Findings of Fact
Orange County Sanitation District 2020 Facilities Master Plan Program EIR
SCH No. 2019070998

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ADT	average daily traffic
AQMP	Air Quality Management Plan
BMP	best management practice
C&D	Construction & Demolition
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Prevention
CAP	Climate Action Plan
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
DAMP	Drainage Area Management Plan
dB	decibel
dBA	A-weighted decibel
EIR	Environmental Impact Report
EO	Executive Order
ESCP	Erosion and Sediment Control Plan
Findings	Findings of Fact
FMP	Facilities Master Plan
GHG	greenhouse gas
HCP	Habitat Conservation Plan
HMBP	Hazardous Materials Business Plan
kV	kilovolt
LBP	lead-based paint
Leq	equivalent sound level
LID	low-impact development
LST	localized significance threshold
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MRZ	Mineral Resource Zone
MT	metric ton
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Community Conservation Plan
NOx	nitrous oxides
NPDES	National Pollutant Discharge Elimination System
OCWD	Orange County Water District
OCWR	Orange County Waste and Recycling
OPR	Office of Planning and Research
PCE	passenger car equivalent

Acronym/Abbreviation	Definition
PCH	Pacific Coast Highway
PEIR	Program Environmental Impact Report
Plant 1	Reclamation Plant No. 1
Plant 2	Treatment Plant No. 2
ppm	parts per million
ppv	peak particle velocity
PRC	California Public Resources Code
ROW	right-of-way
RTP	Regional Transportation Plan
Sanitation District	Orange County Sanitation District
SAR	Santa Ana River
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SR	State Route
SWPPP	Stormwater Pollution Prevention Plan
TAC	toxic air contaminant
TCR	tribal cultural resource
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
VdB	velocity decibel
VMT	vehicle miles travelled

1 Introduction

This statement of Findings of Fact (Findings) addresses the environmental effects associated with the Orange County Sanitation District's 2020 Facilities Master Plan (FMP), as described in the Draft Program Environmental Impact Report (PEIR) for the FMP. These Findings are made pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] Section 21000 et seq.), specifically PRC Sections 21081, 21081.5, and 21081.6, and the CEQA Guidelines (14 CCR 15000 et seq.), specifically Sections 15091 and 15093. The Draft PEIR examines the full range of potential effects of construction and operation of the FMP, and identifies standard mitigation practices that could be employed to reduce, minimize, or avoid those potential effects.

1.1 Purpose

PRC Section 21081, and CEQA Guidelines Section 15091 require that the lead agency, in this case the Orange County Sanitation District (Sanitation District), prepare written findings for identified significant effects, accompanied by a brief explanation of the rationale for each finding. Specifically, CEQA Guidelines Section 15091 states, in part, that:

a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
   1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
   2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
   3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

In accordance with PRC Section 21081, and CEQA Guidelines Section 15093, whenever significant effects cannot be mitigated to below a level of significance, the decision-making agency is required to balance, as applicable, the benefits of the project against its unavoidable environmental risks when determining whether to approve the project. If the benefits of a project outweigh the unavoidable adverse environmental effects, the adverse effects may be considered "acceptable." In that case, the decision-making agency may prepare and adopt a Statement of Overriding Considerations, pursuant to the CEQA Guidelines.

Section 15093 of the CEQA Guidelines states the following:

a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."

b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the Final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.

The Final PEIR for the FMP identified potentially significant effects that could result from the proposed FMP. The Sanitation District finds that the inclusion of certain mitigation measures as part of the approval of the proposed FMP would reduce most, but not all, of those effects to less-than-significant levels. Those impacts that are not reduced to less-than-significant levels are identified and overridden due to specific benefits of the FMP (see Section 5, Statement of Overriding Considerations).

As required by CEQA, the Sanitation District, in adopting these Findings, also adopts a Mitigation Monitoring and Reporting Program (MMRP) for the proposed FMP. The Sanitation District finds that the MMRP, which is incorporated by reference and made part of these Findings, meets the requirements of PRC Section 21081.6 by providing for the implementation and monitoring of measures intended to mitigate potentially significant effects of the proposed FMP.

In accordance with the CEQA Statutes and Guidelines, the Sanitation District adopts these Findings for the proposed FMP. Pursuant to PRC Section 21082.1(c)(3), the Sanitation District also finds that these Findings reflect the Sanitation District's independent judgment as the lead agency for the proposed FMP.

1.1.1 Record of Proceedings

For the purposes of CEQA, the Findings herein sets forth the record of proceedings for the proposed FMP, and consists of those items listed in CEQA Section 21167.6(e), along with other miscellaneous items contained within the Sanitation District's files that are relevant to the consideration of the proposed FMP. The record of proceedings for the Sanitation District's decision on the proposed FMP consists of the following documents, at a minimum and without limitation, which are incorporated by reference and made part of the record supporting these Findings:

- The Notice of Preparation, Notice of Availability, and all other public notices issued by the Sanitation District in conjunction with the proposed FMP.
- The Draft PEIR for the proposed FMP and all technical appendices and documents relied upon or incorporated by reference.
- All written comments submitted by agencies, organizations, and members of the public during the public review comment period on the Draft PEIR, and the Sanitation District's responses to those comments.
- The Final PEIR for the proposed FMP.
- The MMRP for the proposed FMP.
- All reports, studies, memoranda, maps, staff reports, and other planning documents relating to the proposed FMP prepared by the Sanitation District or consultants to the Sanitation District with respect to

the Sanitation District's compliance with the requirements of CEQA and with respect to the Sanitation District's action on the proposed FMP.

- All documents submitted to the Sanitation District by other public agencies and members of the public in connection with the Draft PEIR.
- Minutes and verbatim transcripts of all information sessions, public meetings, and public hearings held by the Sanitation District in connection with the proposed FMP.
- Documentary or other evidence submitted to the Sanitation District at such information sessions, public meetings, and public hearings.
- All resolutions adopted by the Sanitation District regarding the proposed FMP, and all staff reports, analyses, and summaries related to the adoption of those resolutions.
- Matters of common knowledge related to the proposed FMP, including, but not limited to, federal, state, and local laws and regulations.
- Any documents expressly cited in these Findings, in addition to those cited above, and any other materials required for the Record of Proceedings by CEQA Section 21167.6(e).

1.1.2 Custodian and Location of Records

The documents and other materials that constitute the Record of Proceedings for the Sanitation District's actions related to the FMP are located at the Sanitation District Plant No. 1, 10844 Ellis Avenue, Fountain Valley, California 92708. The Sanitation District is the custodian of the Record of Proceedings for the proposed FMP.

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2 CEQA Findings of Independent Judgement

2.1 Independent Review and Analysis

Under CEQA, the lead agency must (1) independently review and analyze the Environmental Impact Report (EIR); (2) circulate draft documents that reflect its independent judgment; (3) as part of the certification of an EIR, find that the EIR or declaration reflects the independent judgment of the lead agency; and (4) submit copies of the documents to the State Clearinghouse if there is state agency involvement or if the project is of statewide, regional, or area-wide significance (PRC Section 21082.1[c]).

These findings reflect the Sanitation District's independent judgment. The Sanitation District has exercised independent judgment in accordance with CEQA Section 21082.1(c)(3) in retaining its own environmental consultant in the preparation of the PEIR, as well as reviewing, analyzing, and revising material prepared by the consultant.

Having received, reviewed, and considered the information in the PEIR, as well as any and all other information in the record, the Sanitation District hereby makes findings pursuant to and in accordance with CEQA Sections 21081, 21081.5, and 21081.6.

2.2 Impacts Determined to Be Significant and Unavoidable

This section identifies the significant, unavoidable impacts that require a statement of overriding considerations to be issued by the Sanitation District, pursuant to Section 15093 of the CEQA Guidelines, if the proposed FMP is approved. Based on the analysis contained in the PEIR, the following impacts have been determined to fall within the "significant unavoidable impacts" category:

- Transportation
  - Conflict with CEQA Guidelines Section 15064.3(b)
  - Cumulative transportation impacts related to CEQA Guidelines Section 15064.3(b)

Other transportation impacts addressed under inadequate emergency access and increased hazards due to geometric design features are addressed in Section 2.3, Impacts Determined to Be Less Than Significant with Mitigation. The remaining transportation impacts under conflict with a circulation system plan, ordinance, or policy (roadway, transit, pedestrian, and bicycle facilities) are addressed in Section 2.4, Impacts Determined to Be Less Than Significant.

2.2.1 Transportation

2.2.1.1 Potentially Significant Impacts to Transportation

Conflict with CEQA Guidelines Section 15064.3(b)

CEQA Guidelines Section 15064.3(b) focuses on specific criteria (i.e., vehicle miles travelled [VMT]) for determining the significance of transportation impacts. It is further divided into four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. The CEQA Guidelines are accompanied by an Office of Planning and Research (OPR) Technical Advisory, which includes specifications for how to estimate and forecast VMT for these purposes.

The proposed FMP is not a land use or transportation project, and therefore neither Section 15064.3(b)(1) nor Section 15064.3(b)(2) of the CEQA Guidelines apply. Instead, the proposed FMP would be categorized under Section 15064.3(b)(3). Section 15064.3(b)(3) provides the following for qualitative analysis:

> If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

The CEQA Guidelines do not establish a significance threshold, but OPR's Technical Advisory recommends a threshold of significance for residential, office, and other land uses. The recommended threshold for per-capita or per-employee for residential or office projects is 15% below that of existing development. There is no suggested significance threshold for construction or maintenance projects.

The FMP consists of approximately 30 near-term and 45 long-term construction projects that would rehabilitate or replace existing facilities that are currently subject to ongoing operation and maintenance activities. These projects do not propose additions or appreciable changes to current operation and maintenance activities. These projects would occur over a period of approximately 20 years—from 2021 through 2040—and would generate temporary construction-related traffic that would cease after the construction activity is completed. Further, new trips generated from future operations and maintenance activities are anticipated to be nominal.

Since the OPR Technical Advisory does not recommend a quantitative method for estimating construction-related VMT, the project-level analysis and program-level analysis have been discussed qualitatively using reliance on fundamental CEQA principles to determine the significance of an impact.

Per the OPR Technical Advisory, a project that would generate fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact. Although the proposed FMP projects are not land use projects and would not generate permanent trips, they would generate temporary trips over an extended period of construction. Therefore, conservatively, the criteria of fewer than 110 trips were used as a screening threshold for individual near-term and long-term projects within the overall FMP program.

As described in Section 4.13, Transportation, of the PEIR, all individual projects would generate fewer than 110 trips per day. However, with individual projects occurring at the same time with overlapping construction phases, the projects would generate greater than 110 trips per day. Although all the individual near-term projects and long-

term projects under the FMP could be screened using the small project threshold of 110 trips per day, with some projects occurring concurrently, the trip generation would exceed 110 trips per day for a number of days over the period of 20 years. The VMT generated from these individual projects would be attributable to worker commute trips and haul trips. Although the approximate trip lengths for worker commute, vendor, and haul trips can be estimated using default values for the Orange County region from the California Emissions Estimator Model (CalEEMod) land use emissions computer model, it is not feasible to predict those trip lengths precisely or to effectively predict trip lengths for specific construction projects. The overall FMP and the individual projects within it are generally consistent with construction activities in terms of the temporary nature of activities, trip generation characteristics, and the types of vehicles and equipment required. However, managing worker, vendor, and haul trip lengths for the FMP projects is not feasible because the location and duration of individual activities would vary. Further, carpooling or accessibility to alternative modes of transportation may not be effectively implemented for workers of these individual projects. Therefore, the FMP would cause an increase in VMT over the span of its implementation. Since measures to reduce the VMT generated by workers and trucks are limited, and there are no thresholds or significance criteria for construction-related VMT, to be conservative, the FMP's impacts related to conflict with CEQA Guidelines Section 15064.3(b) would be significant and unavoidable.

Based on the conclusion above relating to the potential to conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), the program-level projects are presumed to result in a significant and unavoidable impact with respect to VMT due to an increase in net VMT as compared with existing conditions. Therefore, the FMP's program-level VMT impact would be cumulatively considerable.

2.2.1.2 Mitigation Measures

No mitigation measures are feasible to reduce this impact.

2.2.1.3 Findings per CEQA Guidelines

Impacts must be considered significant and unavoidable because there is no feasible mitigation that would reduce VMT. Pursuant to PRC Section 21081(a)(3), and as described in the Statement of Overriding Considerations, the Sanitation District has determined that specific economic, legal, social, technological, or other considerations make infeasible the alternatives identified in the PEIR, and the identified transportation impacts are thereby acceptable because of specific overriding considerations (see Section 5).

2.2.1.4 Facts in Support of the Findings Related to Transportation

As discussed in Section 2.2.1.3, Findings per CEQA Guidelines, since measures to reduce the VMT generated by workers and trucks are limited, and there are no thresholds or significance criteria for construction-related VMT, the FMP's impacts related to conflicting with CEQA Guidelines Section 15064.3(b) would be significant and unavoidable. Furthermore, due to an increase in net VMT as compared with existing conditions, the FMP's program-level VMT impact would be significant and unavoidable.

2.3 Impacts Determined to Be Less Than Significant with Mitigation

This section identifies significant adverse impacts of the proposed FMP that require findings to be made under CEQA Section 21081(a) and CEQA Guidelines Section 15091(a)(1). Based on substantial evidence, the Sanitation District finds that adoption of the mitigation measures set forth in this section would reduce the identified significant impacts to less than significant:

- Aesthetics
  - Adverse effect on a scenic vista
  - New source of light or glare
  - Cumulative aesthetic impacts
- Air Quality
  - Conflict with or obstruct implementation of the applicable air quality plan
  - Cumulatively considerable net increase of criteria pollutants (construction)
  - Exposure of sensitive receptors to substantial pollutant concentrations
- Biological Resources
  - Impact candidate, sensitive, or special-status species
  - Impact riparian habitat or other sensitive natural community
  - Adverse effect on wetlands
  - Conflict with biological resources protection policies and ordinances
  - Cumulative biological resources impacts
- Cultural Resources
  - Impact historical resources
  - Impact archaeological resources
  - Cumulative cultural resources impacts
- Geology and Soils
  - Impact paleontological resources or site or unique geologic feature
  - Cumulative paleontological resources impact
- Hazards and Hazardous Materials
  - Routine transport, use, or disposal of hazardous materials
  - Significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
  - Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school
  - Included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5
  - Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan

- Noise
  - Substantial temporary or permanent increase in ambient noise levels in excess of standards (construction noise)
  - Excessive groundborne vibration or groundborne noise levels (construction-related)
  - Cumulative noise impacts
- Public Services
  - Require new or physically altered governmental facilities (construction impacts to fire and police protection)
  - Cumulative public service impacts
- Transportation
  - Hazards due to geometric design features
  - Inadequate emergency access
  - Cumulative traffic hazards impacts
- Tribal Cultural Resources
  - Cause adverse change in the significance of a tribal cultural resource
  - Cumulative tribal cultural resources impacts

2.3.1 Aesthetics

2.3.1.1 Potentially Significant Impacts to Aesthetics

Adverse Effect on a Scenic Vista

Visual Changes during Construction

Plant 2

Construction activities for FMP projects would occur intermittently throughout Treatment Plant No. 2 (Plant 2). Construction equipment, including backhoes, loaders, cranes, dump trucks, graders, and pavers, would be located at the plant. Construction equipment would move from one project to another over the construction period. Plant 2 is located approximately 500 feet north of Pacific Coast Highway (PCH). Additionally, the Santa Ana River (SAR) Trail is located along Plant 2's eastern border. FMP projects at Plant 2 that are analyzed at the project level and that would potentially be visible from PCH or the SAR Trail would include projects P2-126, P2-138, X-050, and X-054 due to their locations along the frontages of Plant 2.

Construction of the FMP projects would require temporary ground disturbance and construction, requiring the use of construction equipment that would be visible in these areas. Under existing conditions, there are varying levels of landscaping, natural vegetation, and fencing that screens structures and activities at Plant 2 from view, but not all structures and activities are currently completely screened. However, the Sanitation District is in the planning and construction phases of its approved Biosolids Master Plan, which calls for, among other things, construction of the Southwest Corner Perimeter Screening at Plant 2 (Project P2-128, TPAD Digester Facility). The Sanitation District would install vegetative screening to screen structures built along the western perimeter and all structures are subject to the Coastal Commission permit approval process where visual impacts are analyzed and a public hearing is held by the City of Huntington Beach as part of the permit approval process.

Any FMP construction activity that may be visible above the Southwest Corner Perimeter Screening project from PCH would be a temporary component of middle-background views of Plant 2, which in the overall viewing context, is an existing industrial complex. Although scenic views of Talbert Marsh are visible in the foreground, the temporary addition of partially visible construction equipment located within background views would not result in a significant adverse effect to the integrity of existing scenic foreground views of Talbert Marsh, especially considering that the background views are primarily those of an industrial wastewater treatment complex. This impact would largely be the same for views of FMP construction activities at Plant 2 from the SAR Trail.

Although there would not be any substantial new screening erected along Plant 2's eastern boundary, there is already varying amounts of landscaping along Plant 2's eastern border, which would partially obscure views of construction activities within Plant 2. Additionally, no physical modifications would occur to the SAR, and FMP construction projects at Plant 2 would be fully located within the existing boundaries of the plant. As such, although scenic views of the SAR would be visible in the foreground to recreational users of the SAR Trail, the temporary addition of partially visible construction equipment located within background views would not result in a significant adverse effect to the integrity of existing scenic foreground views of the SAR, especially considering that the background views are primarily those of an industrial wastewater treatment complex.

For construction that would occur within Plant 2's interior, construction activities would largely, if not entirely, be screened from public views by fencing (which will be expanded by the Southwest Perimeter Screening project), landscaping, and/or the presence of intervening facilities along the periphery of Plant 2. In addition, per Mitigation Measure (MM-)AES-1, construction staging areas would be sited to minimize visual impacts to adjacent uses, and where construction activities would be visible (e.g., if there are gaps in fencing that provide viewing windows), activities would be screened from public view. Thus, mitigation would be required to further decrease potential impacts. Therefore, with implementation of MM-AES-1, short-term visual impacts with respect to scenic vistas at Plant 2 would be reduced to less than significant.

Collection System Projects

Construction methods for collection system improvement projects generally include lining, utility hole repair, open-trench excavation for new sewer installations, shoring, dewatering, pipe removal, utility hole removal with associated demolition, and potential jack-and-bore methods for installation at sensitive crossings (e.g., busy intersections, railroad spurs, flood control channels). Construction activities associated with implementation of the collection system projects would require the presence of construction workers, equipment, and vehicles within existing rights-of-way. Although construction activities would result in visual changes, these potential visual impacts would be short term and would cease upon completion of construction. In addition, MM-AES-1 would be implemented to further reduce potential visual impacts. Upon completion of an FMP project, the site would be restored to conditions similar to existing conditions. Therefore, short-term impacts for FMP projects analyzed at the project level (i.e., 5-68, X-076, X-082, X-060, 11-33, X-063, 2-73, 3-67, 2-49, and X-083) and those analyzed at the program level would be reduced to less than significant with incorporation of mitigation.

Visual Changes during Operation

Collection System Projects

For collection system projects, all pipelines would be installed below ground, and upon completion of construction, all areas would be restored to their pre-project conditions. As such, pipeline projects would have no visual impact on the built or natural environment. FMP projects within the collection system that are analyzed at the project level for which this would be true include projects X-076, X-082, X-063, 2-49, and X-083, as well as the pipeline projects analyzed at the program level.

For pump station projects, opportunities for visual changes in the environment are limited due to the number of projects proposed and the nature of the pump station projects. Out of all FMP projects, 13 projects would involve pump stations. Of these projects, the majority would involve the repair, replacement, and/or rehabilitation of internal or underground equipment, and would not result in any perceptible visual change. For example, Project X-024, Rocky Point Pump Station Rehabilitation, would involve the routine rehabilitation of the mechanical and electrical equipment at the Rocky Point Pump Station, located along PCH in Newport Beach. Upon completion of construction, no changes to the pump station would be visible.

In some cases, projects would involve minor modifications to pump station exteriors; however, these modifications are proposed to improve the existing character of the pump stations. For example, project X-022, 15th Street Pump Station Rehabilitation, and Project X-023, Lido Pump Station Rehabilitation, would involve the rehabilitation of internal structural and electrical components and site work to maintain and/or enhance screenings, landscaping, and general curb appeal. In some other cases, projects would involve the demolition of a pump station and/or the reconstruction of the pump station in the immediate vicinity. Although the exact designs of future architectural details have not yet been decided for these FMP projects, architectural work generally would involve the use of architectural detailing, integration of color schemes and building styles with the surrounding buildings, and installation of drought-tolerant landscaping to create an appealing façade. Additionally, future improvements would be designed consistent with any applicable design guidelines to ensure that improvements are compatible and harmonious with the surrounding environment. For example, any future improvements for project X-023, Lido Pump Station Rehabilitation, would be consistent with the design guidelines provided for the Newport Boulevard Shops Design Area in the Lido Village Design Guidelines. Similarly, any future improvements for project 11-33, Edinger Pump Station, would be consistent with the design guidelines provided for District 16 (Northwest Industrial) in the Huntington Beach Urban Design Guidelines Manual. Because FMP projects would generally result in high-quality improvements to existing facades that would improve the appearances of existing facilities, impacts would be less than significant. FMP projects within the collection system that are analyzed at the project level for which this would be true include projects X-060, 11-33, 2-73, and 3-67, as well as the pump station projects analyzed at the program level.

In the event that FMP projects present the potential to result in substantial visual changes, MM-AES-1 would ensure that any visual impacts, including those that would occur in or near areas that contain scenic vistas, are reduced to less than significant. Thus, impacts would be less than significant with incorporation of mitigation.

New Source of Substantial Light or Glare

Construction Impacts

Construction activities associated with the proposed FMP projects, including those projects at Reclamation Plant No. 1 (Plant 1), Plant 2, and throughout the collection system, would occur during the daytime hours approved by each corresponding jurisdiction as part of the planning and encroachment permit process. In the event that work is required outside of the standard construction hours (to reduce traffic or other impacts, or as system testing requires), adjacent property owners would be notified of nighttime work in advance, and the Sanitation District would coordinate with the applicable jurisdiction, as required. All nighttime work would require prior approval by the affected jurisdiction.

Construction lighting impacts could result in temporarily significant impacts due to the potential for light to spill over and disturb sensitive receptors, such as residences or biologically sensitive areas. As such, mitigation would be required to reduce impacts. MM-AES-2 would be required where nighttime construction is necessary in residential areas or near other sensitive receptors to reduce impacts to less than significant. FMP projects that are analyzed

at the project level for which this would be true include projects P1-126, X-093, X-092, X-048, P1-135, X-077, X-090, P2-126, P2-138, X-050, X-032, X-054, X-034, J-98, J-120, J-133, X-057, X-058, X-059, J-121, X-044, 5-68, X-076, X-082, X-060, 11-33, X-063, 2-73, 3-67, 2-49, and X-083, and impacts for these projects and those analyzed at the program level would be less than significant with mitigation incorporated.

Operational Impacts (Above-Grade)

For project facilities that would be constructed above-grade (i.e., facilities at Plant 1 and Plant 2 and pump stations within the collection system), lighting would be installed in a manner similar to the existing conditions (i.e., for safety and security purposes). Although not anticipated, the new lighting at these facilities could result in spillover lighting onto neighboring residential, commercial uses, or biologically sensitive areas, resulting in a potentially significant lighting impact. As such, mitigation would be required to reduce impacts. MM-AES-3 would require that project facilities be reconstructed in a manner consistent with the existing lighting ordinances of the applicable jurisdiction, and requires that that permanent exterior lighting be shielded and directed downward to avoid any light intrusion to surrounding uses. Implementation of MM-AES-3 would ensure that potential lighting impacts be reduced to less than significant.

Cumulative Aesthetic Impacts

A significant adverse cumulative aesthetic impact would occur where development of the cumulative projects would degrade the visual quality of an area or where projects would combine to block important views. The proposed FMP would have less-than-significant impacts to aesthetics with incorporation of MM-AES-1 though MM-AES-3, given the nature of the FMP projects as primarily involving the rehabilitation and replacement of existing facilities. Following construction activities, project sites would either be restored to their existing conditions or would largely resemble pre-project conditions. Additionally, cumulative projects would be required to complete environmental review as they are proposed, and would be required to mitigate for aesthetic impacts as applicable. Cumulative projects would also be required to comply with all applicable ordinances and plans that govern visual quality, such as lighting ordinances and architectural standards. Thus, with compliance with these regulations and incorporation of applicable mitigation, cumulative impacts would be less than significant.

2.3.1.2 Mitigation Measures

MM-AES-1 **Construction Screening at Plant 1 and Plant 2.** For Facilities Master Plan projects located within Reclamation Plant No. 1 or Treatment Plant No. 2, prior to commencement of construction, the Sanitation District shall screen views of ground level construction activities from public view with fencing, vegetation, or buildings. If there are gaps in these existing barriers that allow construction activities to be viewed from public viewpoints, the Orange County Sanitation District shall install temporary visual screening barriers within these viewing windows to minimize the visual impacts of construction activities.

MM-AES-2 **Construction Lighting.** Should nighttime construction be required, a construction safety lighting plan shall be submitted to the Orange County Sanitation District Director of Engineering for review and approval prior to any nighttime construction activities. The Construction Safety Lighting Plan shall require that all construction-related lighting fixtures (including portable fixtures) shall be oriented downward and away from adjacent sensitive areas (including residential and biologically sensitive areas) and that all lighting shall consist of the minimal wattage necessary to provide safety at the construction site.

MM-AES-3 **Operational Lighting**. All new permanent exterior lighting associated with Facilities Master Plan project facilities shall be shielded and directed downward to minimize any light intrusion to surrounding uses. Development of the FMP facilities shall comply with existing and future lighting ordinances of each applicable jurisdiction. Per these requirements, all outdoor lighting fixtures shall be designed, shielded, aimed, located, and maintained to minimize impacts to adjacent sites and to not produce glare onto adjacent sites or roadways.

2.3.1.3 Finding

Consistent with CEQA Guidelines Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described in Section 2.3.1.1, Potentially Significant Impacts to Aesthetics. The feasible measures, MM-AES-1 through MM-AES-3, are listed in Section 2.3.1.2, Mitigation Measures.

The Sanitation District finds that the mitigation measures are feasible, are adopted, and would reduce the potential aesthetic impacts of the proposed FMP to less-than-significant levels. Accordingly, the Sanitation District finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed FMP that mitigate or avoid potentially significant aesthetic-related impacts of the individual projects identified in the PEIR.

2.3.1.4 Facts in Support of the Findings Related to Aesthetics

The Sanitation District finds that the above mitigation measures are feasible, are adopted, and would reduce the proposed FMP's aesthetic impacts to less than significant. Potential to impact visual resources during construction would be reduced to less than significant with incorporation of MM-AES-1. Furthermore, impacts associated with the increase in light during construction and operation of the individual FMP projects would be reduced to less than significant with implementation of MM-AES-2 and MM-AES-3. Aesthetic impacts have some components that would be mitigated to a less-than-significant level and some components that would be less than significant with no mitigation required. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts in Section 2.4.1, Aesthetics.

2.3.2 Air Quality

2.3.2.1 Potentially Significant Impacts to Air Quality Resources

Conflict with or Obstruct Implementation of the Applicable Air Quality Plan

The proposed FMP would potentially result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations due to exceedance of the South Coast Air Quality Management District (SCAQMD) construction nitrous oxides (NOx) threshold, and would potentially conflict with Consistency Criterion No. 1. Implementation of the proposed FMP would not exceed the demographic growth forecasts in the Southern California Association of Governments (SCAG) 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); therefore, the FMP would be consistent with the SCAQMD 2016 Air Quality Management Plan (AQMP). Thus, the FMP would not conflict with Consistency Criterion No. 2. However, because the FMP would potentially conflict with Consistency Criterion No. 1, impacts related to the FMP's potential to conflict with or obstruct implementation of the applicable air quality plan is potentially significant and mitigation is required. Thus,

MM-AQ-1 would be implemented. Following implementation of MM-AQ-1, the FMP would not exceed the SCAQMD mass daily construction thresholds for any criteria air pollutant, including NOx; therefore, the FMP would not conflict with Consistency Criterion No. 1, and impacts would be less than significant with mitigation.

Cumulatively Considerable Net Increase of Criteria Pollutants

Construction Emissions

Proposed construction activities associated with the various FMP components would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment and soil disturbance) and off-site sources (i.e., on-road haul trucks, delivery trucks, and worker vehicle trips). The proposed FMP would exceed the SCAQMD construction NOx threshold of 100 pounds per day in 11 of the 20 years of FMP project construction; FMP-generated emissions of volatile organic compounds, carbon monoxide (CO), sulfur oxides (SOx), and particulate matter (PM_{10} and $PM_{2.5}$) would not exceed the relevant SCAQMD construction thresholds in any year. Therefore, because the proposed FMP would exceed the SCAQMD construction NOx thresholds, associated air quality impacts would be potentially significant and would require mitigation.

MM-AQ-1 would reduce impacts related to criteria pollutant emissions during construction. To reduce NO_x emissions from construction activities, MM-AQ-1, requiring Tier 4 Final construction equipment, would be implemented. Maximum daily NO_x emissions generated during FMP project construction would be reduced to below the SCAQMD mass daily construction threshold of 100 pounds per day in all construction years. Accordingly, regarding the potential for the proposed FMP to result in a cumulatively considerable net increase of any criteria pollutant for which the FMP region is nonattainment under an applicable federal or state ambient air quality standard, impacts would be less than significant with mitigation.

Expose Sensitive Receptors to Substantial Pollutant Concentrations

Sensitive receptors near Plant 1 include residential receptors approximately 100 feet from the western boundary of the site and 400 feet from the eastern site boundary; sensitive receptors near Plant 2 include residential receptors approximately 100 feet from the western boundary of the site. The joint plant projects would occur on Plant 1 and/or Plant 2, so the closest sensitive receptors are the same as the ones identified for Plant 1 and Plant 2. The collection system projects are located within the Sanitation District's operating region, which includes developed lands that support various land uses, and sensitive receptors such as residences could be located within 25 meters (approximately 82 feet) of FMP project sites.

Localized Significance Thresholds

The combined maximum emissions from Plant 1 and applicable joint plant projects would exceed the localized significance threshold (LST) for PM_{10} during two construction years (2024 and 2025), and would exceed the LST for $PM_{2.5}$ during three construction years (2024, 2025, and 2026); NOx and CO LSTs would not be exceeded during any construction year. Additionally, combined maximum emissions of Plant 2 and applicable joint plant projects would exceed the applicable LST for PM_{10} during two construction years (2022 and 2023) and exceed the LST for $PM_{2.5}$ during three construction years (2022, 2023, and 2024), primarily due to construction of P2-126, Substation and Warehouse Replacement, at Plant 2, and P2-138, Operations and Maintenance Complex, at Plant 2. For the remaining construction years, combined maximum on-site emissions would not exceed the applicable LST. No collection system project would exceed the applicable LST. Due to the exceedance of the PM_{10} and $PM_{2.5}$ LSTs at Plant 1 and Plant 2, the proposed FMP would result in a potentially significant LST impact, and mitigation would be required.

With implementation of MM-AQ-1, FMP-generated on-site emissions from Plant 1 and applicable joint plant projects in 2024, 2025, and 2026 would be below all applicable LSTs, including the LSTs for PM_{10} and $PM_{2.5}$. Additionally, FMP-generated on-site emissions from Plant 2 and applicable joint plant projects in 2022, 2023, and 2024 would be below all applicable LSTs, including the LSTs for PM_{10} and $PM_{2.5}$. Accordingly, the FMP would result in an LST impact that is less than significant with implementation of mitigation.

Construction Health Impacts of Toxic Air Contaminants

The incremental cancer risk at the maximally exposed individual resident of 46.2 in 1 million (assuming exposure starts in third trimester of pregnancy) from proposed FMP construction would exceed the SCAQMD threshold of 10 in 1 million without mitigation. As such, impacts would be potentially significant and mitigation is required. MM-AQ-1 would be implemented to reduce FMP-generated exhaust PM_{10} (diesel particulate matter) emissions during construction activities. The maximally exposed receptor would be the nearest existing residence to the west of the Plant 2 site.

Incorporation of MM-AQ-1, requiring higher-tier engines during construction, would result in an incremental cancer risk of 7.3 in 1 million. The mitigated chronic hazard index would be 0.002 at the maximally exposed individual resident, which would be below the SCAQMD threshold of 1. FMP health risk impacts associated with construction would, thus, be less than significant with mitigation.

Health Effects of Criteria Air Pollutants

Construction of the proposed FMP would not exceed mass daily thresholds for PM_{10} or $PM_{2.5}$, would not contribute to exceedances of the National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS) for particulate matter, and would not obstruct the South Coast Air Basin (SCAB) from coming into attainment for these pollutants. Additionally, the FMP would be required to comply with SCAQMD Rule 403, which limits the amount of fugitive dust generated during construction. Because the proposed FMP would not exceed the SCAQMD mass daily construction thresholds for PM_{10} or $PM_{2.5}$, the FMP is not anticipated to result in health effects associated with PM_{10} or $PM_{2.5}$. However, the FMP would exceed the SCAQMD construction threshold for NOx, and potential health effects associated with ozone (O_3) and NOx and would be potentially significant, thus mitigation is required. With implementation of MM-AQ-1, FMP-generated construction emissions would be less than the SCAQMD mass daily thresholds for all pollutants; therefore, impacts would be less than significant with mitigation.

2.3.2.2 Mitigation Measure

MM-AQ-1: Prior to the commencement of construction activities for each project, the Orange County Sanitation District (Sanitation District) shall require its construction contractor to demonstrate that all 50-horsepower or greater diesel-powered equipment is powered with California Air Resources Board (CARB)-certified Tier 4 Final engines.

An exemption from this requirement may be granted if (1) the Sanitation District documents equipment with Tier 4 Final engines are not reasonably available, and (2) the required corresponding reductions in criteria air pollutant emissions can be achieved for the project from other combinations of construction equipment. Before an exemption may be granted, the Sanitation District's construction contractor shall: (1) demonstrate that at least two construction fleet owners/operators in Orange County were contacted and that those owners/operators confirmed Tier 4 Final equipment could not be located within Orange County during the desired construction schedule; and (2) the proposed replacement equipment has been evaluated using

California Emissions Estimator Model (CalEEMod) or other industry standard emission estimation method and documentation provided to the Sanitation District to confirm that project-generated emissions do not exceed applicable South Coast Air Quality Management District (SCAQMD) mass daily thresholds, the applicable SCAQMD localized significance thresholds, or the SCAQMD carcinogenic (cancer) risk threshold.

2.3.2.3 Finding

Consistent with CEQA Guidelines Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described in Section 2.3.2.1, Potentially Significant Impacts to Air Quality Resources. The feasible mitigation, MM-AQ-1, is listed in Section 2.3.2.2, Mitigation Measure.

The Sanitation District finds that the mitigation measure is feasible, adopted, and will reduce the potential air quality resources impacts of the proposed FMP to less-than-significant levels. Accordingly, the Sanitation District finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed FMP that mitigate or avoid potentially significant air quality-related impacts of the individual FMP projects identified in the PEIR.

2.3.2.4 Facts in Support of the Findings Related to Air Quality Resources

The Sanitation District finds that the above mitigation measure is feasible, adopted, and will reduce the proposed FMP's air quality impacts. Potential to conflict with or obstruct implementation of the applicable air quality plan would be reduced to less than significant with implementation of MM-AQ-1. Additionally, construction emissions would be reduced to below the SCAQMD's thresholds with implementation of MM-AQ-1. Furthermore, for FMP projects exposing sensitive receptors to substantial pollutant concentrations that have potential to lead to emissions exceeding the localized significance threshold, increasing cancer risk, exceeding chronic hazard index thresholds, and exceeding SCAQMD construction threshold for potential health effects would be reduced to less than significant with implementation of MM-AQ-1. Air quality impacts have some components that would be mitigated to a less-than-significant level and some components that would be less than significant with no mitigation required. These are noted in the findings for the applicable impacts; separate findings are made for the less-than-significant impacts in Section 2.4.3, Air Quality.

2.3.3 Biological Resources

2.3.3.1 Potentially Significant Impacts to Biological Resources

Candidate, Sensitive, or Special-Status Species

Project-Level Direct Impacts (Nesting Birds)

The FMP area contains landscaped trees and native shrubs within and immediately adjacent to each FMP project site that provide suitable nesting habitat for bird species protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC) 3500. Trimming, pruning, and/or removal of trees and landscaped shrubs may occur as a result of construction of the project-level projects. Therefore, there may be a potential for a significant direct impact to occur to nesting birds, particularly during the general nesting season of February 1 through August 31. To reduce the potential for significant impacts to nesting birds, implementation of MM-BIO-1, which requires avoidance

during the nesting bird season (typically February 1 through August 31), or conducting a pre-construction survey if avoidance is not possible, is prescribed to reduce potential direct impacts to nesting birds to below a level of significance. Therefore, direct impacts to nesting birds would be less than significant with mitigation.

Project-Level Indirect Impacts (Nesting Birds)

Noise generated by construction activities, including vegetation removal and grading, conducted during the avian breeding season (February 1 through August 31), could result in potential indirect impacts to nesting birds. Noise related to these activities has the potential to disrupt reproductive and feeding activities. Under the MBTA and CFGC, indirect impacts to individual native birds, active nests, or the young of nesting native bird species would be potentially significant. To reduce the potential for significant impacts to nesting birds, MM-BIO-1 would be implemented. Therefore, indirect impacts to nesting birds would be less than significant with mitigation.

Program-Level Direct Impacts

Potential direct impacts to the state and federally endangered least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) could occur within suitable native willow habitat associated with a concrete-lined channel that occurs within and immediately adjacent to project X-066, the Tustin-Orange Interceptor Sewer at Reach 18 Rehabilitation. As currently designed, vegetation may be trimmed and/or removed for this rehabilitation project, and if this habitat is determined to be occupied by either federally listed species, vegetation removal would result in a direct impact, which would be significant. To reduce potential direct impacts to least Bell's vireo and/or southwestern willow flycatcher, implementation of MM-BIO-2 would reduce potential impacts to a less-than-significant level through biological reconnaissance and potential focused species surveys to determine presence/absence of the species, and subsequent U.S. Fish and Wildlife Service (USFWS) permitting should either species be found and determined to be impacted. Therefore, potential direct impacts to special-status species as a result of implementation of project X-066 would be less than significant with mitigation.

Additionally, the FMP area contains landscaped trees and native shrubs within and immediately adjacent to project sites that provides suitable nesting habitat for bird species protected under the MBTA and CFGC 3500. Trimming, pruning, and/or removal of trees and landscaped shrubs may occur as a result of construction of program-level activities. Therefore, there may be a potential for a significant direct impact to occur to nesting birds, particularly during the general nesting season of February 1 through August 31. To reduce the potential for significant impacts to nesting birds, implementation of MM-BIO-1, which requires avoidance during the nesting bird season (typically February 1 through August 31), or conducting a pre-construction survey if avoidance is not possible, would reduce potential direct impacts to nesting birds to below a level of significance. Therefore, direct impacts to nesting birds would be less than significant with mitigation.

Program-Level Indirect Impacts

Burrowing Owl

Burrowing owl (*Athene cunicularia*) has the potential to occur adjacent to project sites for projects X-065 and 3-68, which are both located adjacent to undeveloped and disturbed areas that contain suitable habitat with recorded occurrences within 5 miles. If burrowing owl is determined to be nesting within 500 feet of the proposed impact areas for projects X-065 and 3-68, indirect impacts could result in nest failure, which would be considered significant. Implementation of MM-BIO-2 would require a determination whether burrowing owl is present/absent within adjacent habitat areas, and would include avoidance, relocation, and compensatory mitigation to reduce potential indirect impacts to a less-than-significant level. Therefore, potential indirect impacts to burrowing owl from program-level activities would be less than significant with mitigation.

Coastal California Gnatcatcher

Program-level activities that could result in potential indirect impacts to coastal California gnatcatcher (*Polioptila californica californica*) include project X-086, Santa Ana Sewer Relief, and project 5-66, Crystal Cove Pumping Station Upgrade and Rehabilitation. Suitable coastal sage scrub habitat occurs just outside the study area for both projects. Suitable habitat near project X-086 is located within planted California brittle bush-California sagebrush vegetation that is associated with the Santa Ana River Lakes located southeast of the intersection of East La Palma Avenue and North Tustin Avenue in east Anaheim. The replacement of the sewer line would occur entirely within the right-of-way (ROW) for La Palma Avenue. However, if coastal California gnatcatcher is determined to nest within the adjacent coastal sage scrub habitat, potential indirect impacts could occur through increased human presence and noise within 300 feet of an active coastal California gnatcatcher nest. Nest failure through adjacent harassment from project-related activities would be considered a significant impact. Implementation of MM-BIO-2 would reduce potential indirect impacts to a level below significance through biological reconnaissance, breeding season avoidance, focused protocol surveys, and USFWS permitting if it is determined that impacts would occur. Therefore, potential project-related indirect impacts to coastal California gnatcatcher through implementation of project X-086 would be less than significant with mitigation.

Tricolored Blackbird

Potential indirect impacts to tricolored blackbird (*Agelaius tricolor*) may occur through implementation of project X-071, the Edinger/Springdale Trunk Sewer Rehabilitation, through the increased human presence and noise from the rehabilitation of the trunk sewer line in the Springdale Street ROW. The previous record of tricolored blackbird in this location is approximately 200 feet east of the project location. If this species is determined to occur within 300 feet of the project site, the increased human presence and noise during rehabilitation activities may result in nest failure, which would be considered a significant impact. Implementation of MM-BIO-2 includes a biological reconnaissance, breeding season avoidance, pre-construction surveys to determine presence/absence, and biological monitoring if a nesting tricolored blackbird is found, which would reduce impacts to a less-than-significant level. Therefore, project-related indirect impacts to tricolored blackbird would be less than significant with mitigation.

Nesting Birds

Noise generated by construction activities, including vegetation removal and grading, conducted during the avian breeding season (February 1 through August 31) could result in potential indirect impacts to nesting birds. Noise related to these activities has the potential to disrupt reproductive and feeding activities. Under the MBTA and CFGC, indirect impacts to individual native birds, active nests, or the young of nesting native bird species would be considered potentially significant. To reduce the potential for significant impacts to nesting birds, implementation of MM-BIO-1, which requires avoidance of nests during the nesting bird season (typically February 1 through August 31) or conducting a pre-construction survey if avoidance is not possible, would reduce potential indirect impacts to nesting birds to a less-than-significant level. Therefore, indirect impacts to nesting birds would be less than significant with mitigation.

Riparian Habitat or other Sensitive Natural Community

Program-Level Direct Impacts (Project X-066)

The proposed program-level activities would be primarily contained within disturbed and developed portions of the FMP area that do not contain native or any sensitive natural vegetation communities. However, Plant 1 and Plant 2 occur immediately adjacent to the SAR, which contains the Southern California arroyo chub/Santa Ana sucker stream

community in inundated portions of the SAR, and scattered native riparian habitat, which are considered sensitive natural communities. No direct impacts to the SAR would occur as a result of implementation of program-level projects in Plant 1 or Plant 2, since these projects would be entirely contained within the boundaries of the facilities.

However, project X-066, Tustin-Orange Interceptor Sewer at Reach 18 Rehabilitation, occurs within and immediately adjacent to arroyo willow thickets habitat associated with a concrete-lined flood control channel. Although arroyo willow thickets are ranked as an S4 vegetation community, and therefore not considered sensitive, this community may provide suitable habitat for the state- and federally listed as endangered least Bell's vireo and southwestern willow flycatcher. If either species is observed in this vegetation community during focused species surveys, then this community would be considered sensitive and would require compensatory-based mitigation for project-related impacts. Project X-066 would require tree trimming and/or removal, which would be considered significant if the arroyo willow vegetation is occupied by least Bell's vireo or southwestern willow flycatcher. Implementation of MM-BIO-3 would reduce potential impacts to a less-than-significant level through biological reconnaissance, focused protocol surveys for least Bell's vireo and southwestern willow flycatcher (Sogge et al. 2010; USFWS 2001), and habitat-based compensatory mitigation. Therefore, implementation of project X-066 would result in a less-than-significant impact with mitigation.

Program-Level Indirect Impacts (Project X-066)

Similar to direct impacts, project X-066 is the only project that occurs within and immediately adjacent to a potentially sensitive natural community, the arroyo willow thickets associated with a concrete-lined channel. If this community is determined to be occupied by a state- or federally listed species, then indirect impacts would be considered significant if project activities in this area result in habitat degradation or root system impacts from construction equipment use. Indirect impacts that result in habitat loss would require compensatory habitat-based mitigation through MM-BIO-3. Therefore, an indirect impact from the proposed program-level activities, specifically X-066, would result in a less-than-significant impact with mitigation.

Adverse Effect on Wetlands

Program-Level Direct Impacts

Direct impacts to federally protected wetland and jurisdictional waters from the program-level activities may only occur during rehabilitation activities for project X-066, Tustin-Orange Interceptor Sewer at Reach 18 Rehabilitation, that occurs within and immediately adjacent to an unnamed concrete-lined flood control channel that is mapped as an intermittent stream and contains native riparian habitat. Project X-066 may result in the potential direct impact to a jurisdictional flood control channel. If the final project design results in encroachment or the placement of fill within this unnamed jurisdictional channel, this impact would be considered significant. MM-BIO-4 would reduce potential impacts to a jurisdictional feature to a less-than-significant level through biological reconnaissance, jurisdictional delineation, regulatory agency permitting, and compensatory habitat-based mitigation. Therefore, direct impacts resulting from implementation of project X-066 would be less than significant with mitigation incorporated.

Conflict with Biological Resources Protection Policies and Ordinances

Project-Level Direct Impacts and Indirect Impacts

Every project-level activity within the FMP area would occur within the vicinity of landscaped ornamental trees that are mainly on public property and ROWs. These activities may result in the trimming, pruning, and/or removal of street and parkway trees, which would be considered a direct impact, as well as indirect impacts from encroachment and ground-disturbing activities associated with replacement and demolition activities. For project activities within the City of Huntington Beach and the City of Fountain Valley, direct and indirect impacts such as cutting, trimming, pruning, removing or injuring a tree within any street, parkway, or public place would be considered significant per Chapter 13.50 of the City of Huntington Beach Municipal Code, and Chapter 12.04 of the City of Fountain Valley Municipal Code. Implementation of MM-BIO-5 would reduce potential direct and indirect impacts to city-protected trees to a less-than-significant level. Therefore, project-level impacts related to local policies or ordinances protecting biological resources would be less than significant with mitigation incorporated.

Program-Level Direct Impacts and Indirect Impacts

Every program-level project within the FMP area occurs within the vicinity of landscaped ornamental trees that are mainly on public property and ROWs. These program-level project activities may result in the trimming, pruning, and/or removal of street and parkway trees, which would be considered a direct impact, as well as indirect impacts from encroachment and ground-disturbing activities associated with replacement and demolition activities. For project activities within the City of Huntington Beach and the City of Fountain Valley, direct and indirect impacts such as cutting, trimming, pruning, removing, or injuring a tree within any street, parkway, or public place would be considered significant. Implementation of MM-BIO-5 would reduce potential direct and indirect impacts to city-protected trees to a less-than-significant level. Therefore, program-level impacts related to local policies or ordinances protecting biological resources would be less than significant with mitigation incorporated.

Cumulative Biological Resources Impacts

Most of the proposed FMP would not result in a cumulatively considerable impact to biological resources within the service area. However, there are several projects that may result in a significant impact to biological resources that would require mitigation to reduce impacts. These projects are locally restricted to a relatively small footprint, but occur within or immediately adjacent to special-status species, sensitive natural communities, or jurisdictional waters. Project-level and program-level impacts would be reduced to a less-than-significant level through implementation of MM-BIO-1 through MM-BIO-5. With implementation of these mitigation measures and due to the proposed impacts within existing developed areas, the proposed project-level and program-level projects would not contribute to a cumulatively considerable impact to biological resources, and no further measures to reduce impacts on a cumulative scale would be required.

2.3.3.2 Mitigation Measures

MM-BIO-1 **Nesting Bird Avoidance.** Construction activities for project-level and program-level projects shall avoid the migratory bird nesting season (typically February 1 through August 31), to reduce any potential significant impact to birds that may be nesting within 500 feet of project sites. If construction activities must occur during the migratory bird nesting season, an avian nesting survey of the project site and suitable habitat within 500 feet of the site shall be conducted for protected migratory birds and active nests. The avian nesting survey shall be performed by a qualified

biologist meeting the standards in the field within 72 hours prior to the start of construction in accordance with the Migratory Bird Treaty Act (16 USC 703–712) and California Fish and Game Code, Sections 3503, 3503.5, and 3513. If an active bird nest is found, the nest shall be flagged and an appropriate buffer established around the nest, which shall be determined by the biologist based on the species' sensitivity to disturbance (up to 300 feet for passerines and up to 500 feet for raptors and special-status species). The nest area shall be avoided until the nest is vacated and the juveniles have fledged. No project activities may encroach into the buffer until a qualified biologist has determined that the nestlings have fledged, and the nest is no longer active.

MM-BIO-2 **Special-Status Species Surveys and Mitigation**. For any program-level projects identified in this program environmental impact report (PEIR) that may result in a significant impact to a special-status species, a biological reconnaissance of the project site will be conducted by a qualified biologist within 1 year prior to the start of construction of future program-level projects to determine if suitable habitat for special-status species occurs on the project site. If suitable habitat is present on or within the immediate vicinity (100–500 feet) of the project site, additional focused surveys and subsequent mitigation measures will be required as described below. The following species-specific measures will be implemented for projects identified with a potential to contain suitable habitat for special-status species.

Least Bell's Vireo and Southwestern Willow Flycatcher Protocol Level Surveys. As determined by a qualified biologist during the biological reconnaissance described above for program-level projects that would result in potential direct and indirect impacts to willow riparian habitat, specifically project X-066, U.S. Fish and Wildlife Service (USFWS) protocol surveys for least Bell's vireo and southwestern willow flycatcher must be conducted by a biologist holding a USFWS permit for least bell's vireo and southwestern willow flycatcher to determine the presence or absence of these species on the project site and within 500 feet of the project site. Prior to construction, a total of eight visits are required to cover both species (three least Bell's vireo-only surveys and five combined least Bell's vireo and southwestern willow flycatcher surveys) with a minimum 10-day interval between surveys. If either listed species is observed during focused protocol surveys, all project activities shall cease during the combined nesting season of April through July to reduce impacts to a less-than-significant level.

However, if project activities cannot avoid the nesting season, potential direct impacts to either species may occur, which would be considered significant. To reduce impacts to less than significant, prior to implementing the project consultation with USFWS and the California Department of Fish and Wildlife (CDFW) will be required to initiate Section 7/10 consultation under the federal Endangered Species Act and apply for an Incidental Take Permit under Section 2081 of California Fish and Game Code. Additionally, impacts to occupied habitat for either species will require compensatory habitat-based mitigation through either the restoration of habitat and long-term conservation through a habitat conservation plan or through the purchase of mitigation credits at a minimum 1:1 ratio from an approved mitigation bank that sells credits for the conservation, creation, and enhancement of similar habitat types. However, the final mitigation strategy will be determined through agency consultation.

Burrowing Owl Focused Surveys. For program-level projects that occur in the vicinity of disturbed habitat that could provide suitable nesting habitat for burrowing owl with nearby occurrences, specifically projects X-086 and 5-66, focused surveys for burrowing owl shall be conducted in order

to positively determine burrowing owl presence or absence prior to the start of construction as described below. In accordance with the protocol outlined in the 2012 California Department of Fish and Game Staff Report on Burrowing Owl Mitigation, four survey visits will be conducted by a qualified biologist on the study area (project site plus 500-foot buffer), spaced apart to allow an adequate amount of time to detect burrowing owl throughout the breeding season. At least one survey will be conducted between February 15 and April 15, and a minimum of three surveys conducted at least 3 weeks apart between April 15 and July 15, with at least one visit after June 15.

If burrowing owl is found within the study area, then avoidance of the owl's breeding season of February through July should occur to reduce potential indirect impacts to a less-than-significant level. If the breeding season cannot be avoided, then a qualified biologist must be on site during all project activities to monitor if adjacent construction noise (within 500 feet) and increased human presence are resulting in significant harassment of a nesting owl. If the biological monitor determines that project activities are significantly harassing burrowing owl, all activities shall halt until the nesting season has concluded. Because no suitable habitat for this species will be impacted, no compensatory habitat-based mitigation will be required.

Coastal California Gnatcatcher Surveys. For program-level projects that occur within suitable Coastal California gnatcatcher habitat, specifically project X-086, surveys shall be conducted by a qualified biologist to determine the presence/absence of this species prior to the start of construction as described below. Because project X-086 is not located within a Natural Community Conservation Plan area, per the 1997 USFWS Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines, six survey visits are required from March 15 through June 30 at least 1 week apart. If this species is absent, no further action is required.

If this species is present within the survey area (project site plus 500-foot buffer), the nest location will be recorded. There is a potential for indirect impacts to occur if construction commences during the breeding season (February 15 to August 31). Therefore, project activities for project X-086 shall avoid the breeding season to avoid potential indirect impacts. If construction must occur during the breeding season when this species is present, a biological monitor will be on site to determine if adjacent project activities will result in the significant harassment and potential nest failure of a nesting gnatcatcher. If the biological monitor determines significant harassment is occurring, project activities must halt until the nesting season has concluded and the biological monitor verifies the nest is no longer active. If construction results in nest failure and ultimate take of the species, consultation with USFWS will be required to permit the take and mitigate for species loss through the Section 7/10 process of the federal Endangered Species Act. Because no direct impacts through habitat removal will occur, no compensatory habitat-based mitigation or agency permitting is required.

Tricolored Blackbird Preconstruction Survey. Within 10 days prior to construction, a qualified biologist knowledgeable in tri-colored blackbird biology shall conduct a preconstruction survey within areas of suitable habitat for tricolored blackbird, such as Carr Park adjacent to project X-071. The biologist shall look for tricolored blackbirds that may be located within or immediately adjacent to the project site (within 500 feet). If any tricolored blackbirds are found, the biologist shall identify their location for avoidance and establish a buffer of up to 500 feet. If tricolored blackbird are found and cannot be avoided by the project, additional mitigation will be required to comply with the California Endangered Species Act, such as applying for an Incidental Take Permit under Section 2081 of California Fish and Game Code prior to project implementation. Additionally,

impacts to occupied habitat for this species will require compensatory habitat-based mitigation through the purchase of mitigation credits at a minimum 1:1 ratio from an approved mitigation bank. The final mitigation ratio will be determined through consultation with CDFW.

MM-BIO-3 **Sensitive Natural Communities.** If it is determined through implementation of MM-BIO-2 that least Bell's vireo and/or southwestern willow flycatcher occur within suitable habitat within the project X-066 study area (project site plus 500-foot buffer area), and the final project design will result in tree trimming or vegetation removal, the following compensatory habitat-based mitigation will be required prior to project implementation. Mitigation will be carried out by the Orange County Sanitation District (Sanitation District) working with the regulatory agencies and can include the following options:

A. Conduct on-site or off-site habitat restoration of in-kind habitat at a ratio agreed upon by the regulatory agencies.
B. On-site revegetation of habitat will be identified in a habitat mitigation monitoring plan (HMMP) that meets regulatory agency standards, which also includes the design for restoration, monitoring requirements to determine if established performance criteria is met, and recommended remedial measures. The HMMP will also include enhancement activities of the remaining habitat on site.
C. If on-site restoration/enhancement is not feasible, the Sanitation District may also purchase off-site mitigation credits from a California Department of Fish and Wildlife-approved mitigation bank in the region that sells credits for the conservation, creation, and enhancement of similar habitat types.

MM-BIO-4 **Jurisdictional Waters and Wetlands.** Direct impacts to jurisdictional waters that may occur through program-level projects such as project X-066, shall be addressed during project-level California Environmental Quality Act review of the project prior to implementation through first a biological reconnaissance conducted by a qualified biologist, and a delineation of waters and wetlands to determine potential regulatory agency jurisdiction. If the reconnaissance and delineation determine potentially jurisdictional waters or wetlands occur and may be impacted by the project, mitigation to reduce impacts will be determined through the regulatory application process to implement Clean Water Act Section 401 and Section 404, the Porter-Cologne Water Quality Act, and California Fish and Game Code Section 1602. Direct impacts to jurisdictional non-wetland waters shall be mitigated through either the on-site restoration of habitat discussed in MM-BIO-3, or through the purchase of off-site mitigation credits. The Orange County Sanitation District may purchase credits through an agency-approved mitigation bank, in-lieu fee program, or other agreement. A ratio agreed upon by the regulatory agencies for establishment or reestablishment credits will be required for impacts to jurisdictional waters and associated willow riparian habitat. The compensatory mitigation ratio is based on the existing relatively low-quality aquatic resources that occur on the project site. However, the final mitigation ratio required will be determined through consultation with the regulatory resource agencies during the permitting process.

MM-BIO-5 **Public and Parkway Trees.** If the final project design for project-level and program-level projects determines that public and parkway trees may be impacted during project construction for any project-level and program-level projects that occur within the City of Huntington Beach, the City of Fountain Valley, and any other city with a tree protection ordinance, a permit or permission from the applicable city must be obtained prior to cutting, trimming, pruning, or removing any tree, shrub or plant.

2.3.3.3 Finding

Consistent with the CEQA Guidelines Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described in Section 2.3.3.1, Potentially Significant Impacts to Biological Resources. These feasible measures, MM-BIO-1 through MM-BIO-5, are listed in Section 2.3.3.2, Mitigation Measures.

The Sanitation District finds that these mitigation measures are feasible, are adopted, and would reduce the potential biological resources impacts of the proposed FMP to less than significant. Accordingly, the Sanitation District finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the proposed FMP that would mitigate or avoid potentially significant biological-related impacts of the proposed FMP identified in the PEIR.

2.3.3.4 Facts in Support of the Findings Related to Biological Resources

MM-BIO-1 would require a nesting bird survey and avoidance measures if nests are documented within a project site or within 500 feet of a project site, if the nesting bird season (typically February 1 through August 31) cannot be avoided, to reduce impacts to less than significant. Implementation of MM-BIO-2 would involve biological reconnaissance and potential focused species surveys to determine presence/absence of the species, and subsequent USFWS permitting should either species be found and determined to be impacted. Similarly, MM-BIO-3 would reduce potential impacts through biological reconnaissance, focused protocol surveys for least Bell's vireo and southwestern willow flycatcher, and habitat-based compensatory mitigation. MM-BIO-4 would involve biological reconnaissance, jurisdictional delineation, regulatory agency permitting, and compensatory habitat-based mitigation. MM-BIO-5 would require that, prior to cutting, trimming, pruning, or removing any tree, shrub, or plant, the applicable permit or permission from the applicable city must be obtained.

Implementation of MM-BIO-1 through MM-BIO-5 would reduce potentially significant impacts related to species identified as candidate, sensitive, or special status in local or regional plans; riparian habitat or other sensitive natural community; wetlands; policies or regulations; and cumulative biological resources to a less-than-significant level. There would be no significant, unavoidable impacts related to biological resources after implementation of these mitigation measures. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts in Section 2.4.4, Biological Resources.

2.3.4 Cultural Resources

2.3.4.1 Potentially Significant Impacts to Cultural Resources

Historical Resources

The proposed FMP would involve disturbance of the ground surface, including possible vegetation clearing, grading, trenching, and other activities. These activities would be confined to a limited amount of ground disturbance and would be restricted primarily to existing utility corridors and disturbed areas. Given the characteristics of the proposed FMP activities, the potential for intact, significant archaeological deposits that could qualify as historical resources to be present in the FMP area is considered low, except near prehistoric archaeological site CA-ORA-1502. Nevertheless, there is the potential to discover significant archaeological materials and deposits during FMP project activities near CA-ORA-1502 and other areas identified as sensitive for archaeological resources. Therefore,

the proposed FMP could have potentially significant impacts to a historical resource. Thus, mitigation would be required to lessen impacts. Implementation of MM-CUL-1 through MM-CUL-3 would reduce impacts to historical resources to a level below significance.

Archaeological Resources

A records search, review of historic and modern maps and aerials, and a reconnaissance survey were conducted to assess impacts to cultural resources. These investigations identified three prehistoric archaeological resources and eight historic built environment resources intersecting the FMP area. Of the three prehistoric archaeological sites, one (CA-ORA-1502) is eligible for listing in the California Register of Historical Resources, and FMP project activities may encounter significant archaeological deposits associated with this resource. None of the historic built environment resources are considered significant or eligible for listing in the California Register of Historical Resources. None of these resources is known to have significant archaeological deposits within the FMP area. However, there is the potential to uncover significant archaeological deposits during FMP activities at some locations. In addition to FMP project activities near CA-ORA-1502, the sensitivity analysis identified other areas where archaeological resources may be encountered during FMP activities.

The proposed FMP would involve disturbance of the ground surface, including possible vegetation clearing, grading, trenching, and other activities. These activities would be confined to a limited amount of ground disturbance and would be restricted primarily to existing utility corridors and disturbed areas. Given the characteristics of the various project sites, the potential for intact, unknown, subsurface archaeological resources to be present in the FMP area is considered low, except near prehistoric archaeological site CA-ORA-1502. However, in the unexpected event that ground-disturbing FMP project activities unearth intact or significant archaeological materials, a potentially significant impact could result. Thus, mitigation would be required to lessen impacts. Implementation of MM-CUL-1 through MM-CUL-3 would reduce impacts to archaeological resources to less than significant.

Cumulative Cultural Resources Impacts

The proposed FMP could have potentially significant impacts to unknown cultural resources, and mitigation would be required to reduce adverse impacts to less than significant. It is anticipated that cultural resources that are potentially affected by cumulative projects would also be subject to the same requirements of CEQA as the proposed FMP and would mitigate for their impacts, if applicable. The determinations of significance would be made on a case-by-case basis, and the effects of cumulative development on cultural resources would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, the proposed FMP would not contribute to a cumulatively considerable impact associated with cultural resources because all impacts to cultural resources can be mitigated to a less-than-significant level. With implementation of MM-CUL-1 through MM-CUL-3, impacts to cultural resources would not be cumulatively considerable. Thus, impacts to cultural resources would be less than significant with mitigation incorporated.

2.3.4.2 Mitigation Measures

MM-CUL-1 Prior to start of ground-disturbing activities, the qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (or an archaeologist working under the direct supervision of the qualified archaeologist) shall be retained by the Orange County Sanitation District (Sanitation District) and shall conduct cultural resources sensitivity training for all construction personnel. Construction personnel shall be informed of the types of archaeological resources that may be encountered, the proper procedures to be enacted in the event of an

inadvertent discovery of archaeological resources or human remains, and safety precautions to be taken when working with archaeological monitors. The Sanitation District's contractor shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

MM-CUL-2 Archaeological monitoring shall be conducted for ground-disturbing activities at Reclamation Plant No. 1, Treatment Plant No. 2, the Seal Beach Pump Station Replacement (3-67), and Los Alamitos Sub-Trunk Extension project (3-68) in Seal Beach. Archaeological monitoring shall be conducted for ground-disturbing activities associated with Newport Beach Pump Station Odor Control Improvements (5-68) only as they intersect with ground-disturbing activities at the 15th Street Pump Station Rehabilitation (X-022), Lido Pump Station Rehabilitation (X-023), Rocky Point Pump Station Rehabilitation(X-024), and A Street Pump Station Rehabilitation (X-041). Archaeological monitoring shall be conducted for ground-disturbing activities associated with high cultural sensitivity portions of the Tustin-Orange Interceptor Sewer at Reach 17 Rehabilitation (X-065), Tustin-Orange Interceptor Sewer at Reach 18 Rehabilitation (X-066), Crystal Cove Pumping Station Upgrade and Rehabilitation (5-66), DAFT Demolition (X-043), Hoover-Western Sub-Trunks Sewer Rehabilitation (X-067/X-085), Edinger/Springdale Trunk Sewer Rehabilitation (X-071), Substation and Warehouse Replacement at Plant 2 (P2-126), Operations and Maintenance Complex at Plant 2 (P2-138). Archaeological monitoring shall be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the program area, and under the direct supervision of the qualified archaeologist. The frequency of monitoring shall take into account the rate of ground-disturbing activities, the materials being excavated (native versus artificial fill soils and older versus younger soils), and the depth of excavation. The frequency of the monitoring shall be determined by the qualified archaeologist and in coordination with the Sanitation District. In the event that archaeological resources are unearthed during ground-disturbing activities, the archaeological monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of the discovery until the Sanitation District and a qualified archaeologist have evaluated the discovery and determined appropriate treatment (as prescribed in MM-CUL-3). The archaeological monitor shall keep logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist shall prepare a report that details the results of monitoring for submittal to the Sanitation District, the South Central Coastal Information Center, and any Native American tribe that requests a copy.

MM-CUL-3 In the event of the unanticipated discovery of archaeological materials during ground-disturbing activities associated with the proposed Facilities Master Plan, the Orange County Sanitation District (Sanitation District) shall immediately cease all work activities in the area (within 100 feet) of the discovery until it can be evaluated by the qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with the Sanitation District on the significance of the resource. In the event that preservation in place is determined to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Treatment Plan, in accordance with the Advisory Council on Historic Preservation's 2009 Section 106 Archaeology Guidance, shall be prepared and implemented by the qualified archaeologist in consultation with the Sanitation District. The Archaeological Resources Treatment Plan will provide for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The Sanitation District shall consult with appropriate Native American

representatives in determining treatment for prehistoric or Native American resources. The treatment options after data recovery efforts occur may include returning the resource to the appropriate tribe or donation of the resource to a repository identified by the tribe. If preservation in place is not an option or re-deposition on site is not an option, the resource will be curated at an archaeological curation facility (compliant with standards established in 36 CFR 79, Sections 9, 10, and 11).

2.3.4.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described in Section 2.3.4.1, Potentially Significant Impacts to Cultural Resources. These feasible measures, MM-CUL-1 through MM-CUL-3, are listed in Section 2.3.4.2, Mitigation Measures.

The Sanitation District finds that these mitigation measures are feasible, are adopted, and would reduce the potential cultural resources impacts of the proposed FMP to less than significant. Accordingly, the Sanitation District finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in or incorporated into the proposed FMP that will mitigate or avoid potentially significant impacts on cultural resources.

2.3.4.4 Facts in Support of the Findings Related to Cultural Resources

Implementation of MM-CUL-1 would require cultural resources sensitivity training for all construction personnel. MM-CUL-2 would involve archaeological monitoring conducted for ground-disturbing activities at specific project locations. MM-CUL-3 would require that, in the event of the unanticipated discovery of archaeological materials during ground-disturbing activities, work activities would cease in the area (within 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. Implementation of MM-CUL-1 through MM-CUL-3 would reduce potentially significant impacts related to cultural resources to less than significant. There would be no significant, unavoidable impacts related to cultural resources after implementation of these mitigation measures. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts in Section 2.4.5, Cultural Resources.

2.3.5 Geology and Soils

2.3.5.1 Potentially Significant Impacts to Geology and Soils

Paleontological Resource or Site or Unique Geologic Feature

No paleontological resources are documented within the FMP area or a 0.33-mile-radius buffer. However, paleontological resources are known from fossil localities in proximity to the FMP area (McLeod 2019). Shallow excavations within mapped areas of low paleontological resources sensitivity (e.g., younger, Holocene-age Quaternary alluvium) are unlikely to uncover any significant paleontological resources. However, sedimentary deposits mapped as moderate to high paleontological resources sensitivity may be impacted at an unknown depth below native topsoil, artificial fill, or younger Quaternary alluvium; therefore, ground-disturbing pipeline, pump station, or equipment replacement activities within these areas may encounter important and unique paleontological resources. Thus, potential ground-disturbing activities allowed under the FMP where moderate to high paleontological resource sensitivity geological units occur could result in a potentially significant

paleontological resource impact. The paleontological resources sensitivity map (Refer to Chapter 4.6, Geology and Soils, of the Draft PEIR) for the FMP area is based on published geological mapping (Morton and Miller 2006) and paleontological sensitivity categories set forth in the County of Orange Archaeological/Paleontological Curation: Final Guidelines, Procedures, and Policies (Eisentraut and Cooper 2002; Rivin and Sutton 2010). For those areas requiring mitigation (e.g., areas of moderate and high paleontological sensitivity), MM-GEO-1 would be required. Therefore, impacts would be less than significant with mitigation incorporated.

Cumulative Paleontological Resources Impact

Potential cumulative impacts to paleontological resources would result from potential ground-disturbing activities allowed under the FMP where moderate to high paleontological resource sensitivity geological units occur. However, impacts to paleontological resources would be reduced through implementation of MM-GEO-1, a paleontological resources impact mitigation program, and paleontological monitoring of individual projects where ground-disturbing activities would impact areas with high paleontological sensitivity. As a result, the FMP projects, in combination with other cumulative projects, would not contribute to a significant cumulative impact. Thus, impacts would be less than significant with mitigation incorporated.

2.3.5.2 Mitigation Measure

MM-GEO-1 **Paleontological Resources**. Prior to commencement of any ground-disturbing activity in areas of moderate to high paleontological sensitivity, the Orange County Sanitation District shall retain a qualified paleontologist per the 2010 Society of Vertebrate Paleontology guidelines. The paleontologist shall prepare a paleontological resources impact mitigation program for the project that reduces all impacts to less than significant. The paleontological resources impact mitigation program shall be consistent with the Society of Vertebrate Paleontology guidelines and shall include: requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the project area based on construction plans and/or geotechnical reports; procedures for adequate paleontological monitoring and discoveries treatment; and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The qualified paleontologist shall attend the preconstruction meeting, and a paleontological monitor under the direction of the qualified paleontologist shall be on site during initial ground-disturbing activities in areas of previously undisturbed moderate and/or high paleontological resources sensitivity. In the event that paleontological resources (e.g., fossils) are unearthed, the paleontological monitor shall temporarily halt and/or divert ground-disturbing activity to allow recovery of paleontological resources. The area of discovery shall be roped off with a 50-foot-radius buffer. Once documentation and collection of the find is completed, the paleontological monitor shall allow ground-disturbing activities to recommence in the area of the find.

2.3.5.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), a feasible measure that can minimize significant adverse impacts was developed for the potentially significant impacts described in Section 2.3.5.1, Potentially Significant Impacts to Geology and Soils. The feasible measure, MM-GEO-1, is listed in Section 2.3.5.2, Mitigation Measure.

The Sanitation District finds that the mitigation measure is feasible, adopted, and would reduce the potential paleontological resources impacts of the proposed FMP to less than significant. Accordingly, the Sanitation District

finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in or incorporated into the proposed FMP that would mitigate or avoid potentially significant impacts associated with paleontological resources.

2.3.5.4 Facts in Support of the Findings Related to Geology and Soils

Implementation of MM-GEO-1 would require a paleontological resources impact mitigation program and paleontological monitoring of individual projects where ground-disturbing activities would impact geological units with moderate to high paleontological sensitivity. Implementation of MM-GEO-1 would reduce potentially significant impacts related to paleontological resources to less than significant. Thus, there would be no significant, unavoidable impacts related to geology and soils after implementation of the mitigation measure. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts in Section 2.4.7, Geology and Soils.

2.3.6 Hazards and Hazardous Materials

2.3.6.1 Potentially Significant Impacts to Hazards and Hazardous Materials

Routine Transport, Use, or Disposal of Hazardous Materials

Demolition, Rehabilitation, and Construction

Hazardous materials that may be used during construction and rehabilitation activities of the proposed FMP (Plant 1, Plant 2, and the collection system) include gasoline, diesel fuel, oil, lubricants, grease, welding gases (e.g., acetylene, oxygen, and argon), solvents, and paints. These materials would be used and stored in designated construction staging areas within the boundaries of the FMP project sites, and would be used, transported, handled, and stored in accordance with all applicable federal, state, and local laws and regulations that are intended to minimize health risk to the public associated with hazardous materials. The use of these materials for their intended purpose would not pose a significant risk to the public or environment. Wastes, both hazardous and non-hazardous, accumulated during demolition, rehabilitation, and construction activities would be handled, documented, and disposed of in accordance with federal, state, and local laws and regulations.

Asbestos-containing materials and lead-based paint (LBP) are documented on both Plant 1 and Plant 2. These specific locations are documented in the asbestos and lead inventories created by the Sanitation District. Additionally, universal wastes (some potentially containing PCBs) may be present in structures scheduled for demolition and rehabilitation. Demolition and rehabilitation of these features may disturb and emit asbestos, lead, PCBs, and other wastes. Additionally, traffic striping on the roads may also contain hazardous levels of lead and chromate. Construction that removes road surfaces may create wastes that contain hazardous levels of chromate and lead. Due to the potential to encounter asbestos-containing material, LBP, universal wastes, hazardous materials, and PCB-containing items during the demolition, rehabilitation, and construction processes, the proposed FMP has the potential to create a significant hazard to the public or the environment through the routine transport or disposal of hazardous materials. Therefore, mitigation would be required to lessen impacts to less than significant. Incorporation of MM-HAZ-1 would require that a hazardous building materials survey be conducted prior to demolition or renovation activities at Plant 1 and Plant 2. The asbestos and LBP inventories would be consulted to verify if asbestos-containing material or LBP are present in the proposed buildings for demolition and/or rehabilitation. A survey for universal wastes, including PCBs, would also be conducted. In addition, should

excavation or road surface removal be required, any yellow traffic striping present would be tested for lead and chrome content prior to excavation or removal activities. Identified hazardous materials would be abated prior to demolition in accordance with MM-HAZ-1. Therefore, hazards to the public or the environment through routine transport, use, or disposal of hazardous materials would be less than significant with mitigation incorporated.

Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment

Demolition, Rehabilitation, and Construction

The proposed FMP has the potential to expose the public and the environment to hazards associated with on-site releases of hazardous materials, including asbestos-containing material, LBP, PCB-containing items, and universal wastes. Management of hazardous materials and waste during pre-demolition surveys and abatement activities would be addressed by MM-HAZ-1.

Multiple underground storage tanks (USTs) were documented at both Plant 1 and Plant 2. One UST is located at the Main Street Pump Station, near the southeast corner of the pump station site. According to the Sanitation District, these documented USTs are true and accurate, and there are no other USTs located on Sanitation District facilities. Construction, especially ground-disturbing activities, has the potential to damage nearby USTs and appurtenances. In accordance with best construction practices and local laws, USTs and associated pipelines would be located and identified prior to construction, substantially reducing the potential to damage a UST and release its contents to the environment. Hazardous materials and/or hazardous waste storage areas, including aboveground storage tanks and USTs, would be avoided during construction to prevent accidental upset or release of hazardous materials. Should construction be required in these storage areas, hazardous materials/wastes would be moved or otherwise protected (e.g., secondary containment, bollards, flammable cabinets) or avoided in accordance with best construction practices and federal, state, and local requirements.

Multiple plugged oil and gas wells were identified on the Plant 2 property, one plugged oil and gas well is located on the Plant 1 property, and multiple plugged oil and gas wells are located within 100 feet of the proposed collection system projects. There are also multiple active oil and gas wells located within 0.25 miles of various proposed collection system projects. The presence of these wells creates a potential for subsurface methane gas to be present. Plant 2 is also located in the Huntington Beach Methane District, which requires additional protections for buildings due to the potential for methane intrusion into buildings. The proposed collection system projects overlap multiple methane districts, including those for Huntington Beach, Newport Beach, and Yorba Linda. Methane gas is colorless and odorless. When methane accumulates, it is highly flammable and may cause explosions. It can also displace oxygen in small enclosed areas, such as trenches, excavations, and small structures. Ground-disturbing activities in methane districts and near oil and gas wells could cause a release of methane gas into the environment, and construction over or near a plugged oil and gas well could create a methane intrusion hazard inside buildings. As such, MM-HAZ-2 would be incorporated to reduce potential impacts associated with methane gas to less than significant. Hazards associated with methane gas would be identified by a methane survey, and methane safety procedures, both jurisdictional and recommended based on the hazards found in the survey, would be followed as outlined in MM-HAZ-2. Should oil and gas wells be located within the proposed FMP area such that they impact construction, rehabilitation, or demolition, wells would be abandoned or re-abandoned as outlined in MM-HAZ-2.

Multiple hazardous material pipelines are located within the Sanitation District's service area boundary. Some of the proposed collection line projects may transect or run parallel to these pipelines. California State Law, Title 1, Division 5, Chapter 3.1, Article 2, Section 4216 requires location and delineation of subsurface utilities before any excavation activities. However, private pipelines may not be identified when locating public utilities. Damage to

these pipelines during ground-disturbing activities could cause a release of hazardous materials to the environment. As such, MM-HAZ-3 would be implemented. Prior to excavation activities on proposed collection system projects, MM-HAZ-3 requires the Sanitation District or its contractors to identify potential hazardous material pipelines in the area and take the necessary precautions to avoid damage and release of hazardous materials to the environment.

Leaking underground storage tanks and other minor releases of petroleum products have been documented on Plant 1 and Plant 2. Although cleanup activities have occurred at multiple locations in response to these releases, residual petroleum and volatile organic compound contamination may remain. Contamination may impact soil, groundwater, and soil vapor. Additionally, current and historical chemical storage and use at Plant 1 and Plant 2, and historical oil drilling activities at Plant 2, may have caused subsurface contamination to soil, groundwater, and soil vapor. Multiple contaminated sites were identified near proposed collection system projects that have caused potential environmental contamination to soils, groundwater, and soil vapor at some of the proposed collection system projects. Excavation in these areas and improper handling and disposal of excavated soils and groundwater could cause a release of hazardous materials to the environment. A Hazards Contingency Plan would be developed according to MM-HAZ-4 that outlines procedures for training, safety, and identification of contaminated media (soil, soil vapor, groundwater) during construction activities. In addition to known contaminated sites, sites are listed on Cortese and non-Cortese List hazardous materials databases on a rolling basis, and new sites may be identified between the date of the PEIR and the actual construction of the proposed FMP project. The Hazards Contingency Plan requires training for identification of contamination in soil, soil vapor, or groundwater; therefore, risks associated with previously unidentified contamination would be mitigated.

In addition to the potential for environmental contamination on collection system projects, multiple monitoring wells are located within the proposed FMP boundary. These monitoring wells are associated with nearby contaminated sites. These monitoring wells may be actively monitored as part of cleanup activities associated with the nearby cleanup site. Disturbance of these monitoring wells during construction activities could cause a release of hazardous materials to the environment. Monitoring wells are protected under California Water Code (Division 7, Chapter 10, Article 4) and cannot be damaged or removed without proper permission from the overseeing regulatory agency. In addition to the monitoring wells identified, other monitoring wells may be installed or located within project boundaries. Any monitoring wells encountered during construction would be managed as described in MM-HAZ-5.

With implementation of MM-HAZ-1 through MM-HAZ-5, any impacts due to potential hazardous materials encountered during demolition and construction activities would be less than significant with mitigation incorporated.

Operation

Once operational, the proposed FMP would not be expected to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The proposed FMP would involve continued operation of the existing plants and collection system, with upgrades and improvements. Hazardous materials used for operation of Plant 1, Plant 2, and the collection system would be in accordance with requirements and recommendations in the Safety Data Sheet, and would be managed in accordance with federal, state, and local laws and regulations. The Sanitation District will continue to submit Hazardous Materials Business Plans (HMBPs) to the local Certified Unified Program Agency to document reportable quantities of hazardous materials stored on site. The Sanitation District is currently phasing out the use of extremely hazardous substances, and does not permit new use or inventories of extremely hazardous substances at their facilities. The FMP would not result in the introduction of new extremely hazardous substances or an increase in the amount of extremely hazardous substances currently at Sanitation District

facilities. The use of these substances would be subject to applicable federal, state, and local health and safety laws and regulations that are intended to minimize health risk to the public associated with hazardous materials. Hazardous wastes that are generated by Sanitation District facilities are generated, stored, manifested, and transported in accordance with federal, state, and local regulations. Although the Sanitation District uses extremely hazardous substances, the Sanitation District does not anticipate future generation of acutely hazardous waste in standard operations. Future wastes generated would not be considered acutely hazardous.

Buildings constructed on or near abandoned oil wells would be constructed in accordance with applicable laws, rules, and regulations, including the Orange County Fire Authority, City of Huntington Beach (Plant 2), City of Fountain Valley (Plant 1), and other local jurisdictions as required for collection system project structures for protection of potential hazards due to methane. Additionally, as described in MM-HAZ-2, a methane survey would be conducted for FMP projects located within methane districts or within 100 feet of an oil and gas well, and a methane safety plan would be developed based on the risks identified in the study. This would include operation of FMP projects within these districts. Therefore, impacts would be less than significant with mitigation incorporated.

Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of a School

Construction and Operation

Hazardous materials would be transported, handled, stored, and disposed of in accordance with federal, state, and local laws and regulations, as described in the previous analysis sections. Hazardous materials used during construction and operation of the proposed FMP would be stored within FMP boundaries. As required, HMBPs, spill prevention plans, and emergency response plans would be developed as required by state and local regulations. These regulations and requirements provide protection from emissions and releases of hazardous materials to the environment, including nearby schools. Hazardous materials associated with environmental contamination (e.g., from a nearby contaminated site) would be managed by the Hazards Contingency Plan, as described in MM-HAZ-4, which would remove the risk of hazardous emissions to the environment. A methane study would be conducted for FMP components located within methane districts or near oil and gas wells (MM-HAZ-2), and potential risks would be addressed in a methane safety plan. Operation of the FMP components would be similar to current operations and would not increase the potential for hazardous emissions or use of hazardous materials near schools. Therefore, impacts would be less than significant with mitigation incorporated.

Included on a List of Hazardous Materials Sites

Demolition, Rehabilitation, Construction and Operation

Plant 1 has an open leaking underground storage tank file for a release that occurred in 2002. As such, Plant 1 is included on a Cortese List database pursuant to California Government Code Section 65962.5. Additionally, Plant 1, Plant 2, and some of the collection system projects have been impacted or potentially impacted by Cortese List and non-Cortese List (e.g., conditionally closed leaking underground storage tank) contaminated sites. These specific listings are discussed in the Draft PEIR and its appendices. The following impacts on the FMP area are associated with these hazardous materials sites:

- There is potential for contaminated soil, groundwater, and soil vapor to be present on the FMP project sites due to multiple former release incidents; this could be disturbed during construction activities.

- Multiple monitoring wells are located within proposed collection system project boundaries. These monitoring wells may still be actively monitored as part of cleanup activities on the nearby sites. Disturbance of these wells is not permissible by law and could cause a release of hazardous materials to the environment.

MM-HAZ-4 and MM-HAZ-5 would be implemented, eliminating significant hazards to the public or the environment.

In addition to known contaminated sites, sites are listed on Cortese List databases on a rolling basis, and new sites may be identified between the date of the PEIR and the actual construction of the FMP projects. Prior to construction, a review for additional Cortese List sites, or changes to existing Cortese List sites, would be conducted in accordance with MM-HAZ-6. Therefore, any new hazards associated with Cortese List sites would be identified. Implementation of the Hazards Contingency Plan, as described in MM-HAZ-4, would be used to mitigate hazards associated with newly identified contaminated sites.

With implementation of MM-HAZ-4, MM-HAZ-5, and MM-HAZ-6, these hazards would be reduced to less than significant with mitigation incorporated.

Adopted Emergency Response Plan or Emergency Evacuation Plan

Demolition, Rehabilitation, and Construction

FMP projects on Plant 1 and Plant 2 would occur entirely within the Plant 1 and Plant 2 boundaries. No road closures or plant operations are anticipated that would impact adopted emergency response plans. Truck traffic for construction activities would not be such that it would interfere with emergency evacuation routes designated for tsunamis. FMP projects for the collection system may require partial road closures. Incorporation of a Construction Traffic Control Plan as defined in MM-TRA-1, discussed in Section 2.3.9.2, Mitigation Measures, would ensure that any temporary impacts to emergency vehicle flow and/or ingress/egress to properties along the FMP projects are coordinated in advance with emergency service providers and law enforcement to ensure that provision of sufficient emergency service, access, and evacuation can occur during construction if necessary. Implementation of the Construction Traffic Control Plan would reduce impacts to local emergency service providers. Thus, impacts would be less than significant with mitigation incorporated.

2.3.6.2 Mitigation Measures

MM-HAZ-1 **Pre-Demolition Hazardous Building Materials Survey and Abatement.** A hazardous building materials survey shall be conducted prior to demolition or renovation activities at Reclamation Plant No. 1 and Treatment Plant No. 2. The survey will include polychlorinated biphenyls and universal wastes. A survey will also be conducted on collection system projects to identify yellow traffic striping that may contain lead chromate. Following results of the hazardous materials survey, and incorporating information from current asbestos and lead inventories, demolition or renovation plans and contract specifications, including those for road-disturbing activities, shall incorporate abatement procedures for the removal of materials containing asbestos, lead, polychlorinated biphenyls, and universal waste items, as required by law. All abatement work shall be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency, Occupational Safety and Health Administration, California Occupational Safety and Health Administration, and the South Coast Air Quality Management District.

MM-HAZ-2 **Methane Management and Mitigation.** If a proposed rehabilitation, renovation, or construction project that involves the construction or occupancy of a building or structure is within a designated methane district, guidance from the applicable jurisdiction shall be consulted prior to project implementation to determine if the proposed Facilities Master Plan (FMP) is subject to any requirements, including health and safety requirements, related to the jurisdiction's methane districts. These jurisdictions include City of Huntington Beach, City of Newport Beach, City of Yorba Linda, and Orange County Fire Authority (OCFA). Additionally, projects located within a designated methane district or located within 100 feet of a plugged or active oil and gas well (a distance defined by OCFA) will have a methane survey conducted prior to ground-disturbing activities. The survey shall be conducted by a professional engineer or geologist with experience and credentials that meet the requirements of the County or local jurisdiction. Based on the result of the methane survey, a methane safety plan will be developed that identifies health and safety procedures for construction (such as ambient air monitoring) and operation (such as passive or active venting systems on buildings) of proposed FMP projects that adequately mitigate risks associated with identified methane. The safety plan will meet minimum requirements set forth by OCFA Combustible Soil Gas Hazard Mitigation C-03, and applicable city-specific methane safety requirements. The Orange County Sanitation District and its contractors shall follow the methane safety plan during applicable projects. Should oil and gas wells require abandonment or re-abandonment to facilitate construction or operation of the proposed FMP, this shall be done in accordance with California Geologic Energy Management Division (CalGEM) requirements. Abandonment approval from CalGEM will be required prior to construction or other activities that could affect the oil and gas well.

MM-HAZ-3 **Hazardous Material Pipeline Location and Notification.** Prior to excavation or other ground-disturbing activities on proposed collection line projects, the Orange County Sanitation District (Sanitation District) or its contractor will determine if hazardous material pipelines are located in the area of excavation or other ground-disturbing activity. The National Pipeline Mapping System may be utilized to identify the location and owner/operator of hazardous material pipelines that may cross or run parallel to the proposed excavation area. The Sanitation District or its contractor will consult the pipeline owner, and will take the necessary precautions, such as setbacks, to avoid contact with the hazardous material pipeline, as required by the pipeline owner and by applicable federal, state, and local laws and regulations.

MM-HAZ-4 **Hazards Contingency Plan.** Prior to commencement of any ground-disturbing activities where it has been determined that hazardous materials are present and will be disturbed (see MM-HAZ-6), a Hazards Contingency Plan shall be developed that addresses potential impacts to soil, soil vapor, and groundwater from releases on or near the project sites. The Hazards Contingency Plan shall include training procedures for identification of contamination. The Hazards Contingency Plan shall describe procedures for assessment, characterization, management, and disposal of hazardous constituents, materials, and wastes, in accordance with all applicable state and local regulations. Contaminated soils and/or groundwater shall be managed and disposed of in accordance with local and state regulations. The Hazards Contingency Plan shall include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. As opposed to a single document, all necessary elements of a Hazards Contingency Plan may be developed into contract specifications.

MM-HAZ-5 **Monitoring Well Protection.** Monitoring wells associated with nearby cleanup sites may be located within proposed collection system project boundaries. Some of these wells may still be actively monitored as part of required cleanup activities. The agency overseeing the associated cleanup site (Regional Water Quality Control Board, Department of Toxic Substances Control, or Orange County Health Care Agency) will be consulted prior to Facilities Master Plan project activities that could affect the monitoring wells to determine the best plan of action to either decommission and destroy, protect, and/or replace affected monitoring wells.

MM-HAZ-6 **Review of Cortese List Databases.** Within proposed collection system project boundaries and prior to construction where ground disturbance is required, a review of Cortese List databases pursuant to Government Code 65962.5(a) and hazardous material sites listed on Department of Toxic Substances Control EnviroStor and State Water Resources Control Board GeoTracker will be conducted within 0.5 miles of the specific Facilities Master Plan project site where the ground disturbance is proposed (project site). The review should be conducted by an environmental professional with experience in review and assessment of hazardous material sites. A search shall be conducted no more than 6 months prior to construction. In addition to the Cortese List and hazardous material sites identified in this program environmental impact report, each new Cortese List and hazardous material site identified within 0.5 miles of the project site will be reviewed for environmental contamination that could impact the project site, including soil, soil vapor, and groundwater contamination. The Hazards Contingency Plan developed in accordance with MM-HAZ 4 would be modified to incorporate findings from this review.

2.3.6.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described in Section 2.3.6.1, Potentially Significant Impacts to Hazards and Hazardous Materials. These feasible measures, MM-HAZ-1 through MM-HAZ-6, are listed in Section 2.3.6.2, Mitigation Measures.

The Sanitation District finds that these mitigation measures are feasible, are adopted, and would reduce the potential hazards and hazardous materials impacts of the proposed FMP to less than significant. Accordingly, the Sanitation District finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in or incorporated into the proposed FMP that would mitigate or avoid potentially significant impacts from hazards and hazardous materials.

2.3.6.4 Facts in Support of the Findings Related to Hazards and Hazardous Materials

Incorporation of MM-HAZ-1 would require that a hazardous building materials survey be conducted prior to demolition or renovation activities at Plant 1 and Plant 2. Additionally, hazards associated with methane gas would be identified by a methane survey, and methane safety procedures, both jurisdictional and recommended based on the hazards found in the survey, would be followed as outlined in MM-HAZ-2. MM-HAZ-3 requires the Sanitation District or its contractors to identify potential hazardous material pipelines in the area and take the necessary precautions to avoid damage and release of hazardous materials to the environment. Furthermore, a Hazards Contingency Plan would be developed according to MM-HAZ-4 that outlines procedures for training, safety, and identification of contaminated media (soil, soil vapor, groundwater) during construction activities. Any monitoring wells encountered during

construction would be managed as described in MM-HAZ-5. Prior to construction, a review for additional Cortese List sites, or changes to existing Cortese List sites, would be conducted in accordance with MM-HAZ-6. Therefore, implementation of MM-HAZ-1 through MM-HAZ-6 would reduce potentially significant impacts related to hazards and hazardous materials to less than significant. There would be no significant, unavoidable impacts related to hazards and hazardous materials after implementation of these mitigation measures. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts in Section 2.4.9, Hazards and Hazardous Materials.

2.3.7 Noise

2.3.7.1 Potentially Significant Impacts to Noise

Construction Noise

Plant 1 Projects

Construction activity noise levels at the nearest source-receiver distances are estimated to range from approximately 48 A-weighted decibels (dBA) equivalent sound level (Leq) during architectural coating activities for FMP project P1-126 to approximately 64 dBA Leq during demolition activities for FMP project P1-126, as well as during building construction activities for FMP project X-049. More typically, construction activities for the Plant 1 FMP projects would range from approximately 47 to 63 dBA Leq. Construction would typically occur between 7:00 a.m. and 6:00 p.m. Monday through Friday, and thus would not exceed applicable local noise standards. Night work, if and when it does occur, would be restricted to the applicable exempt hours per jurisdiction to ensure that it does not result in a noise impact. Based on the ambient noise measurements conducted adjacent to Plant 1 (which ranged from approximately 53 to 64 dBA Leq), noise levels from FMP projects at Plant 1 would be up to 10 decibels (dB) higher than ambient noise levels at times, resulting in a temporary significant increase compared to the existing ambient noise environment. Therefore, Plant 1 FMP construction noise impacts would be potentially significant, absent mitigation. Implementation of MM-NOI-1 would be required to reduce the noise impacts from construction activities to less than significant.

Plant 2 Projects

Construction activity noise levels at the nearest source-receiver distances are estimated to range from approximately 55 dBA Leq during grading activities for FMP project P2-138 to approximately 77 dBA Leq during building construction activities for FMP project P2-126. More typically, construction activities for the Plant 2 FMP projects would range from approximately 52 to 76 dBA Leq. Construction would typically occur between 7:00 a.m. and 6:00 p.m. Monday through Friday, and thus would not exceed applicable local noise standards. Night work, if and when it does occur, would be restricted to the applicable exempt hours per jurisdiction to ensure that it does not result in a noise impact. Based on the ambient noise measurement conducted adjacent to Plant 1 (which was approximately 61 dBA Leq), noise levels from FMP projects at Plant 2 would be up to 16 dB higher than ambient noise levels at times, resulting in a temporary significant increase compared to the existing ambient noise environment. Therefore, Plant 2 FMP construction noise impacts would be potentially significant, absent mitigation. Implementation of MM-NOI-1 would be required to reduce the noise impacts from construction activities to less than significant.

Joint Plant Projects

Construction activity noise levels at the nearest source-receiver distances are estimated to range from approximately 70 dBA Leq during testing activities for FMP projects X-057, X-058, and X-059 at Plant 2 to approximately 80 dBA Leq during building construction activities for FMP projects X-057, X-058, and X-059 at Plant 1. More typically, construction activities for the joint plant projects would range from approximately 58 to 65 dBA Leq. Construction would typically occur between 7:00 a.m. and 6:00 p.m. Monday through Friday, and thus would not exceed applicable local noise standards. Night work, if and when it does occur, would be restricted to the applicable exempt hours per jurisdiction to ensure that it does not result in a noise impact. Based on the ambient noise measurement conducted adjacent to Plants 1 and 2 (which ranged from approximately 53 to 64 dBA Leq), noise levels from FMP joint plant projects at Plant 2 would be up to 16 dB higher than ambient noise levels at times, resulting in a temporary significant increase compared to the existing ambient noise environment. Therefore, joint plant FMP construction noise impacts would be potentially significant, absent mitigation. Implementation of MM-NOI-1 would be required to reduce the noise impacts from construction activities to less than significant.

Collection System Projects

Construction activity noise levels at the nearest source-receiver distances are estimated to range from approximately 70 dBA Leq during testing activities for FMP project X-022 to approximately 94 dBA Leq during pipeline installation activities for FMP project X-083. These high noise levels would only occur at any one noise-sensitive receiver location for relatively brief periods of time because pipeline installation activities generally progress at a rate of several hundred feet per day. More typically, construction activities for the collection system FMP projects would range from approximately 59 to 73 dBA Leq. Construction would typically occur between 7:00 a.m. and 6:00 p.m. Monday through Friday, and thus would not exceed applicable local noise standards. Night work, if and when it does occur, would be restricted to the applicable exempt hours per jurisdiction to ensure that it does not result in a noise impact. Based on the ambient noise measurements conducted adjacent to representative collection system locations (which ranged from approximately 66 to 69 dBA Leq), noise levels from collection system FMP projects would be up to 25 dB higher than ambient noise levels at times, resulting in a temporary significant increase compared to the existing ambient noise environment. Therefore, collection system FMP construction noise impacts would be potentially significant, absent mitigation. Implementation of MM-NOI-1 would be required to reduce the noise impacts from construction activities to less than significant.

Excessive Groundborne Vibration or Groundborne Noise Levels

Groundborne vibration from heavy equipment operations during the course of construction activities under the proposed FMP was evaluated using the methodology contained in Section 7.2 of the Transit Noise and Vibration Impact Assessment Manual (FTA 2018) and compared with relevant vibration impact criteria. The Federal Transit Administration has collected groundborne vibration information related to the use of heavy construction equipment. This information indicates that continuous vibration velocity levels of approximately 75 velocity decibels (VdB) begin to annoy people (FTA 2018).

The heavier pieces of construction equipment (e.g., bulldozers) would have vibration velocity levels of approximately 87 VdB (equivalent to 0.089 inches per second peak particle velocity [ppv]) or less at a distance of 25 feet (FTA 2018). At the distance from the nearest vibration-sensitive receivers to construction activities (approximately 15 feet, during pipeline installation at several collection system projects), and with the anticipated construction equipment, the vibration velocity level would be approximately 94 VdB. These vibration levels would exceed the vibration threshold of potential annoyance of 75 VdB and could result in annoyance at nearby residences or other

noise/vibration-sensitive uses. Pipeline installation activities typically do not remain at any one location for long periods of time, because pipeline work usually progresses at a rate of several hundred feet per day. Moreover, groundborne vibration generally diminishes rapidly over short distances. More typically, at distances from construction activities to receivers of 65 feet and well beyond, vibration levels would be less than the annoyance threshold of 75 VdB. Project Design Feature (PDF-)NOI-1 includes a provision in which the contractor has the responsibility to address noise- and vibration-related complaints.

The major concern with regard to construction vibration is related to building damage, which typically occurs at vibration levels of 0.5 inches per second ppv or greater for buildings of reinforced concrete, steel, or timber construction. At the distance from the nearest vibration-sensitive receivers to construction activities (approximately 15 feet during pipeline installation at several collection system projects), and with the anticipated construction equipment, the anticipated vibration levels associated with construction and pipeline installation would be approximately 0.192 inches per second or less ppv. This level would be well below the threshold of 0.5 inches per second ppv for building damage. Therefore, potential vibration impacts would be less than significant with mitigation.

Cumulative Noise Impact

Cumulative projects may generate new sources of noise and vibration (from increased traffic, on-site operation, and construction), which, in combination with the FMP, could result in cumulative impacts. Noise and groundborne vibration levels decrease as the distance from the noise source to the receiver increases. Therefore, only noise and vibration sources in the immediate vicinity of FMP activities would have the potential to combine with the FMP projects to cause a cumulative noise or vibration impact. Further, the cumulative projects would be subject to the same applicable noise standards and restrictions (i.e., limitations on permitted hours of construction) as the FMP projects. As previously discussed, FMP impacts related to noise and vibration would be less than significant with implementation of MM-NOI-1, and it is not anticipated that the proposed FMP, combined with other related projects, would result in a cumulatively considerable impact to noise in the FMP area.

2.3.7.2 Mitigation Measures

The following project design feature and mitigation measure applies to the FMP:

PDF-NOI-1 To address construction noise impacts, the Orange County Sanitation District has a process in place as follows:

A. Public outreach is conducted in communities that could be impacted by construction activities so that the public is aware of the work that must be conducted, where the work will occur, and the timing of the proposed work.

B. At least five (5) days prior to the start of construction activities, the Sanitation District will notify the surrounding residents and businesses by mail or other means of distribution. For projects located outside of Plant 1 or Plant 2, the construction contractor will post signs in the project vicinity that identify the Orange County Sanitation District as the project owner and a general contract phone number. Sign location(s) will be identified with local jurisdiction approval.

C. Once work begins, the contractor has the responsibility to address noise and vibration-related complaints.

MM-NOI-1 For Facilities Master Plan (FMP) projects located within 500 feet of noise-sensitive receivers (residences, hotels and motels, educational institutions, libraries, hospitals, and clinics), the following measures shall be implemented:

A. All mobile or fixed noise-producing equipment used on an FMP project that is regulated for noise output by a local, state, or federal agency shall comply with such regulation while in the course of program activity.

B. Construction equipment shall be properly outfitted and maintained with manufacturer-recommended noise-reduction devices to minimize construction-generated noise.

C. Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.

D. Stationary noise sources such as generators or pumps shall be located at least 100 feet from noise-sensitive land uses as feasible.

E. Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.

F. Construction site and haul-road speed limits shall be established and enforced during the construction period.

G. As feasible, the hours of construction, including noise-generating activities and all spoils and material transport, shall be restricted to the time periods and days permitted by the local noise or other applicable ordinances. As necessary, the Sanitation District shall coordinate with the applicable local jurisdiction regarding activities that are not consistent with local ordinances to avoid/minimize impacts.

H. The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. Additionally, pursuant to Occupational Safety and Health Act Sections 1926.601(b)(4) and 1926.602(a)(9), a device that uses broadband "white noise" instead of a single-tone alarm may be used if it is shown to be effective.

I. The Orange County Sanitation District or its designees shall coordinate with local jurisdictions and sensitive receptors regarding the proposed FMP to address any potential project-specific noise-related issues prior to commencement of construction activities.

J. Noise-reduction measures such as sound blankets or temporary sound walls shall be used to reduce noise from noise-generating equipment and activities during construction.

2.3.7.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described in Section 2.3.7.1, Potentially Significant Impacts to Noise. The feasible project design feature and mitigation measure, PDF-NOI-1 and MM-NOI-1, are listed in Section 2.3.7.2, Mitigation Measures.

The Sanitation District finds that the project design feature and mitigation measure are feasible, are adopted, and would reduce the potential noise impacts of the proposed FMP to less than significant. Accordingly, the Sanitation District finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in or incorporated into the proposed FMP that would mitigate or avoid potentially significant impacts from noise.

2.3.7.4 Facts in Support of the Findings Related to Noise

Construction activities under the proposed FMP would generate noise from the use of heavy equipment (excavators, tractors, backhoes, cement and mortar mixers, pumps, and other similar equipment) at the sites or from vehicles transporting material to or from the project sites. To reduce construction noise levels, MM-NOI-1 would be implemented; projects located within 500 feet of noise-sensitive receivers (residences, hotels and motels, educational institutions, libraries, hospitals, and clinics) would implement various measures, such as noise reduction measures, coordination with applicable jurisdictions and sensitive receptors, and restricted hours. Implementation of PDF-NOI-1 and MM-NOI-1 would reduce potentially significant impacts related to noise to less than significant. There would be no significant, unavoidable impacts related to noise after implementation of these measures. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts in Section 2.4.13, Noise.

2.3.8 Public Services

2.3.8.1 Potentially Significant Impacts to Public Services

New or Physically Altered Government Facilities

Fire Protection (Construction Impacts)

Facility Improvements at Plant 1 in Fountain Valley

Applicable jurisdictions with FMP projects would implement Traffic Control Plans as part of MM-TRA-1 to reduce impacts to emergency vehicle access caused by potential lane closures during construction activities. Upon completion of construction, each FMP project site would return to existing conditions, and no impact to emergency vehicle access would occur. As such, impacts associated with fire protection services as a result of FMP projects at Plant 1 would be less than significant with mitigation incorporated.

Facility Improvements at Plant 2 in Huntington Beach

As determined by correspondence with the City of Huntington Beach Fire Department, FMP projects at Plant 2 would not result in adverse or significant environmental impacts to the Huntington Beach Fire Department's facilities, nor would it require expansion of existing or construction of new public facilities. However, fire protection plans and calculations would need to be provided to the Huntington Beach Fire Department for approval prior to any site improvements to ensure that adequate fire flow capacity (i.e., water) and access is provided to the private on-site fire system (Eros, pers. comm. 2020). Applicable jurisdictions with FMP projects would implement Traffic Control Plans as part of MM-TRA-1 to reduce impacts to emergency vehicle access caused by potential lane closures during construction activities. Upon completion of construction, each FMP project site would return to existing conditions, and no impact to emergency vehicle access would occur. Therefore, impacts to fire protection services as a result of FMP projects at Plant 2 would be less than significant with mitigation incorporated.

Joint Plant Improvements

During construction of the FMP projects, no lane closures or plant operations that would impact adopted emergency response plans are anticipated. However, fire protection plans and calculations would need to be provided to the Huntington Beach Fire Department for approval prior to any site improvements to ensure that adequate fire flow

capacity (i.e., water) and access is provided to the private on-site fire system (Eros, pers. comm. 2020). Additionally, both the City of Fountain Valley and the City of Huntington Beach would require a Traffic Control Plan as part of MM-TRA-1 to reduce impacts to emergency vehicle access to the FMP project sites during construction. Upon completion of construction, each FMP project site would return to existing conditions, and no impacts to emergency vehicle access would occur. Therefore, impacts to fire protection services as a result of FMP projects at Plant 1 and Plant 2 would be less than significant with mitigation incorporated.

Collection System Improvements

Although construction activities have the potential to close lanes, construction would be temporary and would not result in permanent detours or closures of lanes and/or access driveways. Additionally, a Traffic Control Plan would be implemented as part of MM-TRA-1 to reduce impacts to emergency vehicle access caused by lane closures during construction activities. Upon completion of construction, each FMP project site would return to existing conditions, and no impact to emergency vehicle access would occur. As such, impacts associated with fire protection services as a result of FMP projects throughout the Sanitation District's collection system would be less than significant with mitigation incorporated.

Police Protection (Construction Impacts)

FMP projects would potentially affect emergency vehicle access during construction due to temporary lane closures, potentially resulting in delayed emergency response times and hindering performance objectives. As such, for the purpose of the PEIR, email and phone correspondence with applicable police departments was conducted to gather additional information and further evaluate potential impacts associated with the FMP projects at Plant 1 and Plant 2, joint plant projects, pump stations, and the collection system. In response to the potential disruption of emergency vehicle access, FMP projects would be subject to MM-TRA-1. As part of MM-TRA-1, Traffic Control Plans would be implemented per applicable jurisdictions to reduce impacts to emergency vehicle access caused from potential lane closures that would take place during construction of the FMP projects. With incorporation of MM-TRA-1 and the required Traffic Control Plans to be implemented per applicable jurisdiction, impacts to emergency vehicle access resulting from construction would be reduced to a less-than-significant level.

Facility Improvements at Plant 1 in Fountain Valley

The FMP projects would include rehabilitation, replacement, and other miscellaneous projects on existing facilities within the boundaries of Plant 1. Construction of the FMP projects must comply with the City of Fountain Valley Municipal Code Chapter 13.08, requiring the provision and maintenance of sufficient night lights, signs, barricades, flaggers, temporary sidewalks and surfacing, temporary bridges, danger signals, guards, and other safeguards as necessary during construction. These measures would enhance safety during construction and help reduce the need for police protection services at this FMP project site. As determined through correspondence with the City of Fountain Valley Police Department, potential lane closures could affect the ability of police personnel to traverse the property in the event of an emergency (Luce, pers. comm. 2020). However, because the FMP projects at Plant 1 would not require lane closures or block emergency vehicle routes, police protection services would maintain the appropriate response times and performance objectives to serve the community. Additionally, Traffic Control Plans would be implemented as part of MM-TRA-1 to reduce impacts to emergency vehicle access caused by lane closures during construction activities. Upon completion of construction, each FMP project site would return to existing conditions, and no impact to emergency vehicle access would occur. As such, impacts associated with police protection services as a result of FMP projects at Plant 1 would be less than significant with mitigation incorporated.

Facility Improvements at Plant 2 in Huntington Beach

As determined through correspondence with the City of Huntington Beach Police Department, the FMP projects could result in impacts to emergency vehicle access at Plant 2 in the event of lane closures, and as such, a Traffic Control Plan would be required to reduce those potential impacts (Martin, pers. comm. 2020). However, similar to Plant 1, during construction activities, no lane closures or plant operations are anticipated at Plant 2 that would impact adopted emergency response plans or interfere with emergency evacuation routes. Incorporation of traffic Control Plans, required as part of MM-TRA-1, would reduce impacts to emergency vehicle access caused by potential lane closures during construction activities. Upon completion of construction, each FMP project site would return to existing conditions, and no impact to emergency vehicle access would occur. As such, impacts associated with police protection services as a result of FMP projects at Plant 2 would be less than significant with mitigation incorporated.

Joint Plant Improvements

The main potential impact resulting from the FMP projects would be disruption of emergency vehicle access within Plant 1 and Plant 2 from potential lane closures during construction activities (Luce, pers. comm. 2020; Martin, pers. comm. 2020). However, the FMP projects are not anticipated to result in lane closures or plant operations that would impact adopted emergency response plans. Additionally, both the City of Fountain Valley and the City of Huntington Beach would require a Traffic Control Plan as part of MM-TRA-1 to reduce impacts to emergency vehicle access to the FMP project sites during construction. Upon completion of construction, each FMP project site would return to existing conditions, and no impacts to emergency vehicle access would occur. Therefore, impacts to police protection services as a result of FMP projects at Plant 1 and Plant 2 would be less than significant with mitigation incorporated.

Collection System Improvements

Potential lane closures and parking restrictions may be implemented during construction at FMP project sites located throughout the Sanitation District collection system to facilitate traffic flow around construction areas. Additionally, construction work at intersections might necessitate lane closures when the construction precludes safe traffic or work conditions. Traffic would be detoured around the construction area and, although some disruption to traffic could occur during construction activities, the need for lane closures would be infrequent in many areas. Staging areas would be necessary along construction routes. Construction equipment and materials would be located in parking lots, vacant lots, or segments of street lanes that are temporarily closed.

As determined though correspondence with local police departments, the main concerns arising from the FMP projects are potential lane closures during construction that could affect police response times and access for emergency vehicles. Although construction activities have the potential to close lanes, construction would be temporary and would not result in permanent detours or closures of lanes and/or access driveways. Additionally, applicable jurisdictions with FMP projects would implement Traffic Control Plans as part of MM-TRA-1 to reduce impacts to emergency vehicle access caused by potential lane closures during construction activities. Upon completion of construction, each FMP project site would return to existing conditions, and no impact to emergency vehicle access would occur. As such, impacts associated with police protection services as a result of FMP projects throughout the Sanitation District's collection system would be less than significant with mitigation incorporated.

Cumulative Public Services Impacts

A significant adverse cumulative impact would occur in the category of public services if the service demands of the FMP projects were to combine with those of related projects, triggering a need for new or physically altered public service facilities, the development of which could cause significant environmental impacts. A significant

adverse cumulative impact would also occur if the FMP projects were to make a considerable contribution to a cumulatively significant effect that is already occurring (or that is anticipated to occur).

The FMP projects would be served by the Orange County Fire Authority and other local fire departments for fire protection services and by the Orange County Sheriff Department and local police departments for police protection services. The need for new or expanded public facilities, such as fire and/or police protection facilities, is typically associated with a population increase. The FMP projects would not include construction of new or expanded facilities that would increase the number of fire or police protection facilities, or indirectly cause population growth or development, resulting in the need for additional fire and/or police protection services. FMP projects would involve upgrading, replacing, and rehabilitating aging facilities within the Sanitation District's wastewater collection and treatment system. Upon completion of construction, each FMP project site would return to existing conditions. However, FMP projects would potentially affect emergency vehicle access during construction due to temporary lane closures, potentially resulting in delayed emergency response times and hindering performance objectives. A combination of related projects in the area could result in a cumulative impact to emergency vehicle access; however, each jurisdiction would require a Traffic Control Plan to mitigate each individual effect, and as a result, would contribute toward mitigating the cumulative impact to a less-than-significant level. As such, each jurisdiction with an FMP project would require a Traffic Control Plan, which would be implemented as part of MM-TRA-1, as well as compliance with applicable city codes and regulations. Thus, the FMP projects would not result in impacts to emergency vehicle access that would contribute to a cumulative effect. Therefore, because the FMP projects and related projects in the area would be mitigated as individual effects, cumulative impacts would be less than significant with mitigation incorporated.

2.3.8.2 Mitigation Measure

MM-TRA-1 Prior to initiation of construction activities, engineering drawings and specifications and/or contractor shop drawings shall be submitted for review and approval by the Sanitation District, the Public Works Departments of affected cities, and the California Department of Transportation (Caltrans) (where applicable). The proposed project may impact local transportation facilities due to temporary street and/or lane closures, temporary transit stop relocations, haul truck circulation, and construction staging. These impacts, if any, will be identified in the engineering drawings and specifications and/or contractor shop drawings identified for individual projects. The following steps will be required to mitigate construction traffic impacts identified in the engineering drawings and specifications and/or contractor shop drawings:

Closures to Transportation Facilities

A. Traffic control, and associated Traffic Control Plans, for any lane closure, detour, or other disruption to traffic circulation, including bicycle and pedestrian trails. Bicycle and pedestrian trails shall remain open, to the greatest extent possible, during construction or re-routed to ensure continued connectivity.

B. Engineering drawings and specifications shall meet the standards established in the current California Manual on Uniform Traffic Control Device.

C. Bus stop access impacts shall be coordinated with, and approved by, the Orange County Transportation Authority.

D. Consistent with applicable City and/or Caltrans requirements, and at least three (3) business days before any construction activities that would affect travel on nearby roadways, the construction contractor shall notify the affected City Public Works Department and/or Caltrans

of construction activities that could impede movement (such as lane closures) along roadways to allow for uninterrupted emergency access. Surrounding property owners shall also be notified of construction activities through the Sanitation District Public Outreach Process.

Truck Haul Routes and Circulation

E. As required by the applicable agency, construction vehicle haul routes for the delivery of construction materials (e.g., lumber, tiles, piping, windows) to the site, necessary traffic controls and detours, and a construction phasing plan for the construction activities shall be identified.

F. The hours during which transport activities can occur and methods to mitigate construction-related impacts to adjacent streets shall be specified. Examples of these methods include: 1) transport of materials and heavy equipment to the site(s) shall be avoided during the AM and PM peak commute hours; 2) haul trucks shall utilize designated truck routes to the extent feasible; 3) advance warning signage and/or detour routes shall be provided along streets where construction activities would occur; and, 4) scheduling of construction activities and workers at each individual site so that less than 110 daily trips would occur.

G. The contractor shall be required to keep all haul routes clean and free of debris, including gravel and dirt resulting from its operations. The contractor shall clean adjacent streets, as directed by the Sanitation District, of any material that may have been spilled, tracked, or blown onto adjacent streets and areas.

H. As required by the applicable agency, hauling and transport of oversize loads outside of their standard working hours will require approvals.

I. Use of local streets shall be prohibited, except what is required to provide direct access to a construction site.

J. Haul trucks entering or exiting public streets shall yield to public traffic at all times.

K. If hauling operations cause any damage to existing pavement, streets, curbs, and/or gutters along the haul route, the contractor shall be fully responsible for repairs. The repairs shall restore the damaged property to its original condition.

Construction Staging

L. Any off-site construction staging or material storage sites shall be identified to the extent feasible.

M. All project-related staging of vehicles shall be kept out of the adjacent public roadways and shall occur on site or within other off-street areas.

2.3.8.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described in Section 2.3.8.1, Potentially Significant Impacts to Public Services. The feasible measure, MM-TRA-1, is listed in Section 2.3.8.2, Mitigation Measure.

The Sanitation District finds that the mitigation measure is feasible, adopted, and would reduce the potential public service impacts of the proposed FMP to less than significant. Accordingly, the Sanitation District finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in or incorporated into the proposed FMP that will mitigate or avoid potentially significant impacts on public services.

2.3.8.4 Facts in Support of the Findings Related to Public Services

FMP projects would potentially affect emergency vehicle access during construction due to temporary lane closures, potentially resulting in delayed emergency response times and hindering performance objectives. For the purpose of the PEIR, email and phone correspondence with applicable fire and police departments were conducted to gather additional information and further evaluate potential impacts associated with the FMP projects at Plant 1 and Plant 2, joint plant projects, pump stations, and the collection system.

In response to the potential disruption of emergency vehicle access, FMP projects would be subject to MM-TRA-1. As part of MM-TRA-1, Traffic Control Plans would be implemented per applicable jurisdictions to reduce impacts to emergency vehicle access caused from potential lane closures that would take place during construction of the FMP projects. With incorporation of MM-TRA-1 and the required Traffic Control Plans to be implemented per applicable jurisdiction, impacts to emergency vehicle access resulting from construction would be reduced to a less-than-significant level. There would be no significant, unavoidable impacts related to public services after implementation of the mitigation measure. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts in Section 2.4.15, Public Services.

2.3.9 Transportation

2.3.9.1 Potentially Significant Impacts to Transportation

Hazards due to a Geometric Design Feature

Collection System Improvements (Program-Level Analysis)

Partial road closures and parking restrictions may be implemented during construction at collection system sites to facilitate traffic flow around construction areas. Additionally, construction work at intersections might necessitate lane closures when the construction precludes safe traffic or work conditions. Traffic would be detoured around the construction area and, although some disruption to traffic could occur during construction activities, the need for lane closures would be infrequent in many areas. The Sanitation District would keep access to businesses and residences open during in-street work. If any access points were to be closed, it would be temporary and the Sanitation District would coordinate with the jurisdiction and property owner. Staging areas would be necessary along the construction routes. Construction equipment and materials would be located in parking lots, vacant lots, or segments of street lanes that are temporarily closed. Although construction activities have the potential to block access to certain areas, construction would be temporary and would not result in permanent detours or closures of roads or access driveways; however, these temporary blockages and closures may result in a significant impact to transportation facilities around the construction areas. Thus, mitigation would be required to decrease impacts associated with hazards at construction areas of the collection system. As such, MM-TRA-1 would be implemented and would require the incorporation of a Traffic Control Plan. Therefore, impacts associated with hazards at construction areas of the collection system would be less than significant with incorporation of mitigation.

Inadequate Emergency Access

Plant Improvements at Plant 1 and Plant 2

During construction activities, no lane closures or plant operations are anticipated that would impact adopted emergency response plans. However, project X008 at Plant 2 would require construction activities along Brookhurst Street for the relocation of the Plant 2 main gate. However, with implementation of MM-TRA-1, impacts to emergency access would be mitigated to less than significant.

Collection System

Lane closures and parking restrictions may be implemented during construction at the collection system sites to facilitate traffic flow around construction areas. Additionally, construction work in intersections might necessitate closures when construction precludes safe traffic or work conditions. Traffic would be detoured around the construction area, and although some disruption to traffic could occur during construction activities, the need for lane closures would be infrequent in many areas. If any access points were to be closed, it would be temporary. Although construction activities have the potential to block access, construction would be temporary and would not result in permanent detours or closures of roads or access driveways. However, these temporary blockages and closures may result in a significant impact to emergency access near the construction areas. Therefore, construction impacts due to partial road and/or lane closures may impact emergency access near the construction areas for the collection system improvements. As such, MM-TRA-1 would be implemented and would require the incorporation of a Traffic Control Plan to reduce impacts associated with construction at the collection system sites. Thus, impacts would be less than significant with mitigation incorporated.

Cumulative Traffic Hazards Impacts

The program-level projects for the collection system and the project-level P2-138 project at Plant 2 are presumed to result in a potentially significant impact due to construction activities on public streets. However, with implementation of MM-TRA-1 (Traffic Control Plan), these impacts would be mitigated to less than significant.

2.3.9.2 Mitigation Measure

See Section 2.3.8.2, Mitigation Measures, for the text of MM-TRA-1.

2.3.9.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), a feasible measure that can minimize significant adverse impacts was developed for the potentially significant impacts described in Section 2.3.9.1, Potentially Significant Impacts to Transportation. The feasible measure, MM-TRA-1, is listed in Section 2.3.9.2, Mitigation Measure.

The Sanitation District finds that the mitigation measure is feasible, adopted, and would reduce the potential transportation impacts of the proposed FMP to less-than-significant levels.

2.3.9.4 Facts in Support of the Findings Related to Transportation

With implementation of MM-TRA-1, required to mitigate potentially significant impacts to hazards and emergency access related to the P2-138 project at Plant 2 (relocation of the main gate) and the potential road or lane closures

at the construction areas of the collection system improvements, potential impacts would be mitigated to less than significant. Furthermore, with implementation of MM-TRA-1, cumulative traffic hazard impacts would be mitigated to less than significant. There would be no significant, unavoidable impacts related to traffic hazards after implementation of this mitigation measure. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts in Section 2.4.17, Transportation.

2.3.10 Tribal Cultural Resources

2.3.10.1 Potentially Significant Impacts to Tribal Cultural Resources

Adverse Change in the Significance of a Tribal Cultural Resource

Under CEQA, an effect to a tribal cultural resource (TCR) is considered a "substantial adverse change" if it is shown that the change would materially impair the significance of the historical resource. That is, a project that demolishes or materially alters in an adverse manner those physical characteristics of a historical resource conveying its historic significance would materially impair the significance of a historical resource. Therefore, such a change would constitute a "substantial adverse change" under CEQA.

No TCRs have been identified through tribal consultation under Assembly Bill (AB) 52, and the Sanitation District has not identified any TCRs within the FMP area that would warrant discretionary designation of a resource as a TCR. However, TCRs could be discovered during excavation activities. Thus, mitigation would be required to lessen impacts. Implementation of MM-CUL-3 would reduce impacts to TCRs to less than significant. Therefore, impacts to TCRs would be less than significant with mitigation incorporated.

Cumulative Tribal Cultural Resources Impacts

Implementation of FMP projects, which would involve implementation of MM-CUL-3, would not impact TCRs. Therefore, cumulative impacts to TCRs would be less than significant with mitigation incorporated.

2.3.10.2 Mitigation Measure

See Section 2.3.4.2, Mitigation Measures, for the text of MM-CUL-3.

2.3.10.3 Findings per CEQA Guidelines

Consistent with CEQA Guidelines Section 15126.4(a)(1), feasible measures that can minimize significant adverse impacts were developed for the potentially significant impacts described in Section 2.3.10.1, Potentially Significant Impacts to Tribal Cultural Resources. This feasible measure, MM-CUL-3, is listed in Section 2.3.10.2, Mitigation Measure (full text is provided in Section 2.3.4.2, Mitigation Measures).

The Sanitation District finds that this mitigation measure is feasible, adopted, and would reduce the potential TCR impacts of the proposed FMP to less than significant. Accordingly, the Sanitation District finds that, pursuant to CEQA Section 21081(a)(1) and CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in or incorporated into the proposed FMP that would mitigate or avoid potentially significant impacts on TCRs.

2.3.10.4 Facts in Support of the Findings Related to Tribal Cultural Resources

Implementation of MM-CUL-3 would reduce impacts to TCRs to less than significant. Thus, there would be no significant, unavoidable impacts related to TCRs after implementation of mitigation.

2.4 Impacts Determined to Be Less Than Significant

Based on the analysis contained in the PEIR, the following issue areas have been determined to fall within the "less-than-significant impact" category for all thresholds: agriculture and forestry resources, energy, greenhouse gas emissions, hydrology and water quality, land use, mineral resources, population and housing, recreation, utilities and service systems, and wildfire.

For impacts under aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, public services, transportation, and tribal cultural resources, impacts are addressed in Section 2.3, Impacts Determined to Be Less Than Significant with Mitigation, and the significant and unavoidable VMT impact is addressed in Section 2.2, Impacts Determined to Be Significant and Unavoidable.

2.4.1 Aesthetics

Adverse Effect on a Scenic Vista

Visual Changes during Construction

Plant 1

The City of Fountain Valley does not have any designated scenic views or vistas in the vicinity of Plant 1. As such, FMP construction projects occurring at Plant 1, including the FMP projects analyzed at the project level (i.e., projects P1-126, X-093, X-092, X-048, P1-135, X-077, X-090, J-98, J-120, J-133, X-057, X-058, X-059, J-121, and X-044) and those analyzed at the program level, would result in no impact to scenic vistas. Thus, no mitigation would be required.

Visual Changes during Operation

Plant 1

The City of Fountain Valley does not have any designated scenic views or vistas in the vicinity of Plant 1. For this reason, FMP construction projects occurring at Plant 1, including the FMP projects analyzed at the project level and those analyzed at the program level, would result in no impact to scenic vistas. Thus, no mitigation would be required.

Plant 2

Given the nature of the proposed FMP projects, upon completion of construction, visual impacts would be inherently limited, because the projects would result in the repair, rehabilitation, and/or replacement of existing facilities. For projects that involve rehabilitation or for projects that are located underground, visual impacts would be minimal, if there are any visual changes at all. FMP projects at Plant 2 that are analyzed at the project level for which this would be true include projects X-050, X-032, X-054, J-133, X-057, X-058, X-059, and X-044, and impacts for these projects and those analyzed at the program level would be less than significant. Thus, no mitigation would be required.

For replacement projects, although replacement facilities would not always be an exact in-kind replacement or in the exact same building footprint, visual changes would be minimal, since new facilities would be designed consistent with the overall aesthetic of the existing plant such that the built environment would largely resemble that of the conditions before construction. In addition, under existing conditions, opportunities to perceive changes within Plant 2 are limited. Plant 2 is generally well-screened by existing fencing and landscaping, and views of the internal facilities at Plant 2 are generally limited to those facilities located along the peripheries the plant. Additionally, the Southwest Perimeter Screening project at Plant 2, which will improve or replace the perimeter screening along the entire length of Plant 2 along Brookhurst Street (approximately 4,325 feet) and up to approximately 1,030 feet along PCH, is currently under construction and anticipated to be completed in 2021, further blocking the majority of views of future FMP projects at Plant 2. Therefore, replacement facilities would only be visible when not screened by existing visual barriers, resulting in the majority of FMP projects not being visible. Additionally, there is little variation in the color and form of facilities and infrastructure within each plant. As a result, even if future facilities are visible and feature designs that differ from the designs of their existing facilities, there would be little noticeable change in the overall visual character of Plant 1 or Plant 2 because when viewed from afar, the buildings, facilities, and infrastructure combine to form a uniform industrial backdrop and it would be difficult to perceive the addition, subtraction, or modification of a singular building within the context of a generally uniform industrial setting. FMP projects that are analyzed at the project level that would either be entirely screened by existing or planned visual barriers, or would result in nominally perceptible changes include projects X-034, J-98, J-120, and J-121, and impacts for these projects and those analyzed at the program level would be less than significant. Thus, no mitigation would be required.

FMP projects at Plant 2 that are analyzed at the project level that may remain visible from vantage points outside of Plant 2 because they would not be sufficiently screened by existing visual barriers include projects P2-126 and P2-138. The Pacific Ocean, Huntington State Beach, Talbert Marsh, and SAR are considered to be prominent visual resources that provide scenic vistas in the proximity of Plant 2. Accordingly, the City of Huntington Beach General Plan Coastal Element identifies the stretch of PCH within the vicinity of Plant 2 as a Major Urban Scenic Corridor and Landscape Corridor (City of Huntington Beach 2011). A significant impact could potentially occur with respect to scenic vistas if these FMP projects were to directly modify the identified visual resources that compose scenic vistas within the vicinity of Plant 2; block or obscure these visual resources from the view of publicly accessible vantage points; or result in the placement of new, particularly noticeable, and discordant (e.g., due to color, massing, or other visual characteristics) features in proximity to these resources such that the overall integrity of the scenic vista is degraded.

Project P2-138, Operations and Maintenance Complex at Plant 2, would be visible from Brookhurst Street, which is designated as a Major Urban Scenic Corridor (City of Huntington Beach 2011). Project P2-138 would replace the Operations/Control Center Building, which is located on the western side of Plant 2 near the main entrance off Brookhurst Street, with a new building just north of the existing facility; provide replacement facilities for the temporary engineering construction trailer complex; and demolish and replace the guard shack. The project would also involve reconfiguring the main entry into Plant 2, moving the main entrance farther north, and closing the existing main gate and Banning Gate. Pavement and hardscape in this part of Plant 2 would be demolished and replaced.

Project P2-138 would not directly modify any visual resources (such as the Pacific Ocean, Talbert Marsh, or SAR), and would not block or obscure any visual resources from view of publicly accessible vantage points because the project components would be located within Plant 2 and away from these resources. With regard to the project's potential to result in the placement of particularly noticeable and discordant features within a scenic vista, given that this project would be immediately visible from Brookhurst Street, there would be a high degree of visual change. Although the project has not yet been designed (this project is still only in the planning phase), the ultimate

architectural features and appearance of the physical improvements would be consistent with the existing visual character of the plant's frontage. The future gate and visible buildings would feature appropriately scaled exterior facades, and would feature high-quality landscaping and hardscaping to soften views from Brookhurst Street. Furthermore, the improvements would be designed consistent with the Urban Design Guidelines for District 14 (Edison and Sanitation District). As a result, the ultimate appearance of the project would be harmonious with the existing built environment such that no adverse effects would occur to the visual integrity of Brookhurst Street, a Major Urban Scenic Corridor. Therefore, visual impacts associated with project P2-138 would be less than significant. Thus, no mitigation would be required.

Project P2-126, Substation and Warehouse Replacement at Plant 2, would be located within the northern portion of Plant 2. The project would entail demolition of an existing 21,000-square-foot warehouse in the southern portion of the plant and its reconstruction approximately 1,600 feet to the north. The project would also involve the demolition and reconstruction of an approximately 2,800-square-foot electric service center building, which would include various electrical distribution components (e.g., 12-kilovolt [kV] switchgear, 480-volt panel board, and direct current battery system). The electrical service center would be located in one of two locations, either along Brookhurst Street in its current location, or north of the warehouse along the SAR Trail. In addition, project P2-126 would involve construction of a new 66 kV to 12.47 kV substation, which would involve installation of a second Southern California Edison (SCE) 66 kV incoming distribution line, in addition to the existing 66 kV line that is currently located within an SCE easement that runs parallel to Brookhurst Street north of Plant 2. Installation of this new incoming distribution line may result in the replacement of existing pole structures to accommodate the second line, and may result in slight shifts in location of the existing line to accommodate connection to the new substation, but this would not be substantially different in location or height of the existing power poles.

Project P2-126 would result in visual changes to the environment; however, the project would not directly modify any identified scenic resources, such as the Pacific Ocean, Talbert Marsh, or SAR. Project P2-126 would not result in blockage or obscuration of these visual resources from publicly accessible vantage points (i.e., Brookhurst Street or the SAR Trail). Project components, such as steel beams and poles, electrical wires, electrical enclosures, and buildings, may be visible from these publicly accessible viewpoints, but most project components would be screened by existing or planned walls and vegetation, and given the generally uniform industrial setting of Plant 2, the addition of several industrial facilities would be nominally perceptible to viewers, and would not result in adverse effects to existing views from publicly accessible vantage points. One component of the project, the incoming distribution line, would be located outside Plant 2. However, this project component would result in the installation of a new 66 kV incoming line within an existing utility corridor, and would therefore not result in new levels of blockage of views of the SAR (the Pacific Ocean and Talbert Marsh are not visible in vicinity of the northern portion of Plant 2). Given the nature of power lines, views of the SAR would still be available beyond this project component. Additionally, installation of a second utility line would result in a minimal degree of visual change. Given the existing conditions, its installation would not be highly noticeable and would be consistent with the existing utility line that runs into Plant 2. For these reasons, implementation of project P2-126 would result in less-than-significant impacts to scenic vistas. Thus, no mitigation would be required.

Scenic Resource Damage within a State Scenic Highway

Plant 1, Plant 2, and Collection System

The only highway in Orange County that is an officially designated state scenic highway is a 4.2-mile-long portion of State Route (SR) 91 from SR-55 to the eastern city limit of Anaheim (California Streets and Highways Code, Section 263). This portion of SR-91 was officially designated as a state scenic highway in 1971, when the areas surrounding

the highway contained prominent views of mountain ridgelines, rolling hills, canyons, and intermittent riparian and chaparral vegetation. In the years since its designation, these views have since given way to views of commercial, residential, and industrial development as the surrounding area has urbanized. Notwithstanding, views of these scenic features are still available on an intermittent basis throughout the highway corridor. FMP projects within the vicinity of SR-91 include projects X-086, X-063, and X-078, which are underground pipeline projects that are located within streets beneath and adjacent to SR-91. Although these FMP projects would be located near SR-91, which is an officially designated state scenic highway, these projects would be located entirely underground and within developed and paved public rights-of-way. These projects would not require the removal of any trees or rock outcroppings, or affect any historic buildings, since none are located within future disturbance footprints.

Additionally, a 17-mile-long portion of PCH from Jamboree Road in Newport Beach to the northern city limit of Seal Beach is an eligible state scenic highway, but has not been officially designated (Caltrans 2019). This portion of PCH provides prominent views of the Pacific Ocean in the south, and occasional views of marshland and wetlands in the north, when not interrupted by the urban development within the cities of Huntington Beach and Seal Beach. Plant 2 is located approximately 500 feet north of PCH. FMP projects that would potentially be visible from PCH would be projects X-007, X-050, and X-052. However, as discussed above, views of FMP projects from PCH would be obstructed by the Southwest Perimeter Screening project, and the proposed FMP projects would not result in adverse effects on a scenic vista as experienced from PCH. Accordingly, the FMP projects would be located entirely underground and within developed and paved public rights-of-way, and would not result in removal of any trees or rock outcroppings, or affect any historic buildings within PCH, since none are located within future disturbance footprints. As such, impacts would be less than significant. Because the FMP activities would not result in removal of any trees or rock outcroppings, or affect any historic buildings within a state scenic highway, impacts to state scenic highways would be less than significant. FMP projects that are analyzed at the project level for which this would be true include projects P1-126, X-093, X-092, X-048, P1-135, X-077, X-090, P2-126, P2-138, X-050, X-032, X-054, X-034, J-98, J-120, J-133, X-057, X-058, X-059, J-121, X-044, 5-68, X-076, X-082, X-060, 11-33, X-063, 2-73, 3-67, 2-49, and X-083, and impacts for these projects and those analyzed at the program level would be less than significant. Thus, no mitigation would be required.

Visual Character and Applicable Zoning

The facilities within the FMP area already exist and are built in urban areas. Therefore, none of the proposed FMP activities would change the zoning or regulations governing scenic quality. The Sanitation District would not construct new facilities; rather, the proposed FMP activities involve the rehabilitation of existing facilities or replacement of equipment at existing facilities. If proposed FMP activities involve facility construction (e.g., new segment of pipeline, new utility hole, or new pump station), construction would take place over an existing facility and would not go into new areas where it could conflict with the zoning or other regulations governing scenic quality. Therefore, this impact would be less than significant.

Sources of Light or Glare

Construction Impacts

For all FMP projects (FMP projects at Plant 1, Plant 2, and throughout the collection system), the introduction of construction vehicles and equipment at project sites and at staging areas would not generate substantial new sources of glare that would affect park users, nearby residents, or motorists. As sunlight reflects off of metallic and glass construction equipment, momentary instances of glare could affect nearby receptors; however, any reflected glare would not be concentrated (e.g., such as what might occur near a solar field) and would cease as park users,

nearby residents, motorists, and construction equipment move around project sites. When construction equipment is not in use, it would be stored in designated staging areas away from public view. Therefore, impacts associated with new sources of lighting or glare during construction would be less than significant. FMP projects that are analyzed at the project level for which this would be true include projects P1-126, X-093, X-092, X-048, P1-135, X-077, X-090, P2-126, P2-138, X-050, X-032, X-054, X-034, J-98, J-120, J-133, X-057, X-058, X-059, J-121, X-044, 5-68, X-076, X-082, X-060, 11-33, X-063, 2-73, 3-67, 2-49, and X-083, and impacts for these projects and those analyzed at the program level would be less than significant. Therefore, impacts would be less than significant. Thus, no mitigation would be required.

Operational Impacts

For FMP projects that would be constructed below grade (i.e., collection system pipeline projects), upon completion of construction activities, all areas disturbed during construction would be restored to their pre-construction conditions. Because these pipeline projects would be installed underground and do not require any sources of lighting, no impacts would occur. Thus, no mitigation would be required.

For project facilities that would be constructed above-grade (i.e., facilities at Plant 1 and Plant 2 and pump stations within the collection system), the facilities would not have highly reflective surfaces, and would not include large areas of glass on structures/buildings; therefore, the proposed FMP would result in a less-than-significant impact regarding glare. Thus, no mitigation would be required.

Cumulative Aesthetic Impacts

A significant adverse cumulative aesthetic impact would occur where the development of the cumulative projects would degrade the visual quality of an area or where projects would combine to block important views. However, as previously discussed, impacts associated with the adverse effect on a scenic vista during construction (Plant 1) and operation (Plant 1 and Plant 2), scenic resource damage within a scenic state highway, visual character and applicable zoning, and sources of light and glare would not result in significant impacts. Additionally, cumulative projects would be required to comply with all applicable ordinances and plans that govern visual quality, such as lighting ordinances and architectural standards. Thus, cumulative impacts associated with the aforementioned thresholds would be less than significant.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on aesthetics and visual resources as it relates to scenic vistas (Plant 1), scenic resource damage within a state scenic highway (Plant 1, Plant 2, and collection system), visual character and applicable zoning, and sources of light (collection system) and glare (facilities at Plant 1 and Plant 2 and pump stations within the collection system); therefore, no mitigation is required. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts with mitigation in Section 2.3.1, Aesthetics.

2.4.2 Agriculture and Forestry Resources

Prime Farmland, Unique Farmland, or Farmland of Statewide Importance

As indicated in the California Important Farmland Finder (CDOC 2016), the FMP area is designated as Urban and Built Up. All areas surrounding the FMP project sites are also designated as Urban and Built Up, with the exception of parcels directly south and east of Plant 2, which are designated as Other Land. The area south of the FMP area is beach and the area east is undeveloped land (known as Banning Ranch). Other Land is not considered an important farm or agricultural use. The FMP project sites are not on farmland or within proximity of any Prime, Unique, or Statewide Importance farmland, and will have no impact.

Conflict with Existing Agricultural Zoning or Williamson Act Contract

Plant 1 is identified as Specific Plan Area land use in the City of Fountain Valley's General Plan and is zoned as Manufacturing and Specific Plan (City of Fountain Valley 2019). Plant 1 is surrounded by residential zoned areas to the west, Crossings Specific Plan zoned areas to the north, and the SAR to the east (City of Fountain Valley 2019). Plant 2 land use is identified as Public in the City of Huntington Beach's General Plan and is zoned as Industrial Limited and as Residential Agriculture on the southwest corner of the project site (City of Huntington Beach 2015). It is surrounded by Miscellaneous/Industrial General zone area to the north, Residential Low Density and General Commercial to the west, Coastal Conservation zoned area to the south, and the SAR to the east (City of Huntington Beach 2015). The pump stations and collection system pipelines are spread throughout Orange County, but are not located at or near any agricultural uses. The project sites are also not under a Williamson Act contract (CDOC 2004). The FMP would not impact agricultural use zoning or Williamson Act contracts.

Conflict with Existing Forestland, Timberland, or Timberland Production Zoning

The individual FMP project sites and surrounding areas would not be located within forest or timberland zones (CAL FIRE 2003). Thus, the proposed FMP would have no impact to existing zoning, forest resources, or timberland.

Loss or Conversion of Forestland

No FMP project site would contain forestland. Additionally, the individual project sites would be located in highly developed areas. Thus, the proposed FMP would have no impact on forestland.

Changes in the Existing Environment Resulting in Conversion of Forestland or Farmland

The proposed FMP would not convert farmland to non-agricultural use or forestland to non-forest use. Additionally, the individual project sites are located in highly developed areas. Therefore, the proposed FMP would have no impact regarding conversion of forestland or farmland.

Cumulative Agricultural and Forestry Resource Impacts

As analyzed above, the proposed FMP would experience no impacts related to all agricultural and forestry resource issue areas. Considering the proposed FMP projects would not be located on farmland or forestland, the proposed FMP would not combine with cumulative projects resulting in a significant impact to an agricultural or forestry resource. Therefore, impacts to agricultural and forestry resources would not be cumulatively considerable.

Finding

The Initial Study for the proposed FMP found no potential for significant impacts to agriculture or forestry resources; therefore, agriculture and forestry resources were not addressed in the Draft PEIR. No mitigation would be required.

2.4.3 Air Quality

Expose Sensitive Receptors to Substantial Pollutant Concentrations

Carbon Monoxide Hotspots

At the time that the SCAQMD Handbook (1993) was published, the SCAB was designated nonattainment under the CAAQS and NAAQS for CO. In 2007, the SCAQMD was designated in attainment for CO under both the CAAQS and NAAQS as a result of the steady decline in CO concentrations in the SCAB due to turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities. The SCAQMD conducted CO modeling for the 2003 AQMP (SCAQMD 2003) for the four worst-case intersections in the SCAB: (1) Wilshire Boulevard and Veteran Avenue, (2) Sunset Boulevard and Highland Avenue, (3) La Cienega Boulevard and Century Boulevard, and (4) Long Beach Boulevard and Imperial Highway. At the time the 2003 AQMP was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day. Using CO emission factors for 2002, the peak modeled CO 1-hour concentration was estimated to be 4.6 parts per million (ppm) at the intersection of Wilshire Boulevard and Veteran Avenue. When added to the maximum 1-hour CO concentration from 2016 through 2018 at the West Vermont Street monitoring station, which was 3.7 ppm in 2016, the 1-hour CO would be 8.3 ppm, and the CAAQS is 20 ppm.

The 2003 AQMP also projected 8-hour CO concentrations at these four intersections for 1997 and from 2002 through 2005. From years 2002 through 2005, the maximum 8-hour CO concentration was 3.8 ppm at the Sunset Boulevard and Highland Avenue intersection in 2002; the maximum 8-hour CO concentration was 3.4 ppm at the Wilshire Boulevard and Veteran Avenue in 2002. Adding the 3.8 ppm to the maximum 8-hour CO concentration from 2016 through 2018 at the West Vermont Street monitoring station, which was 2.6 ppm in 2017, the 8-hour CO would be 6.4 ppm, and the CAAQS is 9.0 ppm.

Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would be at least more than 100,000 vehicles per day. Because the proposed FMP would not increase daily traffic volumes at any study intersection to more than 100,000 vehicles per day, a CO hotspot is not anticipated to occur, and associated impacts would be less than significant. As such, potential FMP-generated impacts associated with CO hotspots would be less than significant and no mitigation would be required.

Operational Health Impacts of Toxic Air Contaminants

Following completion of proposed construction activities, FMP-related toxic air contaminant (TAC) emissions would cease. Health impacts associated with TACs are generally associated with long-term exposure, and there are no meaningful sources of TACs for the operating phase of the FMP; therefore, there are no anticipated health impacts related to operational TACs. Because no operational TACs are anticipated to occur as a result of operation of the FMP, impacts would be less than significant.

Other Emissions

Construction Emissions

Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from FMP project sites, and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Operational Emissions

The projects under the proposed FMP do not propose appreciable changes to regular operations and maintenance activity by Sanitation District personnel. In addition, the proposed FMP would include construction of odor control systems (i.e., project X-014, Trickling Filter Solids – Contact Odor Control, and project 5-68, Newport Beach Pump Station Odor Control Improvements). Therefore, proposed FMP operations would result in an odor impact that is less than significant.

Cumulatively Considerable Net Increase of Criteria Pollutants

Operational Emissions

The proposed FMP would not result in a net increase in operational criteria air pollutant emissions from building operation and mobile sources (i.e., vehicles), but would result in a minor increase in criteria air pollutant emissions associated with testing and maintenance for the proposed permanent diesel-fueled emergency generator at the Seal Beach pump station. Estimated maximum daily operational emissions from emergency generator testing would not exceed SCAQMD mass daily operational thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. Therefore, cumulative operational-related impacts would be less than cumulatively considerable. Therefore, FMP operations would result in cumulative impacts that are less than significant.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on air quality as it relates to health impacts of CO hotspots, operation-generated health risk impacts, other emissions, and cumulative operational-related impacts associated with criteria air pollutant emissions; therefore, no mitigation is required. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts with mitigation in Section 2.3.2, Air Quality.

2.4.4 Biological Resources

Candidate, Sensitive, or Special-Status Species

Project-Level Direct Impacts to Special-Status Wildlife Species

The FMP area provides potentially suitable habitat for special-status species, such as the federally threatened coastal California gnatcatcher and Santa Ana sucker (*Catostomus santaanae*), particularly adjacent to project 5-68, Newport Beach Pump Station Odor Control Improvements, and projects within Plant 1 and Plant 2. However, no direct impacts to these species would occur because no FMP project impacts would encroach into suitable habitat for coastal California gnatcatcher or Santa Ana sucker. Additionally, no removal of suitable habitat for coastal California gnatcatcher or Santa Ana sucker would occur as a result of implementation of project 5-68 or any of the proposed

projects within Plant 1 and Plant 2. Therefore, there would be no direct impact to any special-status wildlife species as a result of implementing the project-level FMP projects. Thus, no mitigation would be required.

Project-Level Indirect Impacts to Special-Status Wildlife Species

Indirect impacts associated with project-level activities may occur to the federally threatened Santa Ana sucker through implementation of projects within Plant 1 and Plant 2, and project X-063, the South Santa Ana River Interceptor Connector Rehabilitation project. Suitable habitat for Santa Ana sucker occurs within portions of the SAR adjacent to Plant 1, Plant 2, and project X-063. Project-level projects within Plant 1 and Plant 2 would be contained entirely within the grounds of the existing facilities. Fugitive dust from implementation of projects within Plant 1 and Plant 2 may settle within the adjacent SAR, which could degrade habitat within the river for Santa Ana sucker by increasing sedimentation and turbidity. However, the projects within Plant 1 and Plant 2 would be required to comply with SCAQMD's rule regarding fugitive dust, and would also be required to implement best management practices (BMPs) as part of a project's Stormwater Pollution Prevention Plan (SWPPP), which would reduce potential indirect impacts. The SWPPP and BMPs are required by the National Pollutant Discharge Elimination System (NPDES) program, and discussed further in Section 4.9, Hydrology and Water Quality, of the PEIR. Therefore, potential indirect impacts to special-status species through implementation of project-level projects would be less than significant. Thus, no mitigation would be required.

Program-Level Indirect Impacts to Coastal California Gnatcatcher (Project 5-66)

Project 5-66 would occur within a developed area associated with an existing pump station that is surrounded by ornamental landscaped vegetation with native coastal sage scrub vegetation in the vicinity, yet outside of the study area for project 5-66. Although coastal California gnatcatcher could nest in the vicinity of project 5-66, the increased human presence and noise from the rehabilitation and upgrade of the existing pump station would not be greater than the ambient noise levels generated from vehicle traffic on the adjacent PCH. Ambient noise levels at this location range from 67.8 dBA to 77.9 dBA, and construction-related noise would range from approximately 80 dBA to 85 dBA on average, which would not be a significant increase that could result in noise-related harassment. Therefore, there would be no potential indirect impact to coastal California gnatcatcher through implementation of project 5-66. Thus, no mitigation would be required.

Riparian Habitat or other Sensitive Natural Community

Project-Level Direct and Indirect Impacts

The majority of the habitats associated with the project-level activities for the proposed FMP are disturbed and developed and lack native and natural vegetation. The vegetation observed within these disturbed and developed areas are landscaped ornamental species associated with the developments and rights-of-way. However, Plant 1, Plant 2, and project X-063, the South Santa Ana River Interceptor Connector Rehabilitation project, occur immediately adjacent to the SAR, which contains Southern California arroyo chub/Santa Ana sucker stream habitat in inundated portions of the river, and scattered native riparian habitat, which are considered sensitive natural communities. Nonetheless, no direct impacts would occur to these sensitive natural communities because the proposed FMP projects would be constructed entirely within developed portions of Plant 1 and Plant 2, and would not encroach into any portions of the SAR. Additionally, no indirect impacts would occur because construction of these projects would be contained within a relatively small impact footprint within the plants and would not result in the trimming or encroachment of adjacent native vegetation or habitats. Therefore, the project-level activities would result in no impacts to sensitive natural communities. Thus, no mitigation would be required.

Adverse Effect on Wetlands

Project-Level Direct Impacts

The project-level activities associated with Plant 1 and Plant 2, as well as the joint plant improvements, would occur immediately adjacent to the channelized SAR, which is a relatively permanent water under the jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife. Because this portion of the SAR is a concrete-lined trapezoidal channel, the limits of jurisdiction are defined as the flat channel bottom for Waters of the United States/state, and the top of each levee for California Department of Fish and Wildlife jurisdiction. The SAR lacks suitable hydrophytic vegetation and soils to support federally protected wetlands or vernal pools. Based on a review of the proposed FMP project locations within Plant 1 and Plant 2, no activities are proposed to occur outside of the facility boundaries of either plant; therefore, no potential direct impacts would occur as a result of implementing the proposed FMP project activities within Plant 1 or Plant 2.

Additionally, the majority of the collector system improvement activities would occur within existing rights-of-way that do not encroach into a federally protected wetland or jurisdictional feature. However, jurisdictional resources occur within the study area of two projects—project 11-33, Edinger Pumping Station Replacement, and project X-063, South Santa Ana River Interceptor Connector Rehabilitation—and the air jumper rehabilitations (project X-078). The Westminster Channel, a concrete-lined flood control channel, occurs adjacent to project 11-33. As currently designed, no project replacement activities would encroach into the Westminster Channel; therefore, no direct impacts to this jurisdictional feature would occur. The SAR is located below the interceptor connector line that would be rehabilitated as part of project X-063, and no proposed project activities would encroach into the SAR to conduct the rehabilitation. Additionally, the proposed air jumper rehabilitations for project X-076 would not result in any work activities outside the existing pipelines or utility holes that would cause any ground-disturbing impact. Therefore, project-level activities would result in no direct impact to federally protected wetlands or jurisdictional features. Thus, no mitigation would be required.

Project–Level Indirect Impacts

Implementation of project-level activities within Plant 1 and Plant 2 that occur adjacent to the SAR would not result in potential indirect impacts to the SAR because all projects would be contained within the confines of these facilities. There is a potential for dust from project activities within Plant 1, Plant 2, and project 11-33 to settle within the adjacent SAR and Westminster Channel, which would be considered the indirect placement of fill within a jurisdictional feature. Additionally, there may be indirect impacts to the SAR from rehabilitation project X-063 if any toxics, project materials, or non-sediment-related pollutants inadvertently fall into the SAR. However, the projects within Plant 1 and Plant 2, as well as projects 11-33 and X-063, would be required to implement BMPs as part of the projects' SWPPPs, which would reduce potential indirect impacts. The SWPPPs and BMPs, which are required by the NPDES program, would provide for straw wattles, drop inlet protection, and waste handling and disposal, among other measures. Since the BMPs would reduce potential project-related indirect impacts that may occur as a result of projects within Plant 1 and Plant 2, and replacement and rehabilitation of projects 11-33 and X-063, there would be a less-than-significant indirect impact to federally protected wetlands and jurisdictional features. Thus, no mitigation would be required.

Program-Level Indirect Impacts

Indirect impacts to federally protected wetlands and jurisdictional waters from program-level activities may only occur during rehabilitation activities for project X-071, Edinger/Springdale Trunk Sewer Rehabilitation. A portion of the Edinger/Springdale trunk sewer line runs parallel to and immediately south of the Westminster Channel, which is mapped within the study area for this project. No encroachment into the Westminster Channel is proposed, but

due to the project's location adjacent to the channel, there is potential for indirect impacts to occur due to the possibility of excess dust, toxics, and pollutants entering into the channel during construction activities. However, potential indirect impacts would be reduced to below the level of significance through implementation of BMPs for the project's SWPPP. Therefore, potential indirect impacts to federally protected wetlands and jurisdictional features would be less than significant. Thus, no mitigation would be required.

Interference with Wildlife Movement/Use of Nursery Sites

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as stepping stones for wildlife dispersal.

Project-Level Direct and Indirect Impacts

The projects proposed for Plant 1, Plant 2, the joint plant improvements, and the collection systems that are analyzed at the project level occur in previously disturbed and developed areas of Orange County. The SAR, a significant movement corridor for multiple species, occurs immediately adjacent to Plant 1 and Plant 2. However, the impacts of projects at Plant 1 and Plant 2 would remain entirely within Plant 1 and Plant 2, entirely contained within the developed boundaries of both plants. Because of this, the proposed projects within Plant 1 and Plant 2 would not directly impede wildlife movement within the SAR, or cause an interruption in wildlife use in the region for species that rely on the SAR for movement between habitats fragmented by urban and suburban development. Additionally, the collection system improvements would be contained entirely within public rights-of-way and would not result in the construction of any new buildings or structures that could impede wildlife movement. The increased human presence in these areas during construction would be temporary and would not discourage local wildlife use. Furthermore, projects such as project X-063, the South Santa Ana River Interceptor Connector Rehabilitation project, would cross the SAR along Imperial Highway, but would not encroach into the river or impede wildlife during construction. Therefore, potential direct and indirect impacts to project-level activities in the FMP area would be less than significant. Thus, no mitigation would be required.

Program-Level Direct and Indirect Impacts

The program-level activities proposed for Plant 1, Plant 2, and the collection system would occur primarily within disturbed and developed portions of the FMP area. Opportunities for wildlife movement occur within regional corridors such as the SAR, and local corridors that occur within concrete-lined flood control channels. Future project implementation of the program-level activities would not result in the new construction of buildings or structures that would impede or restrict the movement of wildlife within local and regional corridors. Potential direct impacts to wildlife corridors would be restricted by existing development because the scope of each program-level project would be limited to the boundaries of existing facilities and rights-of-way. Potential indirect impacts to program-level projects would also be limited to the existing facility boundaries; however, although projects such as project X-066, Tustin-Orange Interceptor Sewer at Reach 18 Rehabilitation, would occur within and adjacent to a native riparian area associated with a flood control channel, this project would not permanently restrict the opportunities for wildlife to move through the area because no new permanent structures would be constructed within the channel. There may be a temporary impact during construction due to the increase in noise and human presence; however, this temporary impact would not impede wildlife movement. Therefore, implementation of the program-level projects would result in a less-than-significant direct and indirect impact on wildlife corridors and linkages. Thus, no mitigation would be required.

Habitat Conservation Plan, Natural Community Conservation Plan, or other Conservation Plan

Project-Level and Program-Level Direct and Indirect Impacts

All projects occur partially within the Matrix Area and partially within the Central-Coastal Subarea Plan of the Orange County Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). For project-level and program-level projects that occur within the Matrix Area, no habitat or species conservation goals have been established for this area; therefore, no direct or indirect impacts from implementation of the project-level or program-level projects would result, and this would not conflict with the Orange County NCCP/HCP. Therefore, implementation of projects within the Matrix Area would result in no impact to the Orange County NCCP/HCP. Additionally, project-level and program-level impacts resulting from implementation of the proposed FMP activities within the Central-Coastal Subarea Plan of the Orange County NCCP/HCP would be primarily contained within existing disturbed and developed areas of Orange County. The majority of project sites that occur within and adjacent to natural and native areas, such as the SAR, concrete-lined drainages, and flood control channels that may contain or lack riparian habitats would not result in an impact to Reserve Areas or covered species and habitats because impacts would be restricted to the Matrix Area as mapped in the NCCP/HCP.

However, project 5-66, Crystal Cove Pumping Station Upgrade and Rehabilitation, would occur adjacent to ornamental vegetation and coastal sage scrub habitat that could provide suitable habitat for coastal California gnatcatcher, a covered species under the Orange County NCCP/HCP. Although implementation of this project would not result in the removal of coastal sage scrub habitat, coastal California gnatcatcher may occur within vicinity of this project. However, based on the project site's location adjacent to PCH, indirect impacts to coastal California gnatcatcher, should it be found in the immediate vicinity of the project site, are not expected to occur due to the minimal increase in noise levels during construction. Therefore, project-related impacts from implementation of both project-level and program-level projects are expected to have no impact on the provisions of an adopted NCCP/HCP. Thus, no mitigation would be required.

Cumulative Biological Resources Impacts

The vast majority of the project-level and program-level projects proposed for the FMP would be primarily contained within existing developed facilities and rights-of-way that do not provide habitat for sensitive biological resources, beyond the potential to support nesting birds. The projects within existing rights-of-way would also not construct any new buildings or structures that would result in an impact to the land or cause an obstruction to wildlife moving through the region. And no conflicts with conservation plans would occur during the construction/implementation of any of the proposed FMP projects. Therefore, the majority of the proposed FMP projects located in areas not adjacent to special-status species, sensitive natural communities, or jurisdictional waters would not result in a cumulatively considerable impact to biological resources within the service area. Thus, no mitigation would be required.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on biological resources as it relates to special-status wildlife species (project-level direct/indirect impacts and program-level indirect impacts [project 5-66]), riparian habitat/sensitive natural communities (project-level direct/indirect impacts), wetlands (project-level direct/indirect impacts and program-level indirect impacts), the interference with the movement of any native resident or migratory fish or wildlife species (project-level direct/indirect impacts and program-level direct/indirect impacts), interference with a habitat conservation plan (project-level and program-level direct/indirect impacts), and cumulative impacts to biological

resources (all project-level and program-level contained within existing facilities and rights-of-way that do not provide habitat for sensitive biological resources). Therefore, no mitigation would be required. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts with mitigation in Section 2.3.3, Biological Resources.

2.4.5 Cultural Resources

Disturb Human Remains

Project construction would occur primarily in developed areas (on existing facility sites and within existing streets) where it is unlikely that human remains will be encountered. However, if human skeletal remains are uncovered during proposed ground-disturbing activities, construction workers would be required by law to stop work and contact the county coroner. California Health and Safety Code Section 7050.5 requires that, if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the county coroner has determined, within 2 working days of notification of the discovery, the appropriate treatment and disposition of the human remains. Furthermore, if the coroner determines or has reason to believe that the remains are those of a Native American, the coroner must contact the California Native American Heritage Commission within 24 hours (California Health and Safety Code, Section 7050.5c), and the California Native American Heritage Commission must notify the most likely descendant. The most likely descendant would complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

Therefore, if Native American remains were uncovered during ground-disturbing activities associated with the proposed FMP, compliance with existing regulations would ensure that the appropriate authorities are notified and that discovered remains are treated with the appropriate respect and dignity. As such, impacts would be less than significant.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on cultural resources as it relates to the disturbance of human remains. Therefore, no mitigation is required. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts with mitigation in Section 2.3.4, Cultural Resources.

2.4.6 Energy

Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources

Construction

Electricity

Temporary electric power for lighting and electronic equipment and to convey water for fugitive dust control (if provided using an on-site water source versus a water truck) would be provided by SCE. The amount of electricity used during construction would be minimal because typical demand would stem from electrically powered hand tools. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. When not in use, electric

equipment would be powered off so as to avoid unnecessary energy consumption. The electricity used for construction activities would be temporary and minimal, it would be within the supply and infrastructure service capabilities of SCE, and it would not require additional local or regional capacity. Although electricity demand during construction is anticipated to be minimal, the FMP's peak energy consumptions are anticipated to be sufficiently served by existing supply from SCE. The electricity used for construction activities would be temporary and minimal; therefore, FMP project construction would not result in wasteful, inefficient, or unnecessary consumption of electricity. Thus, impacts to energy related to electricity would be less than significant and no mitigation is required.

Natural Gas

Natural gas is not anticipated to be required during construction of the FMP projects. Fuels used for construction would primarily consist of diesel and gasoline (see the subsection "Petroleum"). Peak energy demand specifically applies to electricity; because natural gas (and petroleum) are liquid, these energy resources do not have the same constraints as electricity supply. Nonetheless, any use of natural gas is anticipated to be sufficiently served by existing supply from SoCalGas and would not require additional local or regional capacity. Any minor amounts of natural gas that may be consumed as a result of FMP construction would be temporary and negligible, and would not have an adverse effect; therefore, FMP project construction would not result in wasteful, inefficient, or unnecessary consumption of natural gas. Thus, impacts to energy relating to natural gas would be less than significant and no mitigation is required.

Petroleum

Heavy-duty equipment associated with construction would rely on diesel fuel, as would vendor trucks involved in delivery of materials to the FMP project sites, and haul trucks exporting demolition material or other materials off site. Construction workers would travel to and from the FMP project sites throughout the duration of construction. It is assumed in this analysis that construction workers would travel in gasoline-powered light-duty vehicles. Fuel consumption from construction equipment was estimated by converting the total carbon dioxide (CO_2) emissions from each construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Construction is estimated to occur intermittently from 2021 to 2040 based on the construction phasing schedule. The conversion factor for gasoline is 8.78 kilograms per metric tons (MT) of CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per MT CO_2 per gallon (The Climate Registry 2018).

In summary, construction of the FMP over 19 years is conservatively anticipated to consume 137,361 gallons of gasoline and 2,346,813 gallons of diesel. Averaged over 19 years, it is anticipated that the FMP would consume on average 7,230 gallons of gasoline and 123,516 gallons of diesel per year.

For disclosure only, by comparison, California as a whole consumes approximately 29 billion gallons of petroleum per year. Countywide total petroleum use by on-road vehicles only (i.e., not including construction off-road equipment) is expected to be 1.4 billion gallons per year in 2020 (CARB 2020). Based on these assumptions, the FMP would require a fraction of the petroleum that would be consumed in California and countywide over the course of the construction period. Therefore, impacts to energy resources during construction would be less than significant. No mitigation is required.

Operation

When replacing or rehabilitating facilities, the Sanitation District uses energy-efficient devices as available. For example, when replacing equipment, the Sanitation District installs energy-efficient motors, which in addition to reducing energy consumption, also save costs over time. In addition, when installing larger pumps, the Sanitation District uses variable-frequency drives or soft-start controls to avoid a large inrush current of starting a large motor.

Various replacement and rehabilitation projects would occur at Plant 1, with only one project (X-090) involving construction of a structure. Project X-090, Network, Telecommunications, and Server Relocation at Plant 1, would involve construction of an approximately 200-square-foot utility building to house Sanitation District network, telecommunications, and servers, which would not result in typical building energy usage.

Similar to Plant 1, various replacement and rehabilitation projects would occur at Plant 2, with only projects P2-126 and P2-138 involving structural replacements. For project P2-126, Substation and Warehouse Replacement at Plant 2, the existing 21,000-square-foot warehouse would be demolished and reconstructed in a new location, which is anticipated to be larger (approximately 30,100 square feet) because some outdoor storage may be moved to indoor storage. Although the new warehouse would be larger in size, it is not anticipated to generate substantially greater electricity or natural gas use. Project P2-126 would also involve replacement of an SCE substation and replacement of a service center (approximately 3,100 square feet), both of which are anticipated to be approximately the same size as the existing structures and would not result in a net increase in operational energy use because these structures would primarily house electrical systems and equipment. Project P2-138, Operations and Maintenance Complex at Plant 2, would demolish the existing building and guard shack totaling 36,680 square feet and construct a new building (35,700 square feet) and new guard shack (200 square feet). Overall, the new structures would be slightly less square footage than the existing structures and would increase building energy efficiency as a result of complying with current building codes (2019 Title 24 Building Energy Efficiency Standards, at a minimum).

The joint plant projects primarily consist of improvements of plant-wide electrical and control systems; however, project J-133 would result in a new structure. For project J-133, Laboratory Rehabilitation or Replacement at Plant 1, the existing 40,000-square-foot laboratory building located at Plant 1 would be rehabilitated or replaced. The replacement J-133 building would be the same size, but since it would be built consistent with current building codes, including the latest Title 24 building energy efficiency standards applicable at the time of development, it is anticipated to be more energy efficient than the existing building.

For the collection system projects, which primarily consist of replacement or rehabilitation of pipelines and pump stations, once the replacement or rehabilitation is complete, no new routine operational activity or associated greenhouse gas (GHG) maintenance emissions would occur. Minor maintenance would occur consistent with existing conditions. Project X-060, Newhope Placentia Chemical Dosing Station, would involve removal of an existing pump station and construction of a new chemical dosing station at the abandoned pump station site. The chemical dosing station is anticipated to be small (less than 100 square feet) and would not consume energy typical of building operation since it would be used primarily to house the chemicals.

No projects under the FMP are anticipated to require additional Sanitation District personnel. To the extent feasible, replacement and rehabilitation projects would assist in improving energy efficiency. As with construction, FMP operation is not anticipated to have an effect on peak or base demand for electricity or base demand for natural gas, would be sufficiently served by existing supply from SCE (electricity) and SoCalGas (natural gas), and would not have an effect on local or regional energy supplies or require additional capacity.

The existing temporary diesel-fueled emergency generator at the Seal Beach pump station (3-67) would be replaced with a permanent diesel-fueled emergency generator. Estimated energy consumption (diesel fuel) from testing and maintenance for the permanent diesel-fueled emergency generator is approximately 4,672 gallons of diesel per year. Diesel fuel from the emergency generator testing is anticipated to be minimal. In addition, energy consumption may be overestimated as it was assumed that the new emergency generator would operate up to 50 hours per year for maintenance and testing; however, based on existing practice, the pump station emergency generators are typically tested for approximately 6 hours per year.

Therefore, FMP operation would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and impacts to energy resources during operations would be less than significant. No mitigation is required.

State or Local Plan

Part 6 of Title 24 of the California Code of Regulations establishes energy efficiency standards for residential and nonresidential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically (every 3 years) to incorporate and consider new energy efficiency technologies and methodologies. Title 24 also includes Part 11, CALGreen. CALGreen institutes mandatory minimum environmental performance standards for all ground-up, new construction of commercial and state-owned buildings. The FMP projects that include replacement structures would meet all applicable Title 24 and CALGreen standards to reduce energy demand and increase energy efficiency. Additionally, the FMP projects would not conflict with the various local plans that would reduce energy use, including the City of Fullerton Climate Action Plan (CAP), the City of Huntington Beach Greenhouse Gas Reduction Program, the City of La Habra CAP, and the City of Santa Ana CAP. Overall, the FMP would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; therefore, impacts during construction and operation of the FMP would be less than significant and no mitigation is required.

Cumulative Energy Impacts

Cumulative projects that could exacerbate the proposed FMP's impacts include any projects that could result in wasteful, inefficient, or unnecessary use of energy. However, the FMP would not result in wasteful, inefficient, or unnecessary use of energy during proposed construction activities. Additionally, the FMP is not anticipated to result in a net increase in operational energy use, and replacement buildings are anticipated to improve energy efficiency. Therefore, cumulative impacts to energy use would be less than cumulatively considerable. No mitigation is required.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on energy as it relates to wasteful, inefficient, or unnecessary consumption of energy resources, state or local plans, and cumulative energy impacts; therefore, no mitigation is required.

2.4.7 Geology and Soils

Direct or Indirect Substantial Adverse Effects

Rupture of a known Earthquake Fault

The Alquist–Priolo Earthquake Zoning Act (Alquist–Priolo Act) requires the delineation of fault zones along active faults in California. The purpose of the Alquist–Priolo Act is to regulate development on or near active fault traces to reduce hazards associated with fault rupture. The Alquist–Priolo Earthquake Fault Zones are the regulatory zones that include surface traces of active faults. Active faults within Orange County include the Whittier Fault and Newport–Inglewood Fault (CGS 2019). The FMP area is located within an area with active splays of the Newport–Inglewood Fault Zone (CGS 2010).

Plant 1 and Plant 2 are not within a designated Alquist–Priolo Earthquake Fault Zone. However, recent geotechnical/seismic studies conducted at Plant 1 and at Plant 2 (Kleinfelder 2017) have identified the presence of fault traces associated with the Newport–Inglewood Fault Zone directly under Plant 2. There are also other various proposed FMP activities (e.g., rehabilitation of sewer lines and pump stations) within the Yorba Linda area that may be affected due to the proximity to the Whittier Fault Zone.

However, based on the revised CEQA thresholds that became effective in January 2019, impacts would only be considered significant in the event that the proposed FMP projects would directly or indirectly cause substantial adverse effects to the environment related to fault rupture. The proposed FMP projects would not have significant effects in this regard unless the project would exacerbate the potential for fault rupture to occur, or would result in adverse effects as a result of a fault rupture. An example of such a scenario would be activation of faults and associated earthquakes in association with oil field activities, such as disposal of wastewater in deep disposal wells in Oklahoma. Proposed upgrades to Sanitation District infrastructure would not exacerbate the potential for fault rupture to occur, nor would the upgrades result in any significant adverse effects due to a fault. Therefore, impacts would be less than significant and no mitigation is required.

Strong Seismic Ground Shaking

The FMP area is located in a seismically active region and is subject to strong ground shaking. The principal potential earthquake hazard for the FMP area is ground shaking, which could cause damage to existing and proposed infrastructure upgrades. However, impacts would only be considered significant in the event that the proposed FMP projects would directly or indirectly cause substantial adverse environmental effects related to strong seismic ground shaking. Proposed upgrades to Sanitation District infrastructure would not exacerbate the potential for seismic ground shaking to occur, nor are they likely to result in any significant adverse environmental effects due to seismic ground shaking. Therefore, impacts would be less than significant and no mitigation is required.

Seismic-Related Ground Failure, Including Liquefaction

Liquefaction is a phenomenon where unconsolidated and/or near saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil during strong earthquake shaking results in the temporary fluid-like behavior of the soil. Some of the FMP area is located within a liquefaction hazard zone due to the presence of younger alluvial soils and shallow groundwater (CGS 2019; City of Huntington Beach 2017; OCWD 2016). However, impacts would only be considered significant in the event that the proposed FMP projects would directly or indirectly cause substantial adverse effects related to seismic-related ground failure, including liquefaction. Proposed upgrades to Sanitation District infrastructure would not exacerbate the potential for seismic-related ground failure to occur and would not result in any significant environmental effects due to seismic-related ground failure. Therefore, impacts would be less than significant and no mitigation is required.

Landslides

Implementation of the proposed FMP projects would not directly or indirectly result in adverse effects associated with landslides. Landslides can either be shallow/surficial or deep-seated ground failures (several tens to hundreds of feet deep), in which sections of slope detach and slide downhill. The project sites and surrounding areas have relatively flat terrain that has previously been graded and developed. The project sites are not located within potential earthquake-induced landslide zones, as designated by the California Geological Survey (CDOC 2017). Therefore, landslides are not considered a hazard within the FMP area, and no impacts would occur. No mitigation is required.

Substantial Soil Erosion or the Loss of Topsoil

Construction

Implementation of the proposed FMP would involve a variety of construction methods that would occur over a 20-year planning period. General construction activities would include installation of new structures, structural

rehabilitation, interior pipeline lining, potential pipe removal, utility hole repair or replacement, and utility hole removal with associated demolition. Construction methods would include temporary aboveground sewer bypassing, open-trench excavation for new sewer extensions or replacement, shoring, dewatering, and potential microtunneling and jack and bore methods for installation at sensitive crossings (e.g., busy intersections, railroad spurs, freeways, or flood control channels). These construction activities and methods could result in temporary, short-term impacts related to soil erosion and possible off-site sedimentation of downstream drainages, creeks, the SAR, and ultimately the Pacific Ocean. FMP projects that would result in ground-disturbing activities in excess of 1 acre, including pipeline rehabilitation projects that cumulatively disturb 1 acre or more of land, would be required to implement a SWPPP in accordance with Construction General Permit requirements to mitigate construction-related sedimentation and siltation impacts. Due to the discontinuous nature and timeline of the FMP projects (over a 20-year span), a new SWPPP would be required for each of these projects.

All FMP projects would be completed in accordance with Orange County's NPDES Program and associated Erosion and Sediment Control Plan (ESCP). The ESCP would require that all sediment from areas disturbed by construction activities be retained on site using an effective combination of erosion- and sediment-control BMPs to reduce off-site sedimentation to the maximum extent practicable. In addition, depending on the size and priority of the project, additional erosion-control methods may be required.

For projects requiring less than 1 acre of ground disturbance (i.e., a SWPPP is not required under the Construction General Permit) and located in municipalities lacking requirements for completion of erosion control plans, construction-related erosion could result in potentially significant impacts. However, ground-disturbance activities in these areas would be required to implement a Sanitation District Stormwater Pollution Control Plan in accordance with Sanitation District standard practices. Implementation of the Stormwater Pollution Control Plan would ensure that standard construction BMPs are included to address sedimentation and erosion from construction activities, consistent with Orange County's NPDES Program and Drainage Area Management Plan (DAMP). These BMPs, when coupled with state, county, and city construction guidelines, including Orange County's ESCP, local erosion-control plans, and SWPPPs, would reduce soil erosion and loss during construction, and impacts would be less than significant. Thus, no mitigation would be required.

Operations

Ongoing activities related to operation and maintenance of FMP facilities would include routine maintenance, cleaning sewer lines and utility holes, visual inspections, closed-circuit television and camera inspection, flow monitoring, as needed repairs, and chemical dosing for odor and corrosion control. The frequency of maintenance of activities would vary by facility and be based on information obtained from ongoing monitoring activities. Operation and maintenance activities generally require confined-space entry and can be completed with minimal disruption to surrounding areas.

Corrective maintenance could potentially include the repair or replacement of failed pumps, pipe segments, and utility holes; replacement of utility hole covers; and root cutting and root foaming with herbicide. Additionally, chemicals, such as magnesium hydroxide, hydrogen peroxide, sodium hydroxide, and ferrous chloride, might be added directly to trunk sewers and at various facilities within Plant 1 and Plant 2, as needed, to control odor and corrosion. However, corrective actions are not expected to result in substantial ground-disturbing activities. In addition, operations and maintenance activities are not expected to change from the activities that are currently ongoing in the system.

As such, long-term operation of the FMP projects would not result in substantial soil erosion or loss of topsoil, since the majority of the FMP project sites would be covered by structures and paving, and the remaining portions of the sites would remain unchanged from existing conditions. No exposed areas subject to erosion would be created or affected by proposed FMP projects. In addition, the majority of the area surrounding FMP project sites is completely developed and would not be susceptible to indirect erosional processes (e.g., uncontrolled runoff) caused by the projects. Therefore, impacts would be less than significant related to erosion or loss of topsoil. Thus, no mitigation is required.

Unstable Geologic Unit

Proposed FMP activities may occur in geologically unstable areas, such as zones of potential liquefaction or collapsible soils. However, construction activities would be completed in accordance with California Building Code regulations, which mandate mitigative engineering to minimize damage and prevent collapse of proposed facility upgrades. In addition, underlying soils and geologic units would not become unstable as a result of facility construction and operation. Therefore, impacts would be less than significant and no mitigation is required.

Expansive Soil

Expansive soils are predominantly composed of clays, which expand in volume when water is absorbed and shrink when the soil dries. Expansion is measured by shrink-swell potential, which is the volume change in soil with a gain in moisture. Soils with a moderate to high shrink-swell potential can cause damage to roads, buildings, and infrastructure (USDA 2019). Facilities within the FMP area may be located on expansive soil. However, FMP project construction would be completed in accordance with California Building Code regulations, which mandate mitigative engineering to minimize damage and prevent collapse of proposed facility upgrades. Therefore, impacts would be less than significant and no mitigation is required.

Soils Incapable of Adequately Supporting Septic Tanks

The proposed FMP would not use septic or alternative wastewater systems. Therefore, no impacts would occur and no mitigation is required.

Cumulative Geological Resource or Soil Impact

Potential cumulative impacts on geology and soils would result from FMP projects that collectively could contribute to substantial, regional erosion. To reduce potential cumulative impacts related to erosion, all FMP projects would be required to adhere to all relevant local construction guidelines, including Orange County's NPDES Program, DAMP, and municipal erosion control plans. In addition, FMP projects that would result in land disturbance activities in exceedance of 1 acre would be required to adhere to BMPs per the most recent version of the Construction General Permit to prevent substantial on- and off-site erosion. FMP projects involving ground disturbance less than 1 acre would incorporate Sanitation District standard practices to minimize erosion. Therefore, a potential cumulative impact related to site-specific geology and soils, such as soil erosion, would not occur. Thus, no mitigation would be required.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on geological resources or soils (with exception of paleontological resources). The Initial Study for the proposed FMP found no potential for significant impacts to geology and soils regarding the proposed FMP projects directly or indirectly causing a potential substantial adverse effect, including rupture of a known

earthquake fault, strong seismic ground shaking, seismic-related ground failure, and landslides; the projects being located on a geologic unit that is unstable; the projects being located on expansive soil; and the projects having soils incapable of adequately supporting the use of septic tanks. Therefore, the above-mentioned geology and soils thresholds were not addressed in the Draft PEIR. No mitigation would be required. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts with mitigation in Section 2.3.5, Geology and Soils.

2.4.8 Greenhouse Gas Emissions

Generation of Greenhouse Gas Emissions

Construction Emissions

Construction of the FMP projects would result in GHG emissions, which are primarily created by off-road construction equipment and on-road vehicles (haul trucks, vendor trucks, and worker vehicles). The SCAQMD Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold (SCAQMD 2008) recommends that, "construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies." The total construction GHG emissions were calculated, amortized over 30 years, added to the estimated operational GHG emissions, and then compared with the GHG significance threshold of 3,000 MT carbon dioxide equivalent (CO_2e) per year.

The estimated total GHG emissions during construction of the entire FMP would total approximately 33,265 MT CO_2e over the assumed 19-year construction period. Estimated FMP-generated construction emissions amortized over 30 years would be approximately 1,109 MT CO_2e per year. The expected lifetime of the FMP projects is anticipated to be greater than 30 years; however, 30 years is an appropriate assumption as many facilities are replaced prior to reaching full anticipated lifetime to maintain reliable service. Nonetheless, because the FMP would be buildout over a 19-year time period, assuming a lifetime of 19 years, estimated amortized FMP-generated construction emissions would be approximately 1,751 MT CO_2e per year. Because there is no separate GHG threshold for construction, the evaluation of significance should consider project operation.

Operational Emissions

Various replacement and rehabilitation projects would occur at Plant 1, with only one project (X-090) involving construction of a structure. Project X-090, Network, Telecommunications, and Server Relocation at Plant 1, would involve construction of an approximately 200-square-foot utility building to house Sanitation District network, telecommunications, and servers, which would not result in typical building GHG emissions such as electricity, water supply, and solid waste.

Similar to Plant 1, various replacement and rehabilitation projects would occur at Plant 2, with only projects P2-126 and P2-138 involving structural replacements. For project P2-126, Substation and Warehouse Replacement at Plant 2, the existing 21,000-square-foot warehouse would be demolished and reconstructed in a new location, which is anticipated to be larger (approximately 30,100 square feet) because some outdoor storage may be moved to indoor storage. Although the new warehouse would be larger in size, it is not anticipated to generate substantially greater electricity, natural gas, or water use, and is anticipated to have increased energy efficiency compared to the existing building. Project P2-126 also would involve replacement of an SCE substation and replacement of a service center (approximately 3,100 square feet), both of which are anticipated to be approximately the same size as the existing structures and would not result in a net increase in operational GHG emissions at these structures because

they would primarily house electrical systems and equipment. Project P2-138, Operations and Maintenance Complex at Plant 2, would demolish the existing building and guard shack totaling 36,680 square feet and construct a new building (35,700 square feet) and new guard shack (200 square feet). Overall, the new structures would be slightly less square footage than the existing structures and would increase building energy efficiency; therefore, this project would not result in an increase in GHG emissions.

The joint plant projects primarily consist of improvements of plant-wide electrical and control systems; however, project J-133 would result in a new structure. For project J-133, Laboratory Rehabilitation or Replacement at Plant 1, the existing 40,000-square-foot laboratory building located at Plant 1 would be rehabilitated or replaced; however, for modeling purposes, it was assumed to be replaced by a new 40,000-square-foot laboratory building. The replacement J-133 building would be the same size, but since it would be built consistent with current building codes, including the 2019 Title 24 building energy efficiency standards, it is anticipated to be more energy efficient than the existing building. Equipment layout and future operation at the laboratory will continue to follow existing and future regulatory requirements for wastewater testing.

For the collection system projects, which primarily consist of replacement or rehabilitation of pipelines and pump stations, once the replacement or rehabilitation is complete, no routine operational activity or associated GHG emissions would occur. Project X-060, Newhope Placentia Chemical Dosing Station, would involve removal of an existing pump station and construction of a new chemical dosing station at the abandoned pump station site. The chemical dosing station is anticipated to be small (less than 100 square feet) and would not generate GHG emissions typical of building operation since it would primarily house chemicals.

No projects under the FMP are anticipated to require additional Sanitation District personnel. To the extent feasible, replacement and rehabilitation projects would assist in improving energy efficiency, which would reduce energy-related (electricity and natural gas) GHG emissions. Therefore, implementation of the FMP is not anticipated to generate an increase in operational GHG emissions compared to existing conditions, and may reduce energy-related GHG emissions, with the exception of the Seal Beach pump station emergency generator. The existing temporary diesel-fueled emergency generator at the Seal Beach pump station (3-67) would be replaced with a permanent diesel-fueled emergency generator. Estimated GHG emissions from testing and maintenance for the permanent diesel-fueled emergency generator are approximately 52 MT CO_2e per year.

Estimated annual operational emissions (approximately 52 MT CO_2e per year) plus amortized construction emissions over 30 years (approximately 1,109 MT CO_2e per year) result in a total annual GHG emissions from the project of 1,160 MT CO_2e per year,[1] which would not exceed the recommended SCAQMD threshold of 3,000 MT CO_2e per year. Thus, impacts related to GHG emissions would be less than significant no mitigation is required.

Conflict with an Applicable Plan, Policy, or Regulation

Consistency with Local Greenhouse Gas Emission Reduction Plans

The FMP includes components that are within cities that have adopted GHG emission reduction plans, such as CAPs. The focus of GHG emission reduction plans is on long-term sources of GHG emissions rather than short-term construction. In addition, GHG reduction measures are primarily aimed at new and existing land use development and local-level municipal operations, and are generally not applicable to utilities or projects undertaken by the Sanitation District. The Sanitation District understands the importance of consistency with the goals and policies identified within local jurisdictions' general plans and other local ordinances/plans, such as GHG reduction plans

[1] Total noted in text does not sum due to rounding.

and CAPs; however, per California Government Code Section 53091, the Sanitation District, as a wastewater treatment facility, is exempt from local building ordinances. As part of standard practice, the Sanitation District would coordinate with local jurisdictions to the extent feasible during proposed FMP implementation to avoid and/or minimize potential impacts from the proposed FMP. The proposed FMP is intended to maintain, repair, and improve existing infrastructure, as necessary, to ensure the reliability of the Sanitation District's water conveyance and treatment system. Overall, the proposed FMP, which is a maintenance program, is not anticipated to conflict with any applicable land use plans, policies, or regulations of local agencies.

City of Fullerton's Climate Action Plan

The City of Fullerton's 2012 CAP identifies a series of climate action strategies that guide Fullerton in four focus areas: transportation and mobile strategy, energy and conservation strategy, water use and efficiency strategy, and solid waste and recycling strategy (City of Fullerton 2012). However, the measures outlined in the CAP are not directly applicable to individual projects, and mainly are intended for the City of Fullerton to implement.

FMP project components located within the City of Fullerton include projects 2-73, X-060, and X-078. Project 2-73 involves abandonment of the Yorba Linda Pump Station and downstream forcemain, and the related project X-060 would add a chemical dosing station at the site of the abandoned Yorba Linda Pump Station. Project X-078 would involve air jumper addition or rehabilitation. Implementation of the FMP projects within the City of Fullerton would not conflict with the CAP transportation/mobility, energy, water, or solid waste GHG emission reduction strategies because they would involve temporary construction activity and would not result in long-term, operational GHG emissions that are typical of land use development projects. In addition, consistency with the City of Fullerton's CAP can be determined if the FMP is consistent with Fullerton's year 2030 growth projections. Because the project would not result in growth within Fullerton, the FMP would be consistent with the growth projections. As such, the FMP would not conflict with the City of Fullerton's CAP.

City of Huntington Beach Greenhouse Gas Reduction Program

The City of Huntington Beach Greenhouse Gas Reduction Program includes GHG reduction strategies grouped into nine categories: (1) land use, (2) transportation, (3) alternative fuels, (4) renewable energy, (5) energy efficiency, (6) off-road equipment, (7) water and wastewater, (8) resource management, and (9) community awareness. Specifically, the renewable energy grouping includes a strategy to expand the number of solar energy systems on new and existing nonresidential buildings and a strategy to transition to zero-net-energy buildings for all new construction in support of state mandates, and energy efficiency strategies include nonresidential retrofits and electrification. The off-road equipment strategies include alternative fuel construction equipment (hybrid-electric, natural gas, and biodiesel). Strategies related to transportation and alternative-fueled vehicles would not apply to the FMP because there would be no operation net increase in Sanitation District staff or associated vehicle trips.

FMP project components located within the City of Huntington Beach include projects 11-33, 11-34, J-121, P2-126, P2-138, X-007, X-032, X-036, X-037, X-050, X-054, X-071, and X-078. Projects 11-33 and 11-34 involve pump station replacement, project X-036 involves pump station rehabilitation, project X-037 involves pump station demolition, project X-007 involves waste side-stream pump station upgrades, and project X-054 involves waste side stream pump station rehabilitation. Project X-032 would involve rehabilitation of an existing truck loading facility, project X-050 would involve rehabilitation of the Plant 2 activated sludge aeration basin, project X-071 would involve truck sewer rehabilitation, project X-078 would involve air jumper addition or rehabilitation, and project J-121 would involve uninterruptible power system upgrades. Project P2-126 would involve substation,

service center, and warehouse replacement, and project P2-138 would involve an operations and maintenance complex at Plant 2; both would involve replacement buildings or smaller structural enclosures.

Projects 11-33, 11-34, J-121, X-007, X-032, X-036, X-037, X-050, X-054, X-071, and X-078 would not include new structures or result in long-term operational GHG emissions; however, all would result in temporary construction GHG emissions. Huntington Beach's off-road GHG reduction strategies include the use of hybrid and alternative fuel construction equipment for large projects. To the extent hybrid-electric, natural gas, and biodiesel equipment becomes more readily available in construction fleets, the Sanitation District will use such equipment for construction activities. Projects P2-126 and P2-138 would replace existing buildings and structures with buildings and structures of equal or similar size, which would be more energy efficient than the existing buildings and structures. Neither project P2-126 nor P2-138 is anticipated to result in a substantial increase in operational activity and associated GHG emissions. Accordingly, projects P2-126 and P2-138 would not conflict with the City of Huntington Beach's Greenhouse Gas Reduction Program strategies related to energy. Overall, the FMP is not anticipated to conflict with the City of Huntington Beach's Greenhouse Gas Reduction Program.

City of La Habra Climate Action Plan

The City of La Habra's 2014 CAP includes various GHG emission reduction measures related to transportation (VMT reduction, alternative fuels, and bicycle infrastructure), energy (energy efficiency for new development and retrofits, and renewable energy), area source (electric landscape equipment, tree planting, and urban heat island reduction), water (water use reduction and water efficiency), and solid waste (waste diversion, landfill energy, and waste education) (City of La Habra 2014).

FMP project components located within the City of La Habra include projects X-061 and X-078. Project X-061 would involve replacing and rehabilitating sewer pipe along Imperial Highway, and project X-078 would involve air jumper addition or rehabilitation. Both projects X-061 and X-078 would involve temporary construction activity and would not represent a long-term source of GHG emissions that would conflict with the City of La Habra's CAP. In addition, the City of La Habra's GHG emission reduction measures would not apply because they are focused on typical land use development. To demonstrate consistency with the City of La Habra's CAP, projects would have to incorporate measures that address the following broad categories of GHG emissions sources: electricity use and use of fossil-fuel-based generation for heating, water use, and mobiles sources. Because the FMP projects within the City of La Habra's city limits would not result in electricity, heating, or water demand, or generate mobile source emissions, no reductions would be necessary. As such, the FMP would not conflict with the City of La Habra's CAP.

City of Santa Ana Climate Action Plan

The City of Santa Ana's 2015 CAP includes reduction measures focused on transportation, land use, energy, solid waste, water, and wastewater. Regarding transportation and land use, the City of Santa Ana's CAP includes measures related to development of local retail nodes, placement of residential nodes near retail and employment, traffic signal synchronization, end of trip facilities, safe routes to school, bike/pedestrian/transit connectivity, bike sharing, and municipal operations. Energy measures include Property Assessed Clean Energy financing, solar photovoltaic, weatherization, streetlight retrofits, benchmarking and retrocommissioning, Title 24 energy efficiency for commercial and residential, green business challenge, and municipal operations measures. Solid waste, water, and wastewater CAP measures include AB 341 commercial and multifamily recycling, food waste digestion, rainwater harvesting, and turf removal (City of Santa Ana 2015).

FMP project components located either entirely within or in a portion of the City of Santa Ana are projects 7-66, X-078, X-083, and X-084. Project 7-66 would repair plastic liner failures of the Sunflower and Red Hill interceptors, project X-083 would involve replacement of pipe with a large-diameter pipe along the Greenville–Sullivan regional sewer, project X-084 would replace and upsize approximately pipe to increase the capacity of the West Trunk regional sewer, and project X-078 would involve air jumper addition or rehabilitation. None of the City of Santa Ana CAP reduction measures would apply to the FMP project components within Santa Ana because they would result in temporary GHG emissions generated during construction, but would not result in long-term operational GHG emissions. Accordingly, the FMP would not conflict with the City of Santa Ana's CAP.

California Air Resources Board Scoping Plan

The California Air Resources Board (CARB) Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California's GHG emissions, and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations. Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-global-warming-potential GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others. Accordingly, Scoping Plan measures focus on reducing long-term operational GHG emissions rather than short-term construction GHG emissions (CARB 2014).

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The FMP would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law and to the extent that they are applicable to the FMP. As such, the FMP would not conflict with the applicable strategies and measures in the Scoping Plan.

Southern California Association of Governments 2016 Regional Transportation Plan/Sustainable Communities Strategy

At the regional level, SCAG adopted the 2016–2040 RTP/SCS for the purpose of reducing GHG emissions attributable to passenger vehicles within its jurisdictional boundaries (Orange, Imperial, Los Angeles, Riverside, San Bernardino, and Ventura Counties) (SCAG 2016). Although the RTP/SCS does not regulate land use or supersede the exercise of land use authority by SCAG's member jurisdictions (e.g., member cities and counties), the RTP/SCS is a relevant regional reference document for purposes of evaluating the connection of land use and transportation patterns and the corresponding GHG emissions. Note that the Sanitation District is not a member of SCAG. The 2016 RTP/SCS provides broad direction and guidance for future development, encouraging the development of new uses in areas well served by transit and in urban infill areas.

SCAG's 2016 RTP/SCS is a regional-growth-management strategy that targets per-capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region pursuant to Senate Bill (SB) 375. In addition to demonstrating the region's ability to attain and exceed the GHG emission-reduction targets set forth by CARB, the 2016 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. Thus, successful implementation of the 2016 RTP/SCS would result in more complete communities with a variety of transportation and housing choices, while reducing automobile use. With regard to individual developments, such as the FMP, the strategies and policies set forth in the 2016 RTP/SCS can be

grouped into the following three categories: (1) reduction of vehicle trips and VMT, (2) increased use of alternative fuel vehicles, and (3) improved energy efficiency.

Because the FMP would not result in a net increase in operational vehicle trips, the FMP would not conflict with the 2016 RTP/SCS strategies related to reducing vehicle trips and VMT or use of alternative fuel vehicles. Construction vehicle trips would be temporary. All proposed replacement buildings would comply with the current CALGreen and Title 24 standards, which would improve energy efficiency and reduce energy consumption; therefore, the FMP would be consistent with the 2016 RTP/SCS goal to improve energy efficiency. Therefore, the FMP would not conflict with the 2016 RTP/SCS strategies and policies.

Senate Bill 32 and Executive Order S-3-05

The FMP would not impede the attainment of the GHG reduction goals for 2030 or 2050 identified in SB 32 and Executive Order (EO) S-3-05, respectively. EO S-3-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. SB 32 establishes a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, will ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030. Although there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

The FMP would not interfere with implementation of any of the previously described GHG reduction goals for 2030 or 2050 because the FMP would not exceed the SCAQMD's recommended threshold of 3,000 MT CO2e per year (SCAQMD 2008). Because the FMP would not exceed the threshold, this analysis provides support for the conclusion that the FMP would not impede the state's trajectory toward the previously described statewide GHG reduction goals for 2030 or 2050. In September 2018, EO B-55-18 was signed, which commits the state to total carbon neutrality by 2045. However, the specific path to compliance for the state in regards to the long-term goals will likely require development of technology or other changes that are not currently known or available.

The FMP's consistency with the state's Scoping Plan would assist in meeting the Sanitation District's contribution to GHG emission reduction targets in California. With respect to future GHG targets under SB 32 and EO S-3-05, CARB has stated its intent to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet the SB 32 40% reduction target by 2030 and the EO S-3-05 80% reduction target by 2050. CARB's statement demonstrates that future regulations will be adopted to continue the trajectory toward meeting these future GHG targets.

Therefore, the FMP would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and potential impacts would be less than significant. No mitigation is required.

Cumulative Greenhouse Gas Impacts

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. GHG emissions inherently contribute to cumulative impacts, and thus, any additional GHG emissions would result in a cumulative impact. However, the FMP would result in GHG emissions that would not exceed the applied threshold, and the FMP would not conflict with applicable GHG reduction plans. Therefore, the FMP would result in a less than cumulatively considerable impact. As such, cumulative impacts would be less than significant.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on GHG emissions and cumulative GHG impacts; therefore, no mitigation is required.

2.4.9 Hazards and Hazardous Materials

Routine Transport, Use, or Disposal of Hazardous Materials

Operation

The operational phase of the proposed FMP would not be expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Hazardous materials used for operation of Plant 1, Plant 2, and the collection system would be in accordance with requirements and recommendations in the Safety Data Sheet, and would be managed in accordance with federal, state, and local laws and regulations. The Sanitation District submits HMBPs to the local Certified Unified Program Agency as required by local and state law, and will continue to update HMBPs as required. In addition, the Sanitation District is beginning to phase out the use of extremely hazardous substances; no new extremely hazardous substances would be added to hazardous material inventories, nor would the amounts of existing extremely hazardous substances increase at the Sanitation District facilities. The use of these substances would be subject to applicable federal, state, and local health and safety laws and regulations that are intended to minimize health risk to the public associated with hazardous materials. Hazardous wastes that are generated by Sanitation District facilities are generated, stored, manifested, and transported in accordance with federal, state, and local regulations. Although the Sanitation District uses extremely hazardous substances, the Sanitation District will not generate additional acutely hazardous substances in standard operations as part of the FMP. Therefore, impacts would be less than significant and no mitigation would be required.

Airport Land Use Plan

A review of airport influence areas maps indicates that the proposed FMP would consist of project activities (Gisler-Red Hill Interceptor Rehabilitation, Sunflower and Red Hill Interceptor Rehab/Repair, and MacArthur Dual FM Project) that are within proximity to John Wayne Airport. The three projects consist of relining trunk sewer mains and repairing forcemains. These projects would not cause a safety hazard because they would involve repairing existing sewer pipes, and no construction activities would create a safety hazard or excessive noise for people working in the project area due to the temporary nature of the rehabilitation work. Therefore, the proposed FMP projects within 2 miles of John Wayne airport would have less-than-significant impacts and no mitigation is required.

Impair Implementation of or Physically Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan

Operation

Operation of the proposed FMP would be similar to current operations. Plant operations would remain within existing plant boundaries, and collection system pipelines and features would be subsurface, or placed such that public rights-of-way would not be permanently impeded. Therefore, impacts would be less than significant. Thus, no mitigation would be required.

Significant Risk of Loss, Injury, or Death Involving Wildland Fires

Under the Orange County Severity Zone Map provided by the California Department of Forestry and Fire Prevention (CAL FIRE), the FMP project sites and surrounding areas are not in Very High, High, or Moderate Fire Hazard Severity Zoned areas (CAL FIRE 2007). Therefore, there would be no impact and no mitigation is required.

Cumulative Hazards and Hazardous Materials Impacts

Impacts associated with routine transport, use, or disposal of hazardous materials would be less than significant. In addition, impacts associated with an airport land use plan, adopted emergency response plan, or wildland fires would not occur. Furthermore, because cumulative projects would be fully regulated, thus reducing potential for public safety risks, cumulative impacts associated with exposure to hazards and hazardous materials would be less than significant. Therefore, cumulative impacts with regard to the aforementioned thresholds would be less than significant.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on hazards and hazardous materials as it relates to routine transport, use, or disposal of hazardous materials (operation) and the interference with an adopted emergency response plan or emergency evacuation plan (operation). Additionally, the Initial Study for the proposed FMP found no potential for significant impacts to hazards and hazardous materials regarding FMP projects related to an airport land use plan or wildland fires. Therefore, the above-mentioned thresholds were not addressed in the Draft PEIR. No mitigation would be required. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts with mitigation in Section 2.3.6, Hazards and Hazardous Materials.

2.4.10 Hydrology and Water Quality

Violate Water Quality Standards or Waste Discharge Requirements

Construction – Plant 1, Plant 2, and Collection System

Implementation of the proposed FMP would involve a variety of construction methods that would occur over a 20-year planning period. Project construction activities would generally include installation of new structures, structural rehabilitation, interior pipeline lining, potential pipe removal, utility hole repair or replacement, and utility hole removal with associated demolition. Construction methods would include temporary aboveground sewer bypassing, open-trench excavation for new sewer extensions or replacement, dewatering, shoring, and use of trenchless installations such as horizontal directional drilling, microtunneling, and jack-and-bore methods. Trenchless methods would potentially be used for pipeline installment and repairs at sensitive crossings (e.g., busy intersections, railroad spurs, freeways, or flood control channels).

The analysis of potential impacts of construction activities, construction materials, and non-stormwater runoff on water quality during the demolition and construction phase focuses primarily on sediment and certain non-sediment-related pollutants. Construction-related activities that primarily result in sediment releases are related to exposing previously stabilized soils to potential mobilization by rainfall/runoff and wind. Such activities include grading, excavations, and temporary stockpiling of soil. Environmental factors that affect erosion include topographic, soil, and rainfall characteristics.

The proposed FMP's demolition and construction impacts would be minimized through compliance with local, state, and federal regulations pertaining to water quality standards. FMP projects that would result in ground-disturbing activities in excess of 1 acre, including pipeline rehabilitation projects that cumulatively disturb 1 acre or more of land, would be required to implement a SWPPP in accordance with Construction General Permit (Order No. 2009-0009-DWQ/CAS000002, as amended) requirements, to mitigate construction-related sedimentation and siltation impacts. Due to the discontinuous nature and timeline of the FMP projects (over a 20-year time span), a new SWPPP would likely be required for each of these projects. However, in some instances, related or proximal projects may be bundled into combined SWPPPs. All projects in unincorporated portions of Orange County would be completed in accordance with Orange County's NPDES Program and the project's associated ESCP. The ESCP would require that all sediments from areas disturbed by construction activities be retained on site using an effective combination of erosion- and sediment-control BMPs to reduce off-site sedimentation to the maximum extent practicable.

The ESCPs and SWPPPs, consistent with the Orange County NPDES Program and the DAMP, would identify BMPs that protect stormwater runoff and ensure avoidance of the substantial degradation of water quality. Implementation of these plans would ensure that no substantial water quality impacts occur on site or off site. Typical BMPs that could be incorporated into the ESCPs and SWPPPS to protect water quality include the following:

- Diverting off-site runoff away from maintenance sites
- Vegetating landscaped/vegetated swale areas as soon as feasible following grading activities
- Placing perimeter straw wattles to prevent off-site transport of sediment
- Using drop inlet protection (filters and sandbags or straw wattles) with sandbag check dams within paved areas
- Regular watering of exposed soils to control dust during demolition and construction activities
- Implementing specifications for demolition/construction waste handling and disposal
- Using contained equipment wash-out and vehicle maintenance areas
- Maintaining erosion and sedimentation control measures throughout the construction period
- Stabilizing construction entrances to avoid trucks from imprinting soil and debris onto adjoining roadways
- Training, including for subcontractors, on general site housekeeping

For projects requiring less than 1 acre of ground disturbance (i.e., projects for which a SWPPP is not required under the Construction General Permit) and located in municipalities lacking requirements for completion of erosion control plans, construction-related erosion could result in potentially significant impacts. However, in accordance with Sanitation District Master Specification Section 02270 (Sanitation District 2020a) and Section 02271 (Sanitation District 2020b), ground-disturbing activities on projects smaller than 1 acre would be completed in accordance with a Sanitation District Stormwater Pollution Control Plan and associated Water Pollution Control Drawings. Implementation of measures detailed in the Sanitation District Stormwater Pollution Control Plan and associated Water Pollution Control Drawings would ensure that standard construction BMPs are included to address sedimentation and erosion from construction activities, consistent with Orange County's NPDES Program and DAMP. Measures would include soil stabilization BMPs, sediment control BMPs, tracking control BMPs, wind erosion BMPs, non-stormwater management BMPs, and waste management/materials pollution control BMPs. The Stormwater Pollution Control Plan would specify measures regarding construction BMP maintenance, inspection, and repair. In addition, the Stormwater Pollution Control Plan would describe the individual project, assign BMP implementation responsibilities, and document personnel training.

Incorporation of required BMPs for materials and waste storage and handling, and equipment and vehicle maintenance and fueling would reduce the potential discharge of polluted runoff from project sites, consistent with the state NPDES Construction General Permit, as well as local and Orange County municipal codes. Compliance

with existing regulations and Sanitation District Stormwater Pollution Control Plans would prevent violation of water quality standards and minimize the potential for contributing sources of polluted runoff. Therefore, compliance with existing regulations and Sanitation District established protocols would ensure that FMP projects would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface quality from demolition and construction activities. Thus, impacts associated with the violation of water quality standards would be less than significant.

Trenchless Installation

Installation and repair of select pipelines would be accomplished using trenchless methods, such as microtunneling, jack-and-bore, and horizontal directional drilling, in sensitive areas (e.g., busy intersections, railroad spurs, freeways, or flood control channels). Trenchless technologies would reduce potential biological impacts in sensitive areas, and would reduce potential water quality impacts resulting from erosion and incidental equipment-related petroleum spills to the waterway.

No FMP projects would include pipeline replacements beneath creeks or the SAR. Although project X-063, South Santa Ana River Interceptor Connector Rehabilitation, would be completed beneath the SAR, this project would not require horizontal directional drilling, as the portion of the project beneath the river would involve rehabilitation, rather than replacement. Pipeline rehabilitation would consist of sewer lining, which is a method of rehabilitation that uses the existing pipe as a host for a new liner and may include slip lining, cured-in-place pipe, and modified cross-section liner. Similarly, no other pipeline replacement projects would occur beneath creeks or the SAR. Rather, horizontal directional drilling would be completed beneath linear infrastructure features and beneath sensitive water bodies.

Trenchless technology would locally require excavation of portals, or pits, at both ends of the borehole. Soil excavation and temporary stockpiling of soils would potentially expose soils to erosion and lead to sedimentation in nearby drainages. However, incorporation of state and local erosion control regulations (e.g., SWPPP, ESCP), as well as Sanitation District Stormwater Pollution Control Plans, would ensure that standard construction BMPs are included to address sedimentation and erosion from construction activities, consistent with Orange County's NPDES Program and DAMP.

In addition, operation and maintenance of trenchless technology equipment could result in incidental spills of petroleum products, which in turn could result in adverse surface water quality impacts. Incorporation of required BMPs for materials and waste storage and handling and BMPs for equipment and vehicle maintenance and fueling would reduce the potential discharge of polluted runoff from construction sites, consistent with the state NPDES Construction General Permit, as well as local and Orange County municipal codes. Compliance with existing regulations and Sanitation District Stormwater Pollution Control Plans would prevent violation of water quality standards and minimize the potential for contributing sources of polluted runoff. Therefore, FMP projects would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface quality from trenchless technology activities. Impacts would be less than significant.

Operation

Implementation of the FMP projects would involve upgrading, replacing, and rehabilitating older facilities within the Sanitation District's wastewater collection and treatment system. Because each of these projects would involve replacement of existing infrastructure, potential water quality impacts associated with potential incidental spills of vehicle oils and other chemicals during operations and maintenance would generally be the same as under existing conditions.

Similar to existing conditions, during storm events, pollutants from paved areas, without proper stormwater controls and BMPs, could enter the municipal storm drain system before eventually being discharged into nearby waterways. The majority of pollutants entering the storm drain system in this manner would be dust, litter, and possibly residual petroleum products (e.g., motor oil, gasoline, diesel fuel). Certain metals, along with nutrients and pesticides from landscape areas, can also be present in stormwater runoff. Between periods of rainfall, surface pollutants tend to accumulate, and runoff from the first significant storm of the year ("first flush") would likely have the largest concentration of pollutants.

Orange County and cities within Orange County are co-permittees under the Orange County Municipal NPDES permit. The NPDES permit sets limits on pollutants being discharged into waterways, and requires all new development and significant redevelopment to incorporate low-impact development (LID) features laid out in the Water Quality Management Plan. Completion of a Water Quality Management Plan is one of the main components of the Orange County Municipal NPDES permit. In accordance with the NPDES permit, depending on the nature and location of the individual FMP project, Orange County or appropriate city would be responsible for monitoring the preparation and implementation of Water Quality Management Plans. As a result of compliance with existing regulations, the FMP would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality during long-term operations. As a result, impacts would be less than significant and no mitigation is required.

Deplete Groundwater Supplies or Interfere with Groundwater Recharge

The proposed FMP would not require use of groundwater supplies. In addition, projects under the proposed FMP are located in predominantly paved areas, and thus, would not result in paving previously unpaved areas. As a result, implementation of the proposed FMP would not interfere substantially with groundwater recharge. Therefore, no impact would occur.

Alter Existing Drainage Pattern

Substantial Erosion or Siltation On Site or Off Site

Projects proposed within the FMP would be located in predominantly paved areas, such that repaving of project areas following facility upgrades would not result in substantial alteration of existing drainage patterns. As a result, potential erosion or siltation following facility upgrades would not occur.

Increase Rate or Amount of Surface Runoff

Projects proposed within the FMP would be located in predominantly paved areas, such that repaving of project areas following facility upgrades would not result in a substantial increase in the rate or amount of surface runoff. As a result, potential flooding following project construction would not occur.

Exceed Capacity of Existing or Planned Stormwater Drainage Systems

Projects proposed within the FMP would be located in predominantly paved areas, such that repaving of project areas following facility upgrades would not 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. As a result, no impact would occur.

Impede or Redirect Flood Flows

Plant 1 and Plant 2

Federal Emergency Management Agency (FEMA) flood insurance maps show that Plant 1 and Plant 2 are located in an area designated as Zone X, areas with reduced risk due to levees. This area is protected from the 1% annual flood zone (i.e., 100-year flood) by levee, dike, or other structures subject to possible failure or overtopping during larger floods, and is therefore considered a 500-year flood zone.

Project activities at Plant 1 and Plant 2 would involve the demolition, replacement, and rehabilitation of various structures. Because Plant 1 and Plant 2 are located in a 500-year flood zone, or an area protected from the 100-year flood by an adjoining levee or dike, any new developments associated within or near the project sites would be located outside Special Flood Hazard Areas, and therefore would not impede or redirect flood flows. As a result, flooding impacts would be less than significant at Plant 1 and Plant 2.

Collection System Improvements

FEMA flood insurance maps indicate that the collection system improvements (i.e., proposed pump stations and pipeline improvements) are located in the following zones:

- AE – areas inundated by the 1% annual chance of flooding (i.e., 100-year flood), for which base flood elevations (BFEs) have been determined
- VE – areas inundated by 1% annual chance of flooding with velocity hazard (wave action) and BFEs have been determined
- A – areas inundated by 1% annual chance of flooding for which no BFEs have been determined
- X (shaded) – 0.2% annual chance of flooding (i.e., 500-year flood)
- X – areas with reduced risk due to levees
- X (unshaded) – areas of minimal flooding

Collection system improvements would involve the rehabilitation, replacement, repair, and modification of existing pump stations and pipeline infrastructure. For pipeline rehabilitation projects, all portions of the individual project site that would be disturbed during construction would be restored to pre-construction conditions once the new trunk line and mainline segments have been installed. As such, site conditions during FMP project operation would be similar to existing conditions. These projects would operate passively belowground, with the exception of minor appurtenant facilities, such as isolation valves, blow-offs, and air/vacuum valves; however, these structures would be low in profile and small in size relative to the surrounding buildings and other built environment features. For pump stations, the projects would involve the replacement of existing infrastructure, the expansion of the footprint, and/or the addition of generators or odor control equipment. However, similar to the project activities at Plant 1 and Plant 2, any ground disturbance related to project activities would result in a drainage pattern that mimics existing conditions and conforms to the current discharge locations. In addition, these proposed activities would incorporate LID features to reduce runoff from the area. As such, impacts would be minor and would not result in a substantial alteration of flood flows.

Regardless of whether collection system improvements are within a 100-year floodplain (Zone X) or are located in a Special Flood Hazard Area (Zone AE, Zone VE, Zone A), these structures would not result in a substantial increase of new or expanded structures in flood zones compared to existing conditions. As such, flood flows would not be impeded or redirected, and would not adversely affect downstream flood-related impacts. As a result, flood-related impacts would be less than significant, and no mitigation is required.

Flood Hazard, Tsunami, or Seiche Zones

Plant 1 and Plant 2

Plant 1 and Plant 2 are located in an area designated as Zone X, areas with reduced risk due to levees. However, Plant 2 is located within a tsunami run-up area. In addition, most of the Sanitation District's service area, including Plant 1, is located in areas susceptible to dam inundation. However, implementation of the FMP projects associated with Plant 1 and Plant 2 improvements would not involve the introduction of new pollutants due to inundation. Post-construction operations and maintenance activities are not expected to change from the activities that are currently ongoing. Since the FMP would collectively improve older and damaged infrastructure, the risk of incidental release of pollutants due to inundation would be reduced with respect to existing conditions. As a result, Plant 1 and Plant 2 improvements would have less-than-significant impacts related to the risk of release of pollutants due to inundation.

Collection System Improvements

Several collection system improvement projects are located in Special Flood Hazard Zones. Multiple pump station sites in Newport Beach, and several air jumper addition/rehabilitation project sites, are located within a tsunami run-up area. Further, most of the Sanitation District's service area is located in areas susceptible to dam inundation. However, implementation of the collection system improvements would not involve the introduction of new pollutants due to inundation. Post-construction operations and maintenance activities are not expected to change from the activities that are currently ongoing. Since the FMP would collectively improve older and damaged infrastructure, the risk of incidental release of pollutants due to inundation would be reduced compared to existing conditions. As a result, the collection system improvements would have less-than-significant impacts related to the risk of release of pollutants due to inundation.

Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan

The FMP would comply with all applicable water quality regulatory requirements, including the implementation of stormwater BMPs and LID design, which would minimize potential off-site surface water quality impacts and contribute to a reduction in water quality impacts within Orange County watersheds. Compliance with these regulatory requirements would reduce potential water quality impairment of surface waters such that existing and potential beneficial uses of key surface water drainages throughout the jurisdiction of the Basin Plan would not be adversely impacted. As a result, the FMP would not conflict with or obstruct the Basin Plan.

With respect to groundwater management, the Orange County Water District (OCWD) is a special district formed to manage the Orange County Groundwater Basin. To do so, OCWD implemented the Orange County Water District Groundwater Management Plan 2015 Update, which presents basin management goals aimed to protect and enhance the groundwater quality of the Orange County Groundwater Basin, to protect and increase the sustainable yield of the basin in a cost-effective manner, and to increase the efficiency of OCWD operations. In addition, OCWD and the Sanitation District jointly manage the Groundwater Replenishment System, which diverts wastewater that otherwise would be discharged to the Pacific Ocean and is instead purified using a three-step process to produce high-quality water used to control seawater intrusion and to recharge the Orange County Groundwater Basin (OCWD 2015). Implementation of the FMP would improve facilities that contribute to the Groundwater Replenishment System, thereby increasing the effectiveness of the local groundwater management plan. As such, the FMP would have less-than-significant impacts related to conflicting with a sustainable groundwater management plan.

Cumulative Hydrology and Water Quality Impacts

Cumulative development in the watersheds could add new sources of stormwater runoff. Construction activities associated with the FMP and other development could temporarily increase the number of exposed surfaces, which could contribute to sediments in stormwater runoff. Additionally, materials associated with construction activities could be deposited on surfaces and carried to receiving waters in stormwater runoff. Continued development and redevelopment within the Orange County watersheds could also increase the number of impervious surfaces that could increase stormwater runoff rates and amounts, as well as changes in land use that may increase the number of pollutants in stormwater runoff.

However, all cumulative development in the watersheds would be subject to the existing regulatory requirements to protect water quality and minimize increases in stormwater runoff. Implementation of BMPs would ensure that no substantial water quality impacts occur on site or off site, ensuring that the proposed FMP does not contribute to regional degradation of water quality. Other development in these municipalities would also be subject to Orange County and city goals and policies related to water quality, such as Orange County's NPDES Program and DAMP, the Santa Ana Watershed Project Authority's One Water One Watershed Plan Update 2018, Municipal Water District of Orange County's Multi-Jurisdictional Hazard Mitigation Plan, and OCWD's Groundwater Management Plan 2015 Update.

Every 2 years, the Santa Ana Regional Water Quality Control Board must re-evaluate water quality within its geographic region and identify the water bodies that are not meeting water quality standards. For those impaired water bodies, a total maximum daily load must be prepared and implemented to reduce pollutant loads to levels that would not contribute to a violation of water quality standards. All developments within the SAR watershed are subject to the water quality standards outlined in the Basin Plan and must comply with any established total maximum daily loads. The continuing review process would ensure that cumulative development within the watershed would not substantially degrade water quality.

Orange County and cities located within Orange County are co-permittees under the Orange County Municipal NPDES permit. The NPDES permit sets limits on pollutants being discharged into waterways, and requires that the project designer and/or contractor of all new development and redevelopment projects that fall under specific project categories develop a Water Quality Management Plan that includes LID design requirements related to water quality. The LID features address long-term effects on water quality within the Orange County watersheds and ensure that BMPs and LID designs minimize potential water quality impacts to the maximum extent practicable. Therefore, with implementation of BMPs, impacts associated with water quality standards and polluted runoff in the watersheds would be minimized, and the proposed FMP's contribution to cumulative impacts would not be cumulatively considerable.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on hydrology and water quality as it relates to violation of water quality standards; alteration of existing drainage pattern; release of pollutants due to flood hazards, tsunamis, or seiche zones; and conflict with a water quality control plan or sustainable groundwater management plan. Therefore, no mitigation is required. Additionally, the Initial Study for the proposed FMP found no potential for significant impacts to hydrology and water quality regarding decrease of groundwater supplies or interference with groundwater recharge or substantially altering existing drainage in a manner that would result in substantial erosion or siltation, increase the rate or amount of surface runoff, or exceed capacity of existing or planned stormwater drainage systems. Therefore, the above-mentioned thresholds were not addressed in the Draft PEIR. No mitigation would be required.

2.4.11 Land Use

Physically Divide an Established Community

Proposed FMP projects focus on the rehabilitation and repair of existing facilities. There would be no expansion of facilities or new facility construction that would divide established communities; therefore, there would be no impact and no mitigation is required.

Conflict with an Applicable Land Use Plan, Policy, or Regulation

Facility Improvements at Plant 1 in Fountain Valley

This FMP project site (Plant 1) is located in the Sanitation District Plant Specific Plan area; the Sanitation District Plant Specific Plan serves as a planning tool to implement the physical development of the plan area by providing mechanisms to ensure consistency with the City of Fountain Valley's General Plan and Sanitation District Plant Specific Plan. As stated in the Sanitation District Plant Specific Plan project objectives, the Sanitation District Plant Specific Plan is intended to ensure that adequate supporting infrastructure exists to service future needs of the City of Fountain Valley and the Sanitation District. Furthermore, Sanitation District Plant Specific Plan implements goals, objectives, and policies of the City of Fountain Valley General Plan (City of Fountain Valley 1993). The City of Fountain Valley's General Plan defines multiple policies that promote the retrofit and rehabilitation of existing infrastructure systems, including broad municipal level wastewater and stormwater solutions for water reuse. The Sanitation District Plant Specific Plan establishes that wastewater treatment facilities are not subject to Fountain Valley's building and zoning ordinances, but the Sanitation District must comply with Fountain Valley's design review and planning process for all non-wastewater treatment facilities on site. Because the FMP would involve improvements to existing wastewater treatment facilities, implementation of the FMP projects would not conflict with local jurisdictions' land use plans, policies, or regulations. In addition, as part of standard practice, the Sanitation District would coordinate with the City of Fountain Valley during implementation of the FMP projects to avoid and/or minimize potential impacts. Therefore, impacts from FMP projects located at Plant 1 would be less than significant with respect to a conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Facility Improvements at Plant 2 in Huntington Beach

This FMP project site is located within the City of Huntington Beach's Coastal Zone and is subject to the City of Huntington Beach's Local Coastal Program. The Local Coastal Program outlines goals, objectives, and policies geared toward the maintenance of water, sewer, and drainage facilities to ensure that the community's needs are met. According to the Local Coastal Program's Coastal Element Policy C 9.1.1, approval and implementation of development associated with water, sewer, and drainage facilities would be in accordance with the City of Huntington Beach General Plan Coastal Element (City of Huntington Beach 2011). As such, implementation of the FMP projects would not conflict with local jurisdictions' land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Furthermore, as part of standard practice, the Sanitation District would coordinate with the City of Huntington Beach during implementation of the FMP projects to avoid and/or minimize potential impacts.

Operations and Maintenance Complex at Plant 2 (P2-138)

The Operations/Control Center Building does not have a City of Huntington Beach building permit and does not meet the State of California's building code. The Sanitation District has proposed a new building that would meet code requirements and also reconfigures the plant entrance to more efficiently meet space needs. By redesigning the Operation Center, the Sanitation District would be eliminating an existing condition that poses a land use plan/policy conflict, and as such, upon FMP PEIR adoption, the FMP project would be less than significant for land use plan/policy/regulatory conflicts. Therefore, impacts from FMP projects at Plant 2 would be less than significant with respect to a conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Joint Plant Improvements at Plant 1 and Plant 2

The joint plant improvements at Plant 1 and Plant 2 would not require or result in changes to land uses or zoning designations. In addition, both the City of Fountain Valley General Plan and the City of Huntington Beach Local Coastal Plan identify goals, objectives, and policies promoting the maintenance of wastewater infrastructure systems. The FMP is consistent with those goals, objectives, and policies. Therefore, impacts from joint plant improvements at Plant 1 and Plant 2 would be less than significant with respect to a conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Collection System Improvements

Most of the existing facilities where the FMP projects are proposed are located in existing roads and Sanitation District rights-of-way traversing developed areas, including residential, commercial, and industrial uses. Additionally, certain existing facilities sit adjacent to public uses such as schools and parks, and some are near small areas of open space. Maintenance of the FMP projects identified in the PEIR would be consistent with each applicable jurisdiction's goals, objectives, and policies associated with wastewater facilities. Additionally, the FMP projects would not require or result in changes to land uses or zoning designations. Furthermore, as part of standard practice, the Sanitation District would coordinate with all applicable local jurisdictions to the extent feasible during implementation of the FMP projects to avoid and/or minimize potential impacts. Therefore, impacts from the FMP projects involving collection systems improvements would be less than significant with respect to a conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Cumulative Land Use and Planning Impacts

The FMP projects are consistent with applicable General Plan goals and policies, as well as the SCAG RTP/SCS. Therefore, the FMP projects that would occur throughout the applicable jurisdictions would not combine to create cumulatively considerable impacts related to land use plans, policies, or regulations, and impacts would be less than significant.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact regarding conflict with an applicable land use plan, policy, or regulation. Additionally, the Initial Study for the proposed FMP found no potential for significant impacts regarding the division of an established community; therefore, that threshold was not addressed in the Draft PEIR. No mitigation would be required.

2.4.12 Mineral Resources

Loss of Availability of a Known Mineral Resource

According to maps and reports obtained through the California Department of Conservation, Plant 1 is within a Mineral Resource Zone (MRZ) 3, meaning that it is an area where the significance of mineral deposits is undetermined (CDOC 2018). Although Huntington Beach, where Plant 1 is located, has an MRZ-2 that indicates significant mineral deposits, Plant 1 is not within the MRZ-2 area. Furthermore, the City of Huntington Beach General Plan's Environmental Resources and Conservation Element establishes that the majority of Huntington Beach is designated as MRZ-1 or MRZ-3, which indicates information is unavailable or historic mining has not occurred, and therefore the significance of mineral resources is unknown (City of Huntington Beach 2017). Additionally, the urbanized character of Huntington Beach generally precludes mining activities. A small area of land is designated as MRZ-2, which indicates that adequate information is available to indicate that significant construction aggregate deposits are present. This area is generally located along the uplifted mesa north of Talbert Avenue, west of Beach Boulevard, and east of Huntington Harbor. Active mining no longer occurs at these sites, and new uses have been introduced that deter future mining activities (City of Huntington Beach 2017). Plant 2, in Fountain Valley, is designated as MRZ-3. Fountain Valley General Plan's Conservation Element does not state any information about mineral resources (City of Fountain Valley 1995). The pump stations and collection systems are not within important mineral zones. Furthermore, the FMP projects are in developed areas and seek to rehabilitate and repair equipment to continue the useful life and productivity. Individual projects within the proposed FMP area would not be located within mineral zones of importance and would not affect the minerals within the areas; therefore, impacts related to mineral resources would not occur.

Loss of Availability of a Locally Important Mineral Resource Recovery Site

As stated above, the only MRZ-2 in Huntington Beach is not nearby the project sites, and mining no longer occurs in MRZ-2. The City of Fountain Valley does not contain any MRZ-2 areas. Additionally, none of the pump stations or collection system projects are identified in MRZs. Given the considerable distance from MRZ-2s, lack of desire to mine in the MRZ-2s, and that the FMP seeks to rehabilitate developed areas, the proposed FMP would not result in the loss of availability of locally important mineral resources. Thus, impacts associated with the loss of availability of a locally important mineral resource recovery site would not occur.

Cumulative Mineral Resource Impacts

As analyzed above, the proposed FMP would experience no impacts related to the mineral resource issue areas. Considering the proposed FMP would not be located within the vicinity of a known mineral resource or a locally important mineral resource recovery site, the proposed FMP would not combine with cumulative projects resulting in a significant impact to mineral resources. Therefore, impacts to mineral resources would not be cumulatively considerable.

Finding

The Initial Study for the proposed FMP found no potential for significant impacts to mineral resources; therefore, mineral resources were not addressed in the Draft PEIR. No mitigation would be required.

2.4.13 Noise

Expose People Residing or Working in Airport Land Use Plan to Excessive Noise Levels

There are no private airstrips within the vicinity of the FMP projects (AirNav 2020); however, FMP collection system projects are located within 2 miles of John Wayne Airport, Joint Forces Training Base Los Alamitos, and Fullerton Municipal Airport. Therefore, proposed FMP project activities (consisting of construction and periodic maintenance) would occur near active airports. Proposed FMP activities, however, would not result in excessive noise levels for those working or residing in the program area. Sanitation District employees and their contract employees are not likely to be exposed to noise or dangers associated with nearby air traffic because work in these areas would be temporary and short term, reducing the likelihood that employees would be significantly impacted by these dangers. Further, proposed FMP activities would not result in construction of facilities or structures that would create permanent, long-term exposure of residents or workers to increased levels of airport-related noise. As such, noise impacts would be less than significant. Thus, no mitigation would be required.

Cumulative Operational Noise Impacts

Additional operational noise would not be created as a result of implementation of the FMP. Following the construction of FMP projects, operational activities associated with the proposed FMP would not contribute to cumulative noise impacts associated with other projects in the region. Further, the related projects would be required to comply with the same regulatory requirements and standards as the proposed FMP. Therefore, the FMP's incremental contribution to noise impacts would not be cumulatively considerable.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on noise as it relates to exposing people residing or working within an airport land use plan to excessive noise levels and cumulative operational noise impacts; therefore, no mitigation is required. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts with mitigation in Section 2.3.7, Noise.

2.4.14 Population and Housing

Induce Substantial Population Growth

Implementation of the proposed FMP would require construction workers to repair, rehabilitate, and construct project facilities. Construction firms would bid on construction contracts for various project activities identified in the FMP, and the winning firms would assign employees they currently employ to each construction job. It is anticipated that construction workers would not need specialized training and would be located within the greater Orange County/Los Angeles area. As such, proposed construction activities would not cause a substantial change in the labor force resulting in unplanned population growth.

One of the primary objectives of the proposed FMP is to ensure that existing Sanitation District equipment and facilities will be able to be sustained and efficiently function throughout and beyond the Sanitation District's planning period. The FMP does not propose construction of new homes or businesses that would result in direct population growth, nor does the FMP propose new extensions of infrastructure into areas currently unserved by a wastewater treatment provider. Some proposed project activities included in the FMP may involve the upsizing of

existing infrastructure, such as pipelines and wastewater treatment facilities; however, these activities would be undertaken not to respond to or accommodate population growth, but rather to respond to increased volumes of stormwater captured by the Sanitation District during peak storm events. Moreover, once constructed, operation of FMP project facilities would not require the hiring of additional employees, as operational and maintenance activities would continue to be performed by existing Sanitation District staff. As such, the proposed FMP would not induce substantial unplanned population growth. Therefore, impacts would be less than significant, and no mitigation is required.

Displace Substantial Numbers of Existing Housing or People

The proposed FMP would involve rehabilitation and repair of existing facilities that would not require relocation or displacement of people. If existing infrastructure had to be replaced or rehabilitated, thereby causing a potential interruption in service, the Sanitation District would have to install by-pass facilities. Therefore, there would be no displacement of people or housing as a result of proposed project activities. Thus, no impact would occur and no mitigation is required.

Cumulative Population and Housing Impacts

Cumulative impacts to population and housing would result from a combination of projects that induce population growth. However, as discussed above, the proposed FMP would not induce substantial unplanned population growth. Thus, in combination with the proposed FMP, cumulative impacts to population growth or housing availability would not be considerable.

Finding

The Initial Study for the proposed FMP found no potential for significant impacts to population and housing; therefore, population and housing was not addressed in the Draft PEIR. No mitigation would be required.

2.4.15 Public Services

New or Physically Altered Government Facilities

Fire and Police Protection (Operational Impacts)

FMP projects would consist of upgrading, replacing, and rehabilitating aging facilities within the Sanitation District's wastewater collection and treatment system. No new structures are proposed. Thus, operational activities would remain the same. Therefore, no impact to service ratios, response times, or other performance objectives would occur.

Schools

Typically, the need for increased school services (e.g., new buildings) is associated with land uses and activities that result in a permanent increase in population, and, specifically, an increase in the population of school-age children. Construction and operation of the projects within the proposed FMP would not be associated with an increase in population of school-age children. Furthermore, the proposed FMP would not generate new students or adversely affect any school facilities necessitating the building of new schools. Therefore, the proposed FMP would have no impact on school services.

Parks

Typically, the need for increased parks and recreational services is associated with land uses and activities that result in a permanent increase in population. Construction and operation of the projects within the proposed FMP would not be associated with an increase in population. Furthermore, the inherent nature of the uses of the proposed FMP projects is that of supporting wastewater treatment and discharging treated water, and these uses do not generate a need for new parks or recreational services. Therefore, the proposed FMP would have no impact on parks.

Other Public Facilities

Typically, the need for other public facilities (e.g., libraries) is associated with land uses and activities that result in a permanent increase in population. Construction and operation of the projects within the proposed FMP would not be associated with an increase in population. Furthermore, the inherent nature of the uses of the proposed FMP projects is that of supporting wastewater treatment and discharging treated water, and these uses do not generate a need for other public facilities, such as libraries. Therefore, the proposed FMP would have no impact on public facilities.

Cumulative Public Services Impacts

Cumulative impacts to public services would result from a combination of projects that would result in a permanent increase in population causing a need for more governmental facilities, including fire, police, schools, parks, or other public facilities. As discussed above, the proposed FMP would not be associated with an increase in population. Thus, in combination with the proposed FMP, cumulative impacts to public services involving fire (operational), police (operational), schools, parks, and other public facilities would not be considerable.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on public services in regard to fire and police facilities (operational impacts). Additionally, the Initial Study for the proposed FMP found no potential for significant impacts to public services with regard to schools, parks, or other public facilities; therefore, they were not addressed in the Draft PEIR. Thus, no mitigation is required. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts with mitigation in Section 2.3.8, Public Services.

2.4.16 Recreation

Increase in the Use of an Existing Neighborhood, Regional Park, or Recreational Facility

Construction would generally occur within the footprint of existing Sanitation District facilities and within the public streets rights-of-way. Some construction activities may occur near or adjacent to recreational, educational, or visitor-oriented opportunities. However, construction and maintenance activities related to utilities, particularly when located within public rights-of-way, are typical. Since construction activities would be temporary and short in duration, any effect from construction to recreational opportunities would be restored upon construction completion. Once operational, FMP project facilities would be located within or adjacent to their existing locations, which currently operate as wastewater treatment and conveyance facilities. Moreover, the proposed FMP would not directly or indirectly induce population growth that could result in new residents using existing recreational facilities. Therefore, implementation of the proposed FMP would not substantially diminish the quality of recreational, educational, or visitor-oriented opportunities, facilities, or resources; thus, no impact would occur.

Inclusion of or Requirement for Construction/Expansion of Recreational Facilities

The proposed FMP does not include recreational facilities and would not require the construction or expansion of recreational facilities. Typically, a project would require the construction or expansion of recreational facilities if it involves the introduction of new residents into an area. As discussed previously, the proposed FMP would not directly or indirectly induce population growth that could result in new residents. Implementation of the proposed FMP would not require new recreational facilities to serve the project sites associated with the proposed FMP. Therefore, the proposed FMP would not result in an adverse physical effect on the environment from the construction or expansion of additional recreational facilities because it would not require new or expanded recreational facilities. Thus, no impact would occur.

Cumulative Recreational Impacts

Cumulative impacts to recreation would result from a combination of projects that induce a substantial and detrimental increased use of parks and recreational facilities. As discussed above, the proposed FMP would not directly or indirectly induce population growth that could result in new residents using existing recreational facilities. Additionally, implementation of the proposed FMP would not require new recreational facilities to serve the project sites associated with the proposed FMP. Therefore, in combination with related projects, cumulative impacts to recreation would not be considerable.

Finding

The Initial Study for the proposed FMP found no potential for significant impacts to recreation; therefore, recreation was not addressed in the Draft PEIR. No mitigation would be required.

2.4.17 Transportation

Conflict with a Program, Plan, Ordinance, or Policy Addressing the Circulation System

Facility Improvements at Plant 1 (and Joint Plant Improvements) in Fountain Valley (Program-Level Analysis)

The lowest trip generation period would occur April through October 2039, with approximately six weekday passenger car equivalent (PCE) daily trips and two peak-hour PCE trips. The highest trip generation period would occur during the first 2 weeks of April 2027, with approximately 122 PCE daily trips and 38 peak-hour PCE trips.

The proposed FMP projects at Plant 1 and joint improvement projects with Plant 2 would not meet the 1,600 average daily traffic (ADT) screening criteria identified by the Orange County Congestion Management Manual (County of Orange 2011), nor would they meet the general screening criteria of 50 AM or PM peak-hour trips. Additionally, there would be no increase in permanent employees once construction is completed. Therefore, no further analysis would be required, and the construction traffic associated with improvement projects at Plant 1 would not conflict with a program, plan, ordinance, or policy addressing the circulation system. Impacts would be less than significant, and no mitigation would be required.

Facility Improvements at Plant 2 (and Joint Plant Improvements) in Huntington Beach (Program-Level Analysis)

The lowest trip generation period would occur from September 2040 to 2041, with approximately six weekday PCE daily and two peak-hour PCE trips. The highest trip generation period would occur during the first 2 weeks of December 2024, with approximately 149 PCE daily and 48 peak-hour PCE trips. The proposed projects at Plant 2

and joint plant improvements would not meet the 1,600 ADT screening criteria identified by the Orange County Congestion Management Manual (County of Orange 2011), nor would they meet the general screening criteria of 50 AM or PM peak-hour trips. Additionally, there would be no increase in permanent employees once construction is complete. Therefore, no further analysis would be required, and construction traffic associated with improvement projects at Plant 2 would not conflict with a program, plan, ordinance, or policy addressing the circulation system. Impacts would be less than significant, and no mitigation would be required.

Collection System Improvements (Program-Level Analysis)

The lowest trip generation period would occur during the first week of March 2038, with approximately six weekday PCE daily and two peak-hour PCE trips. The highest trip generation period would occur from December 2031 to early January 2032, with approximately 169 PCE daily and 50 peak-hour PCE trips.

The proposed collection system improvement projects would not meet the 1,600 ADT screening criteria identified by the Orange County Congestion Management Manual (County of Orange 2011). Although peak-hour trip generation may exceed 50 PCE trips, projects would be spread out across the Sanitation District's service area, and trips would not be consolidated in one construction area. Additionally, there would be no increase in permanent employees once construction is completed. Therefore, no further analysis would be required, and construction traffic associated with the collection system improvement projects would not conflict with a program, plan, ordinance, or policy addressing the circulation system. Impacts would be less than significant and no mitigation would be required.

Plant 1, Plant 2, Joint Plant, and Collection System Improvements (Project-Level Analysis)

No FMP project would individually generate 1,600 ADT or 50 or more peak-hour trips. Therefore, no further analysis would be required, and the construction traffic associated with the project-level improvement projects at Plant 1, Plant 2, joint plant, and collection system improvements would not conflict with a program, plan, ordinance, or policy addressing the circulation system. Impacts would be less than significant and no mitigation would be required.

Hazards Due to a Geometric Design Feature

Plant 1 and Plant 2 Improvements

During construction, no road closures or construction activities at Plant 1 or 2 would occur that would increase hazards on public streets or intersections adjacent to either plant, since construction activities would occur within the plant boundaries. The exception is project P2-138 at Plant 2, which would relocate the existing Plant 2 main gate on Brookhurst Street north to the existing intersection at Banning Avenue as a new east leg to the intersection. Based on the project-level analysis conducted for project P2-138, the relocated main gate would not create any line-of-sight impacts since it would be required to be designed to the City of Huntington Beach's intersection standards, and it would create a new leg at an existing signalized intersection. Additionally, project P2-138 would not create any LOS standard inconsistencies at the new main gate intersection (Brookhurst Street/Banning Avenue) or adjacent intersections, nor would project P2-138 create any significant queuing impacts at related intersections. Therefore, impacts due to increased hazards at Plant 1 and Plant 2 would be less than significant. Thus, no mitigation would be required.

Project-Level Analysis for Plant 2, Project P2-138

The peak construction phase for project P2-138 would overlap with several other projects for Plant 2 and for joint plant projects with Plant 1. All construction-related traffic would access the Plant 2 site via the existing intersection of Brookhurst Street/Bushard Street, where there is existing access. During construction, temporary staging and laydown areas for construction materials and equipment would be accommodated within the Plant 2 site. All construction parking would also be accommodated within the existing Plant 2 site. All construction-related impacts would be temporary.

To evaluate the impact of construction of project P2-138, a queuing analysis was performed. The analysis was performed for turning movements that would be directly affected by the peak construction phase. The findings found that the calculated 95th percentile (design) queue for the Cumulative Year 2021 Plus Project (Construction) condition at all intersections would not exceed the storage lengths provided. Additionally, to evaluate the impact of operations and maintenance of project P2-138, a second queuing analysis was performed. The analysis was performed for turning movements that would be directly affected by the peak construction phase analyzed. The findings found that the calculated 95th percentile (design) queue for the Existing Plus Project (Operations and Maintenance) scenario at all intersections would not exceed the storage lengths provided. Furthermore, to evaluate the impact of operations and maintenance of project P2-138 in the cumulative year, a third queuing analysis was performed. The analysis was performed for turning movements that would be directly affected by the peak construction phase analyzed during the Cumulative Year 2022. The findings found that the calculated 95th percentile (design) queue for the Cumulative Year 2022 Plus Project (Operations and Maintenance) scenario at all intersections would not exceed the storage lengths provided. As such, construction impacts to hazards due to geometric design feature or incompatible uses for the peak construction phase and operations and maintenance of project P2-138 would be less than significant and no mitigation would be required.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on transportation as it relates to a program, plan, ordinance, or policy addressing the circulation system (Plant 1 and Plant 2 improvements and collection system improvements at the program level). Hazards due to a geometric design feature would be less than significant at Plants 1 and 2 and for project P2-138. Furthermore, cumulative impacts related to a program, plan, ordinance, or policy addressing the circulation system, combined with other related projects, would not be expected to occur, since individual components of the FMP would generate relatively low, temporary, construction-related traffic volumes. Therefore, impacts would be less than significant and no mitigation is required. These are noted in the findings for the applicable impacts; separate findings are reached for the less-than-significant impacts with mitigation in Section 2.3.9, Transportation.

2.4.18 Utilities and Service Systems

Require or Result in the Construction of New Water, Wastewater Treatment, Stormwater Drainage, Electric Power, Natural Gas, or Telecommunications Facilities

The FMP proposes maintenance and improvement of public infrastructure within an urban, developed area of Orange County that is currently served by extensive infrastructure for all the service categories named above. Other than the wastewater treatment facilities that are themselves part of the FMP, implementing the FMP would not require construction of new or expanded facilities beyond the facilities described as part of the proposed FMP.

Plant 1 and Plant 2 Projects

Plant 1 and Plant 2 FMP projects would occur in the vicinity of small-diameter water pipelines present throughout the sites that carry municipal potable water, reclaimed water, and plant water, as well as above-ground electrical lines, underground electrical conduit, and telecommunications lines. These facilities are operated by Sanitation District and serve on-site uses, including the wastewater treatment processes and Sanitation District personnel activities, with no downstream connections to customers beyond the Sanitation District facilities. Many of the Plant 1 projects, such as project P1-126, Primary Clarifiers 1 through 5 Replacements and Improvements; project X-093, Administrative Facilities and Power Building 3A; project X-048, Activated Sludge (AS)-1 Aeration Basin and Blower Rehabilitation; and project X-090, Network, Telecommunications, and Server Relocation, would demolish facilities connected to existing utility connections. This demolition would require briefly taking the connected lines out of service and reestablishing connections to ensure continued service elsewhere throughout the plant. At Plant 2, the FMP indicates plant water piping would need to be modified as part of project X-032, Truck Loading Facility Rehabilitation. Other Plant 2 projects, such as project P2-138, Operations and Maintenance Complex at Plant 2; and project X-034, Sodium Bisulfite Station Replacement and Bleach Station Demolition; and the joint plant project X-044, Steve Anderson Lift Station Rehabilitation, would entail demolishing and replacing facilities with existing utility connections, similar to those described above for Plant 2, The utility disconnection and reconnection are integral components of the respective projects that are addressed by the typical engineering planning, design, and construction processes. The size and extent of these utility replacements, and their lack of connection to wider off-site uses outside the Sanitation District facilities, mean that their footprint is minimal and the area affected by temporary shutdowns or bypass connections would be limited; therefore, they would not themselves cause significant environmental impacts.

Collection System Projects

As a result of the extensive existing utility and public service infrastructure throughout the Sanitation District service area, most FMP collection system projects are located in the vicinity of existing infrastructure operated by the various public and private entities. This includes Sanitation District pipelines that run parallel to or intersect with existing water transmission and delivery pipelines, stormwater drainage pipelines and channels, overhead electrical wires and underground electrical conduit, underground natural gas pipelines, and overhead and underground telecommunications lines. This proximity of various entities' utility assets is a routine occurrence, and the Sanitation District's standard project planning process as part of engineering design includes identifying existing underground or overhead utilities occurring in the vicinity of its projects.

Preliminary consideration of potential conflicts with existing utilities was part of the FMP development process, and has been incorporated into individual project information sheets and budget planning, where applicable. Many collection system projects would avoid utilities conflicts by implementing trenchless rehabilitation methods, such as cured-in-place pipe lining instead of trench-based pipe replacement. Avoidance of complex utilities conflicts that themselves could cause significant environmental impacts, such as natural gas pipelines, large-diameter water transmission pipelines, and large-diameter storm drains that cannot be easily addressed by temporary shutdowns or establishment of temporary bypass systems, is one factor in considering whether a pipeline segment is a good candidate for trenchless rehabilitation. In this respect, the FMP planning process has already served to avoid significant environmental impacts due to utilities conflicts.

As potential utility conflicts are identified during the FMP project design process, Sanitation District engineers will coordinate with engineers and right-of-way representatives of the affected service provider, including specific municipalities such as the City of Tustin, City of Santa Ana, City of Orange, City of Anaheim, City of Huntington Beach,

City of Westminster, and County of Orange, as well as private power and telecommunications companies, to ensure that facilities are adequately protected during construction. This coordination would also determine if temporary or permanent relocation of underground or overhead facilities is warranted, and establish agreements for mutually acceptable terms of the relocation. Temporary and permanent relocation of utilities such as small-diameter water pipelines and electrical conduit in an urban area such as the Sanitation District service area is a common component of infrastructure improvement projects, and the scale of any such relocation associated with FMP implementation would be minor and would not have the potential to cause environmental impacts that would be considered significant under CEQA. The FMP project-related impact due to construction or relocation of utilities and public service infrastructure would be less than significant.

Construction of nearly all the FMP projects addressed in the FMP PEIR would entail excavation. Because of this proximity between FMP facilities and other entities' infrastructure, the Sanitation District is required to comply with California Government Code Sections 4215–4216.24 and coordinate with the regional notification center to prevent unintended impacts to underlying pipelines and conduit. Although utility conflicts would be captured by the design process described above, mandatory coordination with the regional notification center would further avoid the potential for accidental breaches of utilities during construction. Compliance with the referenced regulation during construction would ensure that impacts would be less than significant.

Sufficient Water Supplies

The proposed FMP projects would not involve regular or continuous use of water. On the contrary, the proposed FMP projects would rehabilitate and prolong the useful life of wastewater treatment facilities to meet demand for reclaimed water for the Sanitation District's current and future service population, resulting in beneficial impacts with respect to water supplies. With respect to construction and decommissioning of facilities, water usage would include periodic application of water for dust control purposes, consistent with SCAQMD regulations. Because dust control is necessary during windy and dry periods to prevent wind erosion and dust plumes, water would be applied in sufficient quantities to wet the soil, but not excessively. The proposed FMP would not require the extension of water lines, and would not result in new construction or expansion of existing water treatment facilities. Water used for dust suppression activities would result in the use of a nominal amount of water, usually brought to project sites by truck, and thus would not result in the use of a substantial amount of water. As a result, the proposed FMP would have a less-than-significant impact on water supplies.

Adequate Capacity for Wastewater Treatment

The focus of the proposed FMP is to rehabilitate and prolong the useful life of wastewater treatment systems within the Sanitation District's service area. The focus of the proposed FMP is not to increase capacity driven by population growth, but to rehabilitate existing facilities over a 20-year period. The proposed FMP would not result in a determination by the Sanitation District or other wastewater treatment provider that there is inadequate capacity to serve the FMP, because the proposed FMP itself consists of wastewater infrastructure upgrades that would not generate wastewater. Therefore, impacts would not occur.

Generation of Solid Waste and Solid Waste Statutes and Regulations

Implementation of the FMP projects would generate solid waste in the form of construction and demolition debris that would need to be hauled off site and disposed of in a landfill by the Sanitation District's construction contractors. Construction and demolition material would include asphalt and concrete removed from paved areas; concrete, metal, and plastic pipe sections; concrete, brick, masonry, and wood from buildings planned for

rehabilitation; and cardboard and plastic packaging materials. The debris requiring off-site disposal would vary in volume and type depending on the project. For each FMP project, the Sanitation District's contractor would be required to comply with Orange County Waste and Recycling's (OCWR) Construction & Demolition (C&D) Program and to establish a plan for the diversion of at least 65% of this debris to approved C&D facilities that will reuse, recycle, or repurpose the material. If OCWR updates the C&D Program to adjust the required percentage or make other substantive changes in the requirements throughout the life of the FMP, the contractor would be responsible for complying with the C&D Program requirements at the time construction occurs. Compliance with this OCWR program will ensure that each project's impact with respect to the generation of solid waste during the construction phase is less than significant.

With respect to the FMP's long-term operational impacts, the FMP does not propose facilities or processes that would increase the Sanitation District's generation of solid waste requiring off-site disposal. Any increase in treatment capacity resulting from FMP implementation is a response to existing and future demands, and is not itself the product of the FMP. The Sanitation District, through its biosolids facilities, is seeking to reduce its operational solid waste disposal volume. Solid waste disposal impacts of the biosolids program are assessed and documented in the Sanitation District's 2018 Biosolids Master Plan Program Environmental Impact Report (Sanitation District 2018). The FMP's operational impacts relative to solid waste would be less than significant.

Cumulative Utilities and Service Systems Impact

Because the FMP is a multi-year program, projects planned for Plant 1 and Plant 2 and collection system projects proposed throughout the service area would be implemented over time. This would limit the potential for combined Sanitation District projects to result in cumulative impacts on utilities due to overlapping impact areas and timelines. Plant 1 and Plant 2 feature on-site utility systems operated by the Sanitation District for its own uses, which lack downstream connections to off-site systems and customers. As phased projects are implemented within Plant 1 and Plant 2, this means any temporary cumulative impact on utility systems would be contained within the plants and would not affect other service providers in neighboring areas. Further, many of the plant projects are themselves utility upgrades, meaning that the overarching purpose of the projects is to enhance efficient functioning of the Sanitation District system and make avoidance of cumulative utility impacts critical to the purpose of the individual projects and the entire FMP. As collection system projects are implemented throughout the Sanitation District service area during the life of the FMP, it is possible that some will coincide with facility improvement projects undertaken by other utility and service providers. When this occurs, the inter-agency coordination process between the Sanitation District, municipalities, and private service providers during the planning and design process for FMP projects will identify potential overlaps in construction processes and affected facilities, and will ensure that any potential conflicts are appropriately addressed. The FMP has limited its collection system pipeline projects' impacts on major utilities by identifying segments that are feasible for trenchless construction, as opposed to trench-based work that could cause major disruption. This approach reduces the potential for the FMP's contribution to cumulative impacts that may result from non-Sanitation District projects.

Solid waste disposal is, in essence, a cumulative impact, because waste from all manner of uses throughout a given region is deposited together in local landfills. It is the mission of OCWR to plan for and manage this collective impact as it develops and monitors landfill space, and to establish programs to reduce the permanent waste load entering its facilities. As with the FMP projects, cumulative projects will be required to comply with the OCWR C&D Program, and with any additional waste diversion requirements that may be established during the life of each project. Compliance with these requirements is designed to limit individual projects' contribution to the cumulative solid waste impact in local landfills.

Finding

The Sanitation District finds that, based on substantial evidence in the record, the proposed FMP would have a less-than-significant impact on utility and service systems as it relates to water, wastewater, electric power, natural, telecommunications, and solid waste. Additionally, the Initial Study analysis for the proposed FMP found no potential for significant impacts to utilities in regard to sufficient water supplies or adequate capacity to serve the FMP's projected demand; therefore, these issues were not addressed in the Draft PEIR. Thus, no mitigation is required.

2.4.19 Wildfire

Impair an Adopted Emergency Response Plan

According to fire hazard severity maps produced by CAL FIRE, the project sites within the proposed FMP and surrounding areas are not located within very high, high, or moderate fire hazard severity zones (CAL FIRE 2007); therefore, the proposed FMP would not have an impact on an adopted emergency response plan or emergency evacuation plan.

Exacerbate Fire Risk and Expose Project Occupants to Pollutant Concentrations

According to fire hazard severity maps produced by CAL FIRE, the project sites within the proposed FMP and surrounding areas are not located within very high, high, or moderate fire hazard severity zones (CAL FIRE 2007); therefore, the proposed FMP would not exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. Thus, impacts would not occur.

Exacerbate Fire Risk from Installation or Maintenance of Associated Infrastructure

According to fire hazard severity maps produced by CAL FIRE, the project sites within the proposed FMP and surrounding areas are not located within very high, high, or moderate fire hazard severity zones (CAL FIRE 2019); therefore, the proposed FMP would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Thus, impacts would not occur.

Expose People or Structures to Significant Risks

According to fire hazard severity maps produced by CAL FIRE, the project sites and surrounding areas are not located within very high, high, or moderate fire hazard severity zones (CAL FIRE 2019); therefore, the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. Thus, impacts would not occur.

Cumulative Wildfire Impacts

As analyzed above, the proposed FMP would experience no impacts related to all wildfire issue areas. Considering that the proposed FMP project sites and surrounding areas are not located within very high, high, or moderate fire hazard severity zones, the proposed FMP would not combine with cumulative projects resulting in a significant impact to wildfire. Therefore, impacts to wildfire would not be cumulatively considerable.

Finding

The Initial Study for the proposed FMP found no potential for significant impacts to wildfire; therefore, wildfire was not addressed in the Draft PEIR. No mitigation would be required.

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3 Findings on Project Alternatives

CEQA requires that an EIR describe a range of reasonable alternatives to a project, or to the location of the project, that could feasibly attain the basic objectives of that project, and to evaluate the comparative merits of the alternatives (14 CCR 15126.6[a]). The CEQA Guidelines direct that the selection of alternatives be governed by "a rule of reason" (14 CCR 15126.6[a], [f]). As defined by the CEQA Guidelines, "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR needs to examine in detail only the ones that the Lead Agency determines could feasibly attain most of the basic objectives of the project" (14 CCR 15126.6[f]).

3.1 Alternatives Considered and Eliminated During the Scoping/Project Planning Process

The CEQA Guidelines provide that an EIR should "identify any alternatives that were considered by the Lead Agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the Lead Agency's determination" (14 CCR 15126.6[c]). The following is a discussion of the FMP alternatives proposed during the scoping and planning process and the reasons they were not selected for detailed analysis in the PEIR.

With respect to the feasibility of potential alternatives to the proposed FMP, CEQA Guidelines Section 15126.6(t)(l) states, "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries … and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site."

In determining an appropriate range of proposed FMP alternatives to be evaluated in the PEIR, a number of possible alternatives were initially considered and then rejected. Proposed FMP alternatives were rejected because they could not accomplish the basic objectives of the proposed FMP, or they would not have resulted in a reduction of significant adverse environmental impacts.

Alternative Locations

CEQA requires that the discussion of alternatives focus on alternatives to a project or its location that are capable of avoiding or substantially lessening any significant effects of that project. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen the significant effects of the project need be considered for inclusion in the EIR (14 CCR 15126.6[f][2]).

Because the proposed FMP would involve the maintenance, repair, and upkeep of an existing wastewater treatment and conveyance system, as well as maintenance projects to rehabilitate and replace facilities and infrastructure as needed during the 20-year planning period, an alternative site analysis is not appropriate. The proposed FMP location within Orange County comprises the Sanitation District's treatment plants, pump stations, and collection system pipelines and appurtenant structures within Orange County. Rehabilitation, replacement, and maintenance needs have been identified at specific locations associated with the existing wastewater treatment and conveyance system; therefore, it would not be feasible to move the project activities to another location. Relocating activities to other sites would not meet the proposed FMP objectives. As a result, alternative locations were rejected and are not analyzed in detail in the PEIR.

Deferred Maintenance Alternative

A second alternative that was considered was a Deferred Maintenance Alternative, which would defer maintenance to future years. It would also focus on rehabilitation of facilities and equipment instead of replacement. Although this may reduce environmental impacts in the short term, it has great potential to increase impacts in the long term. Deferred maintenance could increase the risk of pipeline rupture and leakage, potentially resulting in downstream biological resource, geology and soils (erosion), and hydrology and water quality impacts. Rehabilitation of equipment, instead of replacement, could also potentially cause increased impacts (air quality, noise, transportation) if, for example, greater numbers of trips and activities become necessary to maintain equipment when a replacement could have avoided those impacts and would have been more cost effective.

Furthermore, the FMP's identified significant impacts would not necessarily be avoided or substantially lessened by implementation of the Deferred Maintenance Alternative. The proposed FMP activities would still be implemented, and the resulting construction-related disturbance would still occur at some point in time. Thus, the Deferred Maintenance Alternative does not meet the criteria for an alternative to avoid or substantially lessen any of the significant effects of the proposed FMP.

3.2 Alternatives Selected for Further Analysis

This section discusses a reasonable range of alternatives to the proposed FMP, including a No Project Alternative, in compliance with CEQA Guidelines Section 15126.6(e). These alternatives are as follows:

- Alternative 1: No Project Alternative
- Alternative 2: Reduced Project Alternative

These alternatives are evaluated for their ability to avoid or substantially lessen the impacts of the proposed FMP identified in the PEIR, and in consideration of their ability to meet the basic objectives of the proposed FMP as described in the PEIR.

3.2.1 Alternative 1: No Project Alternative

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the impacts of a No Project Alternative. 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" (14 CCR 15126.6[e][1]). When defining the No Project Alternative, the analysis must be informed by "what would be 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" (14 CCR 15126.6[e][2]).

Description

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the impacts of the No Project Alternative, which reflects the "circumstances under which the project does not proceed." The No Project Alternative in this case assumes that the existing wastewater treatment and conveyance system in Orange County would continue to operate without the implementation of proposed FMP projects or activities. Instead, the Sanitation District would implement projects on an as-needed basis, and might combine them if it made financial or practical sense to do so.

Finding

The Sanitation District rejects the No Project Alternative as undesirable because it fails to satisfy the proposed FMP's underlying purpose; it fails to meet the objective to efficiently use the existing Sanitation District property, rights-of-way, and existing facilities; and because grouping projects together might increase environmental impacts if projects were to be constructed together that normally would have been planned over a longer term under an FMP.

Rationale

The No Project Alternative assumes that the existing wastewater treatment and conveyance system in Orange County would continue to operate without implementation of proposed FMP projects or activities. Instead, the Sanitation District would implement projects on an as-needed basis, and might combine them if it made financial or practical sense to do so. However, grouping projects together might increase environmental impacts if projects were to be constructed together that normally would have been planned over a longer term under an FMP.

The No Project Alternative would have greater impacts in 12 resource areas: aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, GHG emissions, hazardous and hazardous materials, hydrology and water quality, noise, transportation, and tribal cultural resources. The No Project Alternative would have similar impacts in three resource areas: land use and planning, public services, and utilities and service systems. The No Project Alternative would not have any lesser impacts compared to the proposed project. Adoption of the No Project Alternative would meet some of the project objectives identified by the Sanitation District for ongoing maintenance activities and meeting ever-evolving wastewater regulations, but it would not meet the objective to efficiently use the existing Sanitation District property, rights-of-way, and facilities.

3.2.2 Alternative 2: Reduced Project Alternative

Description

The Reduced Project Alternative would consist of a list of FMP projects without the Strategic Initiative Projects listed in Table 1. Strategic Initiative Projects are projects that enhance the operational efficiency and functioning of the Sanitation District's system, but if they were removed or if funding were not available, these projects would not be pursued; thus, the FMP without these projects represents a Reduced Project Alternative.

Table 1. Strategic Initiative Projects That Would Be Removed under the Reduced Project Alternative

Project Number	Project Name	Project Type	Construction Start (Month Year)	Construction End (Month Year)
2-73	Yorba Linda Pump Station Abandonment	Misc.	Aug 2024	May 2025
7-68	MacArthur Dual Force Main Improvements	Rehab	Dec 2022	Jan 2024
J-133	Laboratory Rehabilitation or Replacement at Plant 1	Rehab	Oct 2024	Apr 2026
P2-138	Operations and Maintenance Complex at Plant 2	Replace	2021	2022
J-98	Plantwide Miscellaneous Electrical Power Distribution System Improvements	Replace	Mar 2021	Dec 2037
P2-126	Primary Clarifiers Replacements and Improvements	Replace	Jun 2024	Mar 2029
X-093	Administrative Facilities and Power Building 3A Demolition	Misc. (Demo)	Nov 2025	Dec 2026

Finding

The Sanitation District rejects the Reduced Project Alternative as undesirable because it would only partially meet all the objectives set by the Sanitation District for the FMP.

Rationale

The Reduced Project Alternative would have fewer impacts in 11 resource areas: air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazardous and hazardous materials, hydrology and water quality, noise, public services, transportation, and tribal cultural resources. The Reduced Project Alternative would have similar impacts in four resource areas: aesthetics, energy, land use and planning, and utilities and service systems. The Reduced Project Alternative would not have any greater impacts compared to the proposed project.

However, the Reduced Project Alternative would only partially meet all the objectives set by the Sanitation District. By not implementing the projects identified in Table 1, the Reduced Project Alternative would remove the opportunity to install more energy-efficient structures, would reduce construction timing efficiency, and would not optimally meet the goals set by the Sanitation District.

3.2.3 Environmentally Superior Alternative

An EIR must identify an "environmentally superior" alternative; and, where the No Project Alternative is environmentally superior, the EIR is required to identify an alternative from among the others evaluated as environmentally superior (14 CCR 15126.6[e][2]).

In this case, Alternative 1, the No Project Alternative, would be environmentally inferior in 12 resource areas: aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, GHG emissions, hazardous and hazardous materials, hydrology and water quality, noise, transportation, and tribal cultural resources. The No Project Alternative would be considered neutral with regard to three resource areas: land use and planning, public services, and utilities and service systems.

The Reduced Project Alternative would be considered environmentally superior because it would reduce impacts to air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazardous and hazardous materials, hydrology and water quality, noise, public services, transportation, and tribal cultural resources. Additionally, the Reduced Project Alternative would have similar impacts as the proposed FMP in regards to aesthetics, energy, land use and planning, and utilities and service systems. Furthermore, the Reduced Project Alternative would allow for maintenance of the existing wastewater treatment and conveyance system and associated infrastructure in a streamlined manner compared to the No Project Alternative, which would only implement projects on an as-needed basis. However, the Reduced Project Alternative would only partially meet the objectives set by the Sanitation District. As previously discussed, by not implementing the projects identified in Table 1, the Reduced Project Alternative would remove the opportunity to install more energy-efficient structures, would reduce construction timing efficiency, and would not optimally meet the goals set by the Sanitation District.

However, despite the Reduced Project Alternative only partially meeting the objectives set by the Sanitation District, the Reduced Project Alternative would remain environmentally superior compared to the No Project Alternative. Therefore, the Reduced Project Alternative is considered to be the environmentally superior alternative.

4 General CEQA Findings

Based on the foregoing Findings and the information contained in the administrative record, and as conditioned by the foregoing, the Board has determined the following:

1. The plans for the proposed FMP have been prepared and analyzed so as to provide for public involvement in the planning and the CEQA processes.
2. To the degree that any impacts described in the Draft PEIR are perceived to have a significant effect on the environment, or such impacts appear ambiguous as to their effect on the environment, any significant effect of such impacts has been substantially lessened or avoided by the mitigation measures set forth in the Draft and Final PEIR.
3. Comments regarding the Draft PEIR received during the public review period have been adequately addressed in Chapter 2, Responses to Comments Received, in the Final PEIR. Any significant effects described in such comments were avoided or substantially lessened by the mitigation measures described in the Draft and Final PEIR.

4.1 Findings Regarding Recirculation

The Sanitation District finds that the Draft PEIR does not require recirculation under CEQA (CEQA Section 21092.1, CEQA Guidelines Section 15088.5). CEQA Guidelines Section 15088.5 requires recirculation of an EIR prior to certification of the Final EIR when "significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review." As described in CEQA Guidelines Section 15088.5:

> New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing that:
>
> 1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented;
> 2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance;
> 3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it;
> 4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

In addition, CEQA Guidelines Section 15088.5(b) provides that "recirculation is not required where the new information added to the EIR merely clarifies and amplifies or makes insignificant modifications in an adequate EIR." Recirculation also is not required simply because new information is added to an EIR; indeed, new information is oftentimes added given CEQA's public/agency comment and response process and CEQA's post-Draft EIR circulation requirement of proposed responses to comments submitted by public agencies. In short, recirculation

is "intended to be an exception rather than the general rule" (*Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1132).

As such, the Sanitation District makes the following Findings:

1. None of the public comments submitted to the Sanitation District regarding the Draft PEIR present any significant new information that would require the Draft PEIR to be recirculated for public review.
2. No new or modified mitigation measures are proposed that would have the potential to create new significant environmental impacts.
3. The Draft PEIR adequately analyzed FMP alternatives and there are no feasible alternatives or mitigation measures considerably different from others previously analyzed that would clearly lessen the significant environmental impacts of the FMP.
4. The Draft PEIR was not fundamentally and basically inadequate and conclusory in nature, and did not preclude meaningful public review and comment.

In this legal context, the Sanitation District finds that recirculation of the Draft PEIR prior to certification is not required. In addition to providing responses to comments, the Final PEIR includes revisions to expand upon information already presented in the Draft PEIR (Chapter 3, Changes to the Draft PEIR); explain or enhance the evidentiary basis for the Draft PEIR's findings; update information; and to make clarifications, amplifications, updates, or helpful revisions to the Draft PEIR. The Final PEIR's revisions, clarifications, and/or updates do not result in any new significant impacts or increase the severity of a previously identified significant impact.

In sum, the Final PEIR demonstrates that the proposed FMP would not result in any new significant impacts or increase the severity of a significant impact compared to the analysis presented in the Draft PEIR. The changes reflected in the Final PEIR also do not indicate that meaningful public review of the Draft PEIR was precluded in the first instance. Accordingly, recirculation of the PEIR is not required because revisions to the PEIR are not significant as defined in Section 15088.5 of the CEQA Guidelines.

4.2 Legal Effects of Findings

To the extent that these Findings conclude that the proposed mitigation measures outlined herein are feasible and have not been modified, superseded, or withdrawn, the Sanitation District hereby commits to implementing these measures. These Findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect upon approval of the proposed FMP.

The mitigation measures that are referenced herein and adopted concurrently with these Findings will be effectuated through the process of construction and implementation of the proposed FMP as indicated in the concurrently adopted MMRP.

5 Statement of Overriding Considerations

Pursuant to PRC Section 21081(b) and CEQA Guidelines Section 15093(a) and (b), the decision-making agency is required to balance, as applicable, the economic, legal, social, technological, or other benefits of a project against its unavoidable environmental risks when determining whether to approve a project. If the specific economic, legal, social, technological, or other benefits of a project outweigh the unavoidable adverse environmental effects, those effects may be considered "acceptable" (14 CCR 15093[a]). CEQA requires the agency to support, in writing, the specific reasons for considering a project acceptable when significant impacts are not avoided or substantially lessened. Those reasons must be based on substantial evidence in the Final PEIR or elsewhere in the administrative record (14 CCR 15093[b]).

Courts have upheld overriding considerations that were based on a variety of policy considerations, including new jobs; stronger tax base; and implementation of an agency's economic development goals, growth management policies, redevelopment plans, the need for housing and employment, conformity to community plan, and provision of construction jobs (see *Towards Responsibility in Planning v. City Council* (1988) 200 Cal App. 3d 671; *Dusek v. Redevelopment Agency* (1985) 173 Cal App. 3d 1029; *City of Poway v City of San Diego* (1984) 155 Cal App. 3d 1037; *Markley v. City Council* (1982) 131 Cal App.3d 656).

In accordance with the requirements of CEQA and the CEQA Guidelines, the Sanitation District finds that the mitigation measures identified in the Final PEIR and the MMRP, when implemented, will avoid or substantially lessen virtually all of the significant effects identified in the PEIR for the Orange County Sanitation District Facilities Master Plan. However, certain significant impacts of the proposed FMP are unavoidable even after incorporation of all feasible mitigation measures. These significant unavoidable impacts result from transportation impacts due to conflict with CEQA Guidelines Section 15064.3(b), and cumulative program-level VMT impacts.

The Sanitation District finds that all feasible mitigation measures identified in the Final PEIR that are within the purview of the Sanitation District would be implemented with the proposed FMP, and that those mitigation measures that may be within another agency's discretion have been, or can and should be, adopted by that other agency. As identified below, the Sanitation District further finds that the remaining significant unavoidable effects are outweighed and are found to be acceptable due to the following specific overriding economic, legal, social, technological, or other benefits based on the facts set forth above, the Final PEIR, and the record.

The Sanitation District finds that any one of the benefits set forth below is sufficient by itself to warrant approval of the proposed FMP. This determination is based on the Findings herein and the evidence in the record. Having balanced the unavoidable adverse environmental impacts against each of the benefits, the Sanitation District hereby adopts this Statement of Overriding Considerations for the following reasons:

a) Maintain the Sanitation District's wastewater conveyance and treatment system in optimal condition for full functionality.
b) Comply with existing regulations governing wastewater treatment and disposal.
c) Meet existing and projected demands for wastewater conveyance and treatment in the Sanitation District's service area.
d) Maximize efficient use of existing Sanitation District property, right-of-way, and existing facilities.

e) To the extent feasible, replacement and rehabilitation projects would assist in improving energy efficiency.

f) Construction of the proposed FMP will create short-term construction jobs that would provide income to local residents and spur an increase in demand for goods and services in the surrounding area during the construction period.

g) The proposed FMP is consistent with the land use designation and zoning for the individual project sites.

On balance, the Sanitation District finds that there are specific economic, legal, social, technological, and other considerations associated with the proposed FMP that serve to override and outweigh the significant unavoidable effects of the proposed FMP, and, thus, the adverse effects are considered acceptable. Therefore, the Sanitation District hereby adopts this Statement of Overriding Considerations.

6 Conclusion

The mitigation measures listed in conjunction with each of the findings set forth above, as implemented through the MMRP, will eliminate or reduce to a less-than-significant level most of the adverse environmental impacts of the proposed FMP. The significant and unavoidable impacts of the proposed FMP would be rendered acceptable by the specific economic, legal, social, technological, and other considerations benefits identified in Section 5, Statement of Overriding Considerations.

Taken together, the Final PEIR, the mitigation measures, and the MMRP provide an adequate basis for approval of the proposed FMP.

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