

Orange County Water District Recycled Water Conveyance Improvement Project

Draft Initial Study/Mitigated Negative Declaration



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- A. Burris Basin GWRS Turnout Project Draft Preliminary Design Report, Stantec Consulting Services Inc., July 1, 2019
- B. GWRS Recycled Water Retention Time Modeling and Buffer Area Analysis Technical Memorandum dated October 12, Stantec Consulting Services Inc., 2020
- C. GWRS Recycled Water Retention Time Modeling and Buffer Area Analysis Technical Memorandum dated June 25, 2021

SECTION 1.0 INTRODUCTION

1.1 Purpose of Environmental Review

The California Environmental Quality Act (CEQA) requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. This Initial Study has been prepared to disclose and evaluate short-term construction related impacts and long-term operational impacts associated with the implementation of the Orange County Water District (OCWD) OCWD Recycled Water Conveyance Improvement Project (Project).

Pursuant to Section 15367 of the State CEQA guidelines, OCWD is the Lead Agency and has the principal responsibility of approving and implementing the proposed Project. As the Lead Agency, OCWD is required to ensure that the Proposed Project complies with CEQA and that the appropriate level of CEQA documentation is prepared. Through preparation of an Initial Study as the Lead Agency, OCWD would determine whether to prepare an Environmental Impact Report (EIR), Negative Declaration or Mitigated Negative Declaration (MND). If the Lead Agency finds that there is no evidence that a project activity either as proposed or as modified to include the mitigation measures identified in the Initial Study prior to its public circulation, would not cause a significant effect on the environment, the Lead Agency may prepare a Negative Declaration or Mitigated Negative Declaration. Based on the conclusions of this Initial Study, OCWD has recommended that the appropriate level of environmental documentation for the Proposed Project is a Mitigated Negative Declaration.

1.2 Statutory Authority and Requirements

This Initial Study/Mitigated Negative Declaration has been prepared in accordance with the CEQA, Public Resources Code Section 21000 et seq. State CEQA Guidelines and OCWD CEQA Environmental Procedures.

1.3 Technical Information and Studies

The following technical studies and information have been incorporated in the environmental impact evaluation prepared for the Recycled Water Conveyance Improvement Project.

- Burris Basin GWRS Turnout Project Draft Preliminary Design Report, Stantec Consulting Services Inc., July 1, 2019
- GWRS Recycled Water Retention Time Modeling and Buffer Area Analysis Technical Memorandum dated June 25, 2021
- GWRS Recycled Water Retention Time Modeling and Buffer Area Analysis Technical Memorandum dated October 12, 2020

SECTION 2.0 PROJECT DESCRIPTION

2.1 Background

The proposed Project involves (1) the installation of a pipeline turnout and associated de-chlorination facility that would connect an existing pipeline that conveys purified water treated at the OCWD Ground Water Replenishment System (GWRS) to Burris Basin in the City of Anaheim, and (2) the modification of the existing operational protocol for releases of GWRS water into the Carbon Creek Diversion Channel.

OCWD manages and operates a surface water recharge system located near the Santa Ana River (SAR) and Santiago Creek comprised of 24 recharge facilities that cover nearly 1,100 wetted acres and have a total storage volume of more than 26,000 acre-feet (AF). Burris Basin is an existing groundwater recharge basin owned and operated by OCWD as component of OCWD's recharge system network in central Orange County. Additionally, the GWRS conveyance pipeline is an existing facility constructed to convey flows of highly purified recycled water from OCWD's GWRS facility in the City of Fountain Valley to other groundwater replenishment facilities in the City of Anaheim.

Purified recycled water produced at the GWRS facility is currently conveyed to multiple sites. About a quarter of the purified recycled water is injected at the Talbert Barrier in the coastal portions of Orange County, and the remainder of the production is percolated at recharge basins north of Burris Basin, injected at the mid-basin injection area in central Orange County, and supplied for a limited number of non-potable water users. At the time this document was prepared, the final expansion of the GWRS facility is under construction, which will result in an increased output of purified water for recharge. The final expansion is anticipated to be completed and operational in late 2022 or early 2023.

The Project is intended to provide a connection to the GWRS pipeline to allow flows from the pipeline to be diverted to Burris Basin where the treated GWRS water would blend with water diverted from the SAR through OCWD's upstream facilities. Water in Burris Basin would continue to be conveyed to Riverview Basin and to the Santiago Basin system through OCWD's existing pump station and pipeline. OCWD's Santiago Basins are located downstream of Villa Park Dam in the City of Orange at former gravel pits that contain a large portion of the storage capacity within the OCWD's recharge system. In the existing condition, Santiago Basin receives water from Santiago Creek as well as SAR water conveyed through the pipeline from Burris Basin.

2.2 Project Location

Figure 1, *Regional Location Map*, and Figure 2, *Burris Basin Local Vicinity Map*, depict the locations of the various Project components from a regional and local vicinity perspective. The turnout and related facilities would generally be located within the southeastern portion of the City of Anaheim. The specific location of each of the Project components that would be constructed as a part of the Project are described separately below.

2.2.1 GWRs Pipeline Turnout and Ancillary Facilities

As shown on *Figure 2, Burris Basin Local Vicinity Map*, the GWRs Pipeline Turnout would be located in the southeastern portion of Burris Basin near the Santa Ana River. This Project component would be located approximately 700 feet north of the centerline of Ball Road and 2,000 feet east of the SR-57 freeway in the City of Anaheim. The Project site is located on USGS San Bernardino Meridian Quadrangle Map, Township 4 South, Range 9 West and Section 4. The closest sensitive receptor would be a residence located approximately 500 feet to the west.

2.3 Project Components

2.3.1 Burris Basin GWRs Pipeline Turnout and Ancillary Facilities

The proposed Project includes the installation of an outlet facility (“turnout” or “pipeline turnout”) that will accommodate the diversion of treated GWRs water into Burris Basin for recharge into the groundwater basin. A conceptual plan showing the location of each of the proposed facilities at Burris Basin is provided in *Figure 3, Proposed Pipeline Turnout Facilities*. The existing 66-inch GWRs pipeline extends from OCWD’s GWRs plant in the City of Fountain Valley along the Santa Ana River levee to other groundwater recharge basins located north of the Project site.

The Project would connect to the GWRs pipeline at an existing 60-inch tee and would construct a new 48-inch welded steel pipe (“connection pipeline”) that would distribute water into the Burris Basin facility. The connection pipeline would connect to a new proposed air gap structure north of the turnout, which would accommodate conveyance to the west into the recharge basin via two parallel 36-inch pipes. A dissipation structure would be constructed at the outfall of the 36-inch pipes.

An approximately 20-foot by 20-foot CMU building would be constructed immediately north of the connection pipeline to house a de-chlorination plant and de-chlorination agent storage. GWRs water would be treated at this facility prior to discharge into Burris Basin in order to remove residual chlorination components that may be present from the treatment process at the GWRs plant.

A 14-foot by 14-foot vault and jay stand would be constructed along the connection pipeline south of the de-chlorination plant in order to house proposed valves. A portion of the riprap headwall in the southern portion of Burris Basin would be reconfigured to accommodate drain lines from the new vault. Motorized valves would be installed to allow for the centralized control of the flows into Burris Basin by OCWD operations staff.

2.3.2 Modification of GWRs Discharge Protocol at Carbon Canyon Diversion Channel

In the existing condition, OCWD discharges purified recycled water through the GWRs Pipeline to Miraloma Basin, La Palma Basin, Miller Basin, and/or Kraemer where the water is spread within the basins to recharge the groundwater basin. During periodic maintenance activities at these basins, OCWD is permitted by the Regional Water Quality Control Board to temporarily discharge flows to Carbon Creek Diversion Channel; these flows will ultimately reach the SAR,

Project Description

but are then immediately diverted into Upper Five Coves Basin. However, in the existing condition, OCWD is only permitted to convey recycled water to Upper Five Coves-Lower Five Coves-Lincoln-Burris Basin system via the SAR and Carbon Canyon Diversion Channel during maintenance pumping events as long as the in-stream contribution of GWRS purified recycled water in facilities downstream of Carbon Creek Diversion Channel (e.g., the Santa Ana River) is less than 10 percent of the total flow in the river, which therefore required dilution of GWRS water with SAR flows.

In order to maximize OCWD's groundwater replenishment system performance and optimize basin maintenance, the proposed Project would eliminate the 10 percent in-stream blending requirement and allow undiluted GWRS water to be recharged in facilities downstream of Carbon Canyon Diversion Channel, provided the chlorine concentrations in the GWRS water meet regulatory requirements. In most years, the amount of GWRS purified recycled water that would need to be discharged to Carbon Canyon Diversion Channel would be low.

The implementation of this component requires only operational changes at existing facilities, no construction or operation of new facilities would occur.

2.4 Construction Activities

The construction of the Project components are described below.

2.4.1 GWRS Pipeline Turnout and Ancillary Facilities

The construction of the GWRS Pipeline Turnout and related components at Burris Basin is scheduled to begin in the spring of 2022 and expected to take approximately 6 months to complete. The work would be completed utilizing daytime construction only, no nighttime construction would be required. The equipment mix that would be utilized for the pipeline turnout is provided in Table 1 below.

Table 1 Pipeline Turnout Construction Equipment Mix

Activity	Equipment	Pieces of Equipment	Hours of Operation	Days of Operation	Horsepower
Pipeline Turnout Installation	Large Excavator	1	9	20	220
Pipeline Turnout Installation	Support Truck	1	4	100	350
Pipeline Turnout Installation	Cement Truck	1	8	3	300
Pipeline Turnout Installation	Cement Pumper	1	8	3	90
Pipeline Turnout Installation	Air Compressor	1	4	10	200
Pipeline Turnout Installation	Pick-up Truck	1	4	100	250
<i>Construction trips: 35 daily, all trips assumed 50 miles.</i>					
<i>Source: OCWD 2021.</i>					

2.1 Operation and Maintenance Activities

The operational and maintenance characteristics of the Project components are described below.

2.1.1 Burris Basin Turnout Long-Term Operation and Maintenance Activities

The pipeline turnout would be operated centrally by OCWD operations staff to discharge GWRS water into Burris Basin for groundwater recharge. The pipeline would accommodate flows up to a maximum of 50 mgd (million gallons per day). However, OCWD anticipates that typical daily flows would range from no flow to approximately 10 mgd when in use; turnout use is envisioned during atypical winter periods when the groundwater basin conditions permit less than 30 MGD of GWRS water injection via the existing OCWD Talbert Barrier and Mid-Basin Injection facilities. During periods when repairs or maintenance is occurring at other recharge basins that receive GWRS water, OCWD may divert up to 50 mgd to Burris Basin through the turnout for periods that could extend for up to two months.

OCWD regularly conducts maintenance activities in the existing condition at Burris Basin as a component of the District's standard basin maintenance. These activities include vegetation management, biological resource monitoring, and sediment removal. After the completion of the Project, OCWD staff would conduct regular inspections and maintenance of the various conveyance facilities to ensure proper function.

The proposed Project would include a small de-chlorination facility that would treat the purified recycled water to remove chlorine prior to discharge into Burris Basin. The facility would be designed to store and administer a solution of 25 percent sodium bisulfite (NaHSO_3 or SBS) concentration to the GWRS water. All of the de-chlorination components, which would include a chemical storage tank and pump would be located within the proposed CMU block building adjacent to the pipeline turnout. Approximately 4,000 gallons of the solution would be stored in a cross-linked polyethylene chemical storage tank. OCWD anticipates that approximately 3,500 gallons of the solution would be used per month, requiring one delivery per month (one truck trip) to the site to resupply the facility.

2.6 Permits and Approvals

The Initial Study/Mitigated Negative Declaration prepared for the Project would be used as the supporting CEQA environmental documentation for the following approvals and permits.

- OCWD Project Approval
- OCWD Authorization of Notice to Invite Bids
- OCWD Authorization of Award of Contract
- California State Water Resources Control Board Division of Drinking Water (DDW) Conditional Acceptance Letter

Project Description

- Santa Ana Regional Water Quality Control Board Discharge Permit

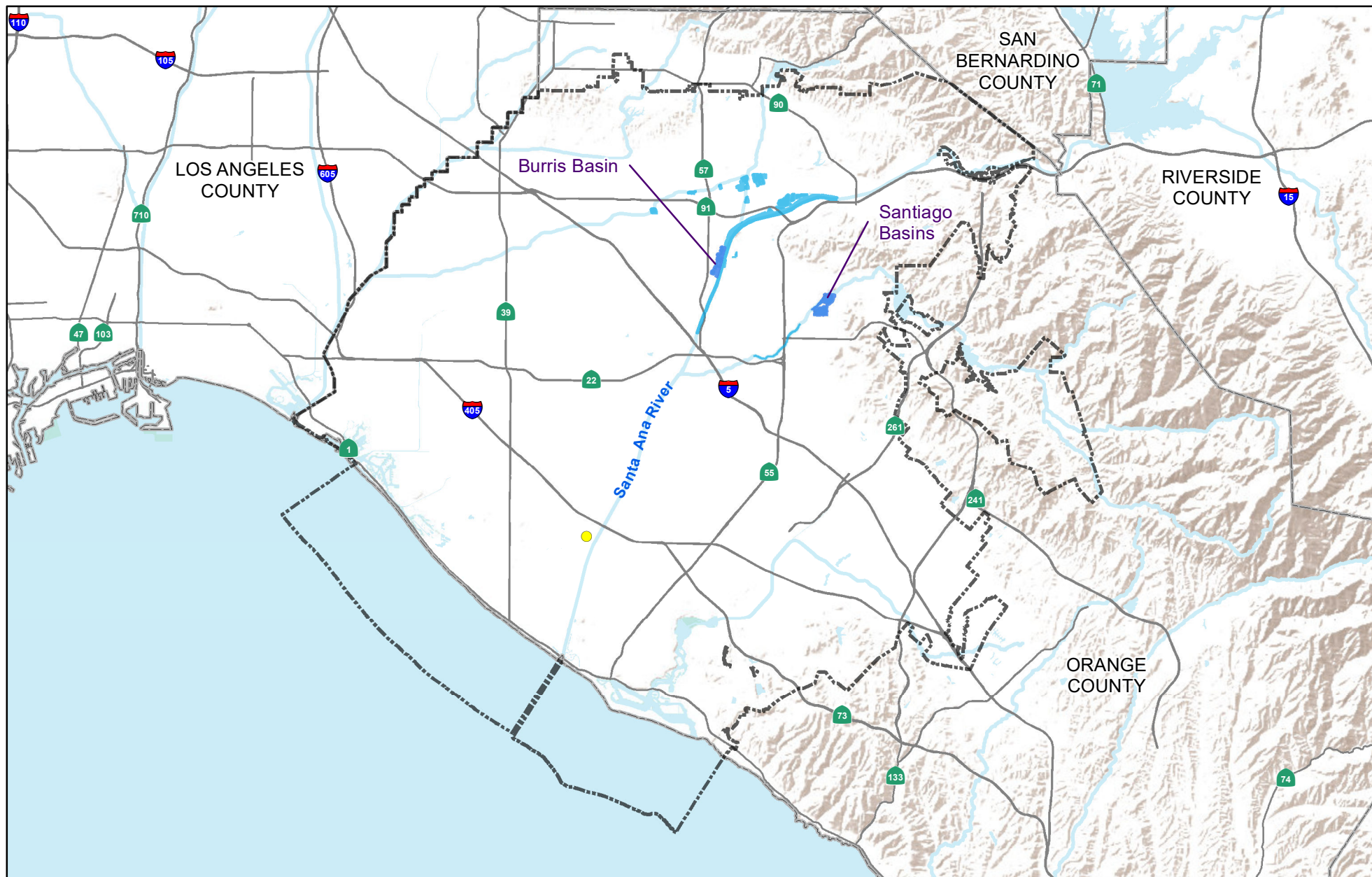
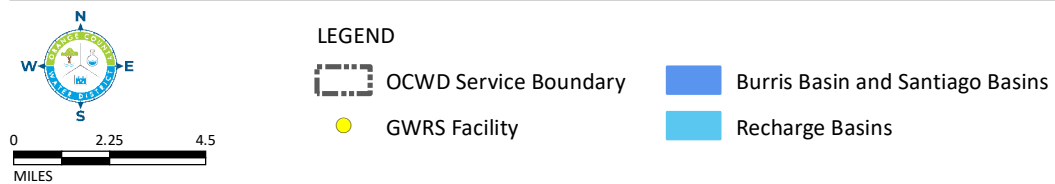
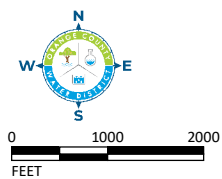
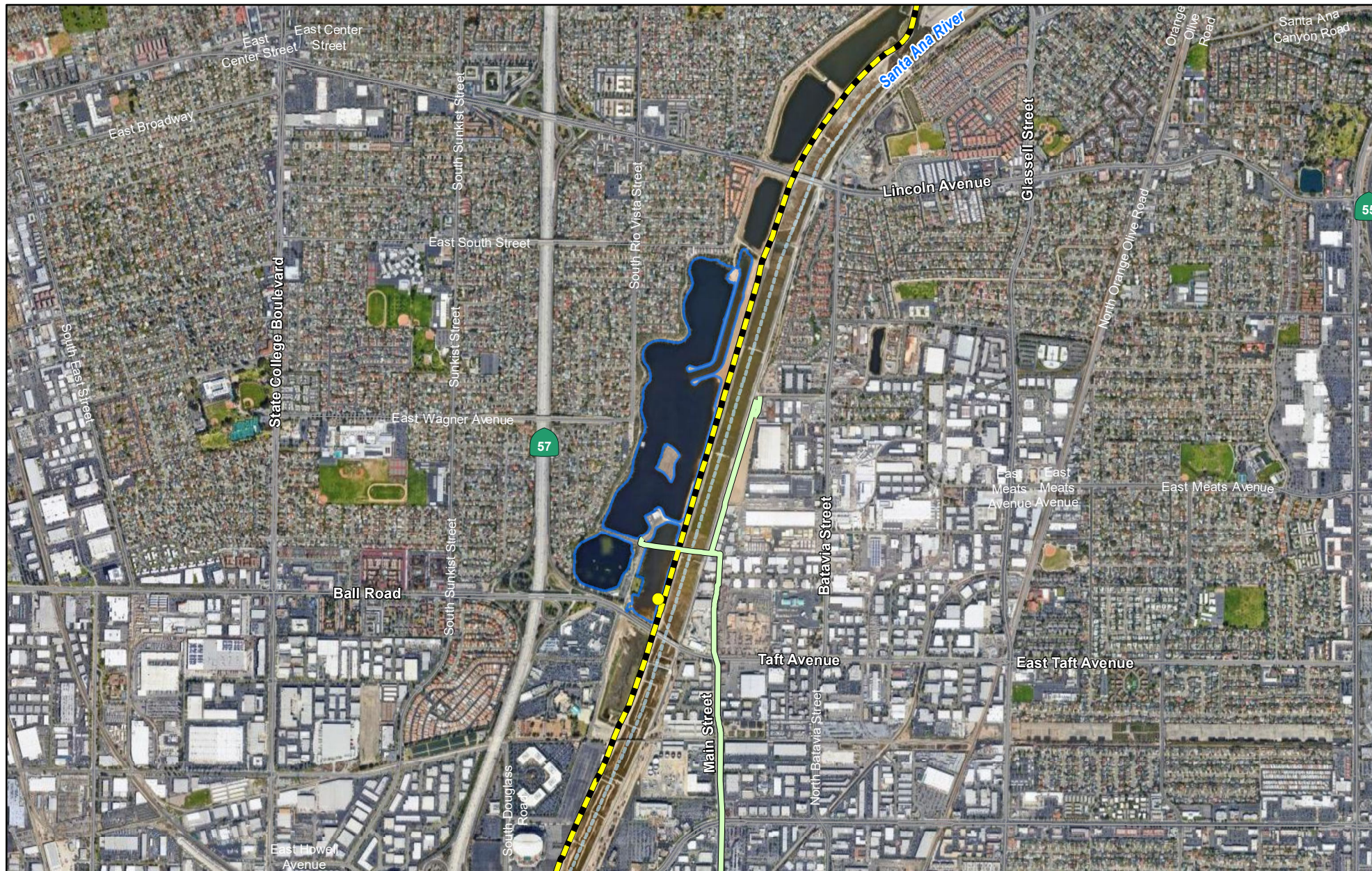


FIGURE 1



REGIONAL LOCATION MAP



LEGEND

- Burris Basin Turnout Location
- Groundwater Replenishment System Pipeline
- Santiago Creek Diversion Pipeline
- Burris Basin Location
- Santa Ana River

FIGURE 2

BURRIS BASIN LOCAL VICINITY MAP

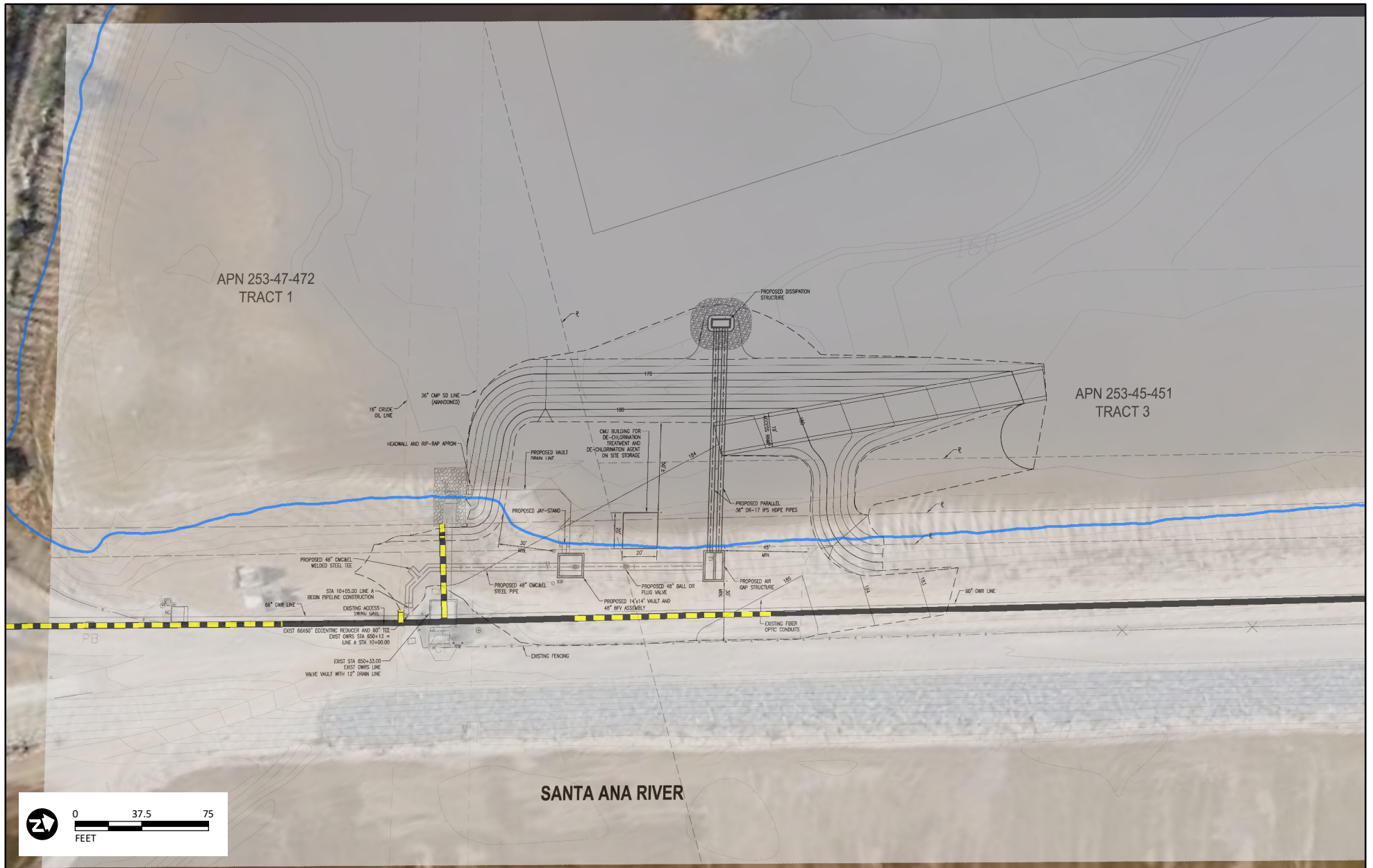


FIGURE 3

PROPOSED PIPELINE TURNOUT FACILITIES

SECTION 3.0 ENVIRONMENTAL CHECKLIST EVALUATIONS

1. **Project Title:** OCWD Recycled Water Conveyance Improvement Project
2. **Lead Agency Name/Address:** Orange County Water District
18700 Ward street
Fountain Valley, CA 92708
3. **Project Contact:** Shawn Nevill, Principal Environmental Planner
4. **Location:** City of Anaheim

Environmental Determination: on the basis of this initial study evaluation, I find that

A	<input type="checkbox"/>	The proposed project COULD NOT have a significant effect on the environment and NEGATIVE DECLARATION will be prepared.
B	<input checked="" type="checkbox"/>	Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.
C	<input type="checkbox"/>	The proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.
D	<input type="checkbox"/>	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR (EIR--) pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the project, nothing further is required.
E	<input type="checkbox"/>	Pursuant to Section 15164 of the CEQA Guidelines, an EIR (EIR --) has been prepared earlier and only minor technical changes or additions are necessary to make the previous EIR adequate and these changes do not raise important new issues and significant effects on the environment. An ADDENDUM to the EIR shall be prepared.
F	<input type="checkbox"/>	Pursuant to Section 15162 of the CEQA Guidelines, an EIR (EIR--) has been prepared earlier; however, subsequent proposed changes in the project and /or new information of substantial importance will cause one or more significant effects not previously discussed. A SUBSEQUENT EIR shall be prepared.

CEQA Environmental Checklist



Signature/Title

January 18, 2022

Date

Environmental Analysis

Environmental Resource	Potential Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I - Aesthetics: Except as provided in Public Resources Code Section 21099 would the project				
a) Would the project have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views (those that are experienced from publicly accessible vantage point) of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
II - Agriculture and Forestry Resources: Would the project				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agriculture use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agriculture use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources code section 12220 (g)), Timberland production as defined by Government Code section 51104 (g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Analysis

conversion of forest land to non-forest use?				
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agriculture use or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
III - Air Quality: Would the project				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other substantial emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IV - Biological Resources: Would the project				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Analysis

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
V - Cultural Resources: Would the project				
a) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
VI - Energy: Would the project				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
VII - Geology and Soils: Would the project				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Analysis

of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?				
b) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Directly or indirectly cause potential substantial adverse effects involving landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or-off site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Be located on expansive soil, as defined in Table 18-1-B of the uniform Building code (1994), creating substantial direct or indirect risks to life or property.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VIII - Greenhouse Gas Emissions: Would the project				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Analysis

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IX - Hazards and Hazardous Material: Would the project				
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people riding or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Analysis

X - Hydrology and Water Quality: Would the project				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on-or-offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on-or-off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would impede	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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or redirect flood flows?				
g) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
XI - Land Use and Planning: Would the project				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purposes of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
XII - Mineral Resources: Would the project				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIII - Noise: Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
XIV - Population and Housing: Would the project				
a) Induce substantial unplanned population growth in an area, either directly by proposing new homes and indirectly through extension of roads or other infrastructure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XV - Public Services: Would the project				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other Public facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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XVI - Recreation: Would the project				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVII - Transportation: Would the project				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3 Subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature or incompatible uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
XVIII - Tribal Cultural Resources: Would the project				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place or object with cultural value to a California Native American tribe and that is listed or eligible for listing in the California Register of Historic Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1 (K)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of a tribal cultural resource,	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape, sacred place or object with cultural value to a California native American tribe and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in Subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?				
XIX - Utilities and Service Systems: Would the project				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which services or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
XX - Wildfire: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				

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a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, or emergency water sources, that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope stability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XXI - Mandatory Findings of Significance				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife populations to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or pre-history.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 4.0 ENVIRONMENTAL ANALYSIS

The following environmental analysis responds to the environmental issues listed on the OCWD CEQA Checklist Form. The analysis identifies the level of anticipated impact that would occur at the well site and, where needed, includes the incorporation of mitigation measures to reduce potentially significant impacts to the environment to a level that is below the significance threshold(s).

4.1 Aesthetics

A. Would the project have a substantial adverse effect on a scenic vista?

Less than Significant Impact: The physical improvements for the proposed Project would occur at Burris Basin in the City of Anaheim. The City of Anaheim General Plan does not identify any scenic vistas at or near Burris Basin. Moreover, Burris Basin occurs within a relatively flat topographical portion of the city and each of the proposed facilities would be relatively low in profile, similar to other existing facilities that occur within Burris Basin. Accordingly, the Project improvements would not have any potential to affect a scenic vista and impacts associated with scenic vistas would be less than significant.

B. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact: No Project components would be located near a State scenic highway and the Project would not have the potential to damage any scenic resources. Therefore, construction and operation of the proposed Project would not have no impact on existing scenic resources located along a State Scenic Highway.

C. In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views (those that are experienced from publicly accessible vantage point) of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant: The physical improvements related to the proposed Project would occur at locations within a highly urbanized portion of the City of Anaheim. The Burris Basin site is operated and maintained as a groundwater infiltration basin and contains existing water conveyance infrastructure facilities within the areas surrounding the basin, including an existing pump station. The proposed pipeline turnout facilities that would be constructed in the southeastern portion of the basin would be limited in overall scale and would be visually similar to other existing components located at the site. Accordingly, the proposed pipeline turnout facilities would not result in a substantial change to the visual character or the quality of public views at the Burris Basin site and impacts would be less than significant.

D. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant: The proposed Project would not require any nighttime lighting during construction or operation. Therefore, impacts associated with light and glare would be less than significant.

4.2 Agricultural Resources/Forest Resources

A. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agriculture use?

No Impact: The proposed Project is located within urbanized portions of the City of Anaheim. The State of California Farmland Mapping and Monitoring Program indicates that there is no Prime Farmland, Unique Farmland or Farmland of Statewide Importance on any of the portions of the Project site subject to the construction activities. Therefore, the proposed Project would have a less than significant impact to Prime Farmland, Unique Farmland or Farmland of Statewide Importance.

B. Would the project conflict with existing zoning for agriculture use or a Williamson Act Contract?

No Impact: The City of Anaheim Zoning Map shows that the Project components are not located within land that is zoned for agriculture land uses. Therefore, the construction and operation of the proposed Project would not conflict with any existing agriculture zoning or existing agriculture leases or contracts on the property. No impacts would occur.

C. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources code section 12220 (g)), Timberland production as defined by Government Code section 51104 (g))?

No Impact: The City of Anaheim Zoning Map shows that none of the proposed Project components are located on land zoned for forest or timberland. Implementation of the proposed Project would not require a change of zone to, or otherwise conflict with, existing forest or timberlands. No impact would occur.

D. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact: There is no existing farmland within either of the areas subject to the proposed Project's physical improvements. Therefore, the construction and operation of the proposed Project would not convert existing forest land to non-forest land. No impact would occur.

E. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agriculture use or conversion of forestland to non-forest use?

No Impact: Currently, there is no existing farmland within any portion of the Project sites. Therefore, the construction and operation of the proposed Project would not directly or indirectly result in the loss of any forest land or result in the conversion forest lands to non-forest lands. No mitigation measures are required.

4.3 Air Quality

Due to the relatively small scale of the construction activities and the limited amount of ground disturbances that will occur during the construction of the Project, the following analysis has been conducted based on a qualitative evaluation of the Project's impacts to air quality.

Setting

The project site is located in the South Coast Air Basin (SoCAB). The SoCAB includes Orange County in its entirety and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties.

Regulatory Framework

Air pollutants are regulated at the national, state and air basin level. Each agency has a different level of regulatory responsibility. The United States Environmental Protection Agency (EPA) regulates at the national level. The California Air Resources Board (ARB) regulates at the state level and the South Coast Air Quality Management District regulates at the air basin level.

Federal Regulation

The EPA handles global, international, national and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, conducts research, and provides guidance in air pollution programs and sets National Ambient Air Quality Standards (NAAQS), also known as federal standards. There are six common air pollutants, called criteria air pollutants, which were identified resulting from provisions of the Clean Air Act of 1970. The six criteria pollutants are Ozone, Particulate Matter (PM₁₀ and PM_{2.5}), Nitrogen Dioxide, Carbon Monoxide, Lead and Sulfur Dioxide. The NAAQS were set to protect public health, including that of sensitive individuals.

State Regulation

A State Implementation Plan (SIP) is a document prepared by each state describing air quality conditions and measures that would be followed to attain and maintain NAAQS. The SIP for the State of California is administered by the ARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. The ARB also administers California Ambient Air Quality Standards (CAAQS), for the ten air pollutants designated in the California Clean Air Act (CCAA). The ten state air pollutants include the six national criteria pollutants and visibility reducing particulates, hydrogen sulfide, sulfates and vinyl chloride.

South Coast Air Quality Management District

The project area is located within the South Coast Air Basin (basin). The air pollution control agency for the basin is the South Coast Air Quality Management District (SCAQMD). The SCAQMD is responsible for controlling emissions primarily from stationary sources. Additionally, SCAQMD in coordination with the Southern California Association of Governments (SCAG) is also responsible for developing, updating and implementing the Air Quality Management Plan (AQMP) for the basin. An AQMP is a plan prepared by an air pollution control district for a county or region designated as non-attainment of the national and/or California ambient air quality standards. The term non-attainment area is used to refer to an air basin where one or

more ambient air quality standards are exceeded. Presently, the basin has a National non-attainment status for Ozone, PM₁₀ and PM_{2.5} and a State non-attainment status for PM₁₀ and PM_{2.5}.

Air Quality Management Plan

SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. It has responded to this requirement by preparing a sequence of AQMPs. The Final 2016 Air Quality Management Plan (2016 AQMP) was adopted by the SCAQMD Board on March 3, 2016 and was adopted by CARB on March 23, 2017 for inclusion into the California State Implementation Plan (SIP). The 2016 AQMP was prepared in order to meet the following standards:

- 8-hour Ozone (75 ppb) by 2032
- Annual PM_{2.5} (12 µg/m³) by 2021-2025
- 8-hour Ozone (80 ppb) by 2024 (updated from the 2007 and 2012 AQMPs)
- 1-hour Ozone (120 ppb) by 2023 (updated from the 2012 AQMP)
- 24-hour PM_{2.5} (35 µg/m³) by 2019 (updated from the 2012 AQMP)

In addition to meeting the above standards, the 2016 AQMP also includes revisions to the attainment demonstrations for the 1997 8-hour ozone NAAQS and the 1979 1-hour ozone NAAQS. The prior 2012 AQMP was prepared in order to demonstrate attainment with the 24-hour PM_{2.5} standard by 2014 through adoption of all feasible measures. The prior 2007 AQMP demonstrated attainment with the 1997 8-hour ozone (80 ppb) standard by 2023, through implementation of future improvements in control techniques and technologies. These “black box” emissions reductions represent 65 percent of the remaining NO_x emission reductions by 2023 in order to show attainment with the 1997 8-hour ozone NAAQS. Given the magnitude of these needed emissions reductions, additional NO_x control measures have been provided in the 2012 AQMP even though the primary purpose was to show compliance with 24-hour PM_{2.5} emissions standards.

The 2016 AQMP provides a new approach that focuses on available, proven and cost-effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities to promote reductions in GHG emissions and TAC emissions as well as efficiencies in energy use, transportation, and goods movement. The 2016 AQMP recognizes the critical importance of working with other agencies to develop funding and other incentives that encourage the accelerated transition of vehicles, buildings and industrial facilities to cleaner technologies in a manner that benefits not only air quality, but also local businesses and the regional economy.

Project Impacts

A. Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant: The main purpose of an AQMP is to bring an area into compliance with the requirements of Federal and State air quality standards. The 2016 AQMP is designed to

accommodate expected future population, housing, and employment growth and are based on SCAG's 2012–2035 RTP/SCS and Draft 2016–2040 RTP/SCS, which were developed from City and County General Plans, as well as regional population, housing, and employment projections. The proposed Project does not include any components that would increase population or otherwise affect operational air quality. The construction of the proposed Project facilities would be relatively small in scale in comparison to typical larger scale construction projects that occur throughout the region. The Project does not involve any large amounts of grading or soil hauling. Activities associated with construction would require the use of smaller earth moving and other construction vehicles for the construction of the pipeline turnout facilities. Given the relatively small scale of the construction and the lack of any substantial amount of soil movement, the proposed Project would have only a nominal effect on regional air quality and would have no potential to exceed the SCAQMD thresholds and would not result in a significant impact. No conflict with the 2016 AQMP would occur with the implementation of the Proposed Project and impacts associated with the 2016 AQMP would be less than significant.

B. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?

Less Than Significant: The region is a Federal and/or State nonattainment area for PM₁₀, PM_{2.5}, and O₃. The proposed Project would contribute particulates and the O₃ precursors VOC and NO_x to the area during short-term Project construction and long-term Project operations. The SCAQMD considers the thresholds for project-specific impacts and cumulative impacts to be the same. As described above, construction and operational regional emissions would be less than the SCAQMD CEQA significance thresholds and would be less than significant. Therefore, regional emissions would not be cumulatively considerable, and the impact would be less than significant.

C. Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant: The following analysis evaluates the potential for sensitive receptors in the project area to be subject to elevated levels of CO and toxic air contaminants.

Carbon Monoxide Hotspots

A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. If a project increases average delay at signalized intersections operating at level of service (LOS) E or F or causes an intersection that would operate at LOS D or better without the project to operate at LOS E or F with the Project, a quantitative screening is required.

The proposed Project would generate a negligible amount of traffic that would be limited to occasional maintenance visits. Therefore, the proposed Project would not increase congestion at major signalized intersections in the area. There would be a less than significant impact and no exposure of sensitive receptors to project-generated local CO emissions.

Criteria Pollutants from On-Site Construction

As described above, the proposed Project construction and operational localized impacts would be less than significant. No mitigation measures required.

Toxic Air Contaminants

The greatest potential for toxic air contaminant emissions during construction or operations would be related to diesel PM emissions associated with construction equipment operations. Diesel equipment operations associated with the Proposed Project would be limited to several months at the Project site. The assessment of cancer risk is typically based on a 30- to 70-year exposure period. Because exposure to diesel exhaust would be substantially less than the 30- to 70-year exposure period, the incremental cancer risk to exposed persons would be negligible. The impact would be less than significant.

D. Would the project result in other substantial emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant: The proposed Project construction activities would generate odors. Potential construction odors would mostly be diesel exhaust emissions. There may be situations where construction activity odors would be noticeable by persons working nearby, but these odors would not be unfamiliar or necessarily objectionable. The odors would be temporary and would dissipate rapidly from the source with an increase in distance. Therefore, the proposed Project impacts would be short-term; would not be objectionable to a substantial number of people and would be less than significant.

4.4 Biological Resources

A. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant with the Incorporation of Mitigation: The proposed Project would include physical improvements at Burris Basin in the City of Anaheim. The construction of the pipeline turnout and related facilities at Burris Basin would occur within the southeastern portion of the facility in an area that is maintained by OCWD to be devoid of vegetation, although some incidental non-native vegetation growth can occur between OCWD's routine vegetation removal activities. The wetted portion of the basin that would be affected by construction activities contains non-native fish species in the existing condition. As the Project site does not contain any native vegetation or native wildlife species, the proposed construction activities would have no potential to affect species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Accordingly, construction impacts would be less than significant.

The operation of the proposed Project would result in the placement of varying quantities of highly purified water into Burris Basin and Riverview Basin that would be treated at OCWD's GWRS facility in Fountain Valley and conveyed through the GWRS pipeline to the Project site. As Burris Basin is interconnected to OCWD's Santiago Basin facility in the City of Orange

through a pump station and pipeline, some quantities of purified GWRS water would be indirectly conveyed to Santiago Basin.

The introduction of GWRS water into Burris Basin could affect the health of non-native fish species that occur within the Basin due the chemical composition of water after the completion of the treatment process. The proposed Project includes a de-chlorination facility as a Project design feature at Burris Basin that would remove residual chlorine that results from the treatment process, which would be expected to avoid or reduce some effects to non-native fish species that occur within Burris Basin. Moreover, as Burris Basin is consistently used to infiltrate Santa Ana River water that reaches the basin through OCWD's conveyance facilities, GWRS flows into Burris Basin would be blended with these waters to varying extents depending on the GWRS flow rate and Santa Ana River base flows.

As Burris Basin does not contain any native fish species or any other aquatic species that are identified as candidate, sensitive, or special status species, any direct effects on the non-native fish populations within Burris Basin would result in less than significant impacts. However, OCWD maintains a floating island and larger earthen island in Burris Basin that is used by California Least Tern (*Sterna antillarum browni*) as a nursery site. The California Least Tern is designated as endangered by the US Fish and Wildlife Service and the California Department of Fish and Wildlife. Although the discharge of GWRS water into Burris Basin would not directly affect nesting birds at Burris Basin, any effects to non-native fish within the basin could reduce the availability of food in the immediate area around the nursery site. While nesting California Least Terns would be expected to utilize other nearby water sources for feeding, including the adjacent Santa Ana River, a substantial reduction in non-native fish within Burris Basin due to the operational introduction of GWRS water would result in a potentially significant impact. Mitigation Measure MM BIO-1 has been identified which would reduce this impact to less than significant. Riverview Basin does not contain any fish species as the basin is typically dry, so no impacts to wildlife species would occur at Riverview Basin.

MM BIO-1: Prior to the operational introduction of GWRS water into Burris Basin, the OCWD Project Biologist shall prepare a Burris Basin Fish Management Plan (Fish Management Plan), which shall be implemented throughout the operational lifetime of the Project. The Fish Management Plan shall require active weekly monitoring of Burris Basin to observe non-native fish health during any period when flows of GWRS water into Burris Basin reach or exceed 20 cubic feet per second (CFS) for three (3) or more consecutive days. The Fish Management Plan shall also identify other measures that OCWD will implement to reduce impacts to nesting California Least Terns which may include, but is not limited, to the following:

- Laboratory analysis of surface water within Burris Basin to monitor water quality;
- Introduction of non-native fish to Burris Basin to increase the availability of the feeding stock;
- Introduction of nutrients or other additives to Burris Basin to supplement inflows of purified GWRS water in a manner that supports non-native fish health;
- Adjustment of blending rates with Santa Ana River water within Burris Basin;
- Provision of supplemental feeding vessels.

The Fish Management Plan shall be revised, as determined necessary by the OCWD Project Biologist, during the operational lifetime of the Project in order to incorporate new information such as scientific data or the results of laboratory analysis of the surface water in Burris Basin.

B. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant: The proposed Project construction would occur within a portion of the Burris Basin site that is routinely maintained to remove vegetation. No component of the Project would be located within vegetated areas, or within sites that contain riparian habitat or other sensitive natural communities. Accordingly, impacts associated with riparian habitat and or other sensitive natural communities would be less than significant.

C. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant: The proposed Project construction would occur within a portion of the Burris Basin site that is routinely maintained to remove vegetation. The Project would not be located within, or otherwise affect any State or federally protected wetlands. Accordingly, impacts associated with riparian habitat and or other sensitive natural communities would be less than significant.

D. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant with the Incorporation of Mitigation: See the analysis located in 4(a), above. The discharge of GWRS water into Burris Basin could affect the health of non-native fish within the Burris Basin, which could indirectly affect reduce the availability of food in the immediate area around a California Least Tern nursery site located on a floating island in the central portion of Burris Basin (north of the area of the proposed construction activities). While nesting California Least Terns would be expected to utilize other nearby water sources for feeding, including the adjacent Santa Ana River, a substantial reduction in non-native fish within Burris Basin due to the operational introduction of GWRS water would result in a potentially significant impact. Mitigation Measure MM BIO-1 has been identified which would reduce this impact to less than significant. No other component of the proposed Project would affect any wildlife nursery sites or movement of native fish or wildlife species.

E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant: The proposed Project would not require the removal of any vegetation, including trees that could be subject to a local policy or ordinance. Accordingly, impacts associated with a conflict with any local policies or ordinances that protect biological resources would be less than significant.

F. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less Than Significant: The proposed Project would be located within developed areas and would not be within an area subject to an adopted habitat conservation plan, natural community conservation plan or any other habitat conservation plans. Therefore, the proposed Project would result in less than significant impacts associated with habitat or natural community conservation plans.

4.5 Cultural Resources

Cultural resources include prehistoric archaeological sites, historic archaeological sites, historic structures, and artifacts made by people in the past.

Prehistoric archaeological sites are places that contain the material remains of activities carried out by the native population of the area (Native Americans) prior to the arrival of Europeans in Southern California. Artifacts found in prehistoric sites include flaked stone tools such as projectile points, knives, scrapers, and drills; ground stone tools such as manos, metates, mortars, and pestles for grinding seeds and nuts; and bone tools.

Historic archaeological sites are places that contain the material remains of activities carried out by people during the period when written records were produced after the arrival of Europeans. Historic archaeological material usually consists of refuse, such as bottles, cans, and food waste, deposited near structure foundations.

Historic structures include houses, commercial structures, industrial facilities, and other structures and facilities more than 50 years old.

A. Would the project cause a substantial adverse change in the significance of an historical resource pursuant to Section 15064.5?

Less Than Significant Impact: The proposed Project construction activities are located within an urbanized portion of the City of Anaheim. The construction of the pipeline turnout to Burris Basin would occur within areas that were heavily disturbed by previous activities associated with the construction of the Santa Ana River levee and the construction of Burris Basin. All portions of the pipeline turnout component would occur within previously disturbed and engineered soils and would not affect any nearby structures beyond the GWRS pipeline and the southeastern portion of Burris Basin. Accordingly, as the Project would not affect any structures or other improvements, the Project would not result in any potential impacts to historical resources and impacts would be less than significant.

B. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant with Mitigation Incorporated: The proposed Project construction activities are located within an urbanized portion of the City of Anaheim. The construction of the pipeline turnout to Burris Basin would occur within areas that were heavily disturbed by previous activities associated with the construction of the Santa Ana River levee and the construction of Burris Basin. All portions of the pipeline turnout component would occur within previously

disturbed and engineered soils and would not be likely to affect any potential archeological resources. The location of the physical improvements of the Project occur within highly disturbed and/or engineered soils ensuring that there would be a low potential for any impacts to archeological resources. However, even though the Project site has been previously disturbed, because archeological resources are known to occur throughout Southern California and specifically within the City of Anaheim, there would still be some potential, although remote, for the discovery of unknown prehistoric and historical archeological resources. Agriculture remains, foundations, trails, hearths, trash dumps, privies, changes in soil colorations human or animal bone, pottery, chipped or shaped stone are all potential indications of an archaeological site. Therefore, in an abundance of caution, Mitigation Measure CR-1 has been identified to reduce any potential adverse impacts to unknown archeological resources to less than significant.

Mitigation Measure

MM CR-1: During all ground disturbing activities, the OCWD Project Manager and/or their designee (including the Construction Supervisor) shall ensure that, in the event that any evidence of cultural resources are discovered, all work within the vicinity of the find shall immediately halt until a Qualified Cultural Resources Consultant can assess the significance of the materials. A resumption of ground disturbing activities shall only be permitted once the Qualified Cultural Resources Consultant has concluded their assessment. The Qualified Cultural Resources Consultant shall prepare a letter report that documents the find and identifies recommendations for the treatment and/or deposition of the materials.

C. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant: No human remains or cemeteries are known to exist within or near the Project areas. Therefore, it would be highly unlikely that human remains would be encountered when well drilling activities are occurring. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. Accordingly, impacts would be less than significant.

4.6 Energy

A. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?

Less Than Significant: The proposed Project would require the consumption of energy in the use of fossil fuels in combustion engines during the construction phase of the Project. No use of electricity would be required at the sites during the construction period beyond the electricity that would be required to convey water that would be used for dust control or electricity needed for construction equipment. Energy would also be expended through the use of petroleum-based fuels and the production of construction materials. The limited scale and duration of the construction of the Project would ensure that energy consumption would be nominal and would not represent a wasteful, inefficient or unnecessary use of energy. During the operational

phase of the Project, only nominal electricity consumption would be utilized associated with the operation of the pipeline valves de-chlorination plant. Therefore, the Project would result in less than significant impacts associated with the consumption of energy.

B. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant: The proposed Project involves the installation of a pipeline turnout to a recharge basin and would not require the permanent consumption of electricity or other forms of energy beyond the occasional operation of motorized valves and the operation of the dechlorination plant. Accordingly, due to the nature of the Project and the operational characteristics of the Project, the Project would not conflict with any State or local plans related to renewable energy or energy efficiency.

4.7 Geology/Soils

A. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Less Than Significant Impact: According to the City of Anaheim General Plan, no areas designated as being within an Alquist-Priolo Earthquake Fault Zoning Map are located within the area subject to Project construction. Therefore, the proposed Project would result in less than significant impacts associated with the rupture of a known fault.

B. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Less Than Significant: As with all projects in Southern California, the proposed Project would be subject to strong seismic ground shaking during earthquakes that originate on local and regional faults, most notably from the San Andreas, Whittier, Elsinore, Palos Verdes, and Puente Hills Faults. An earthquake along any local or regional fault would also have the ability to generate seismic events that would generate strong seismic ground shaking within the Project area. In the event a moderate-to-large earthquake occurs, the proposed pipeline turnout and related facilities could have the potential for periodic shaking, possibly of considerable intensity. However, the risk for seismic shaking impacts at the Project site would be similar to other areas in the Southern California region and the Project facilities would not have any greater risk associated with seismic ground shaking when compared to other similar facilities located throughout the region. Moreover, the proposed Project facilities have been designed to comply with all applicable construction standards to ensure that the Project facilities would withstand strong seismic groundshaking. The facilities would only be periodically staffed during occasional maintenance activities. Accordingly, due to the nature of the Project which includes a pipeline turnout facility, the proposed Project would result in less than significant impacts associated with strong seismic ground shaking.

C. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Less Than Significant: Liquefaction is the phenomenon in which loosely deposited soils located within the water table undergo rapid loss of shear strength due to excess pore pressure generation when subjected to strong earthquake induced ground shaking. Liquefaction is known generally to occur in saturated or near-saturated cohesion- less soil at depths shallower than 50-feet below the ground surface. According to the City of Anaheim General Plan, no areas that would be subject to Project installations have a high liquefaction potential. Additionally, the Project consists of the installation of water conveyance facilities, the Project would not construction any new habitable structures. Accordingly, impacts associated with liquefaction would be less than significant.

D. Would the project directly or indirectly cause potential substantial adverse effects involving landslides?

No Impact: Landslides triggered by earthquakes historically have been a significant cause of earthquake damage, responsible for destroying or damaging numerous structures, blocking major transportation corridors and life-line infrastructure systems. Areas that are most susceptible to earthquake-induced landslides are steep slopes in poorly cemented or highly fractured rocks, areas underlain by loose, weak soils and areas on or adjacent to existing landslide deposits.

The proposed pipeline turnout at Burris Basin is located in a relatively flat area that has been previously graded. The site is not in an area designed by the City of Anaheim General Plan as having a high potential for landslides. Accordingly, no impact would occur related to landslides.

E. Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant: While the installation of the pipeline turnout would require some soil disturbances, these disturbances would be limited in scale and quantity and would not require any large areas of grading. The limited amount of soils that would be exposed would not be sufficient to result in substantial amounts of water and/or wind erosion. Accordingly, impacts associated with soil erosion or the loss of topsoil would be less than significant.

F. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or-off site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant: The City of Anaheim General Plan does not identify the Project site as occurring within an area of geologic hazard. The primary geologic concern at the proposed pipeline turnout site would be potential seismic shaking impacts. As previously identified, the pipeline turnout and ancillary facilities have been designed based on site-specific soil conditions to ensure that no adverse effects would occur associated with soil stability. Accordingly, the potential seismic shaking impacts would be less than significant.

G. Would the project be located on expansive soil, as defined in Table 18-1-B of the uniform Building code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant: Expansive soils are characterized as specific clay materials with the capacity to shrink, swell or otherwise significantly change volume due to variations in moisture content. Expansive soils could cause excessive cracking and heaving of structures with shallow

foundations and concrete. Preliminary investigations conducted by OCWD did not identify any soil constraints that would increase the risks for damage. Accordingly, impacts associated with expansive soils would be less than significant.

H. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?

No Impact: The proposed Project would not involve construction of septic tanks, or other alternative wastewater disposal systems. No impacts would occur related to the disposal of wastewater.

I. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant with the Incorporation of Mitigation: The proposed Project construction activities are located within urbanized portions of the City of Anaheim. The construction of the pipeline turnout to Burris Basin would occur within areas that were heavily disturbed by previous activities associated with the construction of the Santa Ana River levee and the construction of Burris Basin. All portions of the pipeline turnout component would occur within previously disturbed and engineered soils and would not be likely to affect any potential paleontological resources. The location of the physical improvements of the Project occur within highly disturbed and/or engineered soils ensuring that there would be a low potential for any impacts to paleontological resources. However, even though the Project site has been previously disturbed, because archeological resources are known to occur throughout Southern California and specifically within the City of Anaheim, there would still be some potential, although remote, for the discovery of paleontological resources. Therefore, in an abundance of caution, Mitigation Measure PALEO-1 has been identified to reduce any potential adverse impacts to unknown paleontological resources to less than significant.

Mitigation Measure

MM PALEO-1: During all ground disturbing activities, the OCWD Project Manager and/or their designee (including the Construction Supervisor) shall ensure that, in the event that any evidence of cultural or paleontological resources are discovered, all work within the vicinity of the find shall immediately halt until the District's Qualified Paleontological Consultant can assess the significance of the materials. A resumption of ground disturbing activities shall only be permitted once the Qualified Paleontological Consultant has concluded their assessment. The Qualified Paleontological Consultant shall prepare a letter report that documents the find and identifies recommendations for the treatment and/or deposition of the materials.

4.8 Greenhouse Gas Emissions

Greenhouse Gas Emissions (GHGs) are comprised of atmospheric gases and clouds within the atmosphere that influence the earth's temperature by absorbing most of the infrared radiation that rises from the sun warmed surface and that would otherwise escape into space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor, nitrous oxide (N₂O), and chlorofluorocarbons (CFCs). GHGs are emitted by natural processes and human activities. Anthropogenic (caused or produced by

humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the greenhouse effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change.

Regulatory Framework

The State of California has approved a number of regulations that relate to GHGs, including the following:

Pavley Regulations: California AB 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light duty trucks.

Executive Order S-3-05: California announced on June 1, 2005, through Executive Order S 3-05, the following reduction targets for greenhouse gas emissions:

- By 2010, reduce greenhouse gas emissions to 2000 levels.
- By 2020, reduce greenhouse gas emissions to 1990 levels.
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

Low Carbon Fuel Standard - Executive Order S-01-07: California approved Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020.

SB 1368: In 2006, the State Legislature adopted Senate Bill (SB) 1368, which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for greenhouse gas emissions for the future power purchases of California utilities.

AB 32: The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020.

SB 97: Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption.

A new section to the CEQA Guidelines, Section 15064.4, was added to assist agencies in determining the significance of greenhouse gas emissions. The new section allows agencies the discretion to determine whether a quantitative or qualitative analysis is best for a particular project. However, little guidance is offered on how to determine whether the project's estimated greenhouse gas emissions are significant or cumulatively considerable.

Also amended were CEQA Guidelines Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts respectively. Greenhouse gas mitigation measures are referenced in general terms, but no specific measures are recommended. The revision to the cumulative impact discussion requirement simply directs agencies to analyze greenhouse gas

emissions in an EIR when a project's incremental contribution of emissions may be cumulatively considerable, however it does not answer the question of when emissions are cumulatively considerable.

In order to identify significance criteria under CEQA for development projects, the SCAQMD initiated a Working Group which provided detailed methodology for evaluating significance under CEQA. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 3,000 MTCO₂e for all land use projects. The OCWD has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions and relies upon the SCAQMD draft screening level threshold. Therefore, for purposes of analysis herein, the proposed Project may have a significant adverse impact on GHG emissions if it would generate GHG emissions that exceed the SCAQMD's 3,000 MTCO₂e per year screening threshold. However, given the very limited scale of the proposed construction activities the analysis in this section is based on a qualitative evaluation of the Project.

Project Impacts

A. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

and

B. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant: The operation of the proposed Project would generally be passive as the pipeline turnout would only require a nominal amount of electricity to accommodate the conveyance and dichlorination facilities.

Given the limited scale of construction in comparison to larger construction projects that occur throughout the region and the lack of any components that would generate substantial amounts of GHG during operation, the proposed Project would generate nominal GHG levels that would be far below the threshold of significance of 3,000 MTCO₂e per year. Additionally, activities associated with the Project would be subject to all applicable federal, state, and regional requirements adopted for the purpose of reducing GHG emissions. Further, because the Project would generate GHG emissions substantially below the threshold of significance of 3,000 MTCO₂e per year, it would not interfere with implementation of any of the State's GHG reduction goals for 2030 or 2050. Therefore, the proposed Project would not generate potentially significant levels of greenhouse gases and would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases, resulting in a less than significant impact.

4.9 Hazards/Hazardous Materials

A. Would the project create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Less Than Significant: The State of California defines hazardous materials as substances that are toxic, ignitable, flammable, reactive, corrosive, and show high acute or chronic toxicity, are carcinogenic, have bio-accumulative properties that are persistent in the environment or are water reactive.

The proposed pipeline turnout would include a small de-chlorination facility that would require routine maintenance to replenish chemicals used to remove chlorine from GWRS water that would be discharged into Burris Basin. The operation of the de-chlorination plant would not require the use of any acutely hazardous materials and the operation of this facility, including the transport, use and disposal of hazardous materials, would be conducted in compliance with all applicable local, State, and federal regulations. Compliance with mandatory regulations would ensure that impacts associated with hazardous materials would be less than significant.

Construction operations associated with the installation of the pipeline turnout facilities would involve the handling of incidental amounts of hazardous materials, such as fuels, oils and solvents. The construction of the proposed Project would be required to comply with local, State and federal laws and regulations regarding the handling and storage of hazardous materials. Additionally, during construction operations, best management practices would be implemented that would include hazardous material spill prevention and management practices. Mandatory compliance with all applicable regulations pertaining to hazardous materials would ensure that impacts would be less than significant.

B. Would the project 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?

Less Than Significant: The proposed pipeline turnout would include a small de-chlorination facility that would require the onsite storage and use of chemicals used to remove chlorine from GWRS water that would be discharged into Burris Basin. The operation of the de-chlorination plant would not require the use of any acutely hazardous materials and the operation of this facility, including the transport, use and disposal of hazardous materials, would be conducted in compliance with all applicable local, State, and federal regulations. The Project has been designed to include design features that would restrict public access to the facility and ensure that the components are able to withstand damage from seismic events. Compliance with mandatory regulations would ensure that impacts associated with hazardous materials would be less than significant.

C. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant: No component of the Project involves any hazardous emissions or the handling of acutely hazardous materials. The nearest school to the Project site at Burris Basin in the City of Anaheim is James Guinn Elementary School located at 1051 Sunkist Street in the City of Anaheim, approximately 0.65 miles from the proposed facilities. As the proposed pipeline turnout facility at Burris Basin, including the proposed de-chlorination facilities, would be located at a distance greater than one-quarter mile from the school, the construction and operation of the pipeline turnout facilities would have a less than significant impact.

D. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result, would create a significant hazard to the public or the environment?

No Impact: A review of the Burris Basin site indicated the project site has not been listed in accordance with Government Code Section 65962.5, which indicates that the Project site is not located within or adjacent to a listed hazardous materials site. Accordingly, the project would have no impact associated with hazardous materials sites.

E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact: The nearest airport to the Project site is John Wayne International Airport, located approximately 5.7 miles southwest of the nearest component of the proposed Project. The Project site is not located within airport land use plan for John Wayne International Airport and would not result in any safety hazards or excessive noise associated with the airport. Accordingly, no impacts related to the airport safety and noise hazards would occur.

F. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant: The pipeline turnout facilities would be located within OCWD-owned land that is used as a groundwater recharge basin. The Burris Basin site is not publicly accessible to vehicles and is not used for emergency response or evacuation.

Accordingly, the proposed Project would have a less than significant impact to emergency response and evacuation.

G. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact: According to the City of Anaheim General Plan, no portion of the Project components would be located within areas that are susceptible to wildland fire impacts. Burris Basin is located in an urbanized area and is not located adjacent to any large expanses of wildlands. Therefore, no impacts associated with wildland fires would occur.

4.10 Hydrology/Water Quality

The proposed Project involves the construction of a pipeline turnout to Burris Basin in the City of Anaheim. The proposed Project also includes a modification of OCWD's operational discharges of GWRS water to Carbon Creek Diversion Channel to allow discharges of up to 100% GWRS outflows into the channel and to the downstream reach of the Santa Ana River without a requirement for in-stream blending with non-GWRS water. Additionally, as water within Burris Basin can be pumped to Santiago Basin in the City of Orange, the proposed Project would result in quantities of GWRS water indirectly reaching Santiago Basin, which outlets to Santiago Creek. Accordingly, this section includes an evaluation of the proposed new facilities as well as the potential for impacts to water quality that would occur in relation to the alteration of discharges to Carbon Creek Diversion Channel and the conveyance of GWRS flows to Santiago

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Basin. Portions of this section are based on the Burris & Santiago Basins: GWRS Recycled Water Retention Time Modeling and Buffer Area Analysis Technical Memorandum dated October 12, 2020 and included as Appendix B in this MND, and the GWRS Recycled Water Retention Time Modeling and Buffer Area Analysis Technical Memorandum dated June 25, 2021 included as Appendix C in this MND.

Existing Setting

The study area is located in the lower Santa Ana River Watershed, including a portion of Santiago Creek. The Santa Ana River Watershed is the largest watershed in coastal Southern California, consisting of over 2,800 square miles and encompassing parts of Riverside, San Bernardino and Orange Counties. The primary surface water body within the study area is the Santa Ana River. The study area also overlies the Orange County Groundwater Basin.

Santa Ana River

The Santa Ana River is the most prominent hydrologic feature within the watershed. The Santa Ana River is over 100 miles in length and has over 50 contributing tributaries. The headwaters for the Santa Ana River are in the San Bernardino Mountains to the north. The river extends westerly through the Santa Ana Valley to the Prado Basin where it is joined by several tributaries near Prado Dam. Downstream of Prado Dam, the Santa Ana River flows through the Santa Ana Mountain Canyon into Orange County before discharging into the Pacific Ocean. The flows of the Santa Ana River consist of storm flows and perennial flow (base flow) that increases in the winter and decreases in the summer. The base flow of the Santa Ana River consists almost entirely of treated wastewater discharged from upstream waste water treatment plants. The base flow of the Santa Ana River is a primary source of water to recharge the Orange County Groundwater Basin. Since 1933, OCWD has been diverting water from the Santa Ana River for groundwater recharge. Surface water flows of the Santa Ana River are diverted into a series of recharge basins to replenish the groundwater basin. Virtually all of the base flow of the Santa Ana River is captured by OCWD for groundwater recharge and only a portion of the total storm flow of the Santa Ana River is captured by OCWD for groundwater recharge. The storm water that is not captured by OCWD is lost to the ocean.

Orange County Groundwater Basin

The Orange County Groundwater Basin underlies central and northern Orange County and is bordered by the Santa Ana Mountains to the east, the Pacific Ocean to the west, the Newport-Inglewood Fault to the southwest and Coyote Hills to the north. The basin is contiguous and directly connected with the Central Basin of Los Angeles County to the northwest. The basin reaches depths of over 2,000 feet and is comprised of a complex series of interconnected sand and gravel deposits. The aquifer is divided into three sections, shallow, principal and deep. Most of the water in the basin is extracted from the principal aquifer.

Regulatory Setting

The following is discussion of Federal, State and local water resource programs that are applicable to the Proposed Project.

Clean Water Act

The objectives of the Clean Water Act are to restore and maintain the chemical, physical, and biological integrity of Waters of the United States. The Clean Water Act establishes basic guidelines for regulating discharges of pollutants into the Waters of the United States and requires states to adopt water quality standards to protect health, enhance the quality of water resources and to develop plans and programs to implement the Act. Below is a discussion of sections of the Clean Water Act that are relevant to the Proposed Project.

Section 303 (d) Water Bodies

Under Section 303 (d) of the Clean Water Act, the State Water Resources Control Board (SWRCB) is required to develop a list of impaired water bodies. Each of the individual Regional Water Quality Control Boards are responsible for establishing priority rankings and developing action plans, referred to as total maximum daily loads (TMDLs) to improve water quality of water bodies included in the 303(d) list.

Within Orange County, there are two reaches of the Santa Ana River. Reach 1 extends from the Tidal prism to 17th Street in the City of Santa Ana and Reach 2 extends from 17th Street to Prado Dam. Presently, the Santa Ana River Reach 1 and Reach 2 are not listed as impaired.

Section 402

Section 402 of the Clean Water Act established the National Pollution Discharge Elimination System (NPDES) to control water pollution by regulating point sources that discharge pollutants into Waters of the United States. In the State of California, the EPA has authorized the State Water Resources Control Board (SWRCB) to be the permitting authority to implement the NPDES program. The SWRCB issues two baseline general permits, one for industrial discharges and one for construction activities (General Construction Permit). Additionally, the NPDES Program includes the long-term regulation of storm water discharges from medium and large cities through the MS4 Permit Program.

Short-Term Storm Water Management

Storm water discharges from construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for storm water discharges or be covered by a General Construction Permit. Coverage under the General Construction Permit requires filing a Notice of Intent with the State Water Resources Control Board and preparation of Storm Water Pollution Prevention Plan (SWPPP). Each applicant under the Construction General Permit must ensure that a SWPPP would be prepared prior to grading and implemented during construction. The primary objective of the SWPPP is to identify, construct, implement, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site during construction. BMPs include: programs, technologies, processes, practices, and devices that control, prevent, remove, or reduce pollution.

Long-Term Storm Water Management

The Proposed Project would be implemented in the City of Anaheim. The City of Anaheim is a co-permittee to the County of Orange NPDES MS4 Storm Water Permit and would be

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responsible for the implementation of the permit requirements. Under the NPDES MS4 Storm Water Permit, construction projects are defined as Priority Projects or Non-Priority Projects based on the type of project and/or level of development intensity.

Priority Projects

Projects that are determined to be a Priority Project are required to prepare a Priority Project WQMP based on the County of Orange Model WQMP. The Priority Project WQMP is required to demonstrate that a project would be able to infiltrate, harvest, evapotranspire or otherwise treat runoff generated from an 85th percentile storm over a 24-hour period. The Model WQMP requires that Low Impact Development (LID) site design principles be incorporated into the project to reduce and retain runoff to the maximum extent practicable. Such LID site design principles include, but are not limited to, minimizing impervious areas, and designing impervious areas to drain to pervious areas.

Non-Priority Projects

Certain projects that do not meet the Priority Project criteria are considered Non-Priority Projects and require preparation of Non-Priority Project Plans (NPP). The Non-Priority Project Plan requires documentation of the selection of site design features, source control and any other BMPs included in a project.

State of California Porter Cologne Water Quality Control Act

The Porter Cologne Water Quality Act of 1967 requires the SWRCB and the nine RWQCBs to adopt water quality criteria for the protection and enhancement of Waters of the State of California, including both surface waters and groundwater. The SWRCB sets statewide policy and together with the RWQCB, implements state and federal water quality laws and regulations. Each of the nine regional boards adopts a Water Quality Control Plan or Basin Plan. The study area is included within the Santa Ana Region Basin Plan.

Basin Plan

Beneficial Uses

The Santa Ana Region Basin Plan (Basin Plan) designates beneficial uses for waters for the Santa Ana River Watershed and identifies quantitative and narrative criteria for a range of water quality constituents applicable to certain receiving water bodies in order to protect these beneficial uses. Specific criteria are provided for the larger water bodies within the region as well as general criteria or guidelines for ocean waters, bays and estuaries, inland surface waters, and groundwater basins. The beneficial uses in the Basin Plan are described in Table 2, *Beneficial Use Descriptions*.

Table 2 Beneficial Use Descriptions

Abbreviation	Beneficial Use
GWR	Groundwater Recharge waters are used for natural or artificial recharge of groundwater for purposes that may include, but are not limited to, future extraction, maintaining water quality or halting saltwater intrusion into freshwater aquifers.
REC 1	Water Contact Recreation waters are used for recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses may include, but are not limited to swimming, wading, water skiing, skin and scuba diving, surfing, whitewater activities, fishing and use of natural hot springs.
REC 2	Non-Contact Water Recreation waters are used for recreational activities involving proximity to water, but not normally body contact with water where ingestion of water would be reasonably possible. These uses may include, but are not limited to picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing and aesthetic enjoyment in-conjunction with the above activities.
WARM	Warm waters support warm water ecosystems that may include but are not limited to, preservation and enhancement of aquatic habitats, vegetation, fish, and wildlife, including invertebrates.
LWARM	Limited Warm Freshwater Habitat waters support warm water ecosystems which are severely limited in diversity and abundance.
COLD	Cold Freshwater habitat waters support cold water ecosystems.
BIOL	Preservation of Biological Habitats of Special Significance waters support designated areas of habitats.
WILD	Wildlife Habitat waters support wildlife habitats that may include, but are not limited to the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.
RARE	Rare, Threatened or Endangered Species (RARE) waters support habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened or endangered.
MUN	Municipal and Domestic Supply waters are used for community, military, municipal or individual water supply systems. These uses may include, but are not limited to, drinking water supply.
AGR	Agricultural Supply waters are used for farming, horticulture or ranching. These uses may include, but are not limited to irrigation, stock watering,

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Abbreviation	Beneficial Use
	and support of vegetation for range grazing.
IND	Industrial Service Supply waters are used for industrial activities that do not depend primarily on water quality. These uses may include, but are not limited to mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection and oil well depressurization.
PROC	Industrial Process Supply waters are used for industrial activities that depend primarily on water quality. These uses may include, but are not limited to, process water supply and all uses of water related to product manufacture or food preparation.
NAV	Navigation waters are used for shipping, travel, or other transportation by private, commercial or military vessels.
POW	Hydropower Generation waters are used for hydroelectric power generation.
COMM	Commercial and Sportfishing waters are used for commercial or recreational collection of fish or other organisms
EST	Uses of water that support estuarine ecosystems including, but not limited to preservation or enhancement of estuarine habitats, vegetation, fish, shell fish or wildlife.
WET	Uses of water that support wetland ecosystems, including but not limited to preservation or enhancement of wetland habitats, vegetation, fish, shellfish, or wildlife, and other unique wetland functions which enhance water quality, such as providing flood and erosion control, stream bank stabilization, and filtration and purification of naturally occurring contaminants.
MAR	Use of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shell fish or wildlife.
MIGR	Uses of water that support habitats necessary for migration, acclimatization between fresh and salt water, or other temporary activities by aquatic organisms, such as anadromous fish.
SPWN	Use of water that support high quality aquatic habitats suitable for reproduction and early development of fish.
SHELL	Use of water that support habitats suitable for the collection of filter-feeding shellfish for human consumption, commercial or sports purposes.

As shown in Table 3, *Study Area Surface Water Beneficial Uses*, and Table 3, *Study Area Surface Water Beneficial Uses*, the Basin Plan identifies beneficial uses for the Reach 2 of the

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Santa Ana River, Reach 1 of Santiago Creek, and the Orange County Groundwater Water Basin.

Table 3 Study Area Surface Water Beneficial Uses

Santa Ana River Reach 2
Agricultural Supply
Groundwater Recharge
Recreation 2
Recreation 1
Warm Water Habitat
Wild Water Habitat
Rare, Threatened or Endangered Species
Santiago Creek Reach 1
Municipal and Domestic Supply
Groundwater Recharge
Recreation 2
Recreation 1
Warm Water Habitat
Wild Water Habitat

Table 4 Study Area Groundwater Basin Beneficial Uses

Orange County Groundwater Basin
Municipal Supply Waters
Agriculture Supply Waters
Industrial Process Supply Waters
Industrial Service Supply Waters

Water Quality Objectives

The Basin Plan establishes water quality objectives to ensure the protection of beneficial uses. As shown in Table 5, *Water Quality Objectives (mg/l)*, have been established for Reach 2 of the Santa Ana River, Reach 1 of Santiago Creek, and the Orange County Groundwater Basin.

Table 5 Water Quality Objectives (mg/l)

Reach	TDS	HARD	Na	Cl	TIN	NO ₃ -N	SO ₄	COD	B
Santa Ana River Reach 2	650 ¹	NL	NL	NL	NL	NL	NL	NL	NL
Santiago Creek Reach 1	600	NL	NL	NL	NL	NL	NL	NL	NL
Orange County Groundwater Basin	580	NL	NL	NL	NL	3.4	NL	NL	NL
<p><i>Source: Basin Plan, Santa Ana Regional Water Quality Control Board, 2019</i></p> <p><i>NL = no limit</i></p> <p>¹ <i>Evaluated as a five-year moving average</i></p>									

Project Impacts

A. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant: As shown in Table 2 and Table 3, the Basin Plan identifies Beneficial Uses and water quality objectives for the Santa Ana River, Santiago Creek, and the Orange County Groundwater Basin (within the Project area). The following analysis evaluates if the proposed Project would conflict with beneficial uses and water quality objectives established in the Basin Plan and if the proposed Project would further impair any listed 303 (d) Impaired Water Bodies.

Beneficial Uses

The construction of the pipeline turnout facilities would occur within Burris Basin, which is groundwater recharge basin that does not directly outflow to any storm drain facilities or water bodies. Surface water generated at the pipeline turnout site during construction would ultimately infiltrate into the groundwater basin at Burris Basin/Riverview Basin or indirectly at Santiago Basin (as water from Burris Basin is periodically conveyed to Santiago Basin for recharge via the Burris Basin Pump Station and associate pipeline). During construction, Best Management Practices (BMPs) would be implemented to minimize any surface water runoff impacts. Such control measures could include street weeping, storm drain inlet protection, tracking controls, waste management and regular inspections and maintenance of BMPs. With the implementation of mandatory BMPs, potential construction-related storm water impacts associated with the Project would be less than significant.

Water Quality Objectives

As shown in Table 5, the only water bodies within the study area that have numeric water quality objectives would be the Orange County Groundwater Basin, Reach 1 of Santiago Creek, and Reach 2 of the Santa Ana River. The Basin Plan establishes a Total Dissolved Solid (TDS)

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water quality objective of 580 mg/l for the Orange County Groundwater Basin, a TDS objective of 600 mg/l for Santiago Creek Reach 1, and a TDS objective of 650 mg/l for Reach 2 of the Santa Ana River (the latter evaluated as a five-year rolling average). Additionally, the Basin Plan establishes a nitrate as nitrogen objective of 3.4 mg/l for the Orange County Groundwater Basin. There is the potential surface water runoff generated from construction activities could contain elevated levels of TDS. However, the surface water runoff would be controlled by BMP's and it would be unlikely that it would infiltrate into the groundwater basin and conflict with the Basin Plan Water Quality objectives.

Title 22 Compliance

Title 22 of the California Code of Regulations provides specific requirements to protect public water supplies when recycled municipal wastewater is discharged to surface waters, which are regulated by the California Division of Drinking Water. In the existing condition, OCWD recharges recycled wastewater produced at the GWRS facility to several groundwater basins north of Burris Basin, in addition to direct injection at OCWD's Mid-Basin Injection Project and at the Talbert Barrier, southwest of the Project site. The proposed Project would introduce GWRS water to Burris Basin, Riverview Basin, the Santiago Basins, which can include the interconnected Smith Basin during very wet years, and the Santiago Creek downstream of Santiago Basins. The proposed Project would also result in an operational modification that would allow undiluted releases of GWRS water into the Carbon Creek Diversion Channel to the Santa Ana River.

In order to satisfy Title 22 regulatory requirements, OCWD conducted modeling of the potential influence of discharged recycled water at these facilities which is summarized in Appendix B and Appendix C. The current State of California Title 22 requirements regarding Groundwater Replenishment Reuse Projects (GRRPs) requires the establishment of both primary and secondary boundaries (i.e., buffer areas); the primary boundary is the traditional area in which the construction of new drinking water wells is restricted, while the secondary boundary is a zone of potential controlled potable well construction. Construction of drinking water wells within the secondary boundary could subsequently affect the primary boundary, thereby requiring further study and potential mitigating activities prior to potable well construction. Monitoring wells along the flow path between each recycled water recharge area and the nearest downgradient drinking water well are also required. The modeling used an eight-month primary and a ten-month secondary boundary in the evaluation using the OCWD Basin Model, which correspond to 4- and 5-log virus removal due to a 50% required safety factor for model-based boundaries.

Burris and Riverview Basins

The result of the modeling of the placement of recycled water into Burris Basin shows that the flow paths are consistent with the groundwater gradient and hydrogeologic conditions; groundwater flows primarily westward in the Shallow Aquifer and to the south/southwest in the Principal Aquifer. Recharge in the northern half of Burris Basin migrated to the northwest within the Shallow Aquifer due to a merge zone where the intervening aquitard between the Shallow and Principal aquifers is largely absent, thus causing the particles reaching this area to move vertically downward from the Shallow Aquifer to the Principal Aquifer.

There are several production and/or extraction wells down-gradient from Burris Basin, including City of Anaheim production well A-46. Well A-46 is screened in the Principal Aquifer and is the first downgradient drinking water production well to receive particles. Particles reaching A-46 in the Principal Aquifer originated from recharge into Burris Basin and following the flow path described above, i.e., traveling northwest within the Shallow Aquifer and would migrate vertically downward in the merge zone to the Principal Aquifer and then flow south/southwest to A-46 in approximately 2,256 to 2,585 days. Two existing OCWD monitoring wells are proposed to fulfill the state's GRRP monitoring requirements for recharge of recycled water at Burris and Riverview Basins under Title 22.

Santiago Basins

The modeling of the placement of recycled water into Santiago Basin shows that groundwater flows towards the west and southwest in both the Shallow and Principal aquifers. Santiago Basins are deep with a maximum depth of approximately 145 feet below the surrounding ground surface with recharge predominantly occurring through the side walls from elevation 220 to 285 feet msl rather than through the bottom of the Basins.

The modeling indicates that the majority of the particles on the west side of Santiago Basin remained in the Shallow Aquifer for a prolonged time and distance due to the modeled aquitard between the Shallow and Principal aquifers in this more westerly region. There were only a few modeled particles that migrated vertically downward to the Principal Aquifer. There are eight production wells to the west and southwest in the immediate proximity of Santiago Basins: three Serrano Water District (formerly Serrano Irrigation District) wells SID-3, SID-4 and SWD-5; Irvine Ranch Water District well IRWD-OPA1; and City of Orange wells O-23, O-24, O-25, and O-27. There are two East Orange County Water District production wells to the south of Santiago Basins: EOCW-E and EOCW-W. All ten production wells are screened in the Principal Aquifer.

Located to the west-northwest of Santiago Basin, well SID-4 has not been in operation regularly since 2011, and Serrano Water District staff have confirmed there is no intent to return this well to regular operation and that it will be likely destroyed in the future. Therefore, this well was treated as inactive in the modeling. Located farther west are Serrano wells SID-3 and SWD-5. The majority of the particles released from Santiago Basin travelled toward the west in the Shallow Aquifer and bypassed SID-3 and SWD-5, not migrating vertically down to the Principal Aquifer. However, a few particles in the model migrated vertically down to the Principal Aquifer beneath the Basins after travelling in the Shallow Aquifer for only a short distance, and eventually travelled to the west arriving at SWD-5 in 568 to 1,757 days and SID-3 in 1,057 to 1,741 days. Well SWD-5 is the first downgradient drinking water production well to receive particles from recharge of recycled water at the Santiago Basins.

Well IRWD-OPA1 is located less than 600 feet southwest of Santiago Basin, and screened from 390 to 750 feet below ground surface within the Principal Aquifer. While currently inactive, this well is expected to return to operation in the future. Therefore, IRWD-OPA1 was simulated as active in this modeling with approximately 930 AF annual production (scaled up from annual production of 833 AF (July 2015 to June 2016)). The modeling indicated that most particles originating from Santiago Basin would bypass this well above the screened interval, remaining

in the Shallow Aquifer, though some particles would migrate down to the Principal Aquifer in a short time due to the lack of an intervening aquitard between the Shallow and Principal aquifers in this area. These particles would subsequently travel southward and arrived at IRWD-OPA1 in approximately 723 to 2,090 days. Well O-24, west of IRWD-OPA1, would capture a few particles released from the northern part of the Basins in 2,298 to 3,155 days, and one particle released from the Santiago Basin was modeled to arrived at well O-23, southwest of IRWD-OPA1, in the Principal Aquifer in 2,050 days. Well O-27 is located farther to the southwest from Santiago Basin. The model indicated that two particles released from Santiago Basin would migrate down to the Principal Aquifer and arrive at O-27 in 2,440 to 3,262 days. Well O-25 is located approximately 700 feet east of O-27 and was not impacted.

The modeling indicated that a few particles released from Santiago Basin would travel slightly eastward and would migrate down into the Principal Aquifer and continue to travel southward, finally reaching production wells EOCW-E and EOCW-W in approximately 799 to 1,433 days. Particles released from Santiago Basins would also arrive at two other production wells, ANGeo and ABBY-A, which are both screened in the Shallow Aquifer and located west of Santiago Basins, in 1,337-1,407 days and 2,949-2,998 days, respectively.

As water held in Santiago Basin can discharge into Santiago Creek, modeling was conducted to evaluate the potential impact to drinking water wells in the event that recycled water is recharged into the creek. The particle tracking results show that groundwater flows to the east and southeast in the Shallow Aquifer in the vicinity of the creek. Particles released from the bottom of the shallow Santiago Creek remained in the Shallow Aquifer, and no production wells in the area, screened in either the Shallow or Principal Aquifer, were impacted.

One existing monitoring well and one new monitoring well (to be constructed Summer 2022) are proposed to fulfill the state's GRRP monitoring requirements for recharge of recycled water at the Santiago Basins under Title 22.

Carbon Creek Diversion Channel and Santa Ana River

Modeling recycled water recharge via the lower Santa Ana River downstream of the Carbon Creek Diversion Channel shows that the simulated groundwater flow paths are consistent with the observed groundwater gradient and hydrogeologic conditions; groundwater flows primarily westward in the Shallow Aquifer and to the south/southwest in the Principal Aquifer.

Recharge in the northern portion of the lower SAR migrated to the west, southwest or northwest within the Shallow Aquifer, while also migrating vertically downward to the Principal Aquifer due to a merge zone where the intervening aquitard between the Shallow and Principal aquifers is largely absent. This is the same merge zone noted in the discussion of recharge of recycled water at Burris and Riverview Basins above. From this merge zone area, groundwater flow within the Principal Aquifer is to the south/southwest.

There are several production wells downgradient from the lower reach of the SAR, including City of Anaheim production well A-46, two small system production wells (ABBY-A and NOBL-O) and Pacific Scientific (PSCI) remediation wells. A-46 is screened in the Principal Aquifer. Particles reaching A-46 in the Principal Aquifer originated from recharge into the upper portion of the lower SAR. After initially travelling southwest or northwest within the Shallow Aquifer and

then migrating vertically downward in the aforementioned merge zone to the Principal Aquifer, they flowed south/southwest within the Principal Aquifer to A-46 in approximately 2,781 to 3,186 days. Well A-46 is the first downgradient drinking water production well to receive particles from recharge of recycled water at the Santa Ana River.

Five existing OCWD monitoring wells along the lower reach of the SAR are proposed to fulfill the state's GRRP monitoring requirements, including four in the Shallow Aquifer and one in the Principal Aquifer. Two additional wells will be monitored voluntarily, but are not proposed as compliance wells due to lack of accessibility.

Lower Santiago Creek

For Title 22 compliance purposes, recharge of recycled water via Santiago Creek below Hart Park was evaluated separately, because this is likely to occur with less frequency than recharge of recycled water via Santiago Creek above Hart Park. Modeling of lower Santiago Creek recharge shows that the simulated groundwater flow paths are consistent with the observed groundwater gradient and hydrogeologic conditions; groundwater flows primarily southwestward in the Shallow Aquifer. Particles were released along the bottom of Santiago Creek and remained in the Shallow Aquifer within the project area. Based on the available borehole logs in this area, a laterally continuous competent aquitard exists between the Shallow and Principal aquifers in this area that is represented within the model. Therefore, simulated recharge along lower Santiago Creek into the Shallow Aquifer did not migrate down into the Principal Aquifer within the project area during the nine-year model simulation and may not reach the Principal Aquifer even with an extended model simulation due to the laterally continuous aquitard which thickens to the southwest.

There are several production wells in the vicinity of the lower Santiago Creek, including City of Santa Ana large system production wells SA-18, SA-24, SA-36, and SA-39, City of Santa Ana standby large system production wells SA-27 and SA-28, and one small system well RVGC-SA used for irrigation only. These large system production wells (SA-18, SA-24, SA-27, SA-28, SA-36, and SA-39) are all screened in the Principal Aquifer and were not impacted by recharge in the lower reach of the Santiago Creek. Irrigation well RVGC-SA is screened in the Shallow Aquifer and located downgradient from Santiago Creek. Particles released from the west downstream end of Santiago Creek travelled towards the southwest and arrived at this well in approximately 601 to 1,006 days.

Two existing wells are proposed to fulfill the state's GRRP monitoring requirements for recharge of recycled water at the Lower Santiago Creek under Title 22.

Based on the modeling identified above, sufficient particle travel times would occur between any release of GWRS recycled water at Burris Basin, Santiago Basin, Santiago Creek, and the Santa Ana River downstream of the Carbon Creek Diversion Channel and the particles reaching a water supply well to meet Title 22 compliance requirements. Additionally, the GWRS water is of sufficient high quality that it satisfies the water quality objectives for the Orange County Management Zone and the surface water bodies. The average TDS of GWRS water is less than 100 milligrams per liter and the average nitrate (as nitrogen) concentration is less than 3 milligrams per liter. Accordingly, impacts associated with the discharge of GWRS water into these surface water bodies would result in less than significant impacts to groundwater quality.

Section 303 (d) Impaired Water Bodies

The RWQCB does not list any impaired water bodies within the study area for the proposed Project. Therefore, the proposed Project would result in less than significant impacts associated with impaired water bodies.

B. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact: The purpose of the proposed Project is to increase groundwater supplies by providing additional facilities to recharge recycled water produced by OCWD. Accordingly, no component of the Project would decrease or interfere with groundwater recharge and no impact would occur.

C. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on-or-offsite?

Less Than Significant: Construction of the pipeline turnout would be confined to the limited construction area that has been identified for the Project and would not alter any existing drainage patterns within the surrounding area. The construction activities would expose a minimal amount of soil that could potentially be subject to water and/or wind erosion impacts. There would also be the potential that construction equipment could track sediment from the well site and transport to other locations that could drain into local and/or drainage facilities. To minimize the potential for sediment transport, mandatory BMPs would be implemented during the construction of the Project which would ensure that the Project would have a less than significant impact on receiving water bodies.

D. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on-or-off site?

Less Than Significant: The pipeline turnout would occur within a groundwater recharge basin that functions as a terminal basin in regard to drainage. Only nominal amounts of impervious surfaces would be constructed and no measurable increase in existing rates of surface water runoff would occur. No potential increases in onsite or offsite flooding impacts would occur and impacts associated with on- or off-site flooding would be less than significant.

E. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant: The pipeline turnout would occur within a groundwater recharge basin that functions as a terminal basin in regard to drainage. Only nominal amounts of impervious surfaces would be constructed and no measurable increase in existing rates of surface water

runoff would occur. Accordingly, the construction and development of the proposed Project would not create or contribute runoff with volumes or pollution concentrations that would exceed the existing condition at the Project site. Therefore, impacts associated with the capacity of existing or planned storm water drainage systems or polluted runoff would be less than significant.

F. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would impede or redirect flood flows?

Less Than Significant: The pipeline turnout would occur within a groundwater infiltration basin that functions as a terminal basin in regard to drainage. The proposed facilities would be conducted wholly outside of the flood control channels associated with the Santa Ana River and would not affect any stormwater conveyance functions. Only nominal amounts of impervious surfaces would be constructed and no measurable increase in existing rates of surface water runoff would occur. Accordingly, the construction and development of the proposed Project would not create or contribute runoff with volumes that would impede or redirect flood flows. Therefore, impacts associated with the capacity of existing or planned storm water drainage systems or polluted runoff would be less than significant.

G. Would the project, if located in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant: The proposed Project facilities are located inland and would not be exposed to any risk of tsunami. The pipeline turnout would be located adjacent to the Santa Ana River and Burris Basin, which could result in flooding or seiche in the event of a strong earthquake. However, the proposed facilities would be designed to withstand damage from flooding and/or seiche. Moreover, the proposed facilities do not contain any substantial amounts of pollutants that would pose a risk of release in the event that inundation occurs. Accordingly, impacts associated with this issue would be less than significant.

H. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant: The construction of the Project would be conducted in accordance with all applicable local, State, and federal regulations that relate to water quality, ensuring that construction impacts to water quality and the groundwater management plan would be less than significant. The purpose of the proposed Project is to convey recycled water to the groundwater basin to enhance OCWD's efforts to sustainably manage the groundwater basin. Additionally, the GWRS water is of sufficient high quality that it satisfies the water quality objectives in the Regional Board's Water Quality Control Plan for the Orange County Management Zone and the surface water bodies. Accordingly, impacts associated with the implementation of a water quality control plan or a sustainable groundwater management plan would be less than significant.

4.11 Land Use and Planning

A. Would the project physically divide an established community?

No Impact: The proposed Project would occur within a portion of a recharge basin in the City of Anaheim. The Project does not involve any components that would restrict access between two communities. Therefore, the Project would not occur within an established community or affect any nearby communities and no impacts would occur.

B. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purposes of avoiding or mitigating an environmental effect?

Less Than Significant: The proposed Project would occur within a portion of a recharge basin in the City of Anaheim. No components of the Project would require the approval of a zone change or a modification of the General Plan land use designation for the Project sites. All construction at the Project site would be conducted in accordance with adopted plans, policies and regulations that are intended to avoid or mitigate an environmental effect. The analysis identified throughout this document indicates that, with mitigation, the Project would not result in any significant environmental impacts. Accordingly, impacts associated with land use plans, policies and/or regulations would be less than significant.

4.12 Mineral Resources

A. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact: According to the City of Anaheim General, the Project site is not known to contain mineral deposits that are of value to the region and/or residents of the State. Accordingly, no impacts would occur.

A. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact: According to the City of Anaheim General, the Project site is not known to contain locally or regionally important mineral deposits. The decommissioning activities would have no affect on any mineral resources. Accordingly, no impacts would occur.

4.13 Noise

Background

A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. The zero point on the dB scale is based on the lowest sound level that a healthy, unimpaired human ear can detect. Changes of 3 dB or fewer are only perceptible in laboratory environments. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness.

Regulatory Setting

Federal Regulations

The Occupational Safety and Health Administration (OSHA) agency limits noise exposure of workers to 90 dB Leq or less over 8 continuous hours, or 105 dB Leq or less over 1 continuous hour.

State Office of Noise Control Standards

The California Office of Noise Control has set long term land use compatibility noise standards for different types of land uses and has encouraged local jurisdictions to adopt them. The Proposed Project would not result in long term noise impacts. Therefore, the State Office of Noise Control long term noise standards would not be applicable.

Local Regulations

The following lists the City of Anaheim regulations that are applicable to all development projects in the City.

City of Anaheim General Plan Noise Standards

The City of Anaheim General Plan Noise Element provides a noise standard that limits exterior noise impacts to all residential properties to 65 dBA.

Municipal Code Section 6.70.010 Construction Noise Standards

Section 6.70.010 of the City's Municipal Code exempts construction activities from the City's exterior noise standards provided that construction activities occur between 7:00 AM and 7:00 PM.

Project Impacts

A. Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?

Less Than Significant: This impact discussion analyzes the potential for Project construction noise and operational noise to cause an exposure of persons to or generation of noise levels in excess of City of Anaheim noise standards. The noise levels at Burris Basin in the City of Anaheim would be influenced by pipeline turnout construction and operation. No other components of the proposed Project would generate or otherwise affect noise levels.

Section 6.70.010 of the City of Anaheim Municipal Code exempts construction noise from the City noise standards that occurs between the hours of 7:00 a.m. and 7:00 p.m. However, the City of Anaheim construction noise standards do not provide any limits to the noise levels that may be created from construction activities and even with adherence to the City standards, the resultant construction noise levels may result in a significant substantial temporary noise increase to the nearby residents.

In order to determine if the proposed construction activities would create a significant substantial temporary noise increase, the OSHA agency limits for noise exposure to workers have been

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utilized. The use of a significance threshold using an OSHA standard is considered conservative. The OSHA standard limits noise exposure of workers to 90 dB or less over eight continuous hours and this standard has been utilized to analyze the construction noise impacts to the nearby sensitive receptors.

Construction Impacts

The pipeline turnout construction at Burris Basin would take place within OCWD-owned property that is used as an infiltration basin in the City of Anaheim. The noise-generating construction activities would involve shallow excavations, pipeline installations and the construction of ancillary facilities including a new de-chlorination facility. The construction activities would occur in the southwestern portion of Burris Basin.

The nearest sensitive receptor to the construction area in Burris Basin would be homes located west of Burris Basin along South Chantilly Street. The nearest home would be located approximately 500 feet from the proposed construction area. The proposed construction activities do not include any activities that would produce large amounts of noise, such as pile driving. The construction activities associated with the pipeline turnout would be limited in scale and would have no potential to exceed the OSHA 90dB standard given the 500-foot distance between the sensitive receptors and the Project work area. Moreover, the construction activities at Burris Basin would be conducted within the construction noise exemption time periods identified in the City's Municipal Code. Accordingly, the Project would result in less than significant impacts associated with construction noise at Burris Basin.

The operation of the pipeline turnout would require occasional vehicular trips to service the de-chlorination facility and for routine maintenance. The operational noise levels would be nominal and would not include any noise-intensive activities. Accordingly, impacts related to operational noise at Burris Basin would be less than significant.

B. Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant: Vibration impacts from construction and operational activities associated with the proposed Project would be a function of the vibration generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The construction activities for the proposed Project involves the construction of the pipeline turnout facilities at Burris Basin in the City of Anaheim. In addition, operational activities associated the maintenance of the turnout facilities will require the occasional use of construction equipment.

Since the city's Municipal Code and the General Plan do not provide a quantifiable vibration threshold, Caltrans guidance has been utilized, which defines the threshold of perception from transient sources at 0.25 inch per second PPV.

The proposed Project does not include the use of any heavy equipment that would be sufficient to produce substantial amounts of vibration, such as pile drivers or heavy drill rigs. Moreover, the distance between the proposed construction activities at Burris Basin and the nearest sensitive receptor will further ensure that no potential for vibration impacts would occur. Therefore, a less than significant vibration impact would occur.

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant: The nearest airport to the proposed Project site is John Wayne Airport, which is located as near as 5 miles south/southwest of the Project site. The proposed Project consists of the construction of new pipeline turnout facilities, which would be a passive operation that would not require anyone onsite and would not introduce new sensitive receptors to the Project site. Accordingly, impacts associated with aircraft noise would be less than significant.

4.14 Population and Housing

A. Would the project induce substantial unplanned population growth in an area, either directly by proposing new homes and indirectly through extension of roads or other infrastructure?

No Impact: The proposed Project does not include any new homes and would not extend new infrastructure into any undeveloped area and would not provide new underground water supplies to any undeveloped areas. Implementation of the proposed Project would not induce any substantial population growth into the study area. No impact would occur.

B. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact: The implementation of the proposed Project would not displace any existing housing and therefore would not require the construction of any replacement housing. No impact would occur.

4.15 Public Services

A. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?

No Impact: Fire Protection. The proposed Project would be operated and maintained by OCWD and would not increase the demand for fire protection services over the current level of demand that occurs within the City of Anaheim and would not require the construction of any new governmental facilities. No impact would occur.

No Impact: Police Protection. The proposed Project would be operated and maintained by OCWD and would not increase the demand for police protection services over the current level of demand that occurs within the City of Anaheim and would not require the construction of any new governmental facilities. No impact would occur.

No Impact: Schools. The proposed Project would be operated and maintained by OCWD and would not generate any students. Furthermore, the operation of the Project would not affect the use of any other nearby schools. No impact would occur.

No Impact: Parks. The Project would not increase the demand for parks over the current level of demand that occurs within the City of Anaheim and would not require the construction of any new governmental facilities. No impact would occur.

No Impact: Other Public Facilities. The Project would not increase the demand for libraries, hospitals, or any other public facilities over the current level of demand that occurs within the City of Anaheim. No impact would occur.

4.16 Recreation

A. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact: The implementation proposed Project would not involve any activities that would increase the use of existing neighborhood parks or recreation facilities. No impact would occur.

B. Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact: The proposed Project does not propose new recreation facilities or result in the need for new or expanded recreation facilities. No impact would occur.

4.17 Transportation/Traffic

A. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities?

Less Than Significant: The Project components would each occur outside of public roadways, bicycle lanes, and pedestrian facilities. The operation of the proposed Project would generate only a nominal number of vehicular trips associated with maintenance activities. Accordingly, the operation of the Project would not include any components that would conflict with a program, plan, ordinance, or policy addressing the circulation system and impacts would be less than significant.

The construction of Project facilities in the City of Anaheim would temporarily generate vehicular trips during the construction period which would affect nearby roadways. However, due to the limited scale of the construction activities, the anticipated number of vehicular trips that would be nominal in comparison to traffic volumes that occur along nearby roadways. Therefore, the proposed Project would not have the ability to affect levels of service on nearby roadways and would result in less than significant impacts related to traffic.

B. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 Subdivision (b)?

Less Than Significant: Due to the nature of the proposed Project, which would generate nominal temporary volumes of vehicular trips during construction and only occasional single

vehicle trips during operation, the OCWD as Lead Agency has determined that the use of a qualitative analysis of vehicle miles traveled (VMT) in accordance with CEQA Guidelines Section 15064.3 (b) (3) is appropriate. During construction, it is anticipated that contractor vehicles, as well as deliveries and cutting removals would utilize routes that begin and end within Orange County, with one-way trip lengths likely to be approximately 10 miles or less. In some instances, deliveries may require longer trip lengths. However, because of the limited scale of the Project, the proposed Project's traffic volumes would be minor in comparison to regional traffic generation. The Project would occur in areas that are supported by high-quality transit corridors. The limited scale of the Project and the nature of the construction operation activities would ensure that the construction of the Project would not result in the generation of an excessive or a substantial amount of VMT ensuring that the Project would have a less than significant impact in relation to CEQA Guidelines Section 15064.3 Subdivision (b).

C. Would the project substantially increase hazards due to a geometric design feature or incompatible uses?

Less Than Significant: The Project components would each occur outside of public roadways, bicycle lanes, and pedestrian facilities. No component of the Project would affect any changes to roadway design or function. Therefore, the Project would not result in any new or increased roadway hazards due to geometric design features or incompatible uses and impacts would be less than significant.

D. Would the project Result in inadequate emergency access?

Less Than Significant: The Project components would each occur outside of public roadways. The construction and operation of the pipeline turnout facilities at Burris Basin would have no impact on emergency access as the facilities would be located within OCWD property used as a recharge basin. Therefore, impacts associated with emergency access would be less than significant.

4.18 Tribal Cultural Resources

A. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place or object with cultural value to a California Native American tribe and that is listed or eligible for listing in the California Register of Historic Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1 (K)??

Less Than Significant: On April 9, 2020, OCWD contacted three local tribes that have requested to be informed of projects under AB 52: The tribes would include Joyce Perry from Juaneno Band of Mission Indians Acjachemen, Andrew Salas from Gabrieleno Band of Mission Indians-Kizh Nation and Anthony Morales from the San Gabriel Band of Mission Indians. The tribes were requested to provide additional information in regard to Native American Tribal Cultural Resources within the project area and the potential for them to be encountered during the project construction activities. No tribes provided a response to the notification and no further consultation efforts were conducted. Accordingly, no tribal cultural resources were

identified within the areas subject to the proposed Project and impacts associated with tribal cultural resources would be less than significant.

B. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape, sacred place or object with cultural value to a California native American tribe and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in Subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant: As described above, the tribal representatives that were contacted did not provide a response indicating that any tribal cultural resources occur within the areas affected by the proposed Project. Accordingly, impacts associated with tribal cultural resources would be less than significant.

4.19 Utilities/Service Systems

A. Would the project induce require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant: The Project would not affect any existing utility facilities or otherwise require the relocation or construction of utilities beyond the proposed installation of a pipeline turnout to the existing GWRS pipeline. Accordingly, impacts would be less than significant.

B. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant: The purpose of the proposed Project would provide for additional infiltration of purified water produced at OCWD's GWRS facility. The operation of the proposed Project would not generate a demand for water supplies or service. Therefore, impacts would be less than significant.

C. Would the project result in a determination by the wastewater treatment provider which services or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact: The proposed Project would not construct wastewater treatment facilities or include any components that would generate wastewater. Therefore, the implementation of the proposed Project would not have any impact on the capacity of wastewater treatment providers to the area.

D. Would the project generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant: The operation of the proposed Project would not require ongoing solid waste disposal service. Construction operations for the Project would generate minimal amounts of solid waste. The solid waste would be disposed of in the Brea Olinda Landfill which

accepts up to 8,000 tons per day and has adequate capacity to accept the solid waste that would be produced during construction. The amount of solid waste generated from proposed project would have a less than significant impact on the capacity of the Brea Olinda Landfill. No mitigation measures required.

E. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant: The proposed Project would not involve any activities that would be in conflict with federal, state and local statutes and regulations related to solid waste. All waste generated from the construction and operation of the proposed Project would be disposed of in accordance with local, state and federal laws. Therefore, impacts associated with solid waste would be less than significant.

4.20 Wildfire

If located in or near State responsibility areas or lands classified as very high fire severity zones, would the project:

A. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant: The pipeline turnout facilities would be located within OCWD-owned land that is used as a recharge basin. The Burris Basin site is not publicly accessible to vehicles and is not used for emergency response or evacuation. Accordingly, the proposed Project would have a less than significant impact to emergency response and evacuation.

B. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact: The proposed Project site is not located within an area designated as having a high risk of wildland fire by the City of Anaheim General Plan. The Project would be constructed within a primarily urbanized portion of the City of Anaheim. No wildlands are located within the Project vicinity and the nature of the proposed Project would have no potential to generate or exacerbate any risks associated with wildfires.

C. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, or emergency water sources that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact: The proposed Project is not located within an area designated as having a high risk for wildland fire. The Project would be constructed within a primarily urbanized portion of the City of Anaheim. No wildlands are located within the Project vicinity and due to the nature of the Project, it would have no potential to generate or exacerbate any risks associated with wildfires.

D. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope stability, or drainage changes?

Less Than Significant: The proposed Project is not located within an area designated as having a high risk for wildland fire. The Project would be constructed within a primarily

urbanized portion of the City of Anaheim. No wildlands are located within the Project vicinity and due to the nature of the Project, it would have no potential to generate or exacerbate any risks associated with wildfires.

No Impact: The proposed Project is not located within an area designated as having a high risk for wildland fire. The Project would

be constructed within a primarily urbanized portion of the City of Anaheim. Due to the nature of the proposed facilities, the Project would have no potential to affect downstream flooding or landslides. Impacts would be less than significant.

4.21 Mandatory Findings of Significance

A. Would the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife populations to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or pre-history?

Less Than Significant with Mitigation Incorporated: Implementation of the proposed Project would not result in direct impacts to sensitive plants, wildlife or habitat. The Project could indirectly result in potentially significant impacts to a California Least Tern nesting site located at the Burris Basin facility in the event that non-native fish health is affected. The proposed Project would not result in any impacts to any known cultural or paleontological resources and the potential to encounter unknown cultural or paleontological resources would be very low. Mitigation Measures have been incorporated into the proposed Project to avoid significant impacts to California Least Tern as well as for unknown cultural and paleontological resources that might be present.

B. Would the project have impacts that are individually limited, but cumulatively considerable?

Less Than Significant with Mitigation Incorporated: The proposed Project would comply with local and regional planning programs, applicable codes and ordinances, State and federal laws and regulations and project-specific mitigation measures. No component of the Project would result in any impacts that are individually limited but cumulatively considerable beyond the potentially significant impacts associated with biological resources and cultural resources identified in this document. Compliance with mandatory local and regional programs, applicable codes, ordinances, and the implementation of mitigation measures identified in this document would reduce the proposed Project's incremental contributions to cumulative impacts to a less than significant level.

C. Would the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant with Mitigation Incorporated: The proposed Project would comply with local and regional planning programs, applicable codes, and ordinances, State and Federal laws and regulations and project-specific mitigation measures to ensure that long term operation activities and short-term construction activities associated with the proposed project would not result in direct, or indirect adverse impacts to human beings.

SECTION 5.0 SUMMARY OF MITIGATION MEASURES

MM BIO-1: Prior to the operational introduction of GWRS water into Burris Basin, the OCWD Project Biologist shall prepare a Burris Basin Fish Management Plan (Fish Management Plan), which shall be implemented throughout the operational lifetime of the Project. The Fish Management Plan shall require active weekly monitoring of Burris Basin to observe non-native fish health during any period when flows of GWRS water into Burris Basin reach or exceed 20 cubic feet per second (CFS) for three (3) or more consecutive days. The Fish Management Plan shall also identify other measures that OCWD will implement to reduce impacts to nesting California Least Terns which may include, but is not limited, to the following:

- Laboratory analysis of surface water within Burris Basin to monitor water quality;
- Introduction of non-native fish to Burris Basin to increase the availability of the feeding stock;
- Introduction of nutrients or other additives to Burris Basin to supplement inflows of purified GWRS water in a manner that supports non-native fish health;
- Adjustment of blending rates with Santa Ana River water within Burris Basin;
- Provision of supplemental feeding vessels.

The Fish Management Plan shall be revised, as determined necessary by the OCWD Project Biologist, during the operational lifetime of the Project in order to incorporate new information such as scientific data or the results of laboratory analysis of the surface water in Burris Basin.

MM CR-1: During all ground disturbing activities, the OCWD Project Manager and/or their designee (including the Construction Supervisor) shall ensure that, in the event that any evidence of cultural resources are discovered, all work within the vicinity of the find shall immediately halt until a Qualified Cultural Resources Consultant can assess the significance of the materials. A resumption of ground disturbing activities shall only be permitted once the Qualified Cultural Resources Consultant has concluded their assessment. The Qualified Cultural Resources Consultant shall prepare a letter report that documents the find and identifies recommendations for the treatment and/or deposition of the materials.

MM PALEO-1: During all ground disturbing activities, the OCWD Project Manager and/or their designee (including the Construction Supervisor) shall ensure that, in the event that any evidence of cultural or paleontological resources are discovered, all work within the vicinity of the find shall immediately halt until the District's Qualified Paleontological Consultant can assess the significance of the materials. A resumption of ground disturbing activities shall only be permitted once the Qualified Paleontological Consultant has concluded their assessment. The Qualified Paleontological Consultant shall prepare a letter report that documents the find and identifies recommendations for the treatment and/or deposition of the materials.

SECTION 6.0 REFERENCES

Anaheim General Plan and Zoning Code Update Environmental Impact Report No. 330, Certified May 25, 2004

Burris Basin GWRS Turnout Project Draft Preliminary Design Report, Stantec Consulting Services Inc., July 1, 2019

City of Anaheim General Plan, May 2004

GWRS Recycled Water Retention Time Modeling and Buffer Area Analysis Technical Memorandum dated June 25, 2021

GWRS Recycled Water Retention Time Modeling and Buffer Area Analysis Technical Memorandum dated October 12, 2020