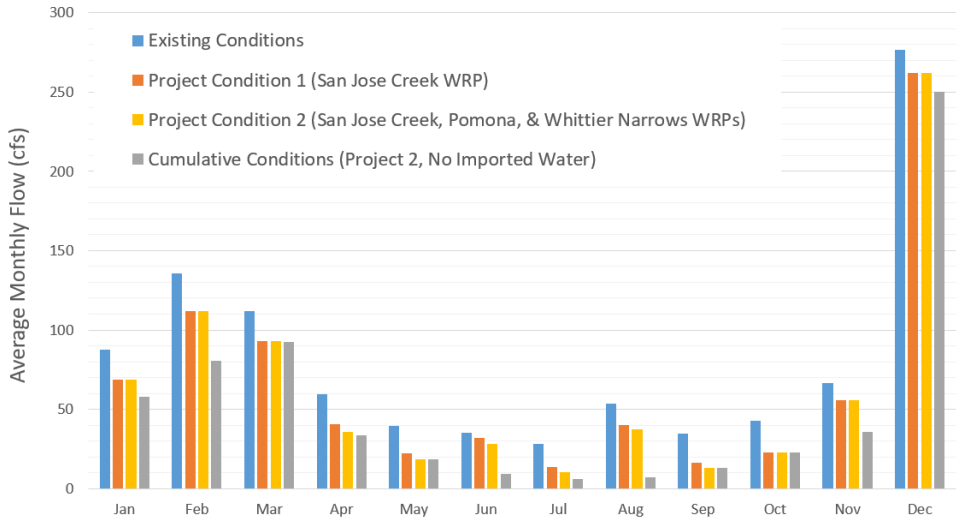
The Hydrology Report 2018 compiles river flow data to characterize the nature of surface flows in the San Gabriel River. **Figure 3.1-4** provides a summary of the cumulative average surface flow conditions within Segments 3 and 4 over a 5-year period from 2011 through 2015. The chart shows that surface flows are greatest during the winter due to storm events, whereas, during the summer, storm flows are absent and the flows in the channel are substantially reduced. As indicated, the cumulative reduction of flows in the river during the summer (June, July, and August) reduces average flows below a 10 cfs average. However, during the winter months, the WRP discharges represent a small percentage of total average flows as shown on Figure 3.1-4. During this period, soils are saturated and riparian vegetation benefits from natural storm events. Riparian habitat recruitment responding to storm flows occurs during the spring, after the large winter storms dissipate, exposing channel erosion as soils begin to drain. The vitality of riparian vegetation in the spring is largely dependent on the duration and frequency of winter storms.

Size and duration of storm flow events vary substantially from year to year in the San Gabriel River system. Each year experiences varying flow events at Whittier Narrows Dam, with some years experiencing consistent soil moisture and other years exhibiting extenuated drought conditions through much of the winter. Although the natural hydrograph experienced at Whittier Narrows Dam is modified by up-stream conservation infrastructure (Cogswell Dam, San Gabriel Dam, Morris Dam, and Santa Fe Dam), the existing and historical condition includes this annual variability. Native vegetation is adapted to the variability, but riparian habitats are most enduring where there is some level of consistent access to water through the year. This is often observed in areas where groundwater is accessible within the root zone 5-15 feet below ground surface or in areas of groundwater upwelling. The Whittier Narrows area was historically a location where groundwater upwelling seems to have been common and generally enduring through the summer.

The extenuated periods of drought conditions under the natural hydrograph suggest that riparian habitat in the Whittier Narrows area historically relied on groundwater. The Hydrology Report 2018 includes an assessment of current groundwater accessibility within the river channel along three distinct transects. The analysis concludes that above Whittier Narrows Dam, groundwater is generally inaccessible to phreatophytic vegetation in the San Gabriel River channel, with depths generally in excess of 20 feet. Directly below the dam, groundwater levels are more frequently accessible, suggesting that the healthy vegetation in this area benefits from groundwater.

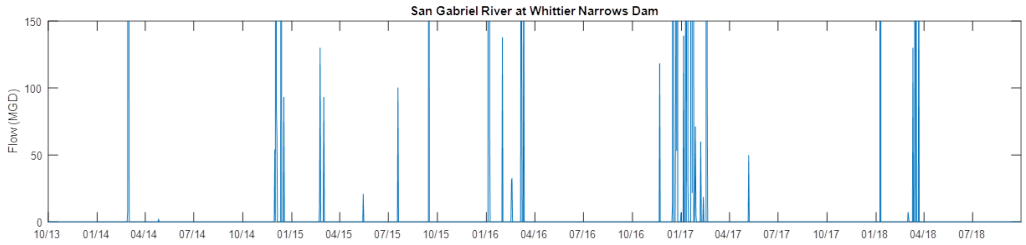
Some groundwater upwelling occurs in the San Jose Creek channel upstream of the confluence with the San Gabriel River, providing a consistent surface flow. Under current conditions, the WRP discharges augment this groundwater upwelling with a more consistent surface flow. However, as shown in **Figure 3.1-5**, this consistent surface flow often does not reach the lower portions of the river channel upstream of Whittier Dam. The hydrograph in Figure 3.1-5 illustrates the variability of flows in the river from 2014 through 2019. Under current summer conditions the lower portion of Segment 4 is entirely dry for long periods of time that may stretch over multiple weeks.

Figure 3.1-4 Surface Water Inflows for San Gabriel River Segment above Whittier Narrows Dam Existing, Project and Cumulative Conditions for 5-Year Average (WY2011-2015)



SOURCE: Appendix E2, Hydrology Report ,2018.

Figure 3.1-5 San Gabriel River at Whittier Narrows Dam (WY2014-2019)



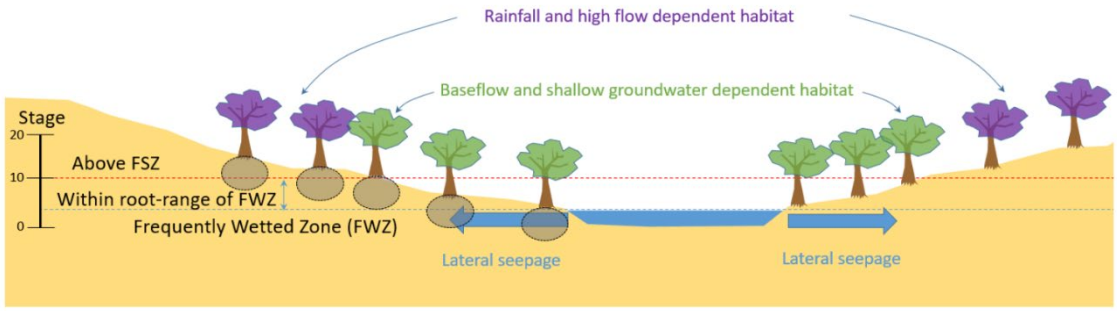
SOURCE: Appendix E1, Hydrology Report, 2019.

Surface Flow / Ecology Relationship

To better understand the relationship of surface water flows and the ecology in Segments 3 and 4, the Sanitation Districts prepared the Hydrology Report 2019 that modeled potential impacts of reduced flow based on environmental flow and ecology relationship assumptions (refer to Appendix E1, *Hydrology Report, 2019*). The Hydrology Report 2019 assessed six operational scenarios that would accommodate the proposed 5.00 million gallons per day (MGD) monthly

average discharge. For each scenario, the report modeled the duration and extent of surface flows, describing a relationship between surface flow reductions and habitat areas that would experience less access to surface water. The model included an in-channel percolation assumption reflecting the strong infiltration rates exhibited in the channel. This infiltration rate was compared to empirical observations conducted by the Sanitation Districts in December 2018 (refer to Appendix E4, *SJC002 Discharge Observations and Monitoring Study, 2019*). The study then made assumptions about the availability of the water to the neighboring habitats based on elevation and the water demands of the habitat. **Figure 3.1-6** illustrates the assumptions of the relationship between flow elevation and root-zone saturation.

Figure 3.1-6 Surface Flow Elevation Relationship to Saturated Root-Zone



SOURCE: Appendix E1, Hydrology Report, 2019

The Hydrology Report 2019 modeled flow reduction along 10 river reaches referred to as Hydrology Assessment Areas (HAA1-10) within Segments 3 and 4 and determined the reaches that would be susceptible to changes, both positive and negative, as a result of a reduction to treatment plant discharges. The Hydrology Report 2019 evaluated the following operational scenarios:

- OS 1a: 5.00 MGD every day from SJC002
- OS 1b: 9.00 MGD 4 days per week from SJC002
- OS 1c: 15.00 MGD 2.5 days per week from SJC002
- OS 2a: 5.00 MGD every day alternating between SJC002 and SJC003
- OS 2b: 9.00 MGD 4 days per week alternating between SJC002 and SJC003
- OS 2c: 15.00 MGD 2.5 days per week alternating between SJC002 and SJC003

Table 3.1-4 identifies the results of the analysis. Under each reduced discharge scenario, habitats in the lower portions of Segment 4 (HAA 5-8 in the Hydrology Report 2019) would experience less water on average that could result in water stress to the riparian vegetation. The results vary from a minimum of 25 percent to a maximum of 64 percent reduction in moisture accessibility, depending on the discharge scenario. The results highlight areas most likely to receive less water than under current conditions. If the reduced access to water resulted in these areas experiencing stress without any commensurate improvement elsewhere in the channel, the river channel could

be less supportive to least Bell's vireo. If the quality or geographic extent of riparian habitat for least Bell's vireo is reduced substantially, that would result in a potentially significant impact to an endangered species. However, the flow study and analysis concludes that, although total volume of water flowing through the system would be reduced, the reduced flows would not necessarily limit the vitality of any vegetation currently benefiting from the episodic flows.

TABLE 3.1-4
CHANGE IN WATER VOLUME TO ASSESSMENT AREAS UNDER DIFFERENT OPERATIONAL SCENARIOS, AND ACREAGE OF HABITAT SUBJECT TO CHANGE

		Operational Scenario					
		1a	1b	1c	2a	2b	2c
Assessment Area (HAA)	Acres of habitat in root range	Change in water supplied during dry season					
1	20.8	-26%	-25%	-26%	-41%	-41%	-45%
2	3.4	-36%	-35%	-36%	-36%	-34%	-35%
3	6.9	-48%	-41%	-38%	-47%	-39%	-36%
4	5.1	-59%	-47%	-41%	-59%	-45%	-39%
5	1.9	-63%	-55%	-46%	-64%	-54%	-43%
6	1.7	-62%	-59%	-49%	-62%	-59%	-46%
7	1.6	-58%	-58%	-51%	-58%	-58%	-48%
8	1.6	-53%	-54%	-51%	-54%	-54%	-51%
9	1.1	-36%	-36%	-35%	-36%	-36%	-35%
10	4.1	-35%	-36%	-35%	-36%	-36%	-35%
Weighted flow reduction (flow reduction x acreage)		-19	-17	-16	-22	-20	-20

SOURCE: Appendix E1, *Hydrology Report, 2019*.

The primary differences between the scenarios are the duration and location of discharges. Table 3.1-4 summarizes the conclusions of the study. When a 5.00 MGD discharge is kept consistent (OS1a and OS2a), much of the water percolates into the channel and the middle reaches experience up to 64 percent less water on average over the year. The scenarios that pulse discharge water at regular intervals (9.00 or 14.00 MGD) overcome percolation losses and minimize impacts to riparian habitat. Pulsing water rather than releasing a continuous 5.00 MGD flow tends to push more water into these lower areas, which is beneficial. As shown in Table 3.1-4, Operational Scenario 1c results in the lowest percentage reduction of applied water.

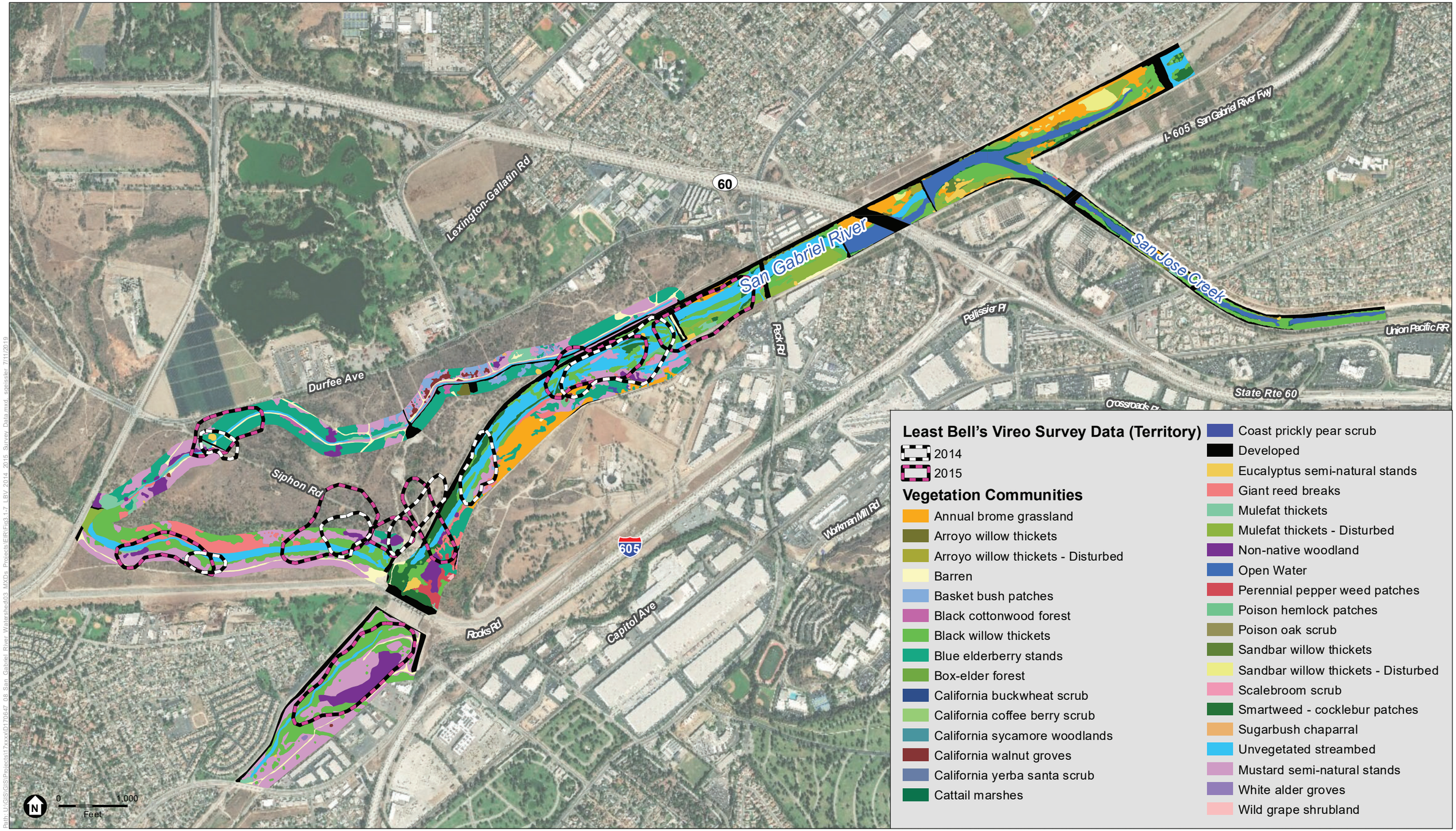
The Hydrology Report 2019 shows that the target habitat types in the lower reaches of Segment 4 (HAA-5-8) currently experience a lower frequency of saturation on average. The report assumes that native plants including willows species associated with riparian habitat require access to saturated soils at least every two weeks to avoid experiencing water stress (CNPS 2019). The report notes that under current conditions, the lower portions of Segment 4 experience long periods of zero flow; much longer than the two-week saturation demand assumptions used in the

model to predict effects (refer to Figure 3.1-5). **Table 3.1-5** shows that two of the discharge scenarios would result in more frequent saturation in the lower portion of Segment 4 than under existing conditions. The report concludes that the increased consistency of the surface flows proposed by the project could balance the effects of the proposed reductions during summer months compared to recent data in the lower reaches of Segment 4. Since the proposed project would ensure some moisture is available during the dry periods, particularly the late summer months, in areas that currently do not receive consistent surface flows, the proposed project could improve the condition of the vegetation in the lower portions of Segment 4 by providing pulse flows on a more consistent basis.

Although the lower reaches of Segment 4 (HAA5-8) appear significantly drier than the upstream areas (HAA1-4), these drier areas of Segment 4 support occupied vireo habitat. This suggests that higher volumes of water (annual average) may not be a good indicator of optimal conditions. **Figure 3.1-7** identifies the most recent least Bell's vireo territory data within the channel. This shows that suitable habitat for least Bell's vireo is sustainable with much less water than is currently being discharged to the upper segments.

In summary, although the proposed project would reduce the overall volume of treated water discharged to the San Gabriel River, the ecological effects are dependent on several factors. First, under current conditions the weirs in the river channel create ponds that detain water, promoting substantial infiltration. These ponds provide little habitat value to native aquatic species. The fixed elevation of the weirs discourages the natural recruitment processes of willows and invites non-native species such as carp, tilapia, palm trees, and *arundo donax*. As a result of the weirs, the river channel does not exhibit a natural tapering of flows as water percolates, but rather the wetted area ends abruptly at each weir as the pools fill. Second, the current treated water discharges occur sporadically and are not a perennial flow. During recent years, the San Jose Creek WRP did not discharge to the channel at all for several months during the summer. Finally, the groundwater upwelling within San Jose Creek provides a surface water source in Segments 2 and 3 that is independent of the WRP discharges and thus is more reliable.

The proposed project would provide a more consistent flow in the river and would discharge water at higher volumes during some periods of time when necessary to push water further down the channel, counteracting the high infiltration rates in the channel. This revised operational scenario would be conducted to benefit ecological values in the channel. Under current conditions, the ponded water percolates quickly in Segment 3. Much of the habitat that may support least Bell's vireo occurs in the lower portions of Segment 4 which currently experiences much less surface water flow than Segment 3.



Path: U:\GIS\GIS\Projects\17xxxx\D170647_08_San_Gabriel_River_Watershed\03_MXDs_Projects\EIR\Fig3.1-7_LBV_2014_2015_Survey_Data.mxd, sgeissler, 7/11/2019

SOURCE: ESRI; USACE Los Angeles District.

San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse

Figure 3.1-7
Least Bell's Vireo 2014-2015 Survey Data

ESA

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TABLE 3.1-5
DURATION AND CHANGE OF DRY PERIODS (PERIODS WITHOUT CHANNEL WETTING) UNDER EXISTING AND PROJECT CONDITIONS

Duration of longest dry period in dry season (average of 5 years) - days											
Operational Scenario	**HAA 1**	**HAA 2**	**HAA 3**	**HAA 4**	**HAA 5**	**HAA 6**	**HAA 7**	**HAA 8**	**HAA 9**	**HAA 10**	**Mean**
Segment	**3**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**5**	
Existing Conditions	4	13	25	35	49	58	64	65	35	37	39
OS1a	0	3	21	61	97	109	118	120	66	66	66
OS1b	1	6	8	20	59	105	112	112	66	66	56
OC1c	2	8	9	10	15	33	50	81	65	65	34
OS2a	2	3	6	73	109	122	129	132	66	66	71
OS2b	3	6	7	9	86	105	112	112	66	66	57
OS2c	4	9	9	10	11	12	70	88	65	65	34

Change in longest dry period in dry season compared with existing conditions										
Operational Scenario	**HAA1**	**HAA2**	**HAA3**	**HAA4**	**HAA5**	**HAA6**	**HAA7**	**HAA8**	**HAA9**	**HAA10**
OS1a	-4	-11	-4	26	48	50	54	55	31	29
OS1b	-3	-7	-17	-15	10	47	49	47	31	29
OC1c	-2	-5	-16	-25	-34	-25	-14	16	30	28
OS2a	-2	-10	-19	38	60	64	66	67	31	29
OS2b	-1	-7	-17	-26	37	47	49	47	31	29
OS2c	0	-5	-16	-25	-38	-46	6	23	30	28

-45	-30	-20	-5	0	5	20	30	40	50	65
Decrease in length of dry periods			Little change in length of dry periods			Increase in length of dry periods				

SOURCE: Appendix E1, *Hydrology Report, 2019.*

In conclusion, the Hydrology Report 2019 establishes a measurable relationship between surface flows and existing riparian and upland habitats, showing that reduced discharges may reduce annual average water available to root zones in the lower reaches of Segment 4 where least Bell's vireo are known to have been present. However, the analysis also shows that under current conditions, this valued habitat is experiencing very low volumes of water. Under future operational scenarios, river flows may be managed to provide a more consistent water flow in the summer months in these lower segments, providing a benefit compared to existing conditions. In addition, the least Bell's vireo riparian habitats in the middle segments of the river (HAA3-6) may expand and improve due to the changed flow conditions under the proposed project. In other words, the proposed project's new discharge and flow regimes for Segments 3 and 4 may improve conditions for riparian habitat through more consistent application of surface water within much of the river channel provided by various operational scenarios.

Segments 5 and 6

Segments 5 and 6 consist of wide soft bottom channels that are groomed regularly to promote groundwater infiltration. Some ornamental and native trees occur sporadically on the edges of the channel but provide little habitat value. Common wildlife utilize the area similar to public parks and urban flood control channel. No sensitive species utilize the area. Furthermore, the proposed project would not alter the hydrology in this area.

Segments 7 and 8

Segment 7 is a wide concrete-lined channel leading to the estuary. Some shore birds forage and loaf in the low flow channel. However, no sensitive species utilize the wetted concrete as a sensitive habitat

Segment 8 is a riprap lined channel that connects to the ocean south of the Long Beach breakwater. As previously mentioned, green sea turtles were observed within the San Gabriel River Estuary in 2017 (Los Angeles Times 2017). Though the freshwater input from the San Gabriel River will decrease as a result of the project, the saltwater influence from the Pacific Ocean that occurs within the "mixing zone" in Segment 8 will continue to support habitat for green sea turtles, since this species is not reliant on freshwater inputs from the San Gabriel River. No other native or sensitive estuarine species are known to occur within the tidal channel that could affected by the reduced freshwater discharges.

Potential Effects to Sensitive Species

Least Bell's Vireo, Yellow Warbler and Yellow-Breasted Chat

As described above, the reduction in surface flows from the proposed project could affect the existing riparian habitat within Segments 3 and 4, which is suitable for supporting least Bell's vireo. This riparian habitat is also suitable for yellow warbler and yellow-breasted chat, both designated as California Species of Special Concern. If a reduction of surface water discharges were to substantially reduce the amount of habitat available to the least Bell's vireo or other special-status riparian birds, the impact would be significant.

The Hydrology Report 2018 indicates that the conditions for suitable habitat for least Bell's vireo, yellow warbler, and yellow-breasted chat (as well as other riparian birds) may be affected by the operational changes in flow to the San Gabriel River. However, the impacts would vary throughout Segments 3 and 4 with some analyzed HAA units potentially declining and others improving such that an overall net effect would be less than significant with mitigation. To ensure that the project benefits the native habitats compared to existing conditions, **Mitigation Measure BIO-1** requires implementation of an Adaptive Management Plan (AMP) which will require monitoring to sustain riparian and wetland vegetation and habitat suitability. As reflected in **Table 3.1-6**, monitoring of parameters such as stem water potential and annual vegetation mapping of existing vegetation will help determine whether the vegetation is substantially stressed from lack of water such that there is a reduction in habitat function and value. The monitoring parameters shown in Table 3.1-6 are preliminary and subject to change. Further details regarding monitoring requirements are provided in the Draft AMP in Appendix H, *Draft AMP, 2019*.

TABLE 3.1-6
ADAPTIVE MANAGEMENT PLAN MONITORING OBJECTIVES AND PARAMETERS

Monitoring Objective	Monitoring Parameter	Methods	Location	Timing	Basis of Comparison
More efficiently manage effluent	Water Stress	Modify existing random effluent flow to an intentional discharge cycle of reduced flow	SJC002 and SJC003	Continuous logging	5-WY average baseline flow
		Stem water potential	71 Select Trees	Spring (single baseline) and Fall (on-going)	Pre-project conditions per AMP Grouping
Maintain quantity and quality of riparian and wetland habitat in areas influenced by treatment plant discharge	Cover of Vegetation Alliances (arroyo willow thickets, black willow thickets, sandbar willow, blue elderberry stands, California sycamore stands, mulefat thickets, box-elder forest, and cattail marsh)	Vegetation Mapping - Aerial Photographs and Ground Truthing	AMP Grouping 1-5	Annually in the Fall	Pre-project conditions per Overall Project Area
	Structure - Canopy Cover	Transects with quadrats of "stacked cubes" every 20 m (Kus 1998)	21 Transects	Annually in the Fall	Pre-project conditions per AMP Grouping
	Structure - Understory	Transects with quadrats of "stacked cubes" every 20 m (Kus 1998)	21 Transects	Annually in the Fall	Pre-project conditions per AMP Grouping
	Species Richness	2 m wide Belt Transects	21 Transects	Annually in the Fall	Pre-project conditions per AMP Grouping
	Recruitment	2 m wide Belt Transects	21 Transects	Annually in the Fall	Pre-project conditions per AMP Grouping

The AMP will also institute remedial action triggers based on monitoring results that require the discharge of additional recycled water as necessary to maintain overall habitat area and habitat suitability for endemic species. These data monitoring events and management actions will be conducted in consultation with CDFW. The AMP prescribes the data collection parameters and environmental management criteria for the river channel with the objective of maintaining or improving habitat values in a way that has not been conducted historically.

It is anticipated that habitat within the Whittier Narrows may transition over time, responding to the new discharge patterns. The transition may result in willow habitat gradually occurring further upstream where more consistent surface flows are accessible. Overall the acreage of the willow habitat will be maintained no less than under current conditions. Habitat within the river channel will change over time in any case, responding to periodic flood events and long-term water availability. Although not necessary to avoid a significant impact, the Sanitation Districts will as a precaution implement **Mitigation Measure BIO-2** that calls for nest predation management to

occur concurrently with the initial monitoring activities associated with the AMP. Mitigation Measure BIO-2 would require trapping of brown-headed cowbirds to minimize predation of Least Bell's vireo nests. This beneficial action will offset any temporary drought stress experienced by the vegetation used by least Bell's vireo as monitored through the AMP.

Fish

The aquatic habitat that occurs within the segments of San Jose Creek and San Gabriel River in the project area supports non-native fish species. Surveys conducted by ESA in 2019 revealed that no native fish species are present in the project area. Moreover, no native fish species, or special-status aquatic species are known to exist in the portion of the San Gabriel River and San Jose Creek that span the project area. Southern California steelhead (*Oncorhynchus mykiss*) and other anadromous fish species are not expected to occur within any segments of the project area and most of the project area is concrete lined or has barriers (i.e., concrete weirs and dams) preventing the fish from being able to travel upstream to spawn. Therefore, no impacts to special-status fish are anticipated.

Benthic Macroinvertebrates

In addition to riparian and aquatic habitat, the river bottom supports a benthic community, which is a food source to both aquatic wildlife, as well as foraging and migratory birds. As part of the NPDES monitoring requirements associated with the Long Beach, Los Coyotes, San Jose Creek, Pomona, and Whittier Narrows WRP permits, the District has conducted bioassessment monitoring annually during the spring/summer index period (semi-annually between 2005 and 2007) since 2004. In addition to this localized monitoring program, the District has also supported the present day form of the San Gabriel River Regional Monitoring Program (SGRRMP) and its bioassessment monitoring since 2009. The San Gabriel River Benthic Macroinvertebrate (BMI) Baseline Conditions Assessment (Los Angeles County 2018) provides a summary of data collected by the District on benthic diversity within the San Gabriel River. The monitoring has consistently demonstrated no discernable differences in the biotic communities upstream and downstream of discharge points. This suggests that water quality or WRP discharges are not affecting benthic diversity. The proposed reductions in flow would not be expected to change this condition.

Special-Status Plants

Although some special-status plants such as smooth tarplant are known to occur in disturbed areas, as previously discussed, the habitat conditions within the river channels are marginal and not ideal for supporting special-status plants due to the level of manmade disturbances as well as unsuitable vegetation types, coverage, and/or soils. As such, there is a low potential for the following special-status plant species to be present: smooth tarplant, mesa horkelia, Robinson's pepperplant, white rabbit-tobacco, and San Bernardino aster. The San Gabriel River Estuary does not provide suitable habitat for special-status plant species to occur. Therefore, impacts to special-status plants having a low potential to occur in the project area would be less than significant.

Reptiles

California glossy snake and coast horned lizard have a low potential to occur within the upland areas that support friable soils and scrub vegetation, and coastal whiptail has a slightly higher (medium) potential to occur in these areas as well. Upland habitats would not be directly impacted by the project; therefore, no impacts are anticipated to these species.

Western pond turtle and two-striped garter have a moderate potential to occur within the portions of the project area that are perennially inundated, primarily within the soft-bottom portions of the San Gabriel River, San Jose Creek and the Zone 1 Ditch. There are no recent recordings of these species according to the CNDDB. Focused surveys conducted in 2019 in the ponded areas of Segment 3 found no western pond turtles (refer to the *Updated Biological Resources Report, 2019*). Therefore, no impacts to western pond turtles are anticipated.

The river drop structures impound surface water in the channel creating perennial ponds that are maintained year-round by groundwater exfiltration and channel flows. The drop structures act as elevation controls that maintain static pool conditions most of the year with flow filling the pools and spilling into the next segment. In some periods when surface water and groundwater exfiltration are low, the ponded areas contract and the edges of the pools retreat. The project would reduce flows from the WRPs but not sufficient to dry up the ponded areas. In accordance with the requirements outlined in the AMP, the proposed project will maintain discharges in the channel sufficient to avoid reducing the extent of aquatic habitat availability compared with existing conditions. As such, there will be minimal effects on two-striped garter snake if the species is present, and any impacts to this species would be less than significant with implementation of the AMP (Mitigation Measure BIO-1).

Finally, although green sea turtles have been sited within the San Gabriel estuary, the salt water turtles would not be affected by reduced freshwater from the river. This species is thought to utilize the warm water discharges from the power plants that discharge to the estuary channel. Therefore, no impacts to green sea turtles are anticipated.

Mammals

San Diego black-tailed jackrabbit has a low potential to occur within the project area, as well as western mastiff bat, silver-haired bat, hoary bat, and western yellow-bat. Although only detected for four “passes”, western red bat was detected during passive acoustic monitoring. A “pass”, for purposes of this analysis, is defined as a recorded sequence of bat echolocation calls with a duration of up to 3 seconds (refer to the *Updated Biological Resources Report, 2019*). The proposed project is not expected to have a negative impact on roosting or foraging habitat, and no direct impacts to wintering or maternal roosting sites would occur. Therefore, impacts to special-status bats would be less than significant.

Cumulative Impacts

The Hydrology Report 2018 provides a comprehensive assessment of existing cumulative surface water flows in the San Gabriel River. In the future, San Gabriel River flows also may be affected by groundwater management practices, stormwater capture programs in the watershed, and climate change. Groundwater management in the region has been consistently managed by the

Main San Gabriel Basin Watermaster for several decades, and is not expected to change significantly in the future. Future drought conditions may result in lowered groundwater levels similar to under current conditions. As dry weather stormwater capture increases in the future less urban runoff will contribute to dry weather flows. Large storm events will continue to flow through the channels similar to existing conditions. In the future climate change may result in longer periods of drought and more severe winter storms. Implementation of the AMP (Mitigation Measure BIO-1) would compile data on the vegetation in the Whittier Narrows area to better understand the effect of future cumulative flow conditions. The AMP will ensure that the amount of riparian habitat currently sustained by discharges remains in the channel in the future. Other factors affecting riparian habitat will continue to affect the cumulative condition including the projects identified in Table 3-1 that result in storm flow diversions, imported water reductions, recycled water diversions, and channel improvements. The proposed project would provide an adaptive management oversight of the river channel that currently does not exist, providing the potential to address cumulative habitat impacts more effectively than under the current condition where no management exists at all. As such, the proposed project would not contribute to an adverse cumulative impact on special-status species, including habitats that may be used by these species; therefore, cumulative impacts associated with the project would be less than significant.

Mitigation Measures

Mitigation Measure BIO-1: The Sanitation Districts shall implement a discharge operational scenario that maintains downstream habitat conditions. The Sanitation Districts shall implement the Adaptive Management Plan (AMP) (refer to Appendix H) to ensure that the quantity and quality of riparian and wetland habitat currently supported by wastewater discharges is maintained at or above baseline levels, recognizing that the habitat in the channel may change naturally in response to long-term changes in surface flows and high flood events. The Sanitation Districts shall coordinate with the USFWS and CDFW in implementing the AMP. As part of the AMP, data collected during monitoring will be submitted to USFWS and CDFW for review and comment. The AMP identifies parameters that would trigger actions to remedy any effects attributable to the proposed reduced discharges. Monitored parameters shall include a combination of water stress, vegetation cover, and structural diversity of vegetation based on richness, canopy and understory cover, and recruitment. The specific trigger levels for each parameter shall be included in a Habitat Monitoring Plan developed in consultation with USFWS and CDFW. If triggers are reached, specific remedial actions will include resumed discharges into the river channel sufficient to support the acreage of habitat sustained by historical discharges.

Mitigation Measure BIO-2: The Sanitation Districts shall conduct brown-headed cowbird trapping adjacent to the San Gabriel River channel in areas that are accessible to Sanitation Districts staff. The trapping shall occur during the first three years of reduced discharges. Additional cowbird trapping activities shall be implemented subject to need based on AMP annual reporting.

Level of Significance After Mitigation

Less than significant

Impact BIO 3.1-2: The proposed projects could have a significant impact if they would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.

As described in the Updated Biological Report 2019, four upland sensitive natural communities inhabit the study area and include the following: wild grape shrubland, scalebroom scrub, coast prickly pear scrub, and basket bush patches. These habitats are in upland areas that rely on natural hydrology and would not be affected by changes in WRP discharges. Therefore, no impacts to these habitats would occur.

Ten riparian or other sensitive natural communities described in the Updated Biological Report 2019*,* as occurring in the river channels that may be affected by the proposed flow reductions include the following: arroyo willow thickets, black cottonwood forest, black willow thickets, blue elderberry, box-elder forest, California sycamore woodlands, California walnut groves, mulefat thickets, sandbar willow thickets, and white alder groves. These habitats are shown in **Table 3.1-7**. Below is an analysis of potential impacts that may occur within each segment of the river that supports riparian vegetation, Sensitive Natural Communities, and/or saltwater or freshwater influences.

Zone 1 Ditch and Bosque Del Rio Hondo

The Updated Biological Report 2019*,* includes an assessment of sensitive habitat within the WNRA including the Zone 1 Ditch, Crossover Channel, and within the Rio Hondo above the dam in the area known as the Bosque Del Rio Hondo. The Zone 1 Ditch is partially lined and partially soft-bottomed; as a result, some groundwater recharge likely occurs that supports vegetation along the edges of the channel. There is little riparian habitat along the channel, whereas upland scrub communities, including elderberry, is prevalent. Along the Crossover Channel some black willow assemblages occur that are likely supported by intermittent periods of inundation in the channel along with potential access to groundwater. A substantial quantity of invasive species, including giant reed, occurs within the Crossover Channel. Within the Bosque Del Rio Hondo, a very large area has been invaded by giant reed, surrounded by intermittent patches of willow. This Bosque is fed by discharges from the Whittier Narrows WRP and by other in-stream urban runoff flows. The low-flow channel in this area is also dominated by giant reed. Project-related reductions of intermittent flows through the Bosque would not eliminate the availability of water in the low-flow channel, nor would it be expected to affect the native habitat values, including any CDFW Sensitive Natural Communities that are present, since water is perennially available from the other sources. The Zone 1 Ditch flows are primarily from the Whittier Narrows WRP that would not be affected by the proposed project. Therefore, the existing relationship between the ditch and habitat in the vicinity will not change. As a result, no changes would occur within the Zone 1 Ditch or Bosque Del Rio Hondo attributable to the proposed project.

San Gabriel River Above Whittier Narrows Dam (Segments 3 and 4)

According to the Hydrology Report 2019, segments HAA1-2 and HAA9-10 are the least affected areas in most operational scenarios. HAA1-2 exhibits perennial ponded water. HAA9-10 is watered by WNWRP discharges and rising groundwater and currently receives very little flow from upstream discharges. White alder groves do not occur in these river segments. Of the 10

riparian or other sensitive natural communities in the channel, according to the Hydrology Report 2019, no hydrological impacts to black cottonwood forest, California sycamore woodlands, or California walnut groves are anticipated (ESA 2019). The riparian communities in the remaining six HAA units may be affected by the operational changes in flow to the San Gabriel River. However, the impacts would vary with habitat in some HAA units potentially declining and others improving such that an overall net effect would be similar to or better than existing conditions.

TABLE 3.1-7
RIPARIAN OR OTHER SENSITIVE NATURAL COMMUNITIES ALONG THE SAN GABRIEL RIVER ABOVE WHITTIER NARROWS DAM

Vegetation Community	Existing Acreage[1]	Potentially Affected Acreage under Proposed Project (OS 1a)[1]	Potentially Affected Acreage (OS 1b)[1]	Potentially Affected Acreage (OS 1c)[1]	Potentially Affected Acreage (OS 2a)[1]	Potentially Affected Acreage (OS 2b)[1]	Potentially Affected Acreage (OS 2c)[1]
Arroyo willow thickets	3.2	0.1	0.0	0.0	0.1	0.0	2.0
Black willow thickets	49.0	7.7	5.0	4.1	7.7	5.0	6.0
Blue elderberry stands	8.8	0.5	0.4	0.4	0.5	0.4	0.4
Box-elder forest	0.1	0.1	0.1	0.0	0.1	0.1	0.0
Mulefat thickets	13.0	1.3	0.1	0.1	1.3	0.1	0.4
Sandbar willow thickets	4.2	0.0	0.0	0.0	0.0	0.0	0.2
Total	**78.3**	**9.7**	**5.6**	**4.6**	**9.7**	**5.6**	**9.0**

[1] Excluding Zone 1 Ditch

SOURCE: ESA, 2019.

If a reduction of surface water discharges were to reduce the amount of riparian or other sensitive natural community, the impact would be significant. However, it is likely that more water is currently discharged to the river than is required to maintain the existing riparian habitat. As previously discussed, all the operational scenarios show a reduction in the duration of dry periods in Segment 4 (Hydrology Report 2019, Table 5). Some operational scenarios allow for potential beneficial effects to the riparian habitat because water is released in a more regular pattern. Therefore, there could be an increase in the amount of riparian or other sensitive natural communities that could offset potential impacts. **Mitigation Measure BIO-1** requires the implementation of an operational scenario that maintains riparian habitat and implements the AMP to ensure habitat is maintained at or above baseline conditions, thereby reducing potential impacts to less than significant.

San Gabriel River Below Whittier Narrows Dam (Segments 5 and 6)

The segment of the San Gabriel River below the Whittier Narrows Dam is soft-bottomed for approximately 6.9 miles. The first 2,000 feet of this area supports healthy willow habitat, as described in the Updated Biological Resources Report 2019. According to the Hydrology Report 2018, this area receives very little surface flow in the summer months. It is likely that this habitat area is supported by groundwater to a greater extent than the areas above the dam.

Since WRP discharges are infrequent in HAA10 under baseline conditions, it is highly unlikely that the vegetated portion of the channel, which includes CDFW Sensitive Natural Communities immediately below the dam, would be adversely affected by reduced discharges from the upstream WRPs.

Further downstream within Segments 5 and 6, this vegetation tapers out and the river bed is groomed through scarifying the channel bottom and by other means to support groundwater recharge. Some natural vegetation exists on the edges in disparate patches, but most of the channel is devoid of natural habitat values. The LACDPW has installed several rubber dams in this segment of the river to impound water when it is available for groundwater recharge. The proposed reductions in discharges of recycled water from the upstream WRPs would have no effect on the habitat in these area since little native habitat occurs under existing conditions.

San Gabriel River Concrete-Lined Segment (Segment 7)

The Long Beach WRP and Los Coyotes WRP discharge to concrete-lined channels in the lower portions of the watershed. Flow from the Los Coyotes WRP flows approximately 6.2 miles until it joins with the tidally influenced channel. Along this segment, the freshwater is used by shorebirds and other birds for foraging and loafing habitat. Algae occurs at the bottom of the low-flow channel, supported by the nutrient-rich, oxygenated water that creates foraging opportunities. However, this portion of the river channel supports no CDFW Sensitive Natural Communities. The proposed project would substantially reduce the water in the channel, but would not eliminate the discharge. Some water would remain in the low-flow channel, maintaining the access to freshwater foraging opportunities by local waterfowl. The Hydrology Report 2019 includes an assessment of the reduced depth of flow. Since flow would not be eliminated, the riparian habitat values would remain within the low flow channel. Impacts would be less than significant.

Similarly, the Long Beach WRP discharges to a concrete-lined portion of Coyote Creek prior to the confluence with the tidally influenced channel. This creek exhibits substantial urban runoff flow from upstream. However, this portion of the river channel supports no CDFW Sensitive Natural Communities. Although the project would substantially reduce flow to this portion of the channel, it would not be eliminated, and freshwater flow would remain. Impacts to freshwater habitat in the concrete channel would be less than significant.

San Gabriel River Estuary (Segment 8)

Freshwater flow from the Long Beach WRP and Los Coyotes WRP flow to the tidally influenced channel, bringing nutrient-rich, oxygenated water to the San Gabriel River estuary. The freshwater flows comingle with the ocean water, generally remaining on the surface for some

distance before mixing with the heavier salt water. In this area, waterfowl congregate for foraging and loafing. The aquatic habitat is also affected by the freshwater, providing a marginal area of mixing. An analysis of the influence of freshwater within the tidally-influenced San Gabriel River estuary is included in the *Evaluating Effects of Reduced WWTP Discharge on the Ecology of the San Gabriel River Estuary Study* (SCCWRP 2018) (refer to Appendix D). In summary, the existing habitat values in this mixing area are marginal due to the channelization of the drainage, rip-rap channel edges, and lack of wetland or salt water marsh habitat. The Estuary Study finds that the diversity of species in the San Gabriel River estuary is greater than the Los Angeles River estuary, which may be attributed in part to the power plant once-through-cooling operations. The Estuary Study concludes that the reduction of freshwater inputs would result in greater salinity caused by increased tidal influence that could reduce diversity of species; however, the proposed project's flow reductions would reduce but not eliminate the freshwater mixing zone. As a result, although the mixing zone would be reduced in size, impacts from freshwater flow reductions would not eliminate the riparian habitats. Impacts would be less than significant.

Cumulative Impacts

The Hydrology Report 2018 provides a detailed summary of the river's hydrology with and without the project. The analysis includes a cumulative condition during dry years, wet years, and on a 5-year average, including the elimination of imported water. The hydrologic summary is provided to assist in understanding the dynamic river system that has been used to convey imported and conserved water supplies for over 75 years to benefit local groundwater recharge programs. As a result of this managed water delivery system, the changing hydrograph from the surrounding urban environment, and in-channel improvements, natural habitat conditions in the San Gabriel River have been modified significantly from historical conditions.

The native habitat once depending on natural hydrologic conditions now depends on irregular water availability. Studies have been conducted in other areas such as the San Joaquin River in central California, to evaluate impacts of modified hydrographs on riverine habitat values and to develop environmental flow objectives (Torrez 2014). The report compares historical hydrology patterns with recent conditions to illustrate how anthropogenic changes have resulted in the loss of riparian vegetation recruitment. The report describes that natural recruitment of new riparian growth benefits from scouring high flow in the winter combined with gradually decreasing flows as the wet season ends. River flows are irregular, spiking during storm events and managed water deliveries, and almost disappearing for periods of time in the summer, and wastewater discharges are irregular as well. The District is permitted to use several points of discharge and currently rotates discharge depending on groundwater recharge objectives. This results in zero discharge from the SJCWRP for periods of days or weeks under current conditions. As a result, the wetted perimeter in the San Jose Creek and San Gabriel River segments changes daily.

In addition, the drop structures within the channels create perennial ponding that fixes the wetted perimeter for much of the year. The channel in these locations is influenced by groundwater. When discharges from SJCWRP are eliminated, ponding water remains in San Jose Creek and the San Gabriel River channel, impounded by the drop structures. Below the drop structures, the wetted area is confined to a low-flow channel that varies depending on the managed flows that are irregular under existing conditions. The varying wetted perimeter condition of the San Jose

Creek and San Gabriel River channel has resulted in irregular recruitment patterns for riparian vegetation. As such the existing vegetation in the channels is dominated by old woody stands of willow with marginal or irregular understory recruitment.

As indicted in the Hydrology Report 2018, reducing the flows from the WRPs will result in less water flowing through the San Gabriel River between the confluence with the San Jose Creek and Whitter Narrows Dam that could result in habitat conversion to a more drought tolerant vegetation in the channel segments that do not experience perennial ponding. To prevent this habitat conversion, the Sanitation Districts have committed to maintaining environmental flows in the river from the San Jose Creek WRP sufficient to prevent loss of riparian habitat in the San Gabriel River that could support such species as the least Bell's vireo. These flows would be managed to ensure that riparian habitat conversion does not occur as a result of the project. Mitigation Measure BIO-1 requires that the District implement the AMP to monitor vegetation and ensure that flows are sufficient to support riparian vegetation similar to current conditions at a minimum. Monitoring events and management actions outlined in the AMP will be conducted in consultation with CDFW. The AMP also will assist in documenting the existing condition and recruitment pattern of the San Gabriel River, providing valuable data to better understand and manage this system for biological values in the future. The AMP will provide data collection and environmental management of the river channel with the objective of maintaining habitat values in a way that has not been conducted historically.

Mitigation Measures

Mitigation Measure BIO-1

Level of Significance After Mitigation

Less than Significant

Wetlands

Impact BIO 3.1-3: The proposed projects could have a significant impact if they would have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Approximately 1.84 acres of existing cattail marsh occupies the segment of the San Gabriel River above Whittier Narrows Dam. The proposed reduction in discharges of recycled water will not result in any discharge of dredge or fill material to waters of the waters of the U.S. or waters of the State, including wetlands subject to regulatory protection under the Clean Water Act. Moreover, the proposed project will not result in the filling of any such "waters" or wetlands. The associated river, creek and channel would remain substantially unchanged. The channel weirs will continue to impound water that supports these wetlands, also inventoried in the Updated Biological Resources Report 2019. However, according to the Hydrology Report 2019, under the project operational scenario, reduced discharges could result in a reduction or hydrological disturbance of up to 0.17 acre of cattail marsh (**Table 3.1-8**). **Mitigation Measure BIO-1** requires the implementation of an operational scenario and the AMP to ensure the cattail marsh habitat is maintained at or above baseline levels, thereby reducing potential impacts to less than significant.

TABLE 3.1-8
POTENTIALLY AFFECTED WETLANDS

Vegetation Community	Existing Acreage[1]	Potentially Affected Acreage under Proposed Project (OS 1a)[1]	Potentially Affected Acreage (OS 1b)[1]	Potentially Affected Acreage (OS 1c)[1]	Potentially Affected Acreage (OS 2a)[1]	Potentially Affected Acreage (OS 2b)[1]	Potentially Affected Acreage (OS 2c)[1]
Cattail marsh	1.8	0.2	0.0	0.0	0.2	0.0	0.2

[1] Excluding Zone 1 Ditch
SOURCE: ESA, 2019.

Cumulative Impacts

No cumulative impacts are expected for Impact BIO 3.1-3.

Mitigation Measures

Mitigation Measure BIO-1

Level of Significance After Mitigation

Less than Significant

Migratory Wildlife Corridors

Impact BIO 3.1-4: The proposed projects could have a significant impact if they would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

The proposed reduction in discharges of recycled water will not interfere substantially with the movement of any native resident or migratory fish or wildlife species. No anadromous fish or other terrestrial migratory fish species presently occur in the project area based on a focused survey conducted by ESA in 2019 (ESA 2019). Although the San Gabriel River is identified as a priority stream for the recovery of California steelhead, no migration currently occurs due at least partially to the number of barriers in the channel. Implementation of the AMP (Mitigation Measure BIO-1) would ensure that no net reduction in riparian habitat would occur, and no direct impacts would occur to upland habitats. As such, migratory birds that rely on the riparian and upland vegetation in the project area for foraging, wading or finding refuge will be unaffected, and the proposed incremental reduction of discharges of recycled water will not interfere with wildlife movement or obstruct any wildlife corridor as compared with existing conditions. No known nursery sites or rookeries occur within the project area that could be affected by the reduced discharge. Impact would be less than significant.

Cumulative Impacts

There are no other projects that have been identified in the region that may contribute to the cumulative reduction of wildlife corridors. The proposed project would not contribute to a cumulative impact on wildlife movement or native wildlife nursery sites.

Impact BIO 3.1-5: The proposed projects could have a significant impact if they would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The reduced discharges would not conflict with any local policies plan or ordinance protecting biological resources, such as a local tree ordinance. No impact would occur.

Cumulative Impacts

The proposed project would not contribute to a cumulative impact on local policies or ordinances protecting biological resources when considering other projects in the region.

HCP and NCCP

Impact BIO 3.1-6: The proposed projects could have a significant impact if they would conflict with provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

There is no applicable HCP or NCCP within the proposed project's area. Operation and maintenance of the proposed project would not conflict with the provisions of any regional or local HCPs or NCCPs.

Although not an HCP, the project area is located adjacent to the Los Angeles County designated SEA 15 (i.e., Puente Hills SEA). However, the proposed project would not have a direct or indirect influence on the SEA. Moreover, implementation of the AMP (Mitigation Measure BIO-1) would ensure that no net reduction in riparian habitat would occur, and no direct impacts would occur to upland habitats within the project area, which may or may not provide a source of natural recruitment of native vegetation in adjacent areas, including the SEA. As such, no impacts would occur to an HCP, NCCP or the adjacent SEA.

Cumulative Impacts

No cumulative impacts would occur, since there are no HCPs or NCCPs in the vicinity of the project. No impact would occur.

3.2 Hydrology and Water Quality

3.2.1 Introduction

This section describes the applicable laws and policies relating to hydrology and water quality, discusses the existing (baseline) conditions relating to hydrology and water quality, and presents an assessment of the potential impacts from project implementation. Baseline hydrologic and water quality conditions relevant to the proposed project include consideration of terrestrial surface waters and groundwater underlying the project area.

Data used in this section includes information obtained from the State Water Resources Control Board (SWRCB), the California Department of Water Resources (DWR), the Regional Water Quality Control Board (RWQCB), the Federal Emergency Management Agency (FEMA), the *Using an Environmental Hydrology Model of the San Gabriel River to Assess Water Reclamation Plant Flow Reductions*, prepared by ESA, dated June 3, 2019 (herein referred to as Hydrology Report 2019 and included as Appendix E1, and *Assessing the Effects of the San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse on Downstream Hydrology* (Hydrology Report) prepared by ESA, dated July 2018 (herein referred to as Hydrology Report 2018 and included as Appendix E2). Related plans and policies are discussed, including the *Water Quality Control Plan, Los Angeles Region* (Basin Plan). All information sources used are included as citations within the text; sources are listed in Chapter 4, *References*, of this Draft Environmental Impact Report (EIR).

3.2.2 Environmental Setting

Regulatory Framework

Federal

Clean Water Act

Regulatory authorities exist on both the state and federal levels for the control of water quality in California. The United States Environmental Protection Agency (USEPA) is the federal agency responsible for water quality management pursuant to the Clean Water Act (CWA) of 1977. The purpose of the CWA is to protect and maintain the quality and integrity of the Nation's waters by requiring states to develop and implement state water plans and policies. The relevant sections of the CWA are summarized below.

CWA Section 303: Water Quality Standards and Implementation Plans

Section 303 of the CWA requires states to designate beneficial uses for water bodies or segments of water bodies and to establish water quality standards to protect those uses for all waters of the United States. Under Section 303(d) of the CWA, states, territories, and authorized tribes are required to develop lists of impaired waters. Impaired waters are waters that do not meet water quality standards established by the state. The law requires that these jurisdictions establish a priority ranking for listed waters and develop action plans to improve water quality. Inclusion of a water body on the Section 303(d) List of Impaired Water Bodies triggers development of a Total Maximum Daily Load (TMDL) for that water body and a plan to control the associated pollutant/stressor on the list. The TMDL is the maximum amount of a pollutant/stressor that a water

body can assimilate and still meet the water quality standards. Typically, a TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. Section 303(d) is described as part of the regulatory framework because the RWQCB identifies impaired waters that intersect the project area.

CWA Section 401: Water Quality Certification

Section 401 of the CWA (33 U.S.C. Section 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into navigable waters, including the crossing of rivers or streams during road, pipeline, or transmission line construction, to obtain a certification from the state in which the discharge originates. The certification ensures that the discharge will comply with the applicable effluent limitations and water quality standards. The state agency responsible for implementing Section 401 of the CWA in California is the SWRCB.

CWA Section 402: National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program under Section 402 of the CWA (33 U.S.C. Section 1342) is one of the primary mechanisms for controlling water pollution through the regulation of sources that discharge pollutants into waters of the United States. USEPA has delegated authority of issuing NPDES permits in California to the SWRQB, which has nine RWQCBs. The RWQCB regulates water quality in the project area. The NPDES permit program is discussed in detail below under State regulations.

Executive Order 11988 and National Flood Insurance Program

Under Executive Order 11988, the FEMA is responsible for management of floodplain areas, defined as the lowland and relatively flat areas adjoining inland and coastal waters subject to a 1 percent or greater chance of flooding in any given year (representing the 100-year flood hazard zone). Also, FEMA administers the National Flood Insurance Program (NFIP), which requires that local governments covered by federal flood insurance enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year flood zone. To facilitate identifying areas with flood potential, FEMA has developed Flood Insurance Rate Maps (FIRM) that can be used for planning purposes, including floodplain management, flood insurance, and enforcement of mandatory flood insurance purchase requirements. As described below, portions of the project area are located within identified Special Flood Hazard Area.

State and Regional

State agencies acting in their sovereign capacity are not subject to local regulations unless the California Constitution says they are or the Legislature has consented to such regulations. However, local regulations are described here because some may apply to a state agency or because local plans and policies help inform the analysis of impacts and consistency of the project with regulatory requirements related to hydrology and water quality.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) provides the basis for water quality regulation within California. The Act establishes the authority of the SWRCB and the nine RWQCBs. The SWRCB administers water rights, sets state policy for water pollution control, and implements various water quality functions throughout the state, while the RWQCBs conduct planning, permitting, and most enforcement activities. The proposed project is within jurisdiction of the RWQCB.

The Porter-Cologne Water Quality Control Act requires the SWRCB and/or the RWQCBs to adopt statewide and/or regional water quality control plans, the purpose of which is to establish water quality objectives for specific water bodies. In the Los Angeles region, the Water Quality Control Plan for the Basin Plan serves as the legal, technical, and programmatic basis of water quality regulation in the region. The Act also authorizes the SWRCB and RWQCBs to implement the NPDES program, which establishes discharge limitations and receiving water quality requirements for discharges to waters of the United States. The Act also authorizes the NPDES program under the CWA, which establishes effluent limitations and water quality requirements for discharges to waters of the state. The Basin Plan and the NPDES permits relevant to the proposed project are discussed further below.

Water Quality Control Plan for the Los Angeles Region (Basin Plan)

The RWQCB's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional terrestrial surface water bodies (e.g., creeks, rivers, streams, and lakes), groundwaters, coastal drainages, estuaries, coastal lagoons, and enclosed bays within the RWQCB's jurisdictional area. The preparation and adoption of Basin Plans are required by California Water Code Section 13240. According to Water Code Section 13050, Basin Plans establish the beneficial uses to be protected for the waters within a specified area, water quality objectives to protect those uses, and an implementation program for achieving the objectives. Because beneficial uses, together with their corresponding water quality objectives, can be defined per federal regulations as water quality standards, the Basin Plans are regulatory references for meeting the state and federal requirements for water quality control. The water quality objectives are thus incorporated into NPDES permits (discussed in detail below).

The Basin Plan is designed to preserve and enhance water quality and protect beneficial uses of all waters. Specifically, it:

1. Designates beneficial uses for surface and ground waters.
2. Sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy.
3. Describes implementation programs for achieving objectives to protect all waters in the region.

In addition, the Basin Plan incorporates all applicable SWRCB and RWQCB plans and policies and other pertinent water quality policies and regulations (LARWQCB 2016). **Table 3.2-1** lists the water bodies in the San Gabriel River Watershed that are relevant to the proposed project, along with beneficial uses identified by the RWQCB.

TABLE 3.2-1
DESIGNATED BENEFICIAL USES OF SURFACE WATER BODIES IN THE PROJECT AREA

			Beneficial Uses																		
Water Bodies	**MUN**	**AGR**	**GWR**	**IND**	**PROC**	**COMM**	**SHELL**	**COLD**	**EST**	**MIGR**	**RARE**	**WET**	**SPWN**	**BIOL**	**WARM**	**WILD**	**REC-1**	**REC-2**	**NAV**	**MAR**	**FRSH**	**ASBS**
San Gabriel River Estuary (Ends at Willow)	X			X		X	X		X	X	X		X			X	X	X	X	X		
Coyote Creek (San Gabriel River Estuary to La Canada Verde Creek)	X			X	X						X				X	X	X	X				
Coyote Creek (above La Canada Verde Creek)	X			X	X						X				X	X	X	X				
San Gabriel River Reach 1 (San Gabriel River Estuary to Firestone Blvd.)	X														X	X	X	X				
San Gabriel River Reach 2 (Firestone Blvd. to Whittier Narrows Dam)	X		X	X	X						X				X	X	X	X				
Whittier Narrows Flood Control Basin	X		X								X				X	X	X	X				
Legg Lake	X		X					X				X			X	X	X	X				
San Gabriel River Reach 3 (Whittier Narrows Dam to San Jose Creek)	X		X												X	X	X	X				
San Gabriel River Reach 3 (San Jose Creek to Ramona Blvd.)	X		X												X	X	X	X				
San Jose Creek Reach 1 (San Gabriel River Reach 3 to Temple Ave.)	X		X												X	X	X	X				
San Jose Creek Reach 2 (Temple Ave. to Thompson Wash)	X		X												X	X	X	X				
Thompson Wash (San Jose Creek Reach 2 to Web Canyon)	X		X												X	X	X	X				

ACRONYMS:
MUN – Municipal and Domestic Supply
AGR – Agricultural Supply
GWR – Groundwater Recharge
IND – Industrial Service Supply
PROC – Industrial Process Supply
COMM – Ocean, Commercial, and Sport Fishing
SHELL – Shellfish Harvesting
COLD – Cold Freshwater Habitat
EST – Estuarine Habitat
MIGR – Migration of Aquatic Organisms
RARE – Preservation of Rare and Endangered Species
WET – Wetland Habitat
SPWN – Spawning, Reproduction, and/or Early Development
BIOL – Preservation of Biological Habitats of Special Significance
WARM – Warm Freshwater Habitat
WILD – Wildlife Habitat
REC-1 – Water Contact Recreation
REC-2 – Non-Contact Water Recreation
NAV – Navigation
MAR – Marine Habitat
FRSH – Freshwater Replenishment
ASBS – Areas of Special Biological Significance

NPDES Waste Discharge Program

The federal CWA established the NPDES program to protect the water quality of receiving waters of the United States. Under CWA Section 402, discharging pollutants to receiving waters of the United States is prohibited unless the discharge is in compliance with an NPDES permit. In California, administration of the NPDES program has been delegated by USEPA to the SWRCB. The SWRCB administers water rights, water pollution control, and water quality functions throughout the state, while the RWQCBs conduct planning, permitting, and enforcement activities. Through the nine RWQCBs, point source dischargers are required to obtain NPDES permits (or, in California under authority of Porter-Cologne, Waste Discharge Requirements). Point sources include municipal and industrial wastewater facilities and stormwater discharges.

Effluent limitations serve as the primary mechanism in NPDES permits for controlling discharges of pollutants to receiving waters. When developing effluent limitations for an NPDES permit, a permit applicant must consider limits based on both the technology available to control the pollutants (i.e., technology-based effluent limits) and limits that are protective of the water quality standards of the receiving water (i.e., water quality-based effluent limits[1] if technology-based limits are not sufficient to protect the water body). For inland surface waters and enclosed bays and estuaries, the water quality based effluent limitations are based on criteria in the National Toxics Rule and the California Toxics Rule, and objectives and beneficial uses defined in the applicable Basin Plan. There are two types of NPDES permits: individual permits tailored to an individual facility and general permits that cover multiple facilities or activities within a specific category.

Prior to issuance of any NPDES permits for operational discharges or issuance of licenses, a review and authorization process by the RWQCB is required to ensure such permits and licenses are protective of designated beneficial uses and water quality and that TMDL requirements are incorporated as permit conditions in a manner consistent with relevant plans, policies, and guidelines. The San Gabriel River Watershed is covered under two municipal storm water NPDES permits and each one of the Sanitation Districts' WRPs is covered under its own NPDES permit.

California Water Code 1211, Wastewater Change Petition

As a way to better manage resources and facilitate water use efficiency, many municipalities are designing water reuse projects. If a water reuse project decreases the amount of water in a stream or other waterway, the owner of the wastewater treatment plant is required to file a Wastewater Change Petition with the Division of Water Rights SWRCB (Division). For approval, the SWRCB must be able to find that the proposed change will not injure other legal users of water, will not unreasonably harm instream uses, and is not contrary to the public interest. All petitioners must send a copy of the petition to the California Department of Fish and Wildlife (CDFW). Additionally, if the proposed project has the potential to impair the water supply of other legal users of water or instream beneficial uses, the Division will require further notice of the petition. Evaluation of whether water is needed to serve in-basin water rights focuses on whether the discharges result from natural flows. Additionally, the California Environmental

[1] Water quality-based effluent limits specify the level of pollutant (or pollutant parameter), generally expressed as a concentration, that is allowable.

Quality Act (CEQA) applies to non-exempt wastewater change petitions, and the SWCRB must either undertake CEQA review as a lead agency, or review CEQA documents as a responsible agency before making a decision (SWRCB 2019). The proposed project would require one Wastewater Change Petition per WRP pursuant to California Water Code Section 1211 to change the place and purpose of use of recycled water, while maintaining sensitive habitat supported by historic effluent discharges. A total of four petitions will be submitted one each for the San Jose Creek WRP, the Pomona WRP, the Los Coyotes Creeks WRP, and the Long Beach WRP. This Draft EIR serves as the first-tier CEQA compliance document for proposed reduction in discharges into the San Gabriel or its tributaries: San Jose Creek and/or Coyote Creek.

Los Angeles County Municipal Separate Storm Sewer System Permit

The Municipal Stormwater Permitting Program regulates stormwater discharges from municipal separate storm sewer (drain) systems (MS4s). Stormwater runoff and authorized non-storm flows (conditionally exempt discharges) are regulated under NPDES stormwater permits. Phase I NPDES permits require medium and large cities, or certain counties with populations of 100,000 persons or more, to obtain NPDES permit coverage for their stormwater discharges. Phase II permits require regulated small MS4s in urbanized areas, as well as small MS4s outside the urbanized areas that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges. The MS4 permits require the discharger to develop and implement a Stormwater Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable, the performance standard specified in CWA Section 402(p), typically through the application of best management practices (BMPs). The management programs specify what BMPs will be used to address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations.

The Los Angeles County currently has a MS4 Permit (Order No. R4-2012-0175) became effective on December 28, 2012. Stormwater runoff and authorized non-storm flows (conditionally exempt discharges) from unincorporated areas of Los Angeles County under County jurisdiction, and 84 cities within the Los Angeles County Flood Control District (the Permittees), are regulated under the MS4 NPDES permit. The MS4 permit contains minimum standards that the Permittees must enforce when construction activities disturb an area greater than one acre.

Stormwater discharges must meet water-quality-based effluent limitations, or water quality standards for discharges leaving the site, and must not cause or contribute to the exceedance of receiving water limitations (water quality standards for receiving waters). The proposed project would be required to comply with the MS4 permit as administered by Los Angeles County and cities in which the WRPS are located (see below), in addition to statewide water quality program administered by the RWQCB including the Porter-Cologne Water Quality Control Act, as described above. As such, discharges of the proposed project are currently covered under the MS4 permit requirements would continue to adhere with the Waste Load Allocations assigned to MS4 discharges for applicable TMDLs.

Anti-Degradation Policy

The SWRCB Anti-Degradation Policy, formally known as the Statement of Policy with Respect to Maintaining High Quality Water in California (SWRCB Resolution No. 68-16), restricts degradation of surface and ground waters. Specifically, this policy protects water bodies where existing quality is higher than necessary for the protection of beneficial uses and requires that existing high quality be maintained to the maximum extent possible.

Under the Anti-Degradation Policy, any actions that can adversely affect water quality in all surface and ground waters must: (1) be consistent with maximum benefit to the people of California; (2) not unreasonably affect present and anticipated beneficial use of the water; and (3) not result in water quality less than that prescribed in water quality plans and policies. Furthermore, any actions that can adversely affect surface waters are also subject to the federal Anti-Degradation Policy (40 CFR Section 131.12) developed under the CWA. The continuation of discharges from the proposed project that could affect surface water quality would be required to comply with the Anti-Degradation Policy, which is included as part of the NPDES permit requirements for point discharges (as discussed previously).

Public Trust Doctrine

Under the common law public trust doctrine, particular activities may be inconsistent with the trust where they substantially impair or impede public trust uses or values (e.g., commerce, navigation, fisheries, recreation, or ecological uses). (*World Business Academy v. California State Lands Commission* (2018) 24 Cal.App.5th 476, 509-510.) The common law public trust doctrine in California derives from the State's role as trustee over tidelands, submerged lands, and lands underlying inland navigable waters, which the State and its grantees hold for public trust purposes. Such trust purposes were traditionally confined to navigation, commerce, and fisheries, but later extended to include recreation and preservation of trust lands in their natural state. In 1983, the California Supreme Court applied the public trust for the first time to potentially limit the appropriation of water from navigable streams and nonnavigable tributaries. Specifically, the Court held that "[t]he state has an affirmative duty to take the public trust into account in the planning and allocation of water resources" and to "preserve[]" those resources to the extent "feasible." (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 446-447.) What is "feasible" in a particular instance, however, is a matter for the trustee agency to determine in light of the "public interest." (*Id.*; see also *State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 674, 777-778 (State fulfilled its public trust duties in implementing water quality control plan under state clean water laws).) Thus, as the Supreme Court noted, the State may "approve appropriations [of water] despite foreseeable harm to public trust uses" so long as it "consider[s] the effect of the taking on the public trust" and finds that such taking is "consistent with the public interest. . . ." (*National Audubon Society*, 33 Cal.3d at 446-447.)

In addition to the common law public trust doctrine, certain agencies of the State (e.g., the CDFW) are subject to "a public trust duty derived from statute." (*Environmental Protection and Information Center v. California Dept. of Forestry & Fire Protection* (2008) 44 Cal.4th 459, 515; Fish & Game Code § 711.7(a) ["The fish and wildlife resources are held in trust for the people of the state"], § 1802 ["The [California Department of Fish and Wildlife], as trustee for fish and wildlife resources, shall consult with lead and responsible agencies and shall provide, as

available, the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities, as those terms are used in [CEQA].”].) The duty to protect wildlife, however, is primarily statutory. (*Environmental Law Foundation v. State Water Resources Control Bd.* (2018) 26 Cal.App.5th 844, 860.)

There is precedent suggesting that counties (or other subdivisions of the State) are also trustees, and thus have all of the powers and duties of the State in consideration of the public trust and approval of non-trust uses in the public interest. (*Id.*, at 868.) However, there is no set “procedural matrix” on what constitutes adequate consideration of the trust, and evaluating project impacts within a regulatory scheme like CEQA can serve as sufficient “consideration” for public trust purposes. (*Citizens for East Shore Parks v. California State Lands Com.* (2011) 202 Cal.App.4th 549, 577; *Center for Biological Diversity v. California Dept. of Forestry & Fire Protection* (2014) 232 Cal.App.4th 931, 953 [agency fulfilled public trust duties through consultation as responsible agency under CEQA]; *San Francisco Baykeeper, Inc. v. California State Lands Commission* (2015) 242 Cal.App.4th 202, 242 [“compliance with other environmental statues can serve to fulfill an agency’s trust obligations”].) Accordingly, this Draft EIR is intended to: 1) fulfill LACSD’s public trust duties (if any) to consider the trust and protect public trust uses and values to the extent feasible; 2) inform the public and interested agencies as to public trust uses and values (e.g., recreational and ecological); and 3) provide a basis for review by responsible and trustee agencies such as the SWRCB and CDFW in the Water Code Section 1211 process.

Existing Conditions

The following sections describe the environmental setting for hydrology and water quality within the project area.

Regional Hydrology

The proposed project is located within Los Angeles County, which is within the South Coast Hydrologic Region (DWR 2003). The coastline between Point Conception and the Mexican border is generally oriented from northwest to southeast. Over time, the continental margin has been slowly emerging, causing a predominantly shear coastline broken by plains around the cities of Oxnard-Ventura, Los Angeles, and San Diego. The SWRCB divides surface watersheds in California into management areas based on political and physiographic boundaries. The proposed project is located within the San Gabriel Hydrologic Unit. Water quality in the project area is regulated by the RWQCB (LARWQCB 2014).

The coastal plains within this region have a Mediterranean climate with mild rainy winters and warm dry summers, while the inland slopes and basins have more extreme temperatures and less precipitation. These variations of climate within the region can be attributed to variable topography. Prevailing winds from the west and northwest carry moist air from the Pacific Ocean over 35 miles inland until it is forced upward by the San Gabriel Mountains, which are located north of the project area. The resulting rainfall occurs mostly between November and March, followed by dry summer months. The average annual rainfall for Los Angeles County is 15.7 inches (39.9 cm). However, large variations exist within Los Angeles County also, as indicated by average annual rainfall of 34.2 inches (86.9 cm) at Cogswell Dam in the San Gabriel

Mountains and average annual rainfall of 13.71 inches (34.82 cm) for the coastal plain part of Los Angeles County. The majority of the coastal region drains via short streams, which support flows during precipitation events; however, only a limited portion of stormwater runoff actually reaches the ocean directly (LARWQCB 2014).

Surface Water

The proposed project is located within the San Gabriel River Watershed (watershed), which is the easternmost watershed located within the Los Angeles Basin. The San Gabriel River receives drainage from a 689 square mile area of eastern Los Angeles County and has a channel length of approximately 58 miles. The San Gabriel River's headwaters originate in the San Gabriel Mountains with the East, West, and North Forks. The river empties to the Pacific Ocean at the Los Angeles and Orange County border in the City of Long Beach. The primary tributaries of the San Gabriel River are the Big Dalton Wash, Little Dalton Wash, San Dimas Wash, Walnut Creek, San Jose Creek, Fullerton Creek, and Coyote Creek (LARWQCB 2000) (**Figure 3.2-1**).

Surface Water Hydrology

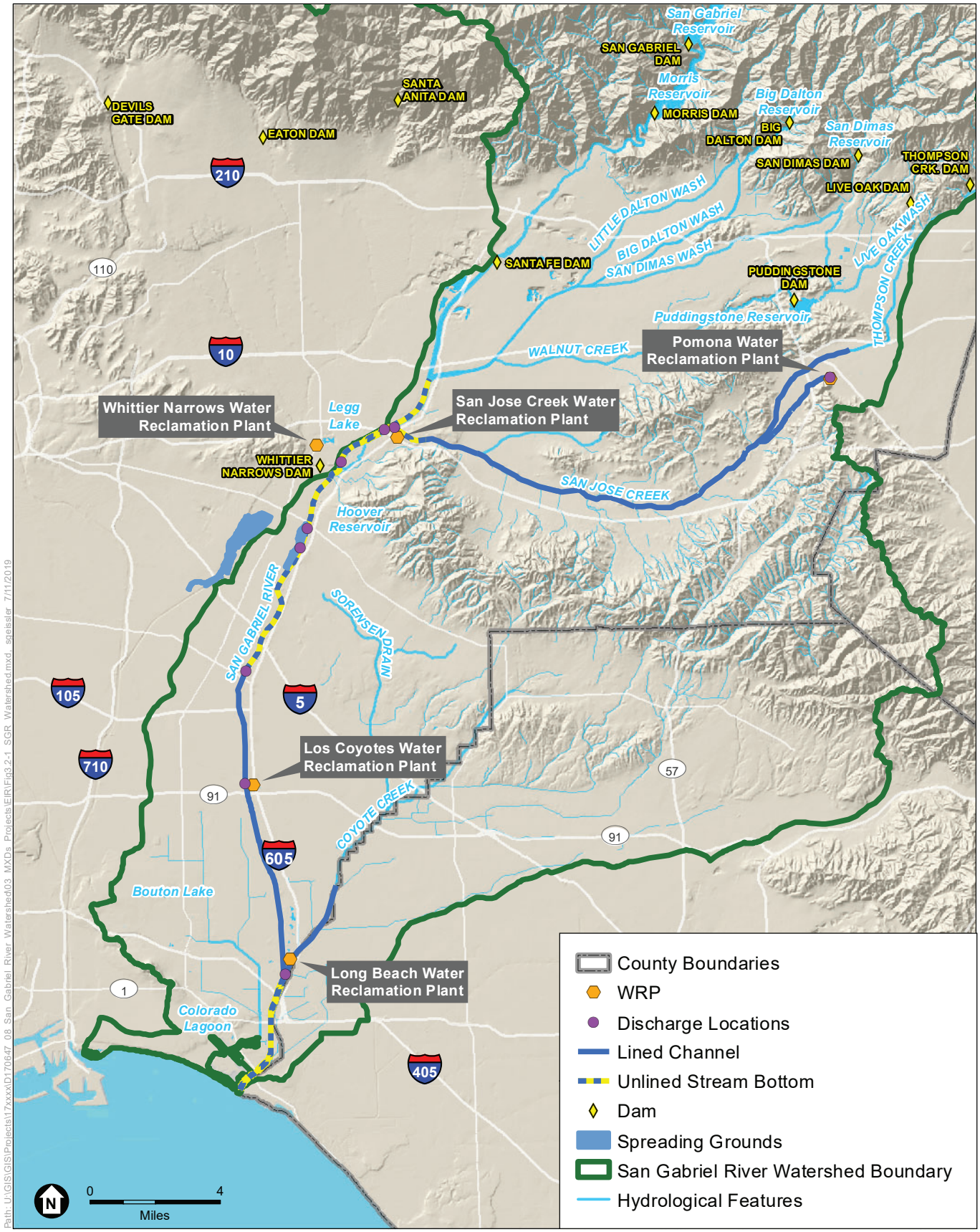
The Upper Watershed

The watershed consists primarily of undisturbed riparian and woodland habitats within the San Gabriel Mountains. This upper portion contains a series of reservoirs and flood control dams including: Cogswell, San Gabriel, and Morris. Cogswell Dam is located 22 miles north of the City of Azusa on the west fork of the San Gabriel River. The San Gabriel Dam is located 7.5 miles north of the City of Azusa on the San Gabriel River. Morris Dam is located 5 miles north of the City of Azusa on the San Gabriel River (LARWQCB 2000).

Santa Fe Dam

The San Gabriel River flows from San Gabriel Canyon and into the San Gabriel Valley through the Santa Fe Dam, approximately 4 miles downstream from the mouth of the San Gabriel Canyon. The Rio Hondo, a distributary of the San Gabriel River, branches from the San Gabriel River just below Santa Fe Dam and flows westward to Whittier Narrows Reservoir. From Whittier Narrows Reservoir, the San Gabriel River flows south to the Pacific Ocean (LARWQCB 2000).

The Santa Fe Dam provides flood protection to downstream communities along the San Gabriel River between the Santa Fe Dam and Whittier Narrows Dam. The spreading grounds are west of the San Gabriel River within the northwest portion of the Santa Fe Reservoir. The Santa Fe Spreading Grounds receives controlled releases from Morris Dam; seasonal local flows originating in San Gabriel Canyon and imported water releases from the Upper San Gabriel Valley Municipal Water District's and San Gabriel Valley Municipal Water District. The spreading grounds recharge water to the Main San Gabriel Basin underlying the San Gabriel Valley. The Groundwater Section below contains more information about the Main San Gabriel Basin (LARWQCB 2000).



SOURCE: ESRI.

San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse

Figure 3.2-1
San Gabriel River Watershed System

ESA

The Area Between Santa Fe and Whittier Narrows Dams

The San Gabriel River is a soft-bottomed channel between the Santa Fe Dam and the Whittier Narrows Basin. Walnut Creek, a tributary to the San Gabriel River is located above the Whittier Narrows area. San Jose Creek, a soft-bottomed channel, is located downstream of Walnut Creek. This creek's dry-weather flow is dominated by tertiary-treated effluent from the Pomona WRP. San Jose Creek enters the San Gabriel River upstream of the Whittier Narrows area (LARWQCB 2000).

Whittier Narrows Dam

Whittier Narrows Dam is a flood control and water conservation facility. The Whittier Narrows area is a natural gap in the hills that form the southern boundary of the San Gabriel Valley. The Rio Hondo and the San Gabriel River flow through this gap and are impounded by the reservoir (LARWQCB 2000).

Recharge Areas Below Whittier Narrows

Downstream of the Whittier Narrows area, along the Rio Hondo and San Gabriel River, are large spreading grounds utilized for groundwater recharge. The stretch of San Gabriel River below the Whittier Narrows area overlies the Central Basin groundwater basin which contains a number of shallow and deep aquifers (the Silverado, the Sunnyside, and the Lynwood). These aquifers are recharged by underflow through the Whittier Narrows from the north and percolation from the San Gabriel River and the Rio Hondo, which flows into the Montebello Forebay just south of the Whittier Narrows. This surface and subsurface flow through the Whittier Narrows represents outflow from the upstream San Gabriel Basin. The San Gabriel River is soft-bottomed in this area, which allows for groundwater recharge at the San Gabriel Coastal Basin Spreading Grounds as depicted in Figure 2-2 of Chapter 2, *Project Description,* of this Draft EIR (LARWQCB 2000). The Rio Hondo in this area is a concrete channel lined below the Whittier Narrows. The spreading grounds are separate from the soft bottomed areas in the San Gabriel River.

The Montebello Forebay is an area managed by the Los Angeles County Department of Public Works. Recharge facilities are located immediately downstream of Whittier Narrows Dam, allowing infiltration into the groundwater basin. Reclaimed water supplements local surface water and imported water for replenishing the groundwater basin. The source of reclaimed water is from the Whittier Narrows, San Jose Creek, and Pomona WRPs (LARWQCB 2000). However, the Pomona WRP may only be a source of reclaimed water during wet weather and not during dry weather.

The Lower Watershed

Within the lower portion of the watershed, the San Gabriel River flows through a concrete-lined channel within an urbanized portion of Los Angeles County, before becoming a soft-bottom channel near the ocean in the City of Long Beach. The concrete-lined Coyote Creek joins the San Gabriel River in the City of Long Beach. The San Gabriel River meets the ocean within a rip-rap lined estuary channel that leads to the ocean south of the Long Beach Breakwater (LARWQCB 2000).

Existing Flow Regime

The Hydrology Report 2019 studied surface flows within the San Gabriel River, focusing on a portion of the project area where San Jose Creek meets the San Gabriel River within the vicinity of Whittier Narrows This focused r area supports the greatest area of potential surface flow and percolation, along with biological habitat linkages (refer to Section 3.1, *Biological Resources,* of this Draft EIR). The study area is where the San Jose Creek and Whittier Narrows WRPs discharge into earth-bottom sections of the San Gabriel River. Results of the Hydrology Report concluded that under existing conditions, the project area received variable surface water flows, most of which were unnatural sources. The existing surface flow sources in the San Gabriel River include the following:

- Groundwater upwelling from the San Jose Creek confluence with the San Gabriel River (natural);
- Treated effluent discharges from three WRPs above Whittier Narrows Dam (Pomona, San Jose Creek and Whittier Narrows) and two WRPs below the dam (Los Coyotes and Long Beach) (unnatural);
- Natural storm flow (natural);
- Urban runoff (unnatural);
- Imported water deliveries (unnatural)); and
- Conserved stormwater deliveries (unnatural).

Surface Water Quality

The quality of surface water is primarily a function of land uses in the project area. Pollutants and sediments are transported within the watershed by stormwater runoff that reaches streams, rivers, storm drains, and reservoirs. Local land uses influence the quality of the surface water within the San Gabriel Watershed through point source discharges (i.e., discrete discharge from a wastewater treatment plant) and nonpoint source discharges (e.g., storm runoff). Surface water quality relevant to the project area is described below.

The Basin Plan for the Los Angeles Region lists current beneficial uses for the key surface water features in the project area (Table 3.2-1). The Basin Plan specifies water quality objectives for all surface waters within the Los Angeles region (LARWQCB 2013). Additionally, the Basin Plan lists site specific water quality objectives for some surface waters in the region to protect a specific beneficial use or based on antidegradation policies. The type and concentration of substances in urban stormwater can vary considerably, both during a storm event and from event to event at any given area (depending on the intensity of rainfall), as well as from site to site within a given urban area (based on land use characteristics). Typical nonpoint source pollutants associated with urbanized areas are described below by major categories:

- **Sediment**: composed of tiny soil particles that are washed (or blown) into surface waters. Sediment represents the major pollutant by volume in surface water and construction sites are the largest source of sediment for urban areas under development. As such, sediment is a primary pollutant regulated under Construction General Permits (the proposed project is not subject to the Construction General Permit [CGP] because there would be no construction). Fine sediment may be suspended in water, increasing turbidity.

- **Nutrients**: Nutrients can cause algal blooms and excessive vegetative growth, especially phosphorous and nitrogen. Nutrient export is typically greatest from development sites with the most impervious areas.
- **Trace Metals**: Trace metals can cause toxic effects on aquatic life and can contaminate drinking water supplies. The most common trace metals found in urban runoff are lead, zinc, and copper. A large fraction of the trace metals in urban runoff are attached to sediment; this effectively reduces the level, which is immediately available for biological uptake and subsequent bioaccumulation. Metals associated with sediment settle out rapidly and accumulate in the soils.
- **Oxygen-demanding Substances**: Aquatic life is dependent on the concentration of dissolved oxygen in the water. When organic matter is consumed by microorganisms, dissolved oxygen is consumed in the process. A rainfall event can deposit large quantities of oxygen demanding substance in lakes and streams. Low dissolved oxygen levels result when the rate of oxygen-demanding material exceeds the rate of replenishment.
- **Bacteria**: Bacteria levels in undiluted urban runoff exceed public health standards for water contact recreation almost without exception. The coliform bacteria that are detected may not be a health risk by themselves, but are often associated with human pathogens.
- **Oil and Grease**: Oil and grease contain a wide variety of hydrocarbons, some of which could be toxic to aquatic life in low concentrations. Hydrocarbons have a strong affinity for sediment and quickly become adsorbed to it. The major source of hydrocarbons in urban runoff is through leakage of oil and other lubricating agents from automobiles. Hydrocarbon levels are highest in the runoff from parking lots, roads, and service stations.
- **Other Toxic Pollutants**: Priority pollutants are generally related to hazardous wastes or toxic chemicals and can be sometimes detected in stormwater.

Various reaches of the San Gabriel River are on the 303(d) list due to nitrogen and its effects, trash, PCBs and pesticides, metals, coliform and other impairments. **Table 3.2-2** summarizes the impaired water bodies on the LARWCQB 2018 Clean Water Act Section 303(d) list within the San Gabriel River Watershed.

TABLE 3.2-2
SAN GABRIEL RIVER WATERSHED IMPAIRED WATERS

Water Quality Limited Segment Name	Pollutant
Coyote Creek	Coliform Bacteria
	Copper, Dissolved
	Diazinon
	Lead
	pH
	Toxicity
	Zinc
	Ammonia[1]
Crystal Lake	Organic Enrichment/Low Dissolved Oxygen
El Dorado Lakes	Algae
	Ammonia
	Copper
	Eutrophic
	Lead
	Mercury (tissue)
	pH

Water Quality Limited Segment Name	Pollutant
San Gabriel River Estuary	Copper
San Gabriel River Reach 1 (Estuary to Firestone)	Coliform Bacteria pH
San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam	Coliform Bacteria Lead
San Jose Creek Reach 1 (SG Confluence to Temple St.)	Coliform Bacteria Selenium Toxicity Ammonia[1]
San Jose Creek Reach 2 (Temple to I-10 at White Ave.)	Coliform Bacteria
Santa Fe Dam Park Lake	Copper Lead pH

1 Enforceable Programs
2 San Gabriel East Fork Trash TMDL, 2000
Source: LARWQCB 2018a

The watershed has various surface water quality objectives outlined within the Basin Plan (**Table 3.2-3**, below) and six TMDLs from 2001 to 2016 for trash in the San Gabriel River, East Fork, metals and bacteria (LARWCQB 2011; 2013; 2018b).

TABLE 3.2-3
WATER QUALITY OBJECTIVES FOR SELECTED CONSTITUENTS IN INLAND SURFACE WATERS[2]

WATERSHED/STREAM REACH[a]	TDS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Boron (mg/L)	Nitrogen (mg/L)	SAR (mg/L)
San Gabriel River Watershed						
San Gabriel River-between Valley Blvd and Firestone Blvd. Includes Whittier Narrows Flood Control Basin, and San Jose Creek-downstream 71 Freeway only.	750	300	180[b]	*1.0*	8	g
San Jose Creek and tributaries-upstream 71 Freeway.	750	300	150	*1.0*	8	g
San Gabriel River-Between Firestone Blvd. and San Gabriel River Estuary (downstream from Willow Street) Includes Coyote Creek.	*no waterbody specific objectives*					
All other minor San Gabriel Mountain streams tributary to San Gabriel Valley[c]	300	40	15	[d]	[e]	[d]

2 As part of the State's continuing planning process, data will continue to be collected to support the development of numerical water quality objectives for waterbodies and constituents where sufficient information is presently unavailable. Any new recommendations for water quality objectives will be brought before the Regional Board in the future.

WATERSHED/STREAM REACH[a]	TDS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Boron (mg/L)	Nitrogen (mg/L)	SAR (mg/L)

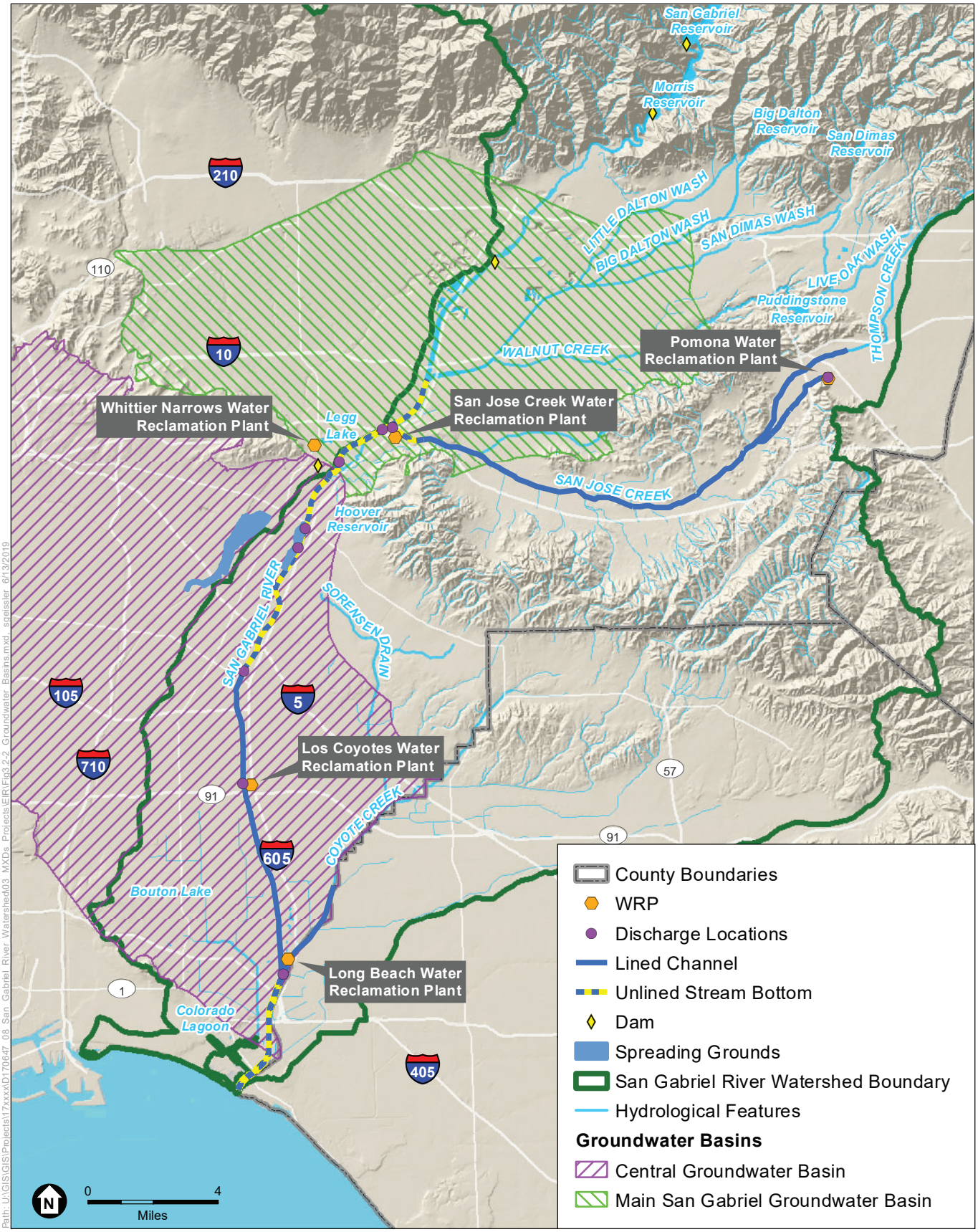
Note: Reaches are in upstream to downstream order.
a. All references to watersheds, streams and reaches include all tributaries. Water quality objectives are applied to all waters tributary to those specifically listed in the table.
b. These objectives were updated through a Basin Plan amendment adopted by the Regional Board on January 27, 1997 (Resolution No. R97-02) and went into effect on February 26, 1998.
c. This objective was updated though a Basin Plan amendment adopted by the Regional Board on November 6, 2003 (Resolution No. R03-015) and went into effect on August 4, 2004.
d. Agricultural supply is not a beneficial use of the surface water in the specific reach.
e. Site-specific objectives have not been determined for these reaches at this time. These areas are often impaired (by high levels of minerals) and there is not sufficient historic data to designate objectives based on natural background conditions. The following table illustrates the mineral or nutrient quality necessary to protect different categories of beneficial uses and will be used as a guideline for establishing effluent limits in these cases. Protection of the most sensitive beneficial use(s) would be the determining criteria for the selection of effluent limits.

		Beneficial Use Categories			
Recommended objective (mg/L)	**MUN (Drinking Water Standards)[1]**	**PROC**	**AGR**	**AQ LIFE*(Frshwtr)**	**GWR**
TDS	500 (USEPA secondary MCL)	50-1500 [2,7,9]	450-2000 [2,3,6]		Limits based on Appropriate groundwater basin objectives and/or beneficial uses
Chloride	250 (USEPA secondary MCL)	20-1000 [2,9]	100-355 [2,3,8]	230 (4 day ave. continuous conc) [4]	
Sulfate	400-500 (USEPA proposed MCL)	20-300 [2,9]	350-600 [2,8]		
Boron			0.5-4.0 [2,6,8]		
Nitrogen	10 (USEPA MCL)				

SAR: Sodium Absorption Ratio
SOURCE: LARWQCB 2013

Groundwater

The project area consists of two groundwater basins, the Main San Gabriel Basin and the Central Basin (**Figure 3.2-2**) (DWR 2003; 2019a). To address overdraft of the basins (where pumping exceeds safe yield), the basins were adjudicated and groundwater pumping within the basins is managed by watermasters further described below (DWR 2003). When multiple parties withdraw water from the same aquifer, the aquifer may become overdrafted resulting in water supply conflicts among users. Through adjudication, the courts assign quantified water rights to specific water users and compel the cooperation of those who might otherwise refuse to limit their pumping of groundwater. Watermasters are appointed by the court to ensure that pumping conforms to the limits defined by the adjudication.



SOURCE: ESRI.

San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse

Figure 3.2-2
Groundwater Basins

ESA

Groundwater Hydrology

Main San Gabriel Basin

The Main San Gabriel basin underlies the San Gabriel Valley located in the southeastern portion of Los Angeles County. The basin covers a surface area of approximately 167 square miles and is bounded by the San Gabriel Mountains on the north, the Raymond fault on the northwest, a system of low rolling hills (Repetto, Merced, Puente, and San Jose Hills) on the west and south, and bedrock high between San Dimas and La Verne on the east. The basin is split into two subareas: the Western Area, and the Eastern Area which are demarcated by a series of streams (Walnut Creek, Big Dalton Wash and Little Dalton Wash). The basin is filled with permeable alluvial deposits (water-bearing formations) and underlain and surrounded by relatively impermeable rocks (nonwater-bearing formations). It also contains many geological features and faults that influence groundwater movement into, through and within the basin (LARWQCB 2016; DWR 2004a; Main San Gabriel Basin Watermaster 2018).

The basin ground surface slopes downward from approximately 1,200 feet above mean sea level (msl) in the San Dimas area, 850 feet msl in the Pomona area on the east, and 600 feet msl in the Alhambra area on the west to approximately 200 feet msl in the Whittier Narrows area on the southwest. The basin surface water system consists of two major streams: the San Gabriel River and the Rio Hondo that each have segments of concrete-lined channel and segments of soft-bottomed channels which allow surface water to percolate into the basin (LARWQCB 2016; DWR 2004a; Main San Gabriel Basin Watermaster 2018).

The basin is recharged from rainfall, irrigation, artificial recharge with local stormwater and untreated imported water, recycled water discharges, and subsurface inflow. **Table 3.2-4** summarizes the source waters to the basin. Groundwater outflow from the San Gabriel Valley Basin includes pumping and subsurface outflow to the Central Basin through Whittier Narrows.

TABLE 3.2-4
CONTRIBUTIONS OF SOURCE WATERS TO THE MAIN SAN GABRIEL BASINS

Type	Source	Contribution To Groundwater
Surface water	San Gabriel River, San Jose Creek and Rio Hondo	Infiltration of surface waters in unlined portions of the San Gabriel River, San Jose Creek and Rio Hondo.
Recycled Water	Tertiary-treated recycled water from Sanitation Districts' WRPs	Percolation to the groundwater basin from surface uses, such as irrigation. Incidental percolation of water discharged into the unlined portions of the San Gabriel River and San Jose Creek as recycled water from the San Jose Creek Wastewater Reclamation Plant and Pomona Wastewater Reclamation Plant comingles with local stormwater in the River.
Stormwater	Precipitation from overlying area	Percolation of precipitation on the Valley floor and percolation of runoff from surrounding watersheds. Artificial recharge of groundwater by direct spreading of local runoff to spreading grounds.

Type	Source	Contribution To Groundwater
Imported water	State Water Project (SWP)	Surface water from the State Water Project is imported by the Upper District, the San Gabriel Valley Municipal Water District (San Gabriel District), and Three Valleys Municipal Water District (Three Valleys District) for artificial groundwater recharge through spreading grounds.
	Upper District and Three Valleys Municipal Water District (Three Valleys District)	Water supply in the Main San Gabriel Basin area
Groundwater	Subsurface from the Raymond Basin	Water supply and irrigation in the Main San Gabriel Basin area
	Puente Basin	Subsurface inflow from adjacent Puente Basin
	Raymond Basin	Subsurface inflow from the Raymond Basin
	San Gabriel Mountains	Subsurface inflow from the San Gabriel Mountains on the north, as a result of stored water moving out of fractures in the Basement Complex into the alluvial fill
	Hills south of the basin	A negligible quantity of water may enter the valley from the hills on the south

SOURCE: LARWQCB 2016

The management of the local water resources within the basin is based on watermaster services under two Court Judgments: San Gabriel River Watermaster (River Watermaster) and Main San Gabriel Basin Watermaster (Basin Watermaster). The Basin Watermaster was created in 1973 to resolve water issues that had arisen among water users in the San Gabriel Valley. The Watermaster is headed by a nine-member board nominated by the Upper San Gabriel Valley Municipal Water District (Upper District) and the San Gabriel Valley Municipal Water District (San Gabriel District) (DWR 2003; 2004a; Main San Gabriel Basin Watermaster 2018). The San Gabriel Watermaster coordinates efforts with the Upper District, San Gabriel District, Three Valleys Municipal Water District (Three Valleys District), Metropolitan Water District of Southern California, the Sanitation Districts, the Los Angeles County Department of Public Works, and local water companies and state and federal regulatory agencies (in coordination with the Upper District) to replenish the groundwater supplies (LARWQCB 2016; DWR 2004a; Main San Gabriel Basin Watermaster 2018).

Central Basin

The Central Basin is located in the southern portion of Los Angeles County. The Central Basin covers approximately 280 square miles and is hydrogeologically divided into four subareas: the Los Angeles Forebay; Montebello Forebay; Whittier Narrows; and Pressure Area. The forebays are areas where confining layers are thin or absent and infiltration rainfall and surface water can recharge aquifers of depth to support potable water supply. The aquifers are generally confined by relatively impermeable clay layers over most of the area, but areas of semi-permeable confining layers allow some interaction between the aquifers. The Montebello Forebay is the most significant area of recharge in the Central Basin (DWR 2003; 2004b).

The basin receives water for use and recharge from surface water/stormwater, imported water, groundwater, and recycled water. Other minor potential sources of groundwater recharge include leaking pipes, septic systems, and stream losses (not associated with managed aquifer recharge). Most of the groundwater in the Central Basin remains at an elevation below sea level due to historic overpumping, so maintaining the seawater barrier wells to keep out the intruding saltwater is of vital importance (WRD 2016). **Table 3.2-5**, below summarizes the source waters to the basin.

TABLE 3.2-5
CONTRIBUTIONS OF SOURCE WATERS TO THE CENTRAL BASIN

Type	Source	Contribution To Groundwater
Surface water	Los Angeles River	Negligible - lined throughout most of the overlying area
	Rio Hondo	Negligible - lined throughout the overlying area
	San Gabriel River	In-stream recharge along the San Gabriel River in the Montebello Forebay
Storm water	Precipitation from overlying area	Active capture and recharge through replenishment operations the MFSG, as well as stormwater retention basins and LID projects in the area
Imported water	Colorado River (CR) and State Water Project (SWP)	Applied to the Montebello Forebay spreading grounds (Untreated imported water)
		Injection into the three seawater intrusion barriers (Treated Imported Water)
	Owens Valley-Mono Basin	Water supply in the CBWCB
	Groundwater extracted from the San Gabriel Basin	Water supply in the CBWCB
Groundwater	Extracted from the CBWCB	Water supply and irrigation (small percentage)
	Subsurface flow from adjacent groundwater basins and minor ocean water inflow	Recharge of the CBWCB
Recycled Water	Pomona, San Jose Creek, and Whittier Narrows Water Reclamation Plants (WRPs)	Managed Aquifer Recharge in the Montebello Forebay
	Tertiary-treated recycled water from Long Beach, Los Coyotes, and San Jose Creek WRPs	Irrigation and commercial/industrial applications in the Central Basin
	Advanced Water Treatment (AWT) recycled water produced by the Leo J. Vander Lans Advanced Water Treatment Facility	Injected at the Alamito Barrier Project (ABP)

SOURCE: LARWQCB 2016

Groundwater outflow from the Central Basin includes: pumping, including extraction associated with the de-salters; subsurface outflow to adjacent basins and the ocean; and groundwater discharge to surface water.

Declining water from groundwater levels due to groundwater pumping, seawater intrusion, and other groundwater management problems related to supply and quality led to the courts adjudicating the basin in the early 1960s. Since the adjudicated groundwater production is substantially higher than the basin's natural recharge, WRD manages, regulates, and replenishes the basin, and annually determines the amount of supplemental recharge that is needed. The basin's artificial replenishment, which is the responsibility of WRD, occurs through a mix of imported water and recycled water. Additionally, the Los Angeles County Department of Public Works owns and maintains a seawater barrier system. Along with the WRD, Los Angeles County Department of Public Works determines how much barrier injection water is required to maintain protective levels to protect the aquifer from seawater intrusion (DWR 2003; 2004b; WRD 2016).

Various management measures, summarized in **Table 3.2-6**, below, have been incorporated to provide reliable groundwater supply, water quality, and prevent seawater intrusion within the Central Basin.

TABLE 3.2-6
HISTORICAL CENTRAL BASIN MANAGEMENT MEASURES

Management Measure	Function
Montebello Forebay Spreading Grounds (MFSG)	To provide artificial groundwater recharge. Water is comprised of stormwater (since 1930s), imported water (since 1950s), and recycled water (since 1960s).
Alamitos Barrier Project (ABP)	To create a pressure ridge or subsurface water wall to block further seawater intrusion through a series of injection wells constructed by Los Angeles County (LAC) along the southern coast of the Central Basin in the 1960s. Currently, treated imported water and advanced treated recycled water are injected.

SOURCE: LARWQCB 2016

Groundwater Quality

Main San Gabriel Basin

Groundwater quality data obtained from the Basin Watermaster, RWQCB and the USEPA were evaluated from 2001-2002 through 2011-2012 to understand water quality conditions of the basin. Results showed concentrations of nitrate, chloride and sulfate generally found in shallow wells, while low concentrations were found in wells adjacent to streams or spreading grounds. Concentrations of nitrate, chloride, sulfate and TDS were below the water quality objectives and assimilative capacity was available for all constituents. Data has shown decreasing trends for nitrate concentrations within the basin, and increasing trends for chloride, sulfate, and TDS. (LARWQCB 2016; DWR 2004a; Main San Gabriel Basin Watermaster 2018).

During the late 1970s and early 1980s, significant groundwater contamination was discovered in the basin. The contamination was caused in part by past practices of local industries that had improperly disposed of industrial solvents referred to as Volatile Organic Compounds (VOCs) as well as by agricultural operations that infiltrated nitrates into the groundwater. In 1989, local water agencies adopted a joint resolution regarding water quality issues that stated the Basin Watermaster should coordinate groundwater activities and adoption of a cleanup plan. In 1991, the Court granted the Basin Watermaster authority to control pumping within the basin. The

Basin Watermaster responsibilities included development of a Five-Year Water Quality and Supply Plan, to be updated annually for the RWQCB.

Central Basin

Groundwater quality in Central Basin is affected by surface contamination and seawater intrusion. As a highly urban area, commercial and industrial activities have resulted in environmental releases due to leaking aboveground and underground storage tanks, leaking oil pipelines, spills, and illegal discharges. WRD, in coordination with other local and state agencies routinely monitor and regulate the basin for water quality constituents. WRD compiles all water quality results in databases and reports annually. Recent reporting shows decreased levels of contamination throughout the basin (WRD 2018). Groundwater quality data obtained from monitoring wells in the Central Basin found concentrations of nitrate, chloride, sulfate and TDS below the water quality objectives and assimilative capacity was available for all constituents. (LARWQCB 2016; DWR 2004b).

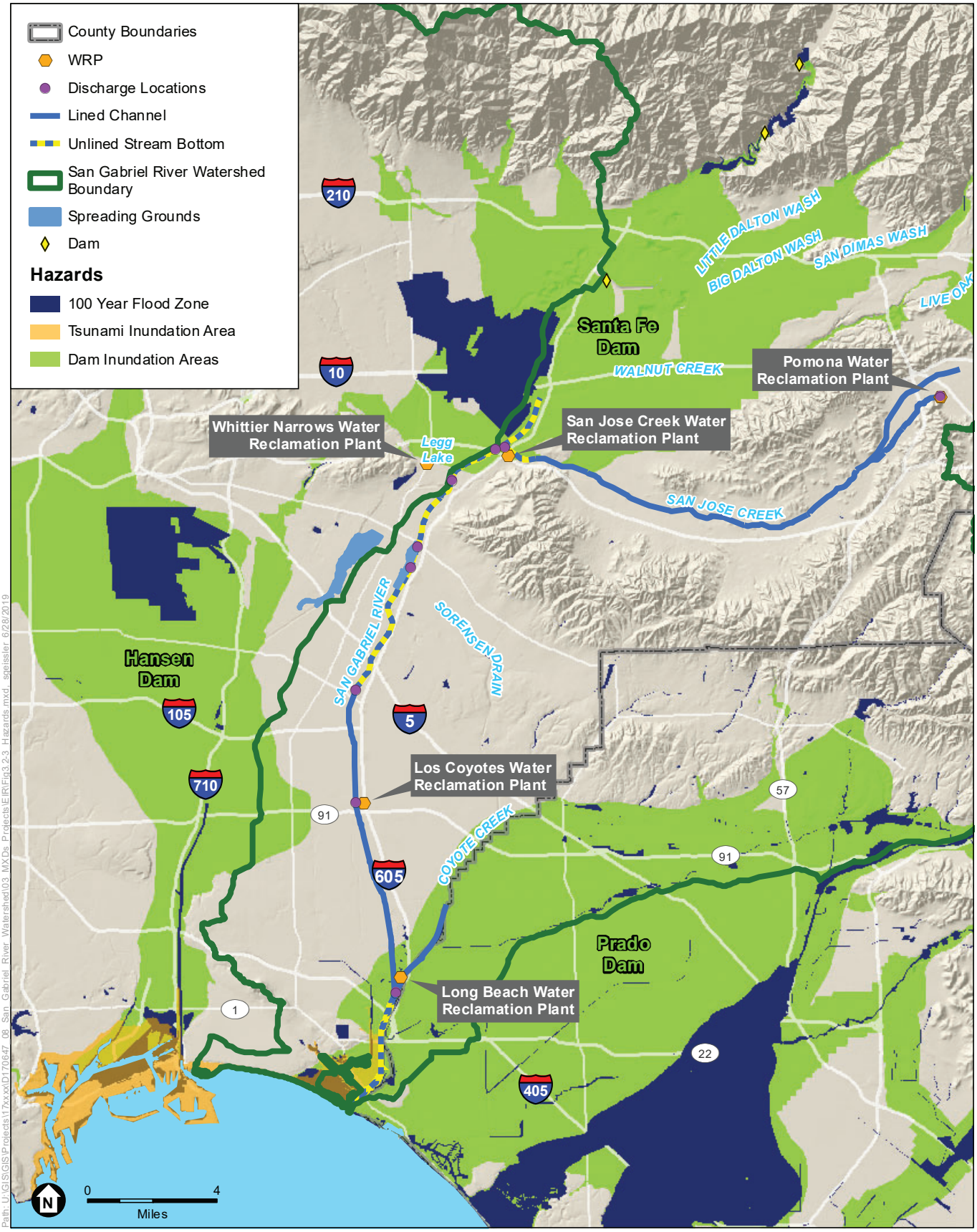
Flood Hazards

FEMA identifies areas throughout the United States that are at risk for flooding. The FEMA FIRM identifies areas that have a 1 percent or greater risk (100-year flood area) of being inundated by a flood event in a given year. Portions of the 100-year flood hazard zone in the project areas are shown in **Figure 3.2-3**. Because various segments of the San Gabriel River and San Jose Creek are channelized and concrete-lined, the corresponding flood zones are narrow and contained within those areas. Other project areas are located in FEMA flood hazard Zone X, representing areas of minimal flood hazard not subject to NFIP requirements outside of an identified Special Flood Hazard Area.

Tsunami, Seiche, and Dam Inundation

Coastal areas can be at risk of flooding from a tsunami. A tsunami is a wave or series of waves generated by an earthquake, landslide, volcanic eruption, or even large meteor hitting the ocean (CDC 2019a). On shore run-up of a tsunami can cause substantial damage and property loss. Areas around the San Gabriel River Estuary are susceptible to the effects of near-field (near-vicinity) tsunamis from sources such as a submarine (underwater) landslide and/or a large earthquake on any of the nearby faults. The California Emergency Management Agency (CalEMA) has identified the tsunami inundation hazard zone for coastal areas of the State, including Los Angeles County (CDC 2019b) (Figure 3.2-3).

Flooding as a result of a seiche or dam failure can also pose flood hazards. A seiche is caused by oscillation of the surface of a large enclosed or semi-enclosed body of water due to an earthquake or large wind event. Flooding from dam failure can result from both natural and human causes, including earthquakes, erosion, improper siting and/or design, and rapidly rising floodwater during heavy storms. The type of failure, ranging from instantaneous to gradual, is dependent on the building material of the dam. The project area is within the dam inundation areas of the dams in the upper watershed (Figure 3.2-3).



SOURCE: ESRI.

San Gabriel River Watershed Project to Reduce River Discharge in Support of Increased Recycled Water Reuse

Figure 3.2-3
Flood Zones/Hazards within the Project Area

ESA

The nearest dam to the project site, is the Whittier Narrows Dam, located at the Whittier Narrows on the San Gabriel River and Rio Hondo. The zoned earth Dam includes three embankments with a combined crest length of 16,960 feet. The design elevation of the crest is 239 feet with a maximum height of 55 feet above the Rio Hondo streambed. The capacity of the reservoir at an elevation of 229 feet is 37,491 acre-feet. The San Gabriel River and Rio Hondo flow through the reservoir and flood flows are constrained by the Dam. At the Whitter Narrows Dam, the outlet works discharge into the Rio Hondo while the spillway discharges into the San Gabriel River. The San Gabriel River discharges into the Pacific Ocean approximately 21 miles downstream of the Dam (USACE 2019).

3.2.3 Project Impacts

Methodology

Hydrology and water quality information for the project area was derived from the Hydrology Report 2019 (refer to Appendix E1) and the Hydrology Report 2018 (refer to Appendix E2) and various sources, then compiled in this section to develop a comprehensive understanding of the potential for adverse hydrologic and water quality impacts associated with implementation of the proposed project.

Thresholds of Significance

For the purposes of this Draft EIR and consistency with Appendix G of the *CEQA Guidelines*, applicable local plans, and agency and professional standards, the project would have a significant impact on hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- 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:
  - result in substantial erosion or siltation on- or off-site;
  - substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
  - create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
  - impede or redirect flood flows;
- In flood hazard, tsunami, or seiche zones, risk or release of pollutants due to project inundation; and
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Analysis of Project Impacts

Impact HYDRO 3.2-1: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

The Sanitation Districts is proposing to incrementally reduce discharges of recycled water from five WRPs including the San Jose Creek WRP, the Pomona WRP, the Whittier Narrows WRP, the Los Coyotes WRP, and the Long Beach WRP, each of which currently discharges into the San Gabriel River or its tributaries: San Jose Creek and/or Coyote Creek. While the proposed reduction in recycled water discharges would occur over time, the treatment process and discharge requirements for effluent for the five WRPs would not change pursuant to the NPDES permit covering each WRP. Effluent limitations imposed by the NPDES discharge permits would not change. Therefore, tertiary-treated effluent that would continue to be discharged from the five WRPs to San Jose Creek and San Gabriel River would not violate water quality standards, existing waste discharge requirements under the NPDES, or otherwise substantially degrade surface or groundwater quality. Impacts would be less than significant.

Under the proposed project, the Sanitation Districts would be required to submit one Wastewater Change Petition pursuant to California Water Code Section 1211 to change the place and purpose of use of recycled water, while maintaining sensitive habitat supported by historic effluent discharges. A total of four petitions will be submitted one each for the San Jose Creek WRP, the Pomona WRP, the Los Coyotes Creeks WRP, and the Long Beach WRP. Impacts to water quality in the receiving water and groundwater would be less than significant.

Cumulative Impacts

The majority of planned and approved projects (cumulative projects) listed in Table 3-1 of this Draft EIR would not degrade surface or groundwater quality because they do not include construction activities or implementation of facilities that would discharge water. These projects' cumulative impacts to water quality include contributions from sedimentation, urban runoff, and effluent discharges.

The implementation of new recycled water programs could result in the construction of recycled water facilities such as pipelines, reservoirs and pump stations (e.g. Southeast Water Reliability Project [SWRP]). During such activities, soils could be exposed to the effects of wind and water erosion causing sedimentation in stormwater runoff. These cumulative projects within the project vicinity could result in temporary impacts to surface hydrology and water quality. However, all related projects above one acre would be subject to federal, state, and local regulations regarding implementation of BMPs under the CGP and Storm Water Pollution Prevention Plan (SWPPP). Therefore, cumulative projects are not expected to contribute to a violation of water quality standards, waste discharge requirements, or otherwise substantially degrade water quality during construction.

Many cumulative projects listed in Table 3-1, such as the Gateway Cities Recycled Water Expansion, include new or expanded connections and supply of recycled water for various needs, such as irrigation for parks and schools within the project vicinity. All cumulative projects,

depending on the nature of operations, must comply with the appropriate NPDES discharge regulations, WDR/WRR, and/or MS4 permits when becoming a new or expanded customer. As described in Chapter 2, *Project Description*, of this Draft EIR, the Sanitation Districts prepared a Handbook outlining general rules, regulations, and guidelines regarding the safe use of tertiary recycled water within the Los Angeles Basin. In conjunction with other resources such as the CA Water Reuse Association's Manual, cumulative projects are not expected to contribute to a violation of water quality standards, waste discharge requirements, or otherwise substantially degrade water quality during operations.

The proposed project does not include any construction activities or implementation of facilities that could temporarily impact surface or groundwater quality. The proposed project would incrementally decrease the discharge of recycled water from the five WRPs to San Gabriel River or its tributaries: San Jose Creek and/or Coyote Creek. No changes to the treatment of the water would occur and therefore, the proposed project would not violate water quality standards, existing waste discharge requirements under the existing NPDES, or otherwise substantially degrade surface or groundwater quality. Therefore, the project's incremental contribution to potential cumulative impacts associated with water quality and waste discharge requirements within the project area would not be cumulatively considerable.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant

Impact HYDRO 3.2-2: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Discharges from the Pomona WRP, San Jose Creek WRP, and Whittier WRPs percolate into the underlying groundwater basin. This percolation contributes to groundwater supplies; therefore, the proposed project would reduce river-bottom recharge into the southern-most edge of the San Gabriel Basin. A recent study prepared by the Basin Watermaster estimated the impacts to groundwater conditions that could be expected from the reduced discharges using the Basin Watermaster's groundwater model (Stetson 2019) (refer to Appendix E3). The results of the study concluded that the proposed discharge reductions would result in negligible loss of storage or subsurface basin flows and that groundwater levels could be reduced by up to 0.5 percent of baseline conditions. Based on the results of the study and the small effect of the project on the San Gabriel Basin compared with other contributing factors of groundwater recharge and pumping, the proposed project would not significantly decrease groundwater supplies or interfere substantially with groundwater recharge.

The Main San Gabriel and Central basins above and below the Whittier Narrows area are adjudicated, limiting extraction volumes by authorized pumpers within limits imposed by the Main San Gabriel Basin Watermaster and WRD. Groundwater levels fluctuate annually

depending on the hydrologic year (refer to Appendix E1, Hydrology Report 2019 and Appendix E2, Hydrology Report 2018). During wet years, groundwater levels rise. Groundwater levels at the Whittier Narrows, along with other aquifers in the project area, would continue to be monitored and managed by the Main San Gabriel Basin Watermaster and WRD to maximize storage and supply benefits to the region as is currently the case. The proposed project provides regional water agencies more flexibility and maximizes the benefits of the local water supplies.

Further, a portion of the recycled water that would not be discharged to the San Gabriel River would be conveyed and used to recharge the Central Basin as part of the Albert Robles Center for Water Recycling & Environmental Learning (ARC) implemented by WRD. The purpose of the ARC is to reduce and eliminate the current use of imported water for groundwater replenishment, replacing that water with local alternative sources (WRD 2019). The Montebello Forebay is the most significant area of recharge within the project area, and the proposed project would directly contribute recycled water to be delivered to the San Gabriel Coastal Spreading Grounds (Figure 2-2) within this forebay, which percolates into the Central Basin. Therefore, the proposed project would continue to recharge the basin and assist the region in meeting potable demands.

The proposed project would not substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Impacts would be less than significant.

Cumulative Impacts

Cumulative projects and programs listed in Table 3-1 that involve or could involve groundwater extraction for the purpose of supplying new areas/customers with water could result in potentially significant cumulative impacts to groundwater in the Main San Gabriel and Central Basins. Some of these cumulative projects include the Long Beach Water Department, Recycled Water System Expansion Program, and La Puente Valley County Water District Recycled Water Project (refer to Table 3-1). However, potentially significant cumulative impacts to groundwater availability and quality would be avoided through effective groundwater monitoring and management overseen by the Main San Gabriel Basin Watermaster. Both groundwater basins (Main San Gabriel and Central) are adjudicated and overseen by the Main San Gabriel Watermaster and WRD. In addition, responsible agencies such as the San Gabriel Basin Water Quality Authority assist in preparing and implementing Groundwater Management Plans and other programs to establish operating guidelines and impact avoidance measures to ensure optimization of storage capacities and water quality protection.

Further, responsible agencies such as the Metropolitan Water District (MWD) and Los Angeles County Public Works work in conjunction with Watermasters to implement projects and programs to recharge and replenish groundwater levels within the Main San Gabriel and Central Basins. Specifically, the Regional Recycled Water Program (RRWP) further detailed in Table 3-1 would treat groundwater and directly recharge to the Main San Gabriel and Central basins. Additionally, reservoir and channel clearing activities (Table 3-1) routinely remove sediment and trash within water storage facilities and stormwater channels in order to conserve and clean water; while servicing multiple beneficial uses including groundwater recharge through surface water percolation in earth-bottom areas, and maintaining sustainable downstream habitat. Cumulative

projects would be implemented within the context of existing groundwater management constraints and opportunities.

Implementation of the proposed project would provide regional water agencies with necessary recycled water supplies to meet growing demand for recycled water, some of which future recycled water customers are detailed on Table 3-1. The proposed project would nominally contribute to cumulative groundwater availability impacts associated with the incremental reduction of discharges from five WRPs that contribute soft-bottom channel recharge within San Jose Creek and the San Gabriel River. Further, some of this recycled water would be used for recharge into the groundwater basin via the ARC pursuant to approved NPDES permits and in compliance with Title 22 regulations. The Main San Gabriel Watermaster and WRD have engaged in Integrated Regional Water Management (IRWM) since 1973 and 1959, respectively, in order to effectively manage the shared regional resources and minimize undesirable effects that have now become the focus of overarching the California Sustainable Groundwater Management Act (SGMA) regulations. As a result, given the historic practices and ongoing integrated management framework in place in the San Gabriel Valley Watershed, implementation of the proposed project would not contribute significantly to cumulative groundwater impacts.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant

Impact HYDRO 3.2-3: The proposed project would not 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 imperious surfaces, in a manner which would:

- **result in substantial erosion or siltation on- or off-site;**

The proposed project would not introduce impervious surfaces, built structures, or increase discharge volumes with a velocity that could substantially alter the existing drainage pattern of the project area in a manner which would result in substantial erosion or siltation. According to the results of the Hydrology Report 2019 and the Hydrology Report 2018, discharges from the San Jose Creek WRP and Pomona WRP have varied significantly over time. The proposed project would reduce the monthly average volume of discharges from each of the five WRPs. However, this reduction would not have the potential to cause substantial erosion or siltation. Thus, while the proposed project would alter the volume of water discharged to the San Gabriel River or its tributaries: San Jose Creek and/or Coyote Creek, it would not alter the drainage pattern of the site or surrounding area in a manner which would result in substantial erosion or siltation on- or off-site. Impacts would be less than significant.

Cumulative Impacts

Cumulative projects could result in impacts to drainage patterns within the project area, which may result in erosion or siltation within the project area. However, these cumulative projects

would occur many miles upstream of the proposed project and would not impact the same reach of the San Gabriel River. Further, these proposed projects, along with various construction projects would comply with the CGP and implement SWPPPs or other BMPs to reduce the amount of erosion or siltation to occur during activities or after such activities when more drainage/flows would occur. The proposed project would not result in erosion or siltation; therefore, the project's contribution to cumulative erosion or siltation within the project area would be less than cumulatively considerable.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant

- **substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**

As described above, the proposed project would not substantially alter the local drainage pattern of the project area. The proposed project does not include the construction of structures or impervious surfaces that would change the rate or amount of surface runoff from the project area. While the proposed project would alter the volume of water discharged to the San Gabriel River, or its tributaries: San Jose Creek and/or Coyote Creek, it would not increase the rate or amount of surface runoff or alter the drainage pattern of the site or surrounding area in a manner which would result in flooding on- or off-site. Thus, given that flows would be reduced under the proposed project, impacts in this regard would be less than significant.

Cumulative Impacts

Similar to cumulative impacts above, cumulative projects listed in Table 3-1, such as the La Mirada Extension have the potential to increase the rate or amount of surface runoff within the project area due to the implementation of impervious surfaces in areas where there is currently no development of recycled water facilities. However, cumulative projects would implement BMPs into their construction activities, and design drainage facilities to control surface runoff in a way such that flooding on or offsite would not occur. Therefore, it is not anticipated that cumulative development would result in potential impacts regarding flooding due to surface runoff. The proposed project would not result in any amount of surface runoff or alter existing drainage patterns of the project area; therefore, the proposed project's contribution to cumulative impacts would not be cumulatively considerable.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant

- **create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or**

As mentioned above, an increase in runoff would not occur as a result of the proposed project. Based on the projected reduction in discharges to the San Gabriel River, or its tributaries: San Jose Creek and/or Coyote Creek from the five WRPs, the capacity of existing or planned stormwater drainage systems would not be exceeded. In addition, the quality of treated effluent discharged would not change from that required by the Waste Discharge Requirements/Waste Recycling Requirements (WDRs/WRRs) for each of the five WRPs. Therefore, impacts to stormwater systems related to increased runoff volumes or polluted runoff would be less than significant.

Cumulative Impacts

Various cumulative projects would implement new or expanded stormwater drainage systems in order to capture more stormwater to be treated and recycled, or injected into the groundwater basin. During construction activities, some cumulative projects have the potential to contribute to runoff water that could exceed stormwater drainages or contribute pollutants to the runoff. However, as described above, cumulative projects would be required to implement BMPs during construction to control runoff, including runoff that contains pollutants like gasoline or oils from construction equipment. Also, all new stormwater drainages/systems must be designed in order to adequately capture new or increased flows under required permits. Therefore, cumulative projects are not expected to result in significant impacts regarding stormwater drainage. The proposed project would not increase runoff volumes or pollute runoff, nor would the proposed project need to expand existing stormwater drainage systems as WRPs' because effluent discharges would be decreased. Therefore, the proposed project's contribution to cumulative impacts would be less than cumulatively considerable.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant

- **impede or redirect flood flows.**

Local FEMA FIRMs show portions of the project area are located within the 100-year flood hazard zone (refer to Figure 3.2-3). However, because no permanent facilities would be implemented as a part of the proposed project, the proposed project would not involve infrastructure that could impede or redirect flows. Further, the proposed project would reduce the amount of discharges from the five WRPs and would not contribute to flows within flood areas. No impact would occur.

Cumulative Impacts

Cumulative projects such as Capital Improvements Projects within the Central Basin have the potential to implement built-facilities within the project vicinity which could impede or redirect flows and impact drainages onsite or offsite. As discussed previously, cumulative projects are not anticipated to result in significant cumulative impacts due to the requirement of NPDES regulations. The proposed project would not impede or redirect flood flows; therefore, the proposed project's contribution to potential cumulative impacts regarding flood drainages and flows would not be cumulatively considerable.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No Impact

Impact HYDRO 3.2-4: The proposed project would not result in flood hazard, tsunami, or seiche zones, risk or release of pollutants due to project inundation.

As stated above, portions of the proposed project are located in a 100-year flood zone. However, the proposed project would not include the construction or operations of facilities that could potentially release pollutants such as chemicals into the project area due to inundation. Further, as discussed above, the proposed project would not change the treatment process or discharge requirements of effluent from the five WRPS under existing NPDES permits. As such, impacts due to potential release of pollutants in a flood hazard area would not occur.

Legg Lake and other bodies of water along with the estuary area of San Gabriel River near Alamitos Bay within the project area are susceptible to seiches and tsunamis hazards (refer to Figure 3.2-3). However, no physical development or changes in current facilities or operations are proposed by the project, therefore, the proposed project would not result in a release of pollutants in these local seiche or tsunami flood hazard areas. No impacts would occur.

Cumulative Impacts

There are multiple 100-year flood, tsunami, seiches, and dam inundation hazard zones within the San Gabriel River Watershed (Figure 3.2-3). Cumulative projects within the project vicinity have the potential to expose structures (both habitable and not-habitable) and persons to pollutants as a result of a flood, tsunami or seiche. Therefore, cumulative projects would result in potentially significant cumulative impacts. However, because the proposed project would not result in any release of pollutants or exacerbate existing conditions within these flood hazards areas, the proposed projects contribution to cumulative impacts would not be cumulatively considerable.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No Impact

Impact HYDRO 3.2-5: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The RWQCB Water Quality Control Plan (Basin Plan) sets water quality objectives that are qualitative and quantitative in order to protect the beneficial uses within the Main San Gabriel and Central Basins (refer to Table 3.2-1). As shown above in Table 3.2-3, many of the water bodies within the basins are impaired due to pollutants from dense residential and commercial activities, sedimentation near dams and reservoirs and recreational uses that contribute trash, debris and habitat destruction. Various reaches of the San Gabriel River, in particular are impaired with nitrogen, trash, PCBs and pesticides, metals, and coliform. Though the amount of discharge from the five WRPs would be reduced, the treatment process and discharge requirements for the all effluent would not change pursuant to the existing NPDES permit covering each WRP. Therefore, tertiary-treated effluent that will continue to be discharged to San Jose Creek and the San Gabriel River would not violate water quality standards or negatively contribute to impaired waters regulated within the Basin Plan.

Further, the proposed project does not involve groundwater extraction or other activities that would substantially interfere with groundwater recharge throughout the project area. As described above, a portion of the recycled water that will not be discharged to San Jose Creek would be used for the ARC facility. In addition, some of the water treated by the ARC facility would be discharged to the San Gabriel River. The proposed project would continue to aid in groundwater recharge. The Sanitation Districts work with the Main San Gabriel Watermaster and WRD to ensure the proper management of groundwater quality and levels throughout the Los Angeles region. As a result, there would be no conflict with implementation of the Basin Plan or local groundwater management plan, and impacts would be less than significant.

Cumulative Impacts

Cumulative groundwater impacts associated with the proposed project would be managed through the Watermasters and other responsible agencies. The following sections describe general groundwater management responsibilities.

Integrated Regional Water Management

The proposed project and other projects listen on Table 3-1 such as the ARC, support IRWM planning administered by the DWR on a state-wide scale. According to DWR, "IRWM is a collaborative effort to identify and implement water management solutions on a regional scale that increase regional self-reliance, reduce conflict, and manage water to concurrently achieve social, environmental, and economic objectives. This approach delivers higher value for investments by considering all interests, providing multiple benefits, and working across jurisdictional boundaries. Examples of multiple benefits include improved water quality, better flood management, restored and enhanced ecosystems, and more reliable surface and groundwater supplies″ (DWR 2019b).

California Sustainable Groundwater Management Act

In 2014, the SGMA was passed. The goal of SGMA is sustainable groundwater management, which is defined as the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results. **Table 3.2-7** below lists the criteria of in undesirable results within a groundwater basin.

TABLE 3.2-7
SUSTAINABLE GROUNDWATER MANAGEMENT ACT UNDESIRABLE RESULTS

SGMA Undesirable Results Criteria
1) Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon. Overdraft during a period of drought is not sufficient to establish a chronic lowering of groundwater levels if extractions and recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods.
2) Significant and unreasonable reduction of groundwater storage.
3) Significant and unreasonable seawater intrusion.
4) Significant and unreasonable degraded water quality, including the migration of contamination plumes that impair water supplies.
5) Significant and unreasonable land subsidence that substantially interferes with surface land uses.
6) Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

SGMA provides authority for agencies to develop and implement groundwater sustainability plans (GSP) or alternative plans that demonstrate the basin is being managed sustainably. Since the Main San Gabriel Basin and the Central Basin are adjudicated, they are exempt from SGMA. However, both the Main San Gabriel Watermaster and WRD have groundwater management and monitoring programs in place to best implement the goals and objectives of SGMA.

The proposed project would not conflict with the implementation of the Basin Plan or any other local groundwater management plan; therefore, the projects contribution to cumulative impacts regarding groundwater management for levels and quality would be less than cumulatively considerable.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant

3.3 Recreation

3.3.1 Introduction

This section identifies existing recreational opportunities within the project vicinity, and analyzes the potential impacts to recreational opportunities and facilities associated with implementation of the proposed project. All information sources used are included as citations within the text; sources are listed in Chapter 4, *References*, of this Draft Environmental Impact Report (EIR).

3.3.2 Environmental Setting

Regulatory Setting

Federal

There are no federal policies or regulations pertaining to recreation that would be applicable to the proposed project.

State

There are no state policies or regulations pertaining to recreation that would be applicable to the proposed project.

Regional

Los Angeles County General Plan

Parks and Recreation Element

The Parks and Recreation Element provides policy direction for the maintenance and expansion of Los Angeles County's parks and recreation system. The purpose of the Parks and Recreation Element is to plan and provide for an integrated parks and recreation system that meets the needs of residents (County of Los Angeles 2015). Goals and policies that may be applicable to the proposed project are provided below.

Goal P/R 5: Protection of historical and natural resources on County park properties.

Policy P/R 5.3: Protect and conserve natural resources on County park properties, including natural areas, sanctuaries, and open space preserves.

Policy P/R 6.1: Support the use of recycled water for landscape irrigation in County parks.

Conservation and Natural Resource Element

The Conservation and Natural Resources Element guides the long-term conservation of natural resources and preservation of available open space areas, which often are used for recreational purposes (County of Los Angeles 2015). Goals and policies that may be applicable to the proposed project are provided below.

Policy C/NR 1.2: Protect and conserve natural resources, natural areas, and available open spaces.

Policy C/NR 1.4: Create, support and protect an established network of dedicated open space areas that provide regional connectivity, between the southwestern extent of the Tehachapi Mountains to the Santa Monica Mountains, and from the southwestern extent of the Mojave Desert to Puente Hills and Chino Hills.

Los Angeles County Significant Ecological Areas

A Significant Ecological Area (SEA) designation is given to land in Los Angeles County that contains irreplaceable biological resources. Individual SEAs include undisturbed or lightly disturbed habitat that support valuable and threatened species, linkages and corridors that facilitate species movement, and are sized to support sustainable populations of its component species (County of Los Angeles 2015). The San Gabriel River traverses the Puente Hills SEA within the Whittier Narrows Recreation Area, which is managed by the Los Angeles County Department of Parks and Recreation (DPR) (County of Los Angeles 2015).

Existing Conditions

The Pomona water reclamation plant (WRP) currently discharges recycled water to San Jose Creek. The San Jose Creek WRP, Whittier Narrows WRP, and Los Coyotes WRP each discharges to the San Gabriel River.[1] The Long Beach WRP discharges to Coyote Creek at the confluence with the San Gabriel River. The project study area includes the San Gabriel River and San Jose Creek. Portions of the 38-mile San Gabriel River Trail, which spans the length of the river from the base of the San Gabriel Mountains to the Pacific Ocean, are adjacent to the project study area. The trail has multiple access points for biking and walking. Recreational access to this trail is allowed within portions of the Whittier Narrows Recreation Area.

Regional

Department of Parks and Recreation

The DPR owns, operates, and maintains approximately 181 parks and recreational facilities throughout Los Angeles County. The local park system encompasses approximately 608 total acres, and includes community parks (10 to 20 acres in size), neighborhood parks (3 to 10 acres in size), pocket parks (less than 3 acres in size), and park nodes (small pieces of open space that provide breaks to the urban landscape). Local parks serve neighborhoods within a maximum of a 2-mile radius of the park. The regional park system makes up 68,986 acres and includes regional parks (greater than 100 acres), community regional parks (20 to 100 acres), and special-use facilities (single-use facilities serving greater recreational or cultural needs). The parks in the regional park system provide service for areas within a 20- to 25-mile radius (County of Los Angeles 2015; 2019a).

The Los Angeles County goal for the provision of parkland is 4 acres of local parkland per 1,000 residents of the population in the unincorporated areas, and 6 acres of regional parkland per 1,000 residents of the total population of Los Angeles County (Los Angeles County 2015). Section 21.24.340 of the Los Angeles County Code has a standard of three acres of local and five acres of regional parkland per 1,000 residents.

[1] The Whittier Narrows WRP also discharges to the Rio Hondo River.

According to Los Angeles County estimates, there are currently a total of 1,057,088 people living in the unincorporated areas. This means that for every 1,000 residents there are a total of approximately 0.57 acres of local parkland, resulting in a local parkland deficit; the current acreage of available local parkland does not meet the Los Angeles County's goal for recreational facilities (Los Angeles County 2015). In addition to the 608 acres of local parkland, there is a total of 68,986 acres of regional parkland in Los Angeles County at this time. For every 1,000 residents in Los Angeles County, there is a total of approximately 68 acres of regional parkland. There is a surplus of regional parkland, which exceeds the Los Angeles County's goal for regional parkland (Los Angeles County 2015).

Local

The 1,492-acre Whittier Narrows Recreation Area is a popular recreational area within the Puente Hills SEA. The Whittier Narrows Natural Area and Nature Center borders the San Gabriel River and Rio Hondo. An artificial lake is maintained in the center of the Whittier Narrows Recreation Area that is fed with pumped groundwater and is not connected to either river system. Recreational activities provided within the Whittier Narrows Recreation Area include pedal boating, paddle boating, kayaking, wading, fishing, and swimming within Legg Lake. Other activities include hiking trails, mountain biking trails, equestrian trails, sporting activities, seasonal special events, naturalist docent trainings, Junior Ranger Programs, and nature day camps (County of Los Angeles 2019c).

Six trails are located within the project area: San Gabriel River Bike Trail and Rio Hondo River Trail within the immediate area along the San Gabriel and Rio Hondo rivers; and the Bellflower Bike Trail; Coyote Creek & Bike Trail, the Nature Trail in the City of Lakewood, and the Schabarum-Skyline Trail. A summary of all parks, trails and other recreational facilities within the area of the San Gabriel River are provided below in **Table 3.3-1**. None of these facilities are within either river channel.

TABLE 3.3-1
RECREATIONAL FACILITIES NEAR THE RIO HONDO AND SAN GABRIEL RIVER

Facility Name	Facility Type	GIS Acres	Managing Agency
Amigo Park	Local Park	4.8	Los Angeles County Department of Parks and Recreation
Angeles NF	Natural Areas	641990.5	United States Forest Service
Azusa Bike Trail Head / Parking Lot	Natural Areas	4.9	Azusa, City of
Behringer Park	Local Park	26.7	La Mirada, City of
Bellflower Bike Trail	Natural Areas	25.0	Bellflower, City of
Bellflower Skate Park	Regional Open Space	2.3	Bellflower, City of
Boyar Park	Local Park	11.9	Lakewood, City of
Caruthers Park North	Regional Open Space	0.2	Bellflower, City of

Facility Name	Facility Type	GIS Acres	Managing Agency
Caruthers Park North	Local Park	4.5	Bellflower, City of
Caruthers Park North	Regional Open Space	0.3	Bellflower, City of
Caruthers Park North	Regional Open Space	0.5	Bellflower, City of
Cerritos Iron Wood Nine GC	Natural Areas	26.7	Cerritos, City of
Cerritos Reg. County Park	Local Park	55.8	Los Angeles County Department of Parks and Recreation
Cerritos Sports Complex	Local Park	28.5	Los Angeles County Department of Parks and Recreation
College Estates Park	Local Park	0.1	Long Beach, City of
Cortez Park	Local Park	18.7	West Covina, City of
Coyote Creek & Bike Trail	Natural Areas	61.5	Los Angeles - Flood Control District, County of
Duck Farm Property	Regional Open Space	59.6	Watershed Conservation Authority
El Dorado East Regional Park	Regional Recreation Park	354.2	Long Beach, City of
El Dorado Nature Ctr.	Regional Open Space	95.8	Long Beach, City of
El Dorado Park GC	Natural Areas	155.0	Long Beach, City of
El Dorado Park West	Regional Recreation Park	116.6	Long Beach, City of
El Rancho Verde Park	Local Park	5.4	Cerritos, City of
Encanto Park	Local Park	10.7	Duarte, City of
Frank G Bonelli RP	Regional Recreation Park	1759.8	Los Angeles County Department of Parks and Recreation
Gemmrig Park	Regional Open Space	2.0	Long Beach, City of
H. Byrum Zinn Community Park and Trail	Local Park	3.1	Bellflower, City of
Heartwell (Campfire) Park	Natural Areas	6.9	Long Beach, City of
Lario Staging Area	Natural Areas	117.9	United States Army Corps of Engineers
Lee Ware Park	Local Park	0.5	Hawaiian Gardens, City of
Liberty Park	Local Park	28.8	Cerritos, City of
Lilly Park	Local Park	0.1	Long Beach, City of
Los Coyotes Athletic Facility	Local Park	11.1	La Mirada, City of
Lyman Staging Area	Regional Open Space	8.5	Los Angeles County Department of Parks and Recreation
Maverick Ridge Rider Park	Local Park	9.6	West Covina, City of
Monte Verde Park	Local Park	3.1	Lakewood, City of
Obregon Park	Local Park	1.3	Pico Rivera, City of
Orangewood Park	Local Park	8.0	West Covina, City of
Pasadena City Parkland	Natural Areas	289.2	Pasadena, City of
Pasadena City Parkland	Natural Areas	74.5	Pasadena, City of
Pico Rivera GC	Natural Areas	26.3	United States Army Corps of Engineers
Pío Pico SHP	Regional Open Space	0.2	Whittier, City of

Facility Name	Facility Type	GIS Acres	Managing Agency
Pío Pico SHP	Local Park	5.7	California Department of Parks and Recreation
Rio San Gabriel Park	Local Park	16.6	Downey, City of
River Wilderness Park	Regional Open Space	70.5	Watershed Conservation Authority
River Wilderness Park	Regional Open Space	1.8	Azusa, City of
Riverview Park	Regional Open Space	4.9	Bellflower, City of
Riverview Park	Regional Open Space	12.1	Bellflower, City of
Ruth R. Caruthers Park	Local Park	14.1	Bellflower, City of
Rynerson Park	Local Park	42.0	Lakewood, City of
San Gabriel Canyon Forest Gateway Ctr.	Local Park	1.7	United States Forest Service
San Gabriel River	Natural Areas	8.6	San Gabriel River Water Committee
San Gabriel River and Bike Trail	Natural Areas	200.0	Los Angeles - Flood Control District, County of
San Gabriel River Trail	Natural Areas	37.0	Los Angeles Department of Public Works, County of
San Gabriel River Trail	Natural Areas	5.0	Los Angeles Department of Public Works, County of
San Jose Creek	Regional Open Space	55.3	United States Army Corps of Engineers
San Jose Creek	Regional Open Space	3.0	Los Angeles County Department of Parks and Recreation
Santa Fe Dam Rec. Area	Regional Recreation Park	989.3	Los Angeles County Department of Parks and Recreation
Santa Fe Springs Park	Local Park	9.1	Santa Fe Springs, City of
Sunset Field	Local Park	2.9	West Covina, City of
Syhre	Local Park	1.4	Baldwin Park, City of
The Nature Trail	Regional Open Space	25.4	Lakewood, City of
Thienes Gateway Park	Regional Open Space	0.1	South El Monte, City of
Valley Ctr. Staging Area	Natural Areas	3.2	Los Angeles County Department of Parks and Recreation
Walnut Creek Community RP	Regional Open Space	4.2	Los Angeles County Department of Parks and Recreation
Walnut Creek Habitat & OS	Regional Open Space	53.6	Watershed Conservation Authority
Walnut Creek Nature Park	Local Park	4.6	Baldwin Park, City of
Walnut Creek Wilderness Park	Natural Areas	55.2	Los Angeles County Department of Parks and Recreation
Westgate Park	Local Park	4.5	Cerritos, City of
Whittier Narrows Dam	Natural Areas	351.0	United States Army Corps of Engineers
Whittier Narrows Natural Area and Nature Center	Natural Areas	350.2	Los Angeles County Department of Parks and Recreation
Wilderness Park	Local Park	18.5	Downey, City of

SOURCE: County of Los Angeles 2019b.

3.3.3 Project Impacts

Methodology

The analysis of impacts on recreational facilities considers the increase in use that would be generated by the implementation of the proposed project in relation to the ability of existing park and recreation facilities to meet that demand. The analysis considers whether an increase in use would result in the need for new or expanded park and recreational facilities, or an increase in use would result in substantial physical deterioration of existing recreational facilities.

Thresholds of Significance

For the purposes of this Draft EIR and consistency with Appendix G of the *CEQA Guidelines*, applicable local plans, and agency and professional standards, the project would have a significant impact on recreation if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.
- Substantially and negatively impact recreational facilities or interfere with existing recreational activities (e.g., boating, fishing, hiking).

Analysis of Project Impacts

Impact REC 3.3-1: The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

The proposed project does not propose the construction and/or operation of any facilities or structures that could result in an increased demand for the use of park or other recreational facilities in the area. The goal of the Sanitation Districts is to make available as much recycled water from its treatment plants as possible to support the water resource planning needs of the region's water agencies. Recycled water is used at more than 850 sites throughout the Sanitation Districts' service area and is conveyed and distributed through the local water agencies systems. General recycled water uses include landscape irrigation, agricultural irrigation, industrial processing, recreational impoundments, and groundwater replenishment. The amount of water reused and the percentages for specific applications vary from year to year depending on annual rainfall levels and other factors (Sanitation Districts July 2017; 2017). Existing and future customers of recycled water include water purveyors that service local cities and unincorporated Los Angeles County. In each of these cities and Los Angeles County areas, private entities and specific departments manage various sites that use recycled water such as construction sites, athletic fields, agriculture, environmental enhancement, industrial, landscape irrigation, ornamental plant irrigation, groundwater replenishment, and impoundment. However, this new water supply would be too marginal to directly induce population growth, such as a residential housing project, that would result in impacts to recreational facilities due to increased use. Furthermore, the proposed project would not require new recreational facilities.

There are many parks and recreational facilities within the project area (refer to Table 3.3-1), including the Whittier Narrows Recreation Area and local trails along the San Gabriel River. However, while these recreational facilities are located within the area of the San Gabriel River, the River and the discharges from the five WRPs are not a physical part of these facilities nor does the River support any of these existing developed recreational facilities. The proposed project would not affect the open space resources or infringe on public access to those resources or facilities. Although there is full public access to the San Gabriel River Channel within the Whittier Narrows Recreation Area, use of the river channel for aquatic sports or fishing is uncommon since flowing water is usually constrained to the upper segments near the SR-60 overcrossing. In this area water ponds behind weirs, creating slow moving pools that are surrounded by dense vegetation. No evidence of any boating activities in this area has been observed. Boating and water sport occurs in the Whittier Narrows Recreation Area only in the artificial Legg Lake. The river channel is occupied by homeless encampments. More common recreational activities within the river channel include hiking and horseback riding. Outside of the Whittier Narrows Recreation Area, public access to the channels is restricted by the Los Angeles County Flood Control District. Therefore, reduced flows within these waterways due to project implementation would not negatively impact or interfere with any recreational activities.

Impacts would be less than significant.

Cumulative Impacts

The cumulative projects listed in Table 3-1 of this Draft EIR could increase population within the project area. This increase in population could result in significant impacts on parks and recreational facilities due to increased use of neighborhood parks, regional parks, and other recreational facilities. Because the proposed project would not result in a direct or indirect increase in the regional population, it would not contribute to an increased use of parks or other recreational facilities.

Overall, the proposed project's contribution to cumulative impacts on parks and recreational facilities would be less than cumulatively considerable, and thus, a less than significant cumulative impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than Significant

Impact REC 3.3-2: The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

As discussed above, the San Gabriel River and the discharges from the five WRPs do not affect any of the existing developed recreational areas managed by Los Angeles County and the United States Army Corps of Engineers, including the Whittier Narrows Recreation Area. The proposed

project would incrementally decrease discharge flows into San Gabriel River, or its tributaries: San Jose Creek and/or Coyote Creek. A portion of the proposed project's reduced flows would be redirected to support landscape irrigation, agricultural irrigation, industrial processing, recreational impoundments, and groundwater replenishment among other uses of recycled water. To the extent the proposed project provides recycled water to local parks, golf courses, and other recreational facilities it could have a beneficial impact on local open space resources used for recreational purposes. Because the proposed project would not cause or contribute to regional population growth or physically impact existing parks or recreational facilities, no new or expanded park or recreational facilities would be required with the implementation of the proposed project. Therefore, no physical effect on the environment would occur related to new or expanded park or recreational facilities.

Cumulative Impacts

Future growth in the project area could require the construction or expansion of park or recreational facilities to accommodate the increase in population. However, the proposed project would not cause or contribute to the increase in population already projected for the region. Because the proposed project will not contribute to projected population growth and associated increase in demand for recreational opportunities in Los Angeles County, the proposed project's possible contribution to cumulative recreational effects is not cumulatively considerable.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No Impact.

Impact REC 3.3-3: The proposed project would not substantially or negatively impact recreational facilities or interfere with existing recreational activities (e.g., boating, fishing, hiking).

As noted in Table 3.3-1, the LARWQCB Basin Plan assigns REC-1 (water contact) and REC-2 (non-water contact) beneficial uses to the San Gabriel River channel. The proposed project would not interfere with these beneficial uses or reduce access to the river channel. As provided above in Table 3.3-1, several parks, trails, and other recreational facilities are located near the San Gabriel River. However, the San Gabriel River and the discharges from the five WRPs are not a physical part of these existing recreational facilities nor does the River support any of these existing developed recreational facilities. Although there is full public access to the San Gabriel River channel within the Whittier Narrows Recreation Area, use of the river channel for aquatic sports or fishing is uncommon since the river channel exhibits high levels of trash and unauthorized homeless encampments. Ponding water is constrained to the upper segments near the SR-60 overcrossing in the flood channel. Horseback riding, biking, and hiking is more common on the river embankments that would not be affected by flow reductions. The proposed reduction in discharges of recycled water would not involve any physical changes to the environment other than the decreased volume of discharge affecting areas where water recreation

does not occur or is not allowed. Therefore, the proposed project would not substantially or negatively impact recreational facilities or interfere with existing recreational activities.

Cumulative Impacts

The cumulative development listed in Table 3-1 of this Draft EIR could increase population within the project area. This increase in population could substantially impact recreational facilities or interfere with existing recreational activities with increased usage. Because the proposed project would not result in a direct or indirect impact to existing recreational activities. Further, the San Gabriel River and the discharges from the five WRPs are not a physical part of existing recreational facilities nor does the San Gabriel River support any existing developed recreational facilities. Therefore, the proposed project's contribution to cumulative impacts on recreational facilities or existing recreational activities would be less than cumulatively considerable, and thus, a less than significant cumulative impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No Impact.

CHAPTER 4
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CHAPTER 5
Alternatives

5.1 Overview of Alternatives Analysis

This chapter addresses alternatives to the proposed project, describes the rationale for their evaluation in the Draft Environmental Impact Report (EIR), evaluates the potential environmental impacts associated with each alternative, and compares the relative impacts of each alternative to those of the proposed project. In addition, this chapter analyzes the extent to which each alternative meets the project's objectives identified in Chapter 2, *Project Description,* of this Draft EIR.

The California Environmental Quality Act (CEQA) requires that an EIR consider a reasonable range of feasible alternatives (CEQA Guidelines, Section 15126.6(a)). According to the CEQA Guidelines, alternatives should be those that would attain most of the basic project objectives and avoid or substantially lessen one or more significant effects of the project (CEQA Guidelines, Section 15126.6(a)). The "range of alternatives" is governed by the "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the lead agency and to foster meaningful public participation (CEQA Guidelines, Section 15126.6(f)).

CEQA also requires the feasibility of alternatives be considered. Section 15126.6(f)(1) states that among the factors that may be taken into account in determining feasibility are: site suitability; economic viability; availability of infrastructure; general plan consistency; other plans and regulatory limitations; jurisdictional boundaries; and (when evaluating alternative project locations) whether the proponent can reasonably acquire, control, or otherwise have access to an alternative site. Furthermore, an EIR need not consider an alternative whose effects could not be reasonably identified, whose implementation is remote or speculative, or that would not achieve the basic project objectives (CEQA Guidelines, Section 15126.6(f)(3)).

The alternatives addressed in this Draft EIR were identified in consideration of the following factors:

- The extent to which the alternative could avoid or substantially lessen the identified significant environmental effects of the proposed project;
- The extent to which the alternative could accomplish basic objectives of the proposed project;
- The feasibility of the alternative; and
- The requirement of the CEQA Guidelines to consider a "no project" alternative.

CEQA Guidelines Section 15126.6(e)(1) states that a no project alternative shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline.

5.2 Proposed Project Summary

5.2.1 Project Objectives

The following project objectives have been established and they serve as basis for comparing the alternatives, and for the evaluation of associated environmental impacts:

- Consistent with State law and policy, support increased recycled water use through maximizing the availability of treated effluent that would otherwise be discharged to flood control channels within the San Gabriel River watershed; and
- Sustain or, if feasible, enhance sensitive habitats that have benefitted from historical treated effluent discharges to the San Gabriel River watershed through more efficient discharges from Sanitation Districts' WRPs.

5.2.2 Potentially Significant Impacts of the Proposed Project

Chapter 3.0, *Environmental Setting, Impacts and Mitigation Measures* and Chapter 6.0, *Other CEQA Considerations*, of this Draft EIR, provide analyses of potential impacts that could result from implementation of the proposed project. As summarized below is **Table 5-1**:

TABLE 5-1
SUMMARY OF PROJECT IMPACT ANALYSIS

Issue Area	Significance Determination
Biological Resources	LSM
Hydrology and Water Quality	LTS
Recreation	LTS

LTS = Less than Significant
LSM = Less than Significant with Mitigation
SOURCE: ESA 2019.

5.3 Alternatives Selected for Analysis

Two project alternatives were selected for detailed analysis. As concluded in Chapter 3, the proposed project would not result in any significant impacts. Nonetheless, this alternatives analysis has been prepared to evaluate other alternatives to compare with the proposed project to further lessen or avoid environmental impacts of the proposed project. The alternatives were developed as operational scenarios that could be implemented to address concerns over reduced availability of water in the river channel and soils.

The following sections provide a general description of each identified alternative, its ability to meet the project objectives, and a discussion of its comparative environmental impacts. As provided in Section 15126.6(d) of the CEQA Guidelines, the significant effects of these alternatives are identified in less detail than the analysis of the proposed project in Chapter 3 of this Draft EIR. Table 5-2 provides a comparison of the alternatives with the proposed project. Table 5-3 compares the alternatives with the project objectives.

5.3.1 Alternative 1: No Project Alternative

An analysis of the No Project Alternative is required under CEQA Guidelines Section 15126.6(e). According to Section 15126.6(e)(2) of the *CEQA Guidelines*, the "no project" analysis shall discuss:

> *what is reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.*

The No Project Alternative represents a "no build" scenario in which the proposed project would not be implemented. It assumes that all five water reclamation plants (WRPs) would continue to discharge water at current volumes into the San Gabriel River or its tributaries: San Jose Creek and/or Coyote Creek. There would be no diverted water from the discharges to supply recycled water programs implemented by other agencies. The reduction in recycled water flow to surface water discharges would not occur.

5.3.2 Alternative 2: Discharge Reduction Phasing

Alternative 2 would involve the same level of reductions in surface water discharges as the proposed project, but would phase the proposed discharge reductions into the San Gabriel River above Whittier Narrows Dam over time. As summarized in Table 2-2 of the Project Description, current discharges from San Jose Creek WRP's discharge point SJC002 and SJC003 are approximately 9.48 million gallons per day (MGD) and 0.04 MGD, respectively, and Pomona WRP's discharge point POM001 is approximately 3.27 MGD, totaling an annual average flow of 12.80 MGD that currently reaches the San Gabriel River upstream of the Whittier Narrows Dam. Under Alternative 2, discharge volumes from these discharge points would be reduced to approximately 9.00 MGD for years 1 and 2 and would then be reduced to 5.00 MGD beginning in year 3. This phased approach ultimately would meet the proposed project's flow objectives after two years. The other proposed WRP discharge reductions under Alternative 2 would be similar to

the proposed project and would occur over time as recycled water projects by other agencies complete project approval and permitting.

TABLE 5-2
SUMMARY OF IMPACTS OF ALTERNATIVES COMPARED TO THE PROJECT

Environmental Topic	Proposed Project	Alternative 1: No Project	Alternative 2: Discharge Reduction Phasing
Biological Resources	Less than Significant with Mitigation	Less	Similar
Hydrology and Water Quality	Less than Significant	Greater	Similar
Recreation	Less than Significant	Greater	Similar

TABLE 5-3
ABILITY OF ALTERNATIVES TO MEET PROJECT OBJECTIVES

Project Objectives	Proposed Project	Alternative 1: No Project	Alternative 2: Discharge Reduction Phasing
Consistent with State law and policy, support increased recycled water use through maximizing the availability of treated effluent that would otherwise be discharged to flood control channels within the San Gabriel River watershed.	Yes	No	Yes
Sustain or, if feasible, enhance sensitive habitats that have benefitted from historical treated effluent discharges to the San Gabriel River watershed through more efficient discharges from Sanitation Districts' WRPs.	Yes	No	Yes

5.4 Impact Analysis

5.4.1 Alternative 1: No Project Alternative

The No Project Alternative assumes that all five WRPs would continue to discharge water at current volumes into the San Gabriel River or its tributaries: San Jose Creek and/or Coyote Creek. There would be no diverted water to supply recycled water programs implemented by other agencies. The reduction in water discharges would not occur. Impacts associated with the proposed project would be avoided with the No Project Alternative. However, without the proposed project, the objective to support increased water recycling in the San Gabriel River watershed through maximizing availability of treated effluent otherwise discharged to flood control channels would not be achieved. The relative difference in environmental impacts associated with the No Project Alternative when compared to the proposed project is provided below.

Biological Resources

The proposed project would result is less than significant impacts to biological resources with mitigation related to adaptive management and monitoring of sensitive habitats. Under the No Project Alternative, water discharges would not be reduced and the timing and volumes of discharges would continue to be managed based on water conservation and flood control

maintenance needs and not necessarily on the needs of sensitive habitats. The No Project Alternative would not result in reduced water discharges and therefore would not affect the existing habitat conditions. This alternative would have no significant impacts on biological resources, and would have fewer impacts compared to the proposed project. The advantages of data collection and monitoring habitat health presented under the proposed project would not be realized under the No Project Alternative. In addition, the implementation of a more consistent discharge plan that takes habitat value in account would not be implemented. As a result, the No Project Alternative would provide less biological management oversight than the proposed project.

Hydrology and Water Quality

The proposed project would result in less than significant impacts to hydrology and water quality. Under the No Project Alternative, water discharge to the San Gabriel River or San Jose Creek would not be reduced from the five WRPs. Therefore, this alternative would have no impacts on existing hydrology. The No Project Alternative would not reduce loading of nutrients, whereas the proposed project would reduce loading of nutrients due to decreased discharges. As a result, the No Project Alternative would provide fewer water quality benefits compared to the proposed project.

Recreation

The proposed project would result in less than significant impacts to recreational facilities and would not result in the construction or expansion of recreational facilities. Under the No Project Alternative, no recycled water would be provided by the project to local parks, golf courses, and other recreational facilities. Additionally, there would be less recycled water available for groundwater recharge. The proposed project would result in recreational benefits not provided by the No Project Alternative. As a result, the No Project Alternative would result in slightly greater impacts to recreation compared to the proposed project.

5.4.2 Alternative 2: Discharge Reduction Phasing

Alternative 2 would phase the proposed discharge reductions over time into the San Gabriel River above Whittier Narrows Dam.

Biological Resources

The proposed project would result in less than significant impacts to biological resources with mitigation. Under Alternative 2, discharge flow reductions would be phased over time. During the first two years of 9.00 MGD discharges, the data collected during monitoring of vegetation in the river channel required under Mitigation Measure BIO-1 would be compared with baseline conditions to assess whether the flow reductions were adversely affecting habitat. This phased approach may increase assurances that impacts to local vegetation are less than significant; however, it would not maximize recycled water availability during the interim 2-year period. Alternative 2 with its phased flow reduction may be unnecessary due to the proposed project's Adaptive Management Plan (AMP) that would impose triggers and responses. These triggers would require the modification of discharge operations to include pulses of higher frequency or

duration, or return 12.80 MGD to the river channel if necessary to maintain habitat. The potential impact to sensitive habitats would remain less than significant with mitigation, similar to the proposed project.

Hydrology and Water Quality

The proposed project would result in less than significant impacts to hydrology and water quality. Under Alternative 2, discharge volumes would be reduced in phases. During the first two years, discharges would be reduced to an annual average of 9.00 MGD. This alternative would result in less than significant impacts to hydrology and water quality, similar to the proposed project.

Recreation

The proposed project would result in less than significant impacts to recreational facilities. Under Alternative 2, discharge volumes would be reduced in phases, and recycled water could be provided by the project to local parks, golf courses, and other recreational facilities. The proposed project would result in recreational benefits that would also be provided by Alternative 2. Alternative 2 would result in impacts to recreational resources similar to the proposed project.

5.5 Environmentally Superior Alternative

CEQA requires that an EIR identify an environmentally superior alternative of a project other than the No Project Alternative (CEQA Guidelines Section 15126.6(e)(2)). Table 5-2 shows an impact determination comparison for potentially significant impacts of the proposed project to all the proposed alternatives. Neither the proposed project, the No Project Alternative, nor Alternative 2 has any significant, unmitigable impacts. Thus, the comparison of effects considers the relationship among varying degrees of less-than-significant impacts across the alternatives.

The No Project Alternative (Alternative 1) would reduce or eliminate Project impacts to biological resources, but would not provide the benefits of the proposed project to recycled water users or to long term biological resources management in the San Gabriel River channel.

Alternative 2 would implement surface water discharge reduction in phases, allowing for the AMP to confirm effects to vegetation. The phasing may increase assurances that monitoring and adaptive management can effectively protect (and possibly improve) vegetation and instream habitat conditions at targeted river segments and seasons. Implementation of Mitigation Measures BIO-1 and BIO-2 (applicable to both the proposed project and Alternative 2) would ensure that biological resources are monitored and maintained at current levels. As a result, Alternative 2 would result in similar effects as the proposed project, though implemented more slowly.

Both the proposed project and Alternative 2 would equally maintain biological and recreational values in the river channels, subject to Mitigation Measures BIO-1 and BIO-2. The proposed project would result in additional benefits because it would supply more recycled water to users sooner than Alternative 2, reducing needs for imported water or pumped groundwater currently meeting these demands. As a result, the proposed project would be considered the Environmentally Superior Alternative.

CHAPTER 6
Other CEQA Considerations

6.1 Introduction

This chapter presents the evaluation of other types of environmental impacts required by California Environmental Quality Act (CEQA) that are not covered within the other chapters of this Draft Environmental Impact Report (EIR). The other CEQA considerations include environmental effects that were found not to be significant, significant and unavoidable adverse impacts, significant irreversible environmental changes that would be caused by the proposed project, and growth-inducing impacts.

6.2 Effects That Were Found Not to Be Significant

An Initial Study was prepared for the proposed project in February of 2019. Each of the environmental issues identified in Appendix G of the State CEQA Guidelines that were found not to be significant are listed below. See the *Initial Study* included in Appendix A of this Draft EIR for additional discussion of the rationale for eliminating these topics from further analysis.

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Land Use/Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

6.3 Significant and Unavoidable Adverse Environmental Impacts

As required by Section 15126.2 (b) of the CEQA Guidelines, an EIR must identify any significant environmental effects which cannot be avoided if the proposed project is implemented. After conducting environmental analyses for each of the environmental issues identified in Appendix G of the State CEQA Guidelines, it was determined that the proposed project would not result in any significant and unavoidable adverse environmental impacts.

6.4 Significant Irreversible Environmental Changes

Public Resources Code Section 21100(b) (2) and CEQA Guidelines Section 15126.2(b) require that any significant effect on the environment that would be irreversible if the project is implemented must be identified. A project would generally result in a significant irreversible impact if:

- Primary and secondary impacts (such as roadway improvements that provide access to previously inaccessible areas, etc.) would commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources; or
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project.

Nonrenewable resources such as steel and other metals cannot be regenerated over time and therefore, construction projects can often involve a large commitment of nonrenewable resources. The proposed project does not include the construction of any built facilities that require building materials, therefore, the implementation of the proposed project would not require the use or consumption of nonrenewable resources. No impact to nonrenewable sources within the project region would occur.

In addition, the proposed project would not involve an increase in the commitment of nonrenewable energy resources. The proposed project proposes to incrementally reduce discharges of recycled water from five WRPs, each of which currently discharges into the San Gabriel River or its tributaries: San Jose Creek and/or Coyote Creek. The Sanitation Districts will continue to maintain the ability to discharge treated water at the same points but anticipates lesser quantities. Energy will continue to be consumed during operation of the proposed project. However, compared to the existing use of energy by the Sanitation Districts' facilities, the incremental reduction in discharge would not require any more energy than baseline operations. As no construction activities or significant changes in current operations are proposed by the project, project implementation would not result in wasteful, inefficient, or unnecessary consumption of energy resources. The use of recycled water reduces energy use by reducing groundwater pumping and reducing reliance on imported water. This energy savings also results in improved air quality, as less energy is needed to pump imported water which results in less burning of fossil fuels to make electricity and less greenhouse gas production. As such, potential impacts due to these irretrievable and irreversible commitments of resources would be reduced.

6.5 Growth-Inducing Impacts

The CEQA Guidelines (Section 15126.2(e)) require that an EIR discuss the potential growth-inducing impacts of a proposed project. The CEQA Guidelines provide the following guidance for such discussion:

> *Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*

A project can have direct and/or indirect growth-inducing impacts. Direct growth inducement would result if a project involves construction of new housing, which directly influences population growth and associated impacts of that growth within the immediate area. A project can have indirect growth-inducing impacts if it would establish substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it would involve a substantial construction effort with short-term employment opportunities, all of which can indirectly stimulate the need for additional housing and services to support the new employment demand (which in turn result in associated environmental impacts within the immediate area or the region as a whole). Similarly, under CEQA, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. Under CEQA, growth is not considered necessarily detrimental or beneficial, but triggers the need to evaluate the ultimate effects of project-induced growth (if any).

Based on the CEQA definition above, assessing the growth-inducement potential of the proposed project involves answering the question: "Would implementation of the proposed project directly or indirectly support economic expansion, population growth, or residential construction?" Water supply is one of the chief public services needed to support growth and community development. While water supply plays a role in supporting additional growth, it is not the single determinant of such growth. Other factors, including General Plan policies, land use plans, and zoning, the availability of solid waste disposal capacity, public schools, transportation services, and other important public infrastructure, also influence business and residential population growth. Economic factors, in particular, greatly affect development rates and locations.

6.5.1 Methodology

This chapter evaluates how the proposed project could affect population growth in the region. The growth anticipated in the region has been identified in local General Plans prepared by local land use agencies and municipalities. The Sanitation Districts have no control over land use decisions or future population growth.

Growth inducement itself is not necessarily an adverse impact. It is the potential consequences of growth, the secondary effects of growth, which may result in environmental impacts. Potential secondary effects of growth could include increased demand on other public services; increased traffic and noise; degradation of air quality; loss of plant and animal habitats; and the conversion of agriculture and open space to developed uses. Growth inducement may result in adverse impacts if the growth is not consistent with the land use plans and growth management plans and policies for the area, as "disorderly" growth could indirectly result in additional adverse environmental impacts. Thus, it is important to assess the degree to which the growth accommodated by a project would or would not be consistent with applicable land use plans.

To determine direct growth-inducement potential, the proposed project was evaluated to verify whether an increase in population or employment, or the construction of new housing would occur as a direct or indirect result of the proposed project. If either of these scenarios occurred, the proposed project could result in direct growth-inducement within the region.

6.5.2 Growth Inducement Potential

CEQA requires an EIR to discuss the growth-inducing impacts of a project and the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. For the purpose of this analysis, the implementation of the proposed project would result in a significant impact if it would induce substantial economic growth (e.g., land conversions) or population growth in the study area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g. through the extension of roads or other infrastructure). Potential direct and secondary growth effects of the proposed project are discussed below.

Direct Growth

The proposed project would not have direct growth inducement effects, as it does not propose development of new housing that would attract additional population. Nor would the proposed project extend roads or other infrastructure that could indirectly induce growth. Furthermore, the proposed project would not result in construction employment or operational employment that is normally associated with short or long-term population growth in the region. Therefore, the proposed project would not directly induce population growth by establishing new employment opportunities. New housing would not be required.

The existing Sanitation Districts' facilities are already sized to serve the projected population of the region and no expansion of facilities or upgrades to existing facilities would occur under the proposed project. The goal of the Sanitation Districts is to support local efforts towards water sustainability. Recycled water is a water source that replaces potable water supplies and can thus be leveraged to reduce the region's dependence on import water supplies and help augment groundwater supplies, particularly in times of drought. The proposed project would make recycled water available to local municipalities to reduce the need for import water sources, and to help manage groundwater in a more sustainable manner. Thus, the proposed project would not have substantial direct or indirect growth-inducing impacts.

Secondary Effects of Growth

The proposed project would not contribute to secondary effects of growth, as it would not generate any discernable influence on population growth within the region, would not pose an inconsistency with local general plans, and would not remove a constraint on growth. The proposed project would provide a local water source to assist in meeting existing and future water demands consistent with local General Plans. Providing this local water supply would not result in additional secondary impacts of growth not already identified by local planning entities. Thus, the proposed project would not cause additional secondary effects.

The Los Angeles County and local cities' General Plans all plan for increased growth which has already been reviewed in corresponding Los Angeles County and city General Plan EIRs. The General Plan EIRs acknowledge that planned development results in adverse secondary effects. Pursuant to CEQA, Los Angeles County and local cities have adopted statements of overriding consideration for the anticipated significant unavoidable effects. Regional adverse effects caused by growth are generally mitigated through regional resource management agencies.

Recycled water increases water supply reliability and provides supplies to landscape irrigation, commercial uses, and groundwater recharge. The growth already accounted for in local land use or general plans currently is supplied with local groundwater or imported water. While the proposed project would increase availability of recycled water, it would not directly or indirectly induce population growth within the study area because it is not designed to accommodate residential expansion, nor will it supply major employment centers that will indirectly contribute to growth.

No construction activities would be associated with the proposed project, as the project entails reductions in the rate and volume of recycled water discharged into the San Gabriel River and San Jose Creek. As such, no construction would occur and no physical changes to the environment, aside from reduced discharges to the San Gabriel River and San Jose Creek, would occur under the proposed project.

CHAPTER 7
List of Preparers

Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90801

Jodie Lanza, Supervising Engineer
Paul Prestia, Division Engineer
Vidal Cortes, Project Engineer
Winnie Siauw, Project Engineer

ESA
626 Wilshire Boulevard, Suite 1100
Los Angeles, CA 90017

Tom Barnes, Vice President
Brian Allee, Managing Associate
Andy Collison, Ph.D., Director of Environmental Hydrology
May Lau, Regulatory Program/Biological Resources Manager
Travis Marella, Senior Fisheries/Aquatic Biologist
Annika Sullivan, P.E., Civil Engineer/Hydrologist
Katelyn Matroni, Associate

Wood Environment & Infrastructure Solutions, Inc.
3120 Chicago Suite 110
Riverside, CA 92507

Carla Scheidlinger