WESTERN RIVERSIDE COUNTY
REGIONAL WASTEWATER AUTHORITY

Initial Study
and
Mitigated Negative Declaration
Odor Mitigation Project

Western Riverside County Regional Wastewater Authority Treatment Plant

Prepared by:
Roy Leidy
Keith S. Dunbar (In Memoriam)
K.S. Dunbar & Associates, Inc.

K.S. DUNBAR & ASSOCIATES

August 2020

Table of Contents

List of Tables

List of Figures

Acronyms and Abbreviations

AADT	annual average daily traffic
ADOE	Archaeological Determinations of Eligibility
AERMOD	Atmospheric Dispersion Modeling
AG	Agriculture
AQMP	Air Quality Management Plan
ARB	Air Resources Board
ASTM	American Society of Testing and Materials
ATC	Authority to Construct
BTF	Biotrickling filter
CAA	Clean Air Act
CAAQS	California Air Quality Standards
CDFW	California Department of Fish and Wildlife
CARB	California Air Resources Board
Caltrans	California Department of Transportation
Cal Recycle	California Department of Resources Recycling and Recovery
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESA	California Endangered Species Act
cfm	cubic feet per minute
cfs	cubic feet per second
CH_4	methane
CH2M	CH2M HILL Companies, Ltd.
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CRWQCB, SAR	California Regional Water Quality Control Board, Santa Ana Region
dB(A)	decibels on the A-scale
DMDS	dimethyl disulfide
DMS	dimethyl sulfide

DS	dissolved sulfides
DT	detection threshold
D/T	dilutions to threshold
DTSC	Department of Toxic Substances Control
DV	Design Value
DWR	Department of Water Resources
EA	Environmental Assessment
EIR	Environmental Impact Report
ENED	Estimated Number of Exceedance Days
EPA	U.S. Environmental Protection Agency
EPDC	expected peak day concentration
ESA	Endangered Species Act
FRP	fiberglass reinforced plastic
g	acceleration due to gravity
GHG	greenhouse gases
GIS	Geographic Information System
gpm	gallons per minute
H_2S	hydrogen sulfide
H2SO4	Sulfuric Acid
GWP	global warming potential
HDPE	high-density polyethylene
Hr	hour
IS	Initial Study
Jacobs	Jacobs Engineering Group, Inc.
KSDA	K.S. Dunbar & Associates, Inc.
LUSTIS	Leaking Underground Storage Tank Information System
Max	maximum
MGD	million gallons per day
MND	Mitigated Negative Declaration
MLD	most likely descendent
MM	methyl mercaptan

MMRP	Mitigation Monitoring and Reporting Program
MRL	Method Reporting Limit
MT	metric tons
mV	millivolt
MW	megawatt
MWh	megawatt hour
NAAQS	National Ambient Air Quality Standards
NaCLO	Sodium Hypochlorite
NaOH	Sodium Hydroxide
NAHC	Native American Heritage Commission
NDDB	Natural Diversity Database
NH_3	ammonia
NO	nitrogen oxide
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
O_3	ozone
OAV	odor activity value
ORP	oxidation reduction potential
ORS	organic reduced sulfur
OTC	odor threshold concentration
OS	odor scrubber
Pb	lead
PF	Public Facilities
pH	Acidic/Basic concentrations of hydrogen in water
PM	particulate matter
PM_{10}	particulate matter (less than 10 microns in diameter)
$PM_{2.5}$	particulate matter (less than 2.5 microns in diameter)
ppb	parts per billion

ppbV	parts per billion by volume
ppm	parts per million
ppmV	parts per million by volume
PRC	Public Resources Code
Project	WRCRWATP Odor Mitigation Project
PV	photovoltaic
ROG	reactive organic gases also called VOC (volatile organic compounds)
RT	recognition threshold
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SDF	Solar Drying Facility
SEMS	Superfund Enterprise Management System
SLF	Sacred Lands File
SO_2	sulfur dioxide
SO_x	oxides of sulfur (sulfates)
SRA	Source Receptor Area
Std	standard
SWRCB	State Water Resources Control Board
SWIS	Solid Waste Information System
TAC	toxic air contaminants
TAP	toxic air pollutants
TMA	trimethylamine
TOG	total organic gases
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VFA	Volatile Fatty Acid
VOC	Volatile Organic Compounds
VOSC	Volatile Organic Sulfur Compounds
VSC	Volatile Sulfur Compounds
WMWD	Western Municipal Water District

WRCRWA	Western Riverside County Regional Wastewater Authority
WRCRWATP	Western Riverside County Regional Wastewater Authority Treatment Plant
Yr	Year
Zone X	Area of Minimal Flood Risk
µg/m^3	micrograms per cubic meter

Western Riverside County
Regional Wastewater Authority

Executive Summary

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Executive Summary

Overview of the Proposed Project

During 1998, the Western Riverside County Regional Wastewater Authority (WRCRWA) commenced operation of its Western Riverside County Regional Wastewater Authority Treatment Plant (WRCRWATP) located at 14634 River Road, in the City of Eastvale, California (33º55'41.67"N, -117º36'13.42"W). That facility is now capable of producing up to 14 million gallons per day (MGD) of recycled water for reuse or for discharge to Reach 3 of the Santa Ana River (Reach 3 extends from upstream of Prado Dam to Mission Boulevard). The facility is owned by WRCRWA and operated by Western Municipal Water District (WMWD). It receives municipal wastewater from five different entities including the City of Corona, City of Norco, Jurupa Community Services District, Home Gardens Sanitary District, and WMWD.

When the WRCRWATP was originally constructed, the area around it was comprised of dairy farms, a green waste composting facility and the Santa Ana River. However, with the subsequent development activity in Eastvale, the dairies and composting facility to the east of the WRCRWATP were sold, and homes were built in their place. As such, the neighborhood to the east of the plant represents sensitive receptors that are susceptible to odor emissions from the plant.

Since the completion of the recent expansion, WRCRWA personnel have observed that odor complaints have increased from the neighborhood to the east. These complaints have been reported to the South Coast Air Quality Management District (SCAQMD) and are considered of utmost importance to WRCRWA. In its attempt to solve this problem, WRCRWA retained the services of CH_2M HILL (now Jacobs Engineering Group, Inc. (Jacobs)) to develop the WRCRWA Odor Mitigation Project for the WRCRWATP (i.e., the Project). Jacobs recommended the following to reduce potential offsite fugitive odors (Figure ES-1):

- Containment and Treatment of Cascading Weir Odors: This project includes covering the cascading weir and capturing and routing potential foul air to the existing biofilter.
- Consolidate and Relocate Scrubber Stack: This project will consolidate the six existing chemical scrubber stacks into one combined stack and will relocate the new combined stack about 635 feet from the existing scrubbers (approximately 700 feet west of the existing fence line). This project may include either fiberglass reinforced plastic (FRP), High Density Polyethylene (HDPE), or Stainless-steel ducting, whichever is determined to be the best fit for the project. This project will also relocate and consolidate the existing six scrubber fans into three higher capacity fans.
- Future Project (if needed): After start-up and commissioning of the above project, offsite assessment should be completed to assess the need for adding a carbon polishing stage near the new stack location. Adding carbon polishing would entail adding carbon vessels with stacks and could entail adding booster fans or upsizing the new chemical scrubber fans.

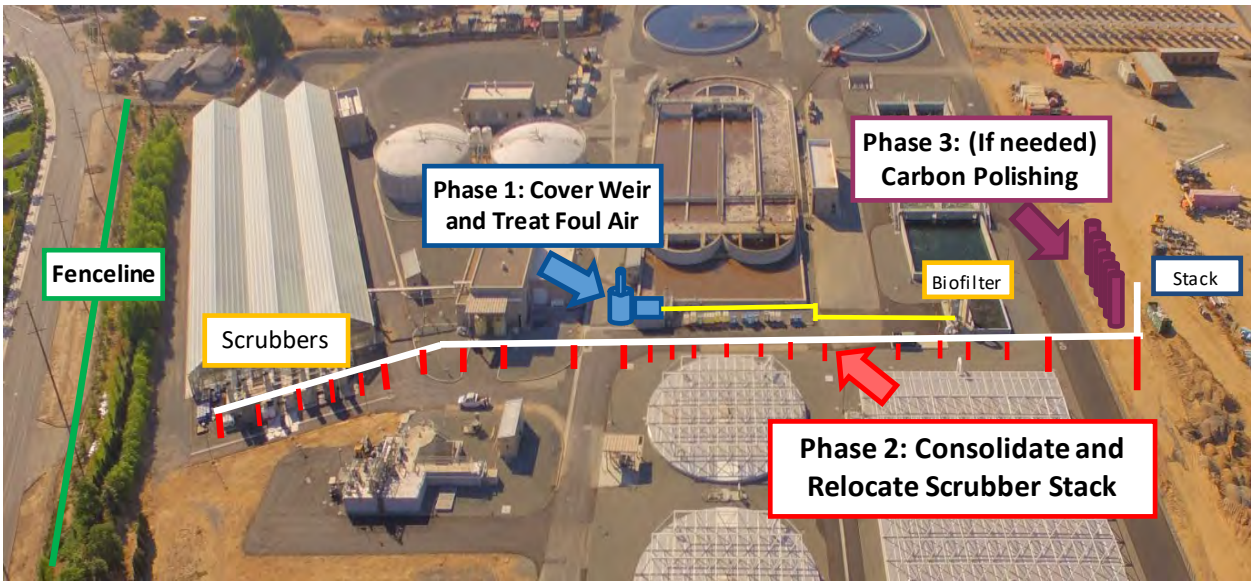

Figure ES-1 Recommended Odor Mitigation Project[1]

Impacts and Mitigation Measures

Table ES-1 identifies each potential significant effect and proposed mitigation measures that would reduce or avoid that effect. Proposed mitigation measures are WRCRWA staffs' and its consultant's recommendations to reduce potential impacts associated with implementation of the proposed Project. Should WRCRWA's Board of Directors adopt the Mitigation Monitoring and Reporting Program (MMRP; Appendix F in the IS&MND) these mitigation measures would become mandatory and part of the Project.

Table ES-1
Impacts and Mitigation Measures

Environmental Factor:	Biological Resources
Impact:	Potential impacts to nesting birds.
Standard Construction Practices/Design Features	WRCRWA will include the following mitigation measures in its contract documents for this Project.

[1] Certain illustrations, appendices, and tables may refer to components of the Odor Mitigation Project as separate "phases." However, Phases 1 and 2 of the project will be implemented simultaneously. The need for a Phase 3 has not yet been determined.

Environmental Factor:	Biological Resources
Mitigation Measures:	If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds shall be conducted within three days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a no-disturbance buffer. The size of the no-disturbance buffer (generally 300 feet for migratory and non-migratory song birds and 500 feet for raptors and special-status species) will be determined by the wildlife biologist, in coordination with the California Department of Fish and Wildlife (CDFW), and will depend on the level of noise and/or surrounding disturbances, line of sight between the nest and the construction activity, ambient noise, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.
Impact After Mitigation:	Less than significant impact
Environmental Factor:	Cultural Resources
Potential Impact:	Possible inadvertent discoveries of cultural resources or human remains during excavation activities.
Standard Construction Practices/Design Features	WRCRWA will include the following mitigation measures in its contract documents for this Project.
Mitigation Measures:	If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
Impact After Mitigation:	Less than significant impact
Environmental Factor	Geology and Soils
Potential Impact:	Possible inadvertent discoveries of paleontological resources during excavation activities.
Standard Construction Practices/Design Features	WRCRWA will include the following mitigation measures in its contract documents for this Project.
Mitigation Measures:	In the unlikely event that potentially significant paleontological materials (e.g., fossils) are encountered during construction of the project, all work shall be halted in the vicinity of the paleontological discovery until a qualified paleontologist can visit the site of discovery, assess the significance of the paleontological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of paleontological material that might be discovered during excavation shall be in accordance with applicable laws and regulations.
Impact After Mitigation:	Less than significant impact

Areas of Controversy

There are no areas of controversy associated with the WRCRWA Odor Mitigation Project for the WRCRWATP.

Issues to be Resolved

There are no issues to be resolved associated with the WRCRWA Odor Mitigation Project for the WRCRWATP.

Document Availability and Contact Personnel

The Initial Study (IS) and Mitigated Negative Declaration (MND) and can be downloaded at:

https://www.wrcrwa.org.

All comments regarding the Project or environmental documents should be mailed (to be received by) or emailed to:

Ron Palacios at rpalacios@wmwd.com by TUESDAY SEPTEMBER 8, 5:00 PM.

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1 Introduction

1.1 Introduction

The following Initial Study (IS) addresses the environmental impacts associated with the Western Riverside County Regional Wastewater Authority's (WRCRWA) Odor Mitigation Project (Project) for its Western Riverside County Regional Wastewater Authority Treatment Plant (WRCRWATP). This IS has been prepared in accordance with the *California Environmental Quality Act of 1970,* as amended, (CEQA), the *State CEQA Guidelines,* and WRCRWA's *Local Guidelines for Implementing the California Environmental Quality Act (2020)*, as amended. WRCRWA is the Lead Agency for the purposes of CEQA for this Project.

1.2 Project Summary

During 1998, WRCRWA commenced operation of its WRCRWATP located at 14634 River Road, in the City of Eastvale, California (33º55'41.67"N, -117º36'13.42"W). This facility is now capable of producing up to 14 million gallons per day (MGD) of recycled water for reuse or for discharge to Reach 3 of the Santa Ana River (i.e. Reach 3 extends from upstream of Prado Dam to Mission Boulevard). The facility is owned by WRCRWA and operated by Western Municipal Water District. It receives municipal wastewater from five different entities including the City of Corona, City of Norco, Jurupa Community Services District, Home Gardens Sanitary District and WMWD.

When the WRCRWA treatment plant was originally constructed, the area around it was comprised of dairy farms, a green waste composting facility and the Santa Ana River. However, with the subsequent development activity in Eastvale, the dairies and composting facility to the east of WRCRWA were sold and homes were built in their place. As such, the neighborhood to the east of the plant represents sensitive receptors that are susceptible to odor emissions from the plant.

Since the completion of the recent plant expansion project, WRCRWA personnel have observed that odor complaints have increased from the neighborhood to the east. These complaints have been reported to the Southern California Air Quality Management District (SCAQMD) and are considered of utmost importance to WRCRWA. In its attempt to solve this problem, WRCRWA retained the services of CH_2M HILL (now Jacobs Engineering Group, Inc. (Jacobs)) to develop the WRCRWA Odor Mitigation Project for the WRCRWATP. Jacobs recommended the following to reduce potential offsite fugitive odors (Figure 1.2-1):

- Containment and Treatment of Cascading Weir Odors: This project includes covering the cascading weir and capturing and routing potential air to the existing biofilter.
- Consolidate and Relocate Scrubber Stack: This project will consolidate the six existing chemical scrubber stacks into one combined stack and will relocate the new combined stack to 635 feet from the existing scrubbers (approximately 700 feet west of the existing fence line). This project may include either Fiber Reinforced Plastic (FRP), High Density Polyethylene (HDPE), or Stainless Steel ducting, whichever is determined to be best for the project. This project will also relocate and consolidate the existing six scrubber fans into three higher capacity fans.
- Future Project (if needed): After start-up and commissioning of the above project, offsite assessment should be completed to assess the need for adding a carbon polishing stage near the new stack location. Adding carbon polishing would entail adding carbon vessels with stacks and could entail adding booster fans or upsizing the new chemical scrubber fans.

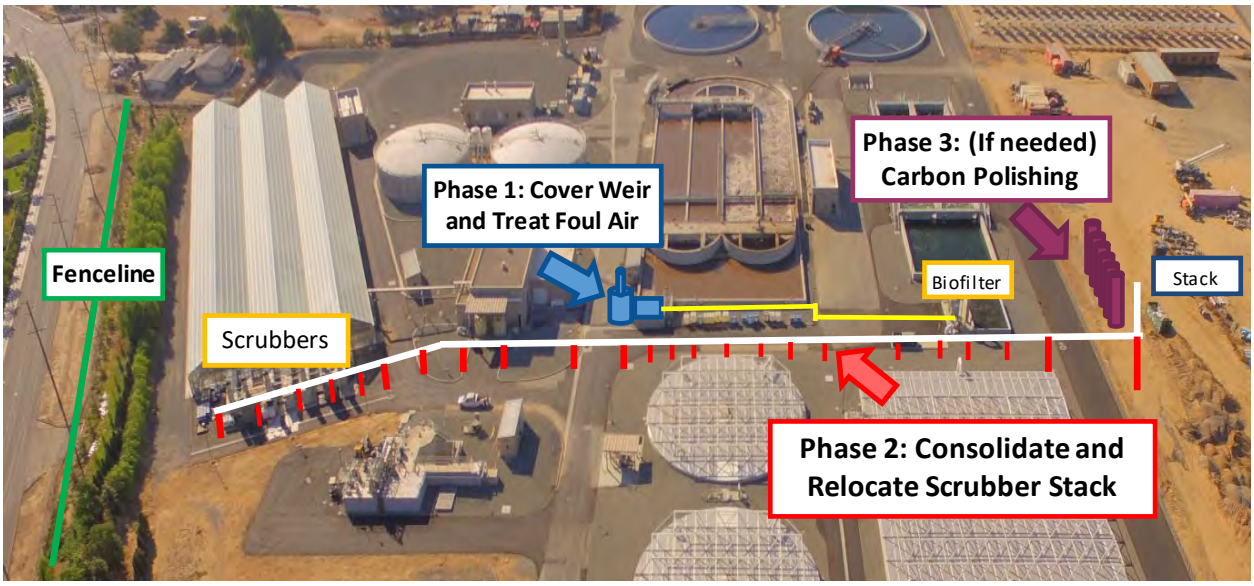

Figure 1.2-1 Recommended WRCRWA Odor Mitigation Project[2]

1.3 California Environmental Quality Act Compliance

The California Environmental Quality Act (California Public Resources Code (PRC) §21000 et seq.), requires that the physical environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. Therefore, to fulfill the purpose and intent of CEQA, WRCRWA, as the Lead Agency, has prepared this Initial Study and Mitigated Negative Declaration (IS/MND) to be prepared to address the potentially significant adverse environmental impacts associated with implementation of the Project.

1.3.1 Purposes of an Initial Study

The purposes of an IS, as outlined in §15063(c) of the State CEQA Guidelines (2020), are:

1) *Provide the Lead Agency with information to use as the basis for deciding whether to prepare an* Environmental Impact Report (EIR) *or a Negative Declaration;*
2) *Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration;*
3) *Assist the preparation of an EIR, if one is required, by:*
   a. *Focusing the EIR on the effects determined to be significant,*
   b. *Identifying the effects determined not to be significant,*
   c. *Explaining the reasons for determining that potentially significant effects would not be significant, and*
   d. *Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.*
4) *Facilitate environmental assessment early in the design of a project;*
5) *Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment;*
6) *Eliminate unnecessary EIR's; and*

[2] Certain illustrations, appendices, and tables may refer to components of the Odor Mitigation Project as separate "phases." However, Phases 1 and 2 of the project will be implemented simultaneously. The need for a Phase 3 has not yet been determined.

7) *Determine whether a previously prepared EIR could be used with the project.*

1.3.2 Contents of an Initial Study

The contents of an IS are defined in §15063(d) of the State CEQA Guidelines (2020) as follows:

1) *A description of the project including the location of the project;*
2) *An identification of the environmental setting;*
3) *An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries. The brief explanation may be either through a narrative or a reference to another information source such as an attached map, photographs, or an earlier EIR or Negative Declaration. A reference to another document should include, where appropriate, a citation to the page or pages where the information is found;*
4) *A discussion of ways to mitigate the significant effects identified, if any;*
5) *An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls;*
6) *The name of the person or persons who prepared or participated in the Initial Study.*

1.3.3 Intended Uses of the Initial Study

The IS will be presented to WRCRWA's Board of Directors for its use in implementing CEQA. The basic purposes of CEQA as outlined in §15002(a) of the State CEQA Guidelines (2020) are to:

1) *Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.*
2) *Identify the ways that environmental damage can be avoided or significantly reduced.*
3) *Prevent significant avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.*
4) *Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.*

1.3.4 Lead Agency Decision-Making Process

The Lead Agency (i.e., WRCRWA) would base its decision on the Project on the findings contained within this IS plus the professional knowledge and judgment of its staff and consultants. During the review process, mitigation measures contained in this document should be evaluated with respect to their effectiveness in reducing impacts to a level of insignificance. Public input, including responsible and trustee agencies, should also be requested and evaluated during the review process.

The approval process for the proposed Project will begin with WRCRWA's staff deciding to prepare a Negative Declaration, a Mitigated Negative Declaration, or an EIR for the Project. Should WRCRWA decide to prepare a Negative Declaration or a Mitigated Negative Declaration, based on this IS, the WRCRWA Board of Directors would determine whether it would approve of the Project in accordance with §15074 of the State CEQA Guidelines. Should WRCRWA decide to prepare an EIR for the Project, it would also have to make findings in accordance with §15091 of the State CEQA Guidelines and to certify the Final EIR in accordance with §15090 of the State CEQA Guidelines. The WRCRWA staff has prepared a Mitigated Negative Declaration and believes this is adequate to address environmental impacts from the project. The IS/MND document will be brought to the WRCRWA Board for adoption once all requirements have been met for posting/comment period.

1.3.5 Approvals for Which This Initial Study Will Be Used

The following agencies would also utilize this document in their decision-making process regarding the proposed Project: SCAQMD, Authority to Construct (ATC) Permit to Operate

2 Project Background and Description

2.1 Project Background

As stated previously, the WRCRWATP was brought online during 1998. At that time, the area surrounding the treatment facility included dairies, a green waste composting facility, and open space associated with the Santa Ana River. However, around 2010, the City of Eastvale allowed the development of single-family homes immediately east of the plant site. Since those residences were occupied, WRCRWA has received several complaints regarding odor issues which the residents associated with the facility. Therefore, to be a "good neighbor", WRCRWA has invested several million dollars in odor control equipment at the facility.

2.2 Existing Odor Control Systems

The following discussion is based on recommendations provided by Jacobs. Two odor control/treatment systems are currently operated at the WRCRWATP including a biofilter system and a multi-stage chemical scrubber system. Figure 2.2-1 provides a schematic of these systems and the processes that they serve.

2.2.1 Preliminary Sources Biofilter System

An engineered media biofilter treats extracted air from the primary clarifiers, screw pump lift station, primary scum pump station and the equalization basin. The biofilter includes the following key components:

- Extraction fan, 10,000 cubic feet per minute (cfm) capacity, of FRP construction. A differential pressure transmitter located at the fan provides fan alarm monitoring.
- Primary humidifier packed tower, complete with vertical tower, packing, recirculation pump and ancillary equipment,including instrumentation and controls.
- Biofilter bed including air distribution system consisting of FRP support beams and FRP grating, engineered media (Biorem Technologies Inc.® media, essentially aggregate with nutrient coating), concrete floor and walls and secondary irrigation system.

Air is directed into the biofilter where microbe colonies residing in the biofilm attached to the media consume odorants. Odorants removed include hydrogen sulfide (H_2S) via autotrophic bacteria and organic reduced sulfur (ORS) compounds [e.g., methyl mercaptan (MM), dimethyl sulfide (DMS), and dimethyl disulfide (DMDS)] via heterotrophic bacteria. Humidification ensures that the biofilm does not dry out while nutrients integral to the media coating provides necessary nitrogen and phosphorus for healthy biology.

Biofilter media is guaranteed for 10 years. However, based on the loading rate and operating parameters, it is expected that the biofilter media will not require replacement for close to 20 years.

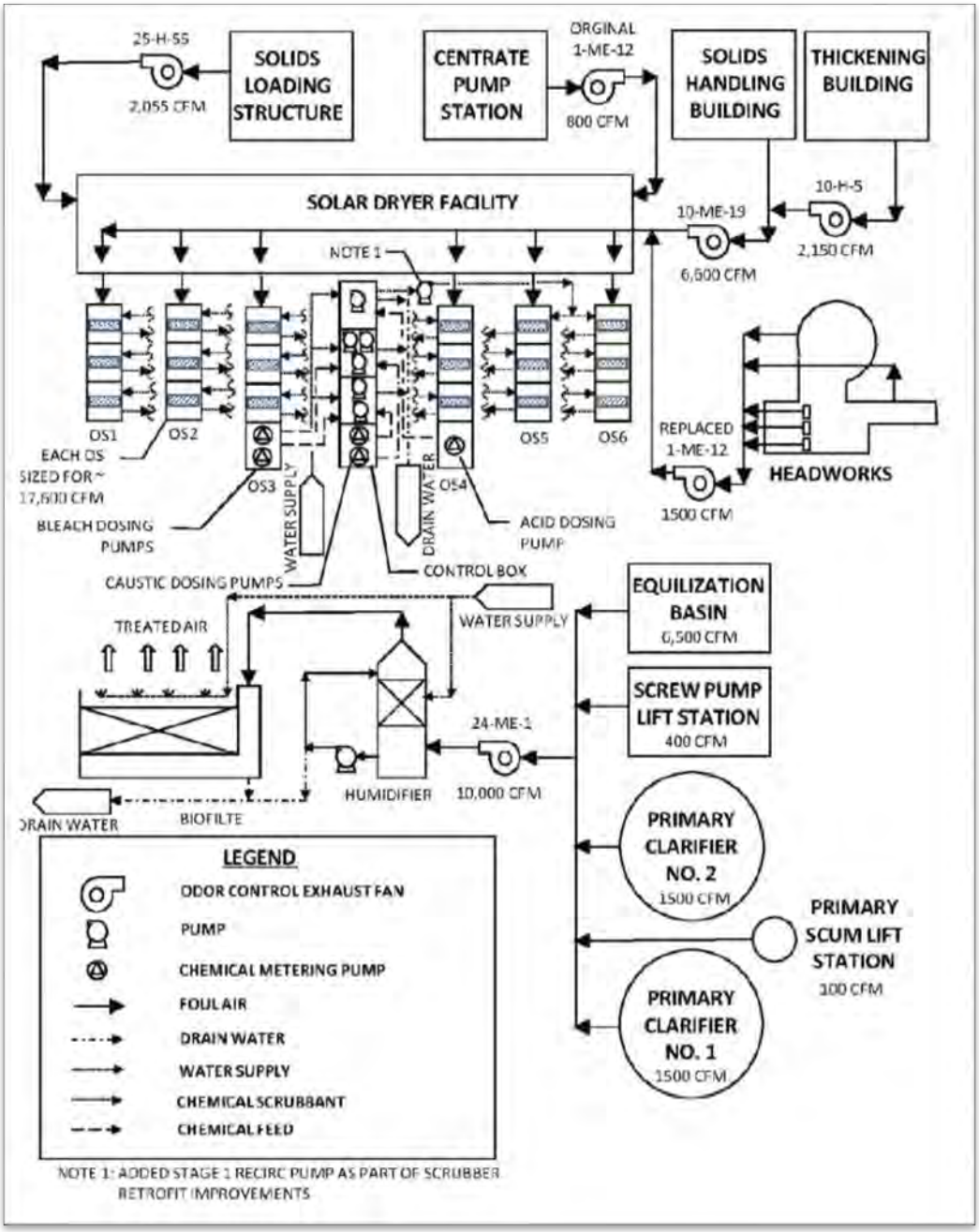

Figure 2.2-1 WRCRWATP Odor Control Process Flow Diagram

2.2.2 Solar Dryer Facility Chemical Scrubbers

A 3-stage chemical odor scrubber (OS) system manufactured by Aqueous Engineered Cleaning (AEC) Systems, LLC treats extracted air from the solar drying facility (SDF), headworks, solids handling facility and thickening facility. In addition, recent modifications provide transfer fans that transfer air from the solids loading structure and centrate pump station directly into the SDF for treatment at the OS system.

The OS system consists of six 3-stage scrubber trains in parallel. Each train consists of three cross-flow packing sections. Stage 1 uses sulfuric acid (H_2SO_4) for targeting ammonia (NH_3) and amines (various chemical formulae)

and Stages 2 and 3 use sodium hydroxide (caustic, NaOH) and sodium hypochlorite (NaOCL,bleach) for targeting sulfur-based compounds. Common recirculation pumps and sumps along with chemical metering pumps are housed in a central walk-in enclosure unit (aka, control box).

Each OS train is a draw-through arrangement with the fan located at the end of the train. Each train is sized for 17,600 cfm for total capacity of 105,600 cfm. Individual OS trains are operated based on required ventilation within the solar dryer. Intake louvers on the opposite south side of the solar dryer facility provide the necessary fresh (makeup) air into the facility.

Chemical scrubbers are operated to control pH and oxidation reduction potential (ORP) in specific stages as follows;

- Stage 1: pH range of 1.4 to 5.
- Stages 2 and 3: pH range of 9 to 12 and ORP range of 350 to 500 millivolts (mV).

Chemical scrubbers are provided with make-up and blow-down controls to minimize accumulations of byproducts in recirculation pumps.

2.2.3 Upstream Collection System Chemical Dosing

In addition to the foregoing facilities, WRCRWA utilizes an iron salt dosing system at the upstream pump station that has the added benefit of suppressing dissolved sulfides (DS) entering the WRCRWATP. The product utilized is called SULFeND® and is supplied by Pencco, Inc.

2.3 Off-Site Goals

Typical off-site goals for wastewater treatment plants vary considerably ranging from 1 to 20 D/T (Dilution to threshold) and 3 to 10 parts per billion by volume (ppbV) for H_2S. Development of offsite odor goals specific for the WRCRWATP considered multiple factors including regulatory requirements, adjacent neighborhood sensitivities, and comparison to what other agencies are doing. Since the WRCRWATP is adjacent to a residential neighborhood already sensitized by fugitive emissions from the treatment facility, a stringent fence line goal was recommended by Jacobs that goes above and beyond regulatory requirements. Until the project is completed Jacobs recommended that WRCRWA adopt a short-term off-site odor goal and then implement a more stringent offsite goal once the project is complete. These goals are:

- Short-Term Offsite Odor Goal: Operations at the plant shall limit odors at the fence line and beyond to:
  - H_2S: 10 ppbV based on one-hour average and 99 percent compliance (allowable 88 hours per year of exceedances)
  - D/T: 20 D/T correlates with the 10 ppbV H_2S limit above based on one-hour average and 99 percent compliance (allowable 88 hours per year of non-compliance).

  Analysis by Jacobs suggests that WRCRWA is currently meeting this short-term goal.

- Future Endorsed More Stringent Offsite Odor Goal: Operations at the plant shall limit odors at the fence line and beyond to:
  - H_2S: 2.5 ppbV based on one- hour average and 99 percent compliance.
  - D/T: 5 D/T (correlates to the 2.5 ppbV H_2S limit above) based on one-hour average and 99 percent compliance.

2.4 Jacobs' Recommendations

Sampling of key odor sources at the WRCRWATP was conducted and analyzed. A general summary of Jacobs's analysis and findings follows:

- Due to the location to the fence line, the chemical scrubbers collectively may be odors sources for DMDS and TMA.
- The Bioreactor No. 1 cascading weir may be a source for H_2S and methyl mercaptan (MM).
- Afternoon winds are believed to contribute to offsite odor impacts to the east of the plant.
- The addition of SULFeND® RT upstream of the WRCRWA appears to provide benefits by reducing odors.

2.5 Alternatives Considered

Jacobs recommended that the following WRCRWATP sources should be mitigated to meet the future stringent 5 D/T offsite odor goal:

- SDF Chemical Scrubbers.
- Bioreactor No. 1 Cascading Weir.

Jacobs considered the following alternatives to mitigate the chemical scrubber and cascading weir odors.

2.5.1 Alternative 1 – Increased Chemical Scrubber Stack Height

This alternative would not provide any new technologies or revisions to existing technologies. Instead, it simply considers the impact of raising the existing SDF chemical scrubber stack heights. The increased stack heights would increase plume heights and trajectories, improving dispersion and dilution with the result of reducing ground-level odor concentrations offsite.

2.5.2 Alternative 2 – Relocated Consolidated Single Chemical Scrubber Stack

Alternative 2 would not include new treatment. Instead, it focuses on creating a greater buffer distance from the chemical scrubber stacks to the fence line. Currently, the chemical scrubber stacks are located immediately west of the east fence line, approximately about 65 feet. Emissions from the scrubber stacks, while consistently below regulatory permit requirements, have the potential to include constituents such as DMDS and TMA which nearby residents may smell at very low concentrations. During prevailing wind conditions offsite impacts to the neighborhood may be more noticeable. By creating a larger buffer distance, additional dispersion/dilution is created such that any odor impacts is reduced. This alternative entails consolidating all chemical scrubber stack air flows into a common duct and routing the duct to a single stack further to the west.

2.5.3 Alternative 3 – Addition of Carbon Polishing Stage to SDF Chemical Scrubbers

Alternative 3 focuses on providing further odorant removal at the SDF chemical scrubbers by providing an additional stage of treatment. There are multiple viable treatment technology options for meeting this requirement. However, for this application, Jacobs recommended dry adsorption media polishing.

2.5.4 Alternative 4 – Containment and Treatment of Bioreactor No. 1 Cascading Weir

Alternative 4 focuses on providing odor containment at the Bioreactor No. 1 cascading weir and ventilating the containment area in a vapor phase odor treatment system. There are multiple viable treatment technology options for this alternative. However, Jacobs recommended using the existing biofilter because of feasibility, minimal modifications needed, and effectiveness.

2.6 Alternatives Selected

This is the recommended WRCRWA Odor project.

Jacobs recommended the following to meet the Future Endorsed More Stringent Offsite Odor Goal of 5 dilutions to threshold (D/T) (shown previously on Figure 1.2-1):

- No single alternative above by itself will allow WRCRWA to meet its Future Offsite Odor goal. Therefore, a combination of alternatives should be implemented. Alternatives which will be implemented include:
- Containment and Treatment of Cascading Weir Odors: This project includes covering the cascading weir and capturing and routing potential foul air to the existing biofilter.
- Consolidate and Relocate Scrubber Stack: This project will consolidate the six existing chemical scrubber stacks into one combined stack and will relocate the new combined stack 700 feet west of the existing fence line. The new consolidated stack will be 40 feet tall from the ground level. This project may include either fiberglass reinforced plastic (FRP), High Density Polyethylene (HDPE), or Stainless-steel ducting, whichever is determined to be the best fit for the project. This project will also relocate and consolidate the existing six scrubber fans into three higher capacity fans.
- Future Project (if needed): After start-up and commissioning of the above project, offsite assessment should be completed to assess the need for adding a carbon polishing stage near the new stack location. Adding carbon polishing would entail adding carbon vessels with stacks and could entail adding booster fans or upsizing the new chemical scrubber fans.

2.7 Explanation Related to Appendix A, C, and D and E

The project descriptions and in Appendices A, C, D, and E were developed at the onset of this project and indicate a phased approach with three phases (initial and future implementation). As planning for this project progressed, it was determined phase one and phase two of the project would be completed together and the need for phase thee would be evaluated in the future after additional assessment. Consequently, the AB52 letters, and mitigation reports had already been mailed before the final determination was made to complete phases one and two together as one project and therefore contain an old project description. The change in project description does not affect the findings of this Initial Study in any way.

3 Environmental Checklist, Analysis and Mitigation Measures

3.1 Introduction

1. Project Title:	WRCRWA Odor Project Western Riverside County Regional Wastewater Treatment Plant
2. Lead Agency Name and Address:	Western Riverside County Regional Wastewater Authority 14205 Meridian Avenue, Riverside, California 92518
3. Contact Person, Phone Number and Email:	Roy Leidy K.S. Dunbar & Associates, Inc. Environmental Engineering (916) 502-3213 grleidy@sbcglobal.net
4. Project Location:	14634 River Road, Eastvale, Riverside County, California APN: 130-040-004 33º55'41.67"N, -117º36'13.42"W. Section 10, Township 3 South, Range 7 West, San Bernardino B&M Thomas Bros. Map: Page 712, H5, H6, J5
5. Project Sponsor's Name and Address:	Western Riverside County Regional Wastewater Authority 14205 Meridian Avenue, Riverside, California 92518
6. General Plan Designations:	Public Facilities (PF)
7. Zoning:	Agriculture (AG)
8. Project Description (Describe the whole action involved, including, but not limited to, later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets, if necessary):	The Western Riverside County Regional Wastewater Authority intends to implement a WRCRWA Odor Mitigation Project at its Western Riverside County Regional Wastewater Treatment Plant.
9. Surrounding Land Uses and Setting:	Vacant land to the north and west, residential to the east and open space to the south.
10. Other Public Agencies whose Approval is Required (e.g., permits, financing approval, or participation agreement):	South Coast Air Quality Management District
11. Have California Native American Tribes traditionally and culturally affiliated with the project area requested information pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?	Yes

3.2 Environmental Factors Potentially Affected

The environmental factors listed below would be potentially affected by the Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources	☐	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Energy
☐	Geology/Soils	☐	Greenhouse Gas Emissions	☐	Hazards & Hazardous Materials
☐	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
☐	Noise	☐	Population and Housing	☐	Public Services
☐	Recreation	☐	Transportation	☐	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	☐	Mandatory Findings of Significance

3.3 Determination

Based on this initial evaluation:

☐	I find that the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.
◙	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures in the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that 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 or NEGATIVE DECLARATION pursuant to applicable legal standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Ron Palacios

Ronald Palacios, P.E.
Senior Engineer, CIP

08/04/2020

Date

3.4 Chapter Organization

This section describes how this chapter of the IS and Mitigated Negative Declaration (MND) is organized. In this analysis, potential reasonably foreseeable impacts are evaluated with respect to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire. Additionally, mandatory findings of significance regarding short-term, long-term, and cumulative impacts are evaluated. Each topic area begins with a listing of the factors identified by the State CEQA Guidelines (2020) for analysis, followed by a discussion of the environmental setting, the analysis for each factor, and an overall conclusion.

3.4.1 Environmental Setting

Throughout this document and according to the State CEQA Guidelines, the environmental setting is intended to mean the environmental conditions as they exist at the time the environmental analysis is commenced. The environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to gain an understanding of the significant effects of the proposed Project and its alternatives.

3.4.2 Discussion and Mitigation Measures

The IS includes an analysis of direct and reasonably foreseeable physical changes in the environment from the proposed Project and feasible mitigation measures that would reduce such impacts to a less than significant level. Thresholds of significance for each potential impact are provided as appropriate.

A "significant effect on the environment" is defined in the State CEQA Guidelines Section 15382 as a "substantial or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. A social or economic change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant."

"Environment" is defined in the State CEQA Guidelines Section 15360 as "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a Lead Agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

The following requirements for evaluating environmental impacts are cited directly from the State CEQA Guidelines Appendix G.

1) All answers must consider of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as

operational impacts.

2) Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation incorporated, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

3) "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures, and briefly explain how they reduce the effect to less than significant.

4) Earlier analyses may be used where pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration. [§15063(c)(3)(D)]. In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less Than Significant with Mitigation Incorporated", describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site- specific conditions for the project.

5) Lead Agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

6) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

7) This is only a suggested form, and lead agencies are free to use different formats; however, Lead Agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

8) The explanation of each issue should identify:

   a) The significance criteria or threshold, if any, used to evaluate each question; and

   b) The mitigation measures identified, if any, to reduce the impact to less than significance.

3.5 Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	◙
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	◙
c. Substantially degrade the existing visual character or quality of public views 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?	☐	☐	☐	◙
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☐	◙

3.5.1 Environmental Setting

The WRCRWATP is in a mixed-use area as there is vacant land to the west and north, open space to the south and residential to the east across Baron Drive. However, as shown on Figure 3.5-1, the treatment facilities are well screened from view from Baron Drive.

Figure 3.5-1 WRCRWATP as Viewed from Baron Drive

3.5.2 Discussion and Mitigation Measures

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

Answer: No Impact.

Discussion:

There are no scenic vistas at the Project site which is within the confines of the WRCRWATP site. Consequently, no further analysis or mitigation is required.

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

Answer: No Impact.

Discussion:

There are no officially designated State scenic highways within the greater Project area. Therefore, no further analysis or mitigation is required.

Aesthetics c. Would the project substantially degrade the existing visual character or quality of public views 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 scenicquality?

Answer: No Impact.

Discussion:

As shown previously on Figure 3.5-1, the WRCRWATP is well screened from the residential development along Baron Drive just east of the plant site. The Project site is within an urbanized area although the latest zoning map (August 2019) shows the site as Agriculture (AG) while the latest General Plan Land Use Map (June 13, 2012) shows the site as Public Facilities (PF). Therefore, there would be no conflict with applicable zoning and other regulations governing scenic quality. Consequently, no further analysis or mitigation is required.

Aesthetics d. *Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

Answer: Less than Significant Impact.

Discussion:

There is already security lighting installed at the WRCRWATP and no additional lighting is proposed as part of this Project. Therefore, no further analysis or mitigation is required.

3.5.3 Conclusion

No significant impacts were identified; therefore, no further analysis or mitigation is required.

3.6 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, Lead Agencies may refer to the California Agricultural Land Evaluation Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. *Would the Project:*				
a. Convert Prime Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	◙
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	◙
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 511104(g))?	☐	☐	☐	◙
d. Result in the loss of forest land or conversion of forest land to non-forest uses.	☐	☐	☐	◙
e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	◙

3.6.1 Environmental Setting

As shown previously on Figure 1.2-1, the Project site is totally within the confines of the WRCRWATP. There are no agricultural or forest lands on the Project site.

3.6.2 Discussion and Mitigation Measures

Agriculture and Forestry Resources. a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Answer: No Impact.

Discussion:

There are no Prime Farmlands or Farmlands of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency at the Project site *(resources.ca.gov, 09/28/2019).* Therefore, there would be no impacts and no further analysis or mitigation is required.

Agriculture and Forestry Resources. b. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

Answer: No Impact.

Discussion:

The site is zoned as Heavy Agriculture (A-10) and designated in the General Plan as Public Facilities (PF). It is not under a Williamson Act contract. Therefore, there would be no impacts and no further analysis or mitigation is required.

Agriculture and Forestry Resources. 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 (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

Answer: No Impact.

Discussion:

The site is not zoned for forest land or timber land use. Therefore, there would be no impacts and no further analysis or mitigation is required.

Agriculture and Forestry Resources. d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

Answer: No Impact.

Discussion:

There is no forest land within the Project site. Therefore, there would be no impacts and no further analysis or mitigation is required.

Agriculture and Forestry Resources. 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-agricultural use or conversion of forest land to non-forest use?*

Answer: No Impact.

Discussion:

There is no farmland or forest land at the Project site. Therefore, there would be no impacts and no further analysis or mitigation is required.

3.6.3 Conclusion

No significant impacts were identified; therefore, no further analysis or mitigation is required.

3.7 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. *Would the Project:*				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	◙	☐
b. Result in cumulatively considerable net increase of any criteria pollutant under an applicable federal or state ambient air quality standard?	☐	☐	◙	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	◙
d. Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?	☐	☐	◙	☐

3.7.1 Environmental Setting

Ambient air quality is affected by both the rate and location of pollutant emissions and by meteorological conditions that influence the local and regional dispersal of pollutants. Atmospheric conditions such as wind speed and direction and air temperature gradients combined with local topography provide the link between air pollutant emissions and air quality.

The proposed Project is within the South Coast Air Basin (SCAB), which incorporates approximately 12,000 square miles, consisting of four counties (i.e., San Bernardino, Riverside, Los Angeles, and Orange) including some portions of what used to be the Southeast Desert Air Basin that includes the Beaumont-Banning area. Nearly half of California's population, which generates about one-third of the State's total criteria pollutant emissions, lives within the SCAB.

Planning for the attainment and maintenance of both federal and State air quality standards in the Project area is the responsibility of the SCAQMD.

Air Pollutants

Pollutants regulated by the State and federal Clean Air Acts (CAA) fall within three categories:

- criteria air pollutants
- toxic air contaminants, and
- global warming and ozone (O_3) depleting gases.

Pollutants in each of these categories are monitored and regulated differently. Criteria air pollutants are measured by sampling concentrations in the air; toxic air contaminants are measured at the source and in the general atmosphere, and global warming and O_3-depleting gases are not monitored but are subject to federal and regional policies that call for their reduction and eventual phase-out *(www.aqmd.gov,10/18/06).* California's landmark global warming legislation, AB 32, requires that the State's greenhouse gas emissions be reduced to 1990 levels by 2020. Emission trading is being considered for achieving the requirements of AB 32 *(www.aqmd.gov, 4/21/07).*

Criteria Air Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health. Those standards have been set at levels to protect the human health with an adequate margin of safety.

Table 3.7-1 lists the federal Clean Air Act, National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), as well as the key health and welfare effects of regulated pollutant.

Table 3.7-1
Ambient Air Quality Standards and Key Health and Welfare Effects

Air Pollutant	Federal Standard (Clean Air Act)	State Standard (CAAQS)	Key Health & Welfare Effects
	Concentration, Averaging Time, Year of NAAQS Review	Concentration, Averaging Time	
Ozone (O_3)	0.070 ppm, 8-Hour (2015) 0.075 ppm, 8-Hour (2008) 0.08 ppm, 8-Hour (1997) 0.12 ppm, 1-Hour (1979)	0.070 ppm, 8-Hour 0.09 ppm, 1-Hour	(a) Pulmonary function decrements and localized lung injury in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Increased respiratory related hospital admissions and emergency room visits; (e) Vegetation damage;
Fine Particulate Matter ($PM_{2.5}$)	35 µg/m³, 24-Hour (2006) 12.0 µg/m³, Annual (2012) 15.0 µg/m³, Annual (1997)	12 µg/m³, Annual	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Decline in pulmonary function or growth in children; (c) Increased risk of premature death; (d) Increased risk of lung cancer; (e) Increased asthma-related hospital admissions; (f) Increased school absences and lost work days; (g) Possible link to reproductive effects; (h) Visibility reduction
Respirable Particulate Matter (PM_{10})	150 µg/m³, 24-Hour (1997)	50 µg/m³, 24-Hour 20 µg/m³, Annual	
Carbon Monoxide (CO)	35 ppm, 1-Hour (1971) 9 ppm, 8-Hour (1971)	20 ppm, 1-Hour 9.0 ppm, 8-Hour	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Possible impairment of central nervous system functions; (d) Possible increased risk to fetuses.
Nitrogen Dioxide (NO_2)	100 ppb, 1-Hour (2010) 0.053 ppm, Annual (1971)	0.18 ppm, 1-Hour 0.030 ppm, Annual	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in children with asthma; (b) Increased airway responsiveness in asthmatics; (c) Contribution to atmospheric discoloration.
Sulfur Dioxide (SO_2)	75 ppb, 1-Hour (2010)	0.25 ppm, 1-Hour 0.04 ppm, 24-Hour	Respiratory symptoms (bronchoconstriction, possible wheezing or shortness of breath) during exercise or physical activity in persons with asthma.
Lead (Pb)	0.15 µg/m³, rolling 3-month average (2008)	1.5 µg/m³, 30-day average	(a) Learning disabilities; (b) Impairment of blood formation and nerve conduction; (c) Cardiovascular effects, including coronary heart disease and hypertension.
Sulfates (PM_{10}) (SO_4)	N/A	25 µg/m³, 24-Hour	(a) Decrease in lung function; (b) Aggravation of asthmatic symptoms; (c) Vegetation damage; (d) Degradation of visibility; (e) Property damage.
Hydrogen Sulfide (H_2S)	N/A	0.03 ppm, 1-hour	Exposure to lower ambient concentrations above the standard may result in objectionable odor and may be accompanied by symptoms such as headaches, nausea, dizziness, nasal irritation, cough, and shortness of breath.

Notes: NAAQS = National Ambient Air Quality Standards CAAQS = California Ambient Air Quality Standards
ppm = parts per million by volume; ppb = parts per billion by volume (0.01 ppm = 10 ppb) µg/m³ = micrograms per cubic meter
Standards in bold are the current, most stringent standards; there may be continuing obligations for former standards State standards are "not-to-exceed" values based on State designation value calculations
Federal standards follow the 3-year design value form of the NAAQS Source: SCAQMD, December 2016.

Toxic Air Contaminants

Toxic air pollutants (TAPs) are those pollutants that are known or suspected of causing cancer or other serious health effects. Some TAPs are immediately dangerous to human health even in small quantities; some TAPs cause health problems if the exposure extends over a longer period of time. The degree to which a TAP affects a person's health depends on many factors, including the quantity of the pollutant the person is exposed to, the duration and frequency of exposures, the toxicity of the chemical, and the person's state of health and susceptibility.

Scientists estimate that millions of tons of TAPs are released into the air each year. Some air toxics are released from natural sources such as volcanic eruptions and forest fires. However, most originate from manmade sources, including both mobile sources (e.g., cars, trucks, and buses) and stationary sources (e.g., factories, refineries, power plants, and small businesses). In addition, many routine activities around the home, such as using gas-powered lawn mowers and tools, or using volatile paints and solvents release TAPs into the atmosphere.

The list of TAPs in the Clean Air Act is a long one (275 names) and includes some familiar names such as benzene. Examples of other TAPs include percholoroethylene, methylene chlorine, toluene, dioxin, and metals such as mercury, chromium, and lead compounds.

Ambient Air Quality Data

The California Air Resources Board (CARB) provides ambient air quality data for most air basins in the State. A summary of the data available for the greater Project area is provided in Tables 3.7-2 through 3.7-5.

Table 3.7-2
Ozone Trends Summary at Riverside-Rubidoux National Standards

	Days > Standard			1-hr Observations				8-hr Observations				
	8-hr			EENED[1]				0.070 Std.		0.075 Std.		
Year	0.070	0.075	0.08	Max.	1-Yr	3-Yr	D.V.[2]	Max.	D.V.[2]	Max.	D.V.[2]	Coverage
2018	53	34	14	*0.123*	0.0	1.1	0.124	0.101	0.098	0.101	0.098	97
2017	81	58	32	*0.145*	2.1	1.4	0.132	0.118	0.098	0.118	0.098	95
2016	69	47	20	*0.142*	1.1	1.1	0.122	0.104	0.094	0.104	0.094	96
2015	55	39	17	*0.132*	1.0	0.7	0.122	0.105	0.093	0.105	0.093	97
2014	66	41	12	*0.141*	1.1	0.7	0.122	0.104	0.093	0.104	0.093	96
2013	36	26	7	*0.123*	0.0	1.8	0.126	0.103	0.098	0.103	0.098	93
2012	70	47	17	*0.126*	1.1	2.1	0.127	0.102	0.098	0.102	0.098	93
2011	90	67	35	*0.128*	4.2	1.8	0.126	0.115	0.095	0.115	0.095	93
2010	74	47	21	*0.128*	1.1	3.1	0.135	0.098	0.097	0.098	0.097	90
2009	54	36	11	*0.116*	0.0	3.4	0.135	0.100	0.099	0.100	0.099	88
Ambient Standards				0.070				0.070		0.075		

Notes: All concentrations expressed in parts per million.
The national 1-hour ozone standard was revoked in June 2005. Statistics related to the revoked standard are shown in *italics* or ***italics***. National exceedances shown in **orange**.
An exceedance is not necessarily a violation.
Daily maximum 8-hour averages associated with the National 0.070 ppm standard exclude those 8-hour averages that have first hours between midnight and 6:00 am, Pacific Standard Time.
Daily maximum 8-hour averages associated with the National 0.070 ppm standard include only those 8-hour averages from days that have sufficient data for the day to be considered valid.
Daily maximum 8-hour averages associated with the National 0.075 ppm standard may come from days that don't have sufficient data for the day to be considered valid, provided the daily maximum 8-hour average itself includes sufficient data to be considered valid.
[1] EENED = Estimated Expected Number of Exceedance Days
[2] D.V. = National Design Value
hr =hour

Yr = Year
Max. = maximum
Std. = standard
Source: arb.ca.gov, 09/29/2019

Table 3.7-3
Ozone Trends Summary at Riverside-Rubidoux State Standards

Days > Standard			1-Hour Observations			8-Hour Averages			Year
Year	1-Hour	8-Hour	Max.	EPDC[1]	D.V.[2]	Max.	EPDC[1]	D.V.[2]	Coverage
2018	22	57	0.123	0.1295	0.12	0.101	0.1138	0.114	96
2017	47	82	0.145	0.1271	0.13	0.119	0.1108	0.106	95
2016	33	71	0.142	0.1277	0.13	0.105	0.1069	0.106	96
2015	31	59	0.132	0.1258	0.13	0.106	0.1058	0.106	95
2014	29	69	0.141	0.1242	0.12	0.105	0.1047	0.105	95
2013	13	38	0.123	0.1330	0.13	0.104	0.1161	0.115	92
2012	27	70	0.126	0.1329	0.13	0.102	0.1142	0.111	92
2011	52	92	0.128	0.1297	0.13	0.115	0.1128	0.111	91
2010	31	74	0.128	0.1320	0.13	0.099	0.1138	0.113	88
2009	25	57	0.116	0.1322	0.13	0.101	0.1187	0.116	86
Ambient Standards			0.09			0.070			

Notes: All concentrations expressed in parts per million.
State exceedances shown in green.
An exceedance is not necessarily a violation.
[1] EPDC = Expected Peak Day Concentration
[2] D.V. = State Designation Value
Max= maximum
">" = greater than
Source: arb.ca.gov, 09/29/2019

Table 3.7-4
PM_{10} Trends Summary at Riverside-Rubidoux

Year	Est. Days > Std.		Annual Average		3-yr Average		High 24-hr Average		Year Coverage
	Nat'l	State	*Nat'l*	State	*Nat'l*	State	Nat'l	State	
2018	0.0	133.6	*35.4*	43.9	*37*	44	86.5	126.0	100
2017	0.0	102.5	*39.0*	41.3	*36*	41	92.0	137.6	97
2016	0.0	*	*38.1*	*	*35*	45	84.0	170.5	96
2015	0.0	92.2	*32.2*	40.0	*34*	45	69.0	107.4	100
2014	0.0	124.7	*36.3*	44.8	*35*	45	100.0	122.7	100
2013	0.0	30.2	*33.2*	34.6	*34*	35	135.0	199.2	100
2012	0.0	51.7	*34.5*	33.4	*34*	34	67.0	82.6	100
2011	--	30.3	*33.5*	32.5	*35*	42	82.7	79.0	0
2010	0.0	42.7	*33.1*	33.8	*41*	42	75.0	72.0	100
2009	0.0	120.1	*40.0*	41.9	--	42	86.8	78.0	0
Ambient Standards			--	20			150	50	

Notes: All concentrations expressed in micrograms per cubic meter ($\mu g/m^3$).
The national annual average PM_{10} standard was revoked in December 2006 and is no longer in effect. Statistics related to the revoked standard are shown in *italics* or italics.
State exceedances shown in green. National exceedances shown in green.
*There was insufficient (or no) data available to determine the value.
Nat'l= National
Est = Estimated
Std= standard
Yr=year
Hr=hour
">" = greater than
Source: Air Resources Board 2018 (arb.ca.gov 09/29/2019)

Table 3.7-5
$PM_{2.5}$ Trends Summary at Riverside-Rubidoux

Year	Est. Days >Nat'l '06 Std.	Annual Average		Nat'l Ann. Std. D.V.[1]	State Ann. D.V.[2]	Nat'l '06 Std. 98th Percentile	Nat'l '06 24-Hr. Std D.V.[1]	High 24-Hour		Year Coverage
		Nat'l	State					Nat'l	State	
2018	3.1	12.6	12.6	12.5	15	28.2	30	66.3	68.3	98
2017	7.2	12.3	14.5	12.3	15	30.7	34	50.3	50.3	97
2016	5.1	12.6	12.6	*	17	32.0	36	51.5	60.8	97
2015	10.3	11.9	15.3	*	17	38.1	37	54.7	61.1	94
2014	*	*	16.8	*	18	39.3	36	48.9	50.6	36
2013	6.2	12.5	17.1	13.2	18	34.6	33	60.3	170.8	96
2012	7.1	13.5	17.6	13.4	18	33.7	32	38.1	182.2	96
2011	4.2	13.6	13.5	14.0	18	31.0	34	50.8	70.0	97
2010	4.2	13.2	17.9	14.9	18	32.0	38	46.5	59.2	97
2009	13.5	15.2	17.1	16.9	20	39.6	45	54.4	54.4	95
Ambient Standard		12	12					35	--	

Notes: All concentrations expressed in micrograms per cubic meter (µg/m³).
State exceedances shown in green. National exceedances shown in orange.
[1] D.V. = State designation value.
[2] D.V. = National design value.
Est= Estimated
Nat'l 06 = National 2006
Ann = annual
Std= standard
Hr=hour
">" = greater than
*There was insufficient (or no) data available to determine the value.
Source: Air Resources Board 2019 (arb.ca.gov 09/29/2019)

The CARB has designated the South Coast Air Basin (SCAB) as non-attainment for the State O_3, PM_{10} and $PM_{2.5}$ standards. In addition, the U.S. Environmental Protection Agency (EPA) has designated the SCAB as non-attainment for the federal O_3, PM_{10} and $PM_{2.5}$ standards.

3.7.2 Discussion and Mitigation Measures

Air Quality. a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Answer: No Impact.

Discussion:

A project is deemed inconsistent with air quality plans if it would result in population and/or employment growth that exceeds growth estimates included in applicable air quality management plans (AQMP) [i.e., SCAQMD's 2016 Air Quality Management Plan]. The AQMP is based on general plans from local jurisdictions, which includes the General Plans adopted by the Cities of Corona, Eastvale, Jurupa Valley, and Norco. The AQMP accounts for development that would occur because of implementation of the local general plans. The purpose of the Project is to meet the long-term odor goal of 5 dilutions to threshold (D/T) at 99 percent compliance. The project would not accommodate growth and therefore is consistent with the AQMP. Consequently, no impacts are anticipated, and no mitigation is required.

Air Quality. b. *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Answer: Less than Significant.

Discussion:

The SCAQMD has suggested threshold criteria for determining significance with respect to construction and operational air quality impacts. Those threshold criteria are shown in Table 3.7-6.

Table 3.7-6
Threshold Criteria for Determining Significance

Pollutant	Threshold Criteria, pounds per day	
	Construction	Operation
Carbon Monoxide (CO)	550	550
Sulfur Dioxide (SO_2)	150	150
Nitrogen Oxides (NO_X)	100	55
Particulates (PM_{10})	150	150
Particulates ($PM_{2.5}$)	55	55
Volatile Organic Compounds (VOC)	75	55
Lead (Pb)	3	3
Toxic Air Contaminants (TACs), Odor and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million Chronic and Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO_2eq for industrial facilities	

Source: SCAQMD CEQA Handbook, 1993, revised March 2011
MT/yr= metric tons per year
eq = equivalent

These threshold criteria are used in this air quality analyses in determining significance of air quality impacts.

The following assumptions were utilized in estimating the air emissions from construction equipment for the WRCRWA Odor Mitigation Project.

- Approximately 0.5 acres per day would be disturbed during construction.
- There would be approximately 2 heavy-heavy duty diesel trucks moving supplies to the site and removing waste materials from the site. It is anticipated that each truck would travel approximately 100 miles per day.
- There would be approximately 2 pickup trucks traveling to and from the site by inspectors. Mileage for each pickup would be approximately 100 miles per day.
- Approximately 10 construction workers would be involved in construction activities at the site on the peak day of activities.

Mileage for worker commuters would be approximately 50 per day.

- In addition to the truck traffic and worker commute traffic discussed above, the following construction equipment would be on the job site:

Equipment	Number	Horsepower[a]	Load Factor[b]	Hours per Day
Air Compressors	1	78	0.48	4.0
Cranes	2	226	0.29	4.0
Sweeper/Scrubbers	1	64	0.46	1.0
Tractors/Loaders/Backhoes	2	98	0.37	6.0
Water Trucks	1	189	0.38	2.0
Welder	1	60	0.45	4.0

Notes: [1] 2011 OFFROAD default values. [2] Percentage of the engine's maximum horsepower rating that the equipment actually operates.

K.S. Dunbar & Associates, Inc. (KSDA), developed an Excel spreadsheet model, based on CARB's 2011 OFFROAD emission factors, that calculates estimated emissions from construction activities. That model was used to estimate construction related emissions from off-road heavy construction equipment. Based on construction occurring in 2021, the model generated estimated construction emissions as shown in Table 3.7-7 (detailed model results are contained in Appendix B)[3].

Table 3.7-7
Estimated Maximum Day Emissions from Off-road Heavy Construction Equipment

	Pollutant (pounds per day)[a]							
	ROG	CO	NO_x	SO_x	PM_{10}	$PM_{2.5}$	CO_2	CH_4
Construction Year 2021	0.81	9.33	11.98	0.02	0.11	0.10	1,778	0.50
Threshold Limits[b]	75	550	100	150	150	55	N/A	N/A
Localized Significance Thresholds[c]	N/A	887	148	N/A	12	4	N/A	N/A

[a] Use of particulate traps reduces PM_{10} and $PM_{2.5}$ by 85 percent and oxidation catalysts reduces NO_x by 15 percent.
[b] Construction-related threshold limits developed by SCAQMD to determine significance.
[c] Localized threshold limits developed by SCAQMD to determine significance at construction sites of up to 1 acre and the nearest receptor within 50 meters of the construction site.
ROG= reactive organic bases
CO = carbon monoxide
NOx= oxides of nitrogen
SOx= Oxides of sulfur
CO2= carbon dioxide
CH4= methane

As can be seen by the data in Table 3.7-7, emissions from heavy construction equipment during construction would not exceed SCAQMD's construction-related threshold limits nor localized threshold limits.

There would also be two heavy-duty trucks traveling to and from the job site as well as two pickup trucks utilized by inspectors at the job site. Based on the assumption that each heavy-duty truck and pickup travels 100 miles per day, exhaust emissions would be as shown in Table 3.7-8.

Table 3.7-8
Estimated Maximum Day Emissions from On-Road Vehicles

Equipment	Pollutant (pounds per day)							
	ROG	CO	NO_x	SO_x	PM_{10}	$PM_{2.5}$	CO_2	CH_4
On-Road Trucks	0.22	1.06	2.55	0.01	0.13	0.10	841	0.01
Pickups	0.10	0.89	0.08	0.00	0.02	0.01	221	0.01
Totals	0.32	1.95	2.63	0.01	0.15	0.11	1,062	0.02

Vehicles owned by construction workers would be an additional source of air pollutants. An estimate of emissions based on 10 worker vehicles per day of which 100 percent are pickup trucks (gross vehicle weight of 8,500 pounds or less) with an average round trip of 50 miles is presented in Table 3.7-9.

Table 3.7-9
Construction Worker Commute Vehicle Emissions

Pollutant (pounds per day)							
ROG	CO	NO_x	SO_x	$P1M_{10}$	$PM_{2.5}$	CO_2	CH_4
0.26	2.22	0.20	0.01	0.05	0.03	552	0.02

[3] Should the construction period be delayed, the emissions from heavy construction equipment would be less due to technology improvements and phasing out of older equipment. Therefore, the emissions shown are considered the worst-case scenario.

Installation of the odor control equipment would create fugitive dust emissions. It is estimated that fugitive dust emissions from construction activities on disturbed soil approximate 5 pounds per acre per day (PM_{10}) with no mitigation. However, the application of water as required would reduce the emissions by 61 percent. As stated above, it is anticipated that approximately 0.5 acres would be disturbed each day. Therefore, the resulting PM_{10} emissions would be estimated at 0.98 pounds per day. SCAQMD also estimates that the $PM_{2.5}$ emissions in fugitive dust are equal to 21 percent of the PM_{10} emissions in fugitive dust (SCAQMD, October 2006). Therefore, the $PM_{2.5}$ emissions would equal 0.21 pounds per day.

The total estimated daily emissions from the construction of the odor control facilities are shown in Table 3.7-10.

Table 3.7-10
Total Estimated Construction Emissions[a]

Source	Pollutant (pounds per day)							
	ROG	CO	NO_x	SO_x	PM_{10}	$PM_{2.5}$	CO_2	CH_4
Construction Equipment	0.81	9.33	11.98	0.02	0.11	0.10	1,778	0.50
On-Road Vehicles	0.32	1.95	2.63	0.01	0.15	0.11	1,062	0.02
Worker Commutes	0.26	2.22	0.20	0.01	0.05	0.03	552	0.02
Fugitive Dust	0.00	0.00	0.00	0.00	0.98	0.21	0.00	0.00
Total Estimated Emissions	1.39	13.50	14.81	0.04	1.29	0.45	3,392	0.54
Threshold Limits[b]	75	550	100	150	150	55	N/A	N/A
Localized Thresholds[c]	N/A	887	148	N/A	12	4	N/A	N/A

[a] Use of particulate traps reduces PM_{10} and $PM_{2.5}$ by 85 percent and oxidation catalysts reduces NO_x by 15 percent.
[b] Construction-related threshold limits developed by SCAQMD to determine significance.
[c] Localized significant thresholds developed by SCAQMD to determine localized significance, based on a work area of up to 1 acre and a 164 feet (50-meter) distance to the nearest receptor.

As shown in Table 3.7-10, the total estimated emissions from construction of the odor control facilities would not exceed the construction-related threshold limits for significance nor the localized thresholds. Therefore, no impacts are anticipated and no mitigation is required.

The existing operation and maintenance personnel would operate and maintain the odor control equipment. Consequently, there would be essentially no emissions associated with vehicle travel to and from the site during operation and maintenance of the new facilities. Operation of the actual facilities would produce essentially no emissions.

Toxic Air Contaminants (TACs)

The combustion of diesel fuel produces diesel particulate matter as a byproduct. Diesel particulate matter has been identified by the CARB as a toxic air contaminant (TAC). While TACs can have long-term and/or short-term effects, diesel TAC has been shown by the CARB to have little or no short-term impact.

The ARB determined that the chronic impact of diesel particulate matter was of more concern than the acute impact in the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines *(ARB 2000)*. In that document, ARB noted that "Our analysis shows that the potential cancer risk from inhalation is the critical path when comparing cancer and non-cancer risk. In other words, a cancer risk of 10 cases per million from the inhalation of diesel particulate matter (PM) will result from diesel PM concentrations that are much less than the diesel PM or TAC concentrations that would result in chronic or acute non-cancer hazard index values of 1 or greater." Consequently, any analysis of diesel TAC should focus on the long-term, chronic cancer risk posed by diesel emissions. Chronic cancer risk is normally measured by assessing what the risk to an exposed individual from a source of TACs would be if the exposure occurred over 70 years. Diesel emissions related to construction of the proposed Project would only

occur for less than a one-year period. Therefore, the impact would be considered less than significant and no further analysis is required.

Air Quality. c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Answer: No Impact.

Discussion:

As shown previously, all emissions from construction of the Project would be less than significant based on the threshold limits shown in Table 3.7-5. Therefore, implementation of the Project would not expose sensitive receptors to substantial pollutant concentrations. Consequently, no further analysis or mitigation is required.

Air Quality. d. *Would the project result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?*

Answer: Less than Significant Impact.

Discussion:

Based on Jacobs' sampling and analysis, odor emissions at the WRCRWATP were found to be a combination of both inorganic and organic compounds, like most wastewater treatment facilities. Based on the recent site assessment sampling results, Jacobs determined that the dominant odor compounds at the treatment facilities are H_2S, other ORS compounds, and nitrogen-based compounds. H_2S and ORS compounds fall under the general category of volatile sulfur compounds (VSCs) with the latter falling under the category of volatile organic sulfur compounds (VOSCs).

H_2S generally contributes up to 90 percent of the volatile compound emissions from wastewater treatment facilities with the remainder attributed to ORS compounds [e.g., MM, DMDS, and DMS], nitrogen-based compounds, and other complex odorous compounds including volatile fatty acids and aldehydes. Both MM and DMDS exhibit very low odor threshold concentrations (OTCs) meaning that they are easily detectable by smell at very low threshold concentrations. Similarly, TMA exhibits a very low OTC. Two types of threshold values exist: (DT and RT). DT is defined as the minimum concentration required to arouse a sensation and RT is defined as the minimum threshold required for the specific compound to be recognized. As such DTs are generally lower than RTs. Where threshold value is referred to in this discussion it refers to DT.

DT is quantified via odor tests conducted in an odor laboratory where all air samples containing a combination of odorous compounds are diluted with clean air to below detectable concentrations and then introduced to a gas delivery system. A panel of eight members trained in odor response serves as the odor "detectors" for the sample. Panel members are asked to smell air samples delivered to a nose cone piece by the gas delivery system. By depressing buttons, the panelist introduces three distinct samples, one with the diluted sample and two with clean dilution air. Panel members are then asked if they can detect a difference in the odor of the samples. If they cannot, the sample concentration is then increased by a given dilution amount, and the test is repeated. This process continues until half the panel members can detect the sample odor. This final level of sample concentration is called DT. By this means, broad spectrum odor concentration is determined based upon how many dilutions are required to

make the odor barely perceptible to one half of the odor panelist regardless of what odor causing compound(s) are causing the odor. Field olfactometry utilizes a field olfactometer, which dynamically dilutes the ambient air with carbon-filtered air in distinct dilution ratios known as Dilutions to Threshold (D/T), indicating the number of dilutions of pure air required to get to the threshold of detection. The calculation for field olfactometry (D/T) is slightly different from the calculation of the dilution factor in laboratory olfactometry (DT) but the two concepts both express odors in terms of broad-spectrum odor impact as measured by the number of dilutions required to reach the threshold of detection.

Table 3.7-11 presents a relative comparison of human reactions to odors at varying D/T values. These levels should be considered order-of-magnitude approximations because reactions to odors are dependent upon individual sensitivity of the receptor, as well as the level of background odor that the receptor may be accustomed to prior to the introduction of the new odor.

Table 3.7-11
Dilution-to-Threshold Level Comparison and Typical Human Response

D/T Level	Description	Reaction
Human Threshold	The lowest concentration of which the average nose can detect the odor.	The human nose can sense the odor and determine a difference from normal background odors. However, odor is not alarming at this level.
5	Odor is slightly detectable above background odors.	The human nose may determine the source if the nose has previously experienced higher strengths of this same odor compound. Odor may cause slight annoyance to some receptors, but typically is not alarming.
10	Odor is detectable above background levels to sensitive receptors.	Some sensitive individuals can determine the source (especially if the odor is familiar to them), and the odor may cause nuisance odor response.
20	Odor is detectable above background levels to the general public.	The human nose can determine the source, even it has previously experienced it or not (may cause nuisance odor response with some individuals).
50	Odor is very detectable above background levels.	The human nose can easily determine the source, and the odor is likely to result in a nuisance odor reaction with most individuals.
100 (plus)	Odor is extremely noticeable above background levels.	The human nose can detect the source and the odor typically results in a nuisance odor response.

Note: Compiled from various case studies by CH2M (now Jacobs) based on the ASTM E 679 method using the 4 European presentation rate of 20 liters per minute (5.28 gallons per minute).

Tests have been conducted on panel detection of H_2S, ORS compounds and nitrogen-based compounds to approximate their individual OTCs. Each OTC varies depending upon the literature source cited, but in general each OTC can be summarized as follows:

- H2S OTC = 0.51 parts per billion by volume (ppbV).
- NH3 OYC = 2.8 ppbV (based on recent work by St. Croix Laboratories for Sacramento Regional Sanitation District.
- MM OTC = 0.077 ppbV.
- DMDS OTC = 0.22 ppbV.
- DMS OTC = 3.0 ppbV.
- TMA OTC = 0.032 ppbV.

As shown in Table 3.7-12, several entities have established off-site odor standards for wastewater treatment plants.

Table 3.7-12
Published Off-Site Odor Standards

Location	Off-Site Goal (D/T)	Off-Site Goal (ppbV H_2S)	Frequency and Average Times	Surrounding Community
Spokane County DBO, WA	10	10	100%, 1 hour	Light Industrial
Puma County (Tucson) DBO WWTP, AZ	7	10	100%, 1 hour	Commercial, residential
Wilsonville DBO WWTP, OR	5	5	100%, 1 hour	Residential
Dublin San Ramon WWTP, CA	4	--	99%, 3 minutes	Residential
City and County of Honolulu WWTPs, HI	7	3	99%, 3 minutes	Residential, industrial
Bay Area Air Quality Management District, CA	5	30	Not defined for D/T 1 hour for H_2S	Varies, complain- based regulation
Hawaii Kai WWTP, HI	20	8	99%. 3 minutes	Residential, public beach
Massachusetts, MA	5	--	100%, 1 hour	Commercial, residential
Bridgewater WWTP. Seattle, WA	1	--	100%, 1 hour	Commercial, residential
Fairfax, VA	7	--	100%, 1 hour	Commercial, residential
Delta Diablo Sanitation District, CA	20	--	99%, 3 minutes	Residential, commercial

Notes: DBO = Design Build Operate D/T = Dilution to Threshold
WWTP = Wastewater Treatment Plant Source: Jacobs, August 2019

As can be seen, published off-site goals vary considerably ranging from 1 to 20 D/T and 3 to 10 ppbV for H_2S. Development of offsite odor goals specific for the WRCRWATP considered multiple factors including regulatory requirements, adjacent neighborhood sensitivities, and comparison to what other agencies are doing. Since the WRCRWATP is adjacent to a residential neighborhood already sensitized by fugitive emissions from the treatment facility, a stringent fence line goal was recommended by Jacobs that goes above and beyond regulatory requirements. Until the project is completed Jacobs recommended that WRCRWA adopt a short-term off-site odor goal and then implement a more stringent offsite goal once the project is complete. These goals are:

- Short-Term Offsite Odor Goal: Operations at the plant shall limit odors at the fence line and beyond to:
  - H_2S: 10 ppbV based on one-hour average and 99 percent compliance (allowable 88 hours per year of exceedances)
  - D/T: 20 D/T (correlates with the 10 ppbV H_2S limit above based on one-hour average and 99 percent compliance (allowable 88 hours per year of non-compliance).

  Analysis by Jacobs suggests that WRCRWA is currently meeting this short-term goal.

- Future Endorsed More Stringent Offsite Odor Goal: Operations at the plant shall limit odors at the fence line and beyond to:
  - H_2S: 2.5 ppbV based on one- hour average and 99 percent compliance.
  - D/T: 5 D/T (correlates to the 2.5 ppbV H_2S limit above) based on one-hour average and 99 percent compliance.

The purpose of this Project is to reduce offsite odor impact and this project will help achieve the Future Stringent Offsite Odor Goal. .

As shown in Table 3.7-10, the fugitive dust emissions would be less than significant based on threshold criteria shown in Table 3.7-6. In addition, implementation of the Project would not result in the generation of odors. Consequently, no further analysis or mitigation is required.

3.7.3 Conclusion

No significant impacts were identified; however, WRCRWA will include best management practices in the construction documents for this Project to ensure there are no significant impacts.

3.8 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Game or U.S. Fish and Wildlife Service?	☐	◙	☐	☐
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 Game or U.S. Fish and Wildlife Service?	☐	☐	☐	◙
c. Have a substantial adverse effect on state or federally protected (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	◙
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?	☐	☐	☐	◙
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	◙
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?	☐	☐	☐	◙

3.8.1 Environmental Setting

KSDA retained ELMT Consulting (ELMT) to conduct a biological due diligence study for WRCRWA's Odor Mitigation Project (Project site or site) located in the City of Eastvale, Riverside County, California. The habitat assessment was conducted by biologist Jacob H. Lloyd Davies on September 26, 2019, to document baseline conditions and assess the potential for special-status[4] plant and wildlife species to occur within the Project site that could pose a constraint to implementation of the proposed Project. Special attention was given to the suitability of the Project site to support special-status plant and wildlife species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), and other electronic databases as potentially occurring in the general vicinity of the Project site. EMLT's complete report is included as Appendix C to this report.

[4] As used in this report, "special-status" refers to plant and wildlife species that are federally and State-listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

Existing Site Conditions

The proposed Project site is located in a completely developed area at the WRCRWATP. The greater WRCRWATP facility is bordered to the north and west by vacant land, to the east by residential development, and to the south by Riverview Recreation Park and the Santa Ana River. The proposed Project will cross the northern portion of the developed WRCRWATP from east to west and is surrounded by existing development associated with wastewater processing operations.

Elevation ranges from approximately 591 to 595 feet above mean sea level and generally slopes from west to east. Based on the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Web Soil Survey, the Project site is historically underlain by the following soil units: Ramona sandy loam (5 to 8 percent slopes) and Ramona sandy loam (2 to 5 percent slopes). Due to existing development, undeveloped/native surface soils are no longer present.

The proposed Project footprint will be installed within the existing developed WRCRWATP. This area is classified as developed which encompass all paved, impervious surfaces. No native plant communities or natural communities of special concern occur within or adjacent to the proposed Project footprint. As a result, no native plant communities will be affected from Project implementation. The only plant species observed on site were ruderal/non-native weedy plant species. Plant species observed onsite included flax-leaved horseweed (*Erigeron bonarienses*) and Mediterranean grass (*Schismus arabicus*).

Wildlife

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. Due to the overall lack of vegetation within the Project site, only animal species highly adapted to anthropogenic disturbance could be expected to occur on site. This section provides a discussion of those wildlife species that were observed or are expected to occur within the Project site. The discussion is to be used a general reference and is limited by the season, time of day, and weather conditions in which the field investigation was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation. The Project site provides limited habitat for wildlife species except those adapted to a high degree of anthropogenic disturbances and development.

No fish, amphibians, or hydrogeomorphic features (e.g., creeks, ponds, lakes, reservoirs) with frequent sources of water that would support populations of fish or amphibians were observed on or within the vicinity of the Project site. Therefore, no fish or amphibians are expected to occur and are presumed absent from the Project site.

The Project site provides minimal foraging and cover habitat for reptile species adapted to high anthropogenic disturbance. The only reptile species observed during the field investigation was western side-blotched lizard (*Uta stansburiana elegans*). Other reptilian species that could be expected to occur include Great Basin fence lizard (*Sceloporus occidentalis longipes*), and alligator lizard (*Elgaria multicarinata*).

The Project site provides minimal foraging for bird species adapted to high anthropogenic disturbance. Bird species detected during the field investigation include northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), European starling (*Sturnus vulgaris*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), and house finch (*Haemorhouse mexicanus*).

No mammals were observed during the field investigation. Common mammalian species adapted to high anthropogenic disturbance that could potentially occur on site include opossum (*Didelphis virginiana*) and raccoon (*Procyon lotor*).

Nesting Birds

No active nests or birds displaying nesting behavior were observed during the field investigation. The Project site and surrounding area provides foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. The Project site has the potential to provide suitable nesting opportunities for birds that nest on the open ground and those acclimated to routine disturbances. Additionally, the trees that border the Project site provide suitable nesting opportunities. A pre-construction nesting bird clearance survey should be conducted within three (3) days prior to ground disturbance to ensure no nesting birds will be impacted from site development.

Migratory Corridors and Linkages

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are like linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of enough width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The proposed Project footprint will be confined to existing developed land, which has removed natural plant communities from the surrounding area. Due to on site conditions and surrounding development, no migratory corridors or linkages are present on site. Further, the entire WRCWRATP is surrounded by tall barbed-wire fencing that would preclude most large animal species, such as coyote (*Canis latrans*) from accessing the property. As a result, implementation of the proposed Project will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

Jurisdictional Areas

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Army Corps of Engineers (USACE) Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Inland Deserts Region of the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Santa Ana Regional Water Quality Control Board (Regional Board) regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Within the proposed limits of disturbance, no discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the USACE, Regional Board, or CDFW were observed. Based on the proposed site plan, Project activities will not result in impacts to USACE, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required.

Special-Status Biological Resources

The CNDDB Rarefind 5 and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Corona North U.S. Geological Survey (USGS) 7.5-minute quadrangle.

The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the Project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified seven (7) special-status plant species, sixty-nine (69) special-status wildlife species, and three (3) sensitive plant communities as having the potential to occur within the Corona North USGS 7.5-minute quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the Project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the Project site are presented in Attachment D*: Potentially Occurring Special-Status Biological Resources* in Appendix C of this document.

Special-Status Plants

According to the CNDDB and CNPS, seven (7) special-status plant species have been recorded in the Corona North USGS 7.5-minute quadrangle (refer to Attachment D). No special-status plant species were observed on site during the habitat assessment. The entirety of the Project site has been subject to anthropogenic disturbances from existing development activities. On site disturbances have reduced the suitability of the habitat to support special-status plant species known to occur in the general vicinity of the Project site. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the Project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and are presumed to be absent from the Project site. No focused surveys are recommended.

Special-Status Wildlife

According to the CNDDB, sixty-nine (69) special-status wildlife species have been reported in the Corona North USGS 7.5-minute quadrangle (refer to Attachment D). No special-status wildlife species were observed onsite during the habitat assessment. On site development has greatly reduced potential foraging and nesting/denning opportunities for wildlife species on site. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed Project site does not provide suitable habitat for any of the special-status wildlife species known to occur in the area and all are presumed to be absent from the Project site. No focused surveys are recommended.

Special-Status Plant Communities

According to the CNDDB, three (3) special-status plant communities are reported to occur in the Corona North USGS 7.5-minute quadrangle: Southern California Arroyo Chub/Santa Ana Sucker Stream, Southern Cottonwood Willow Riparian Forest, and Southern Sycamore Alder Riparian Woodland. Based on the results of the field investigation, no special-status plant communities were observed on site.

Critical Habitat

Under the federal Endangered Species Act (EPA) (16 U.S.C. §et seq. (1973), "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the U.S Fish and Wildlife Service (USFWS) regarding non-anadromous and non-marine listed species regarding activities they authorize, fund, or permit which may affect a federally listed

species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a Clean Water Act permit from the USACE). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The Project site is not located within federally designated Critical Habitat. The nearest designated Critical Habitat is located approximately 1,020 feet south of the Project site for least Bell's vireo (*Vireo bellii pusillus*). Therefore, the loss or adverse modification of Critical Habitat from site development will not occur and consultation with the USFWS for impacts to Critical Habitat will not be required for implementation of the proposed Project.

3.8.2 Discussion and Mitigation Measures

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?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

As stated previously, the CNDDB RareFind 5 and the CNPS Inventory of Rare and Endangered Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Corona North USGS 7.5-minute quadrangle. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the Project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified seven (7) special-status plant species, sixty-nine (69) special-status wildlife species, and three (3) sensitive plant communities as having the potential to occur within the Corona North USGS 7.5-minute quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the Project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the Project site are presented in Attachment D*: Potentially Occurring Special-Status Biological Resources* In Appendix C of this document.

No active nests or birds displaying nesting behavior were observed during the field investigation. The Project site and surrounding area provides foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. The Project site has the potential to provide suitable nesting opportunities for birds that nest on the open ground and those acclimated to routine disturbances. Additionally, the trees that border the Project site provide suitable nesting opportunities.

In order to ensure impacts to the aforementioned species do not occur from implementation of the proposed Project, WRCRWA will include the following in its contract documents for this Project:

- If construction occurs between February 1 and August 31, a pre-construction clearance survey for nesting birds shall be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a no-disturbance buffer. The

size of the no-disturbance buffer (generally 300 feet for migratory and non-migratory song birds and 500 feet for raptors and special-status species) will be determined by the wildlife biologist, in coordination with the CDFW, and will depend on the level of noise and/or surrounding disturbances, line of sight between the nest and the construction activity, ambient noise, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Implementation of the aforegoing measure will ensure the impacts to special-status species are less than significant.

Biological Resources. 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, and regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Answer: No Impact.

Discussion:

As discussed previously, there is no riparian habitat or other sensitive natural community on the Project site. Therefore, there would be no impacts and no further analysis or mitigation required.

Biological Resources. 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?*

Answer: No Impact

Discussion:

As discussed previously, the Project site does not support any discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the USACE, Regional Board, or CDFW. Therefore, Project activities will not result in impacts to USACE, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required. Therefore, there would be no impacts and no further analysis or mitigation is required.

Biological Resources. 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?*

Answer: No Impact.

Discussion:

As discussed previously, the proposed Project will be confined to an existing disturbed area within the treatment facility boundary that is fenced. As a result, the Project site is isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping stone habitat (natural areas) within or

connecting the Project site to any identified wildlife corridors or linkages. As a result, implementation of the proposed Project will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area. Therefore, no further analysis or mitigation is required.

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

Answer: No Impact.

Discussion:

There are no local policies or ordinances protecting biological resources that would be applicable to the Project. Therefore, no further analysis or mitigation is required.

Biological Resources. 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?*

Answer: No Impact.

Discussion:

The Project site is not within a cell or cell group in the Western Riverside County Multiple Species Habitat Conservation Plan. Therefore, no further analysis or mitigation is required.

3.8.3 Conclusion

Implementation of the foregoing mitigation measures will insure that the impacts to biological resources are reduced to a level of less than significant.

3.9 Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	◙
b. Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	☐	◙	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	◙	☐	☐

3.9.1 Environmental Setting

Anza Resource Consultants (Anza) was retained by KSDA to complete a cultural resources study for the WRCRWA's WRCRWATP Odor Management Project. Its complete report is included in Appendix D of this report.

California Historical Resource Information System

Anza conducted a records search of the California Historical Resources Information System (CHRIS) at the Eastern Information Center (EIC) located at University of California, Riverside, on October 9, 2019. The search was conducted to identify previous cultural resources studies and previously recorded cultural resources within a 0.5-mile radius of the Project site. The CHRIS searches included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the ADOE (Archaeological Determinations of Eligibility) list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5-, 15-, and 30-minute quadrangle maps surrounding the proposed Project area.

Previous Studies

The EIC records search identified ten cultural resources studies that were conducted within a 0.5-mile radius of the Project site, one of which (RI-09472) was adjacent to or very close to the Project site (Table 3.9-1). Six (6) additional studies provide regional overviews in the general Project vicinity (Table 3.9-1).

Table 3.9-1
Previous Cultural Resource Studies within a 0.5-Mile Radius of the Project Site

Report Number	Author	Year	Title	Proximity to Project Site
RI-00061	Paul E. Langenwalter, II and James Brock	1985	Phase II Archaeological Studies Prado Basin and The Lower Santa Ana River	Outside
RI-00535	Lowell John Bean, Sylvia	1979	Cultural Resources and the Devers-Mira 500 kV Transmission Line	Overview
	Brakke Vane, Matthew		Route (Valley to Mira Loma Section)	
	C. Hall, Harry Lawton,			
	Richard Logan, Lee			
	Gooding Massey, John			
	Oxendine, Charles			
	Rozaire, and David P.			

Report Number	Author	Year	Title	Proximity to Project Site
	Whistler			
RI-01697	Christopher Drover	1982	Environmental Impact Evaluation: Archaeological Assessment of the	Outside
			Proposed Norco Wastewater Management Facilities	
RI-01954	E. Jane Rosenthal and	1981	A Cultural Resource Survey of the Proposed Santa Ana River	Outside
	Steven J. Schwarz		Hiking/Biking Trail in the Prado Flood Control Basin	
Report Number	Author	Year	Title	Proximity to Project Site
RI-02429	Stickel, E. Gary and Terence D'Altroy	1980	Santa Ana River and Santiago Creek: A Cultural Resource Survey	Outside
RI-02593	Drover, Christopher E.	1989	An Archaeological Assessment of the Archibald Sewage Treatment Plant Norco, Riverside County, California	Outside
RI-02902	Mark T. Swanson and	1989	The Prado Dam and Reservoir, Riverside and San Bernardino	Overview
	Roger G. Hatheway		Counties, California	
RI-03490	McIntosh, Beverly Childs	1991	The Juan Bautista De Anza Trail Past, Present and Future, Baja to Riverside, California	Overview
RI-03604	Carleton S. Jones	1992	The Development of Cultural Complexity Among the Luiseno: A Thesis Presented to the Department of Anthropology, California State University, Long Beach in Partial Fulfillment of the Requirements for the Degree, Master of Arts	Overview
RI-03629	Gregory Seymour and David Doak	1992	An Archaeological Survey for the Western Riverside Regional Wastewater Treatment System in Corona and Norco, Riverside County.	Outside
RI-04762	Barker, Leo R. and Ann E. Huston, editors	1990	Death Valley to Deadwood; Kennecott to Cripple Creek. Proceedings of the Historic Mining Conference, January 23-27, 1989, Death Valley National Monument	Overview
RI-05049	McKenna et al.	2003	Archaeological Survey Report: A Phase I Cultural Resources Investigation for the Proposed Eastvale Water and Sewer Master Plan, Riverside County, California	Outside
RI-05964	Bai Tang, Michael Hogan, Josh Smallwood, and Daniel Ballester	2003	Historical/Archaeological Resources Survey Report, Tentative Tract Map No. 31406, Near the City of Norco, Riverside County, CA	Outside
RI-09472	Virginia Clifton	2016	A Cultural Resources Assessment of the Proposed Waste Water/RS0359 New Tower Site, located at 14700 River Road, Eastvale, Riverside County, California	Adjacent or very close to north, within the WRCRWATP
RI-10311	Christopher Duran and Breana Campbell	2017	Addendum to the Proposition 1 Reclaimed Water Distribution System Project Cultural Resource Assessment, Riverside County, California	Outside
RI-10691	Alan Curl	1979	Phase I Survey of the City of Riverside Final Report	Overview

Source: EIC, October 2019

RI-09472

Virginia Clifton of EBI Consulting prepared "A Cultural Resources Assessment of the Proposed Waste Water/RS0359 New Tower Site, located at 14700 River Road, Eastvale, Riverside County, California" in February 2016. This study regarded a proposed cellular communications tower site and linear alignment within the WRCRWATP approximately 335 feet north of the current Project site. The study included a cultural resources records search, Native American

scoping, pedestrian survey, and review of historical maps and aerial photographs. The study was negative for cultural resources and concluded that the WRCRWATP possesses low sensitivity for both prehistoric and historic archaeological resources. This conclusion was based on both the high level of disturbance from construction of the WRCRWATP and analysis of the landform and resource distribution prior to its development.

Previously Recorded Resources

The EIC records search identified two cultural resources that were recorded within a 0.5-mile radius of the project site (Table 3.9- 2). Neither resource was within or adjacent to the project site.

Table 3.9-2
Previously Recorded Cultural Resources within 0.5- Mile of the Project Site

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded By and Year	Relationship to Project Site
P-33-000652	CA-RIV-652	Prehistoric lithic artifact scatter; at least partially destroyed	Insufficient information	1983 (J. Brock and P. Langenwalter)	Approximately 0.5-mile south
P-33-013408		Prehistoric isolate – bifacially ground mano	Presumed not eligible	1975 (M. Hall)	Approximately 0.25-mile south

Source: EIC, October 2019

Native American Scoping

KSDA initiated Native American tribal outreach on behalf of WRCRWA on September 7, 2019 by requesting a search of the Native American Heritage Commission's (NAHC) Sacred Lands File (SLF). The NAHC responded on September 24, 2019 stating that the SLF search results were positive (i.e., sacred lands or resources important to a Native American tribal group are recorded in the vicinity of the Project site). The NAHC also provided a list of 17 Native American representatives for KSDA to contact (Attachment A in Anza's report).

Travis Armstrong, Tribal Historic Preservation Officer of the Morongo Band of Mission Indians (Morongo), responded to KSDA via email on September 9, 2019. Mr. Armstrong stated that "[Morongo's] office has no additional comments at this time" and that AB 52 consultation may be concluded assuming Morongo receives a copy of any cultural resources study produced for the project (Attachment A in Anza report)).

Lacy Padilla, Archaeologist with the Agua Caliente Band of Cahuilla Indians, responded to KSDA via email on October 7, 2019. Ms. Padilla stated that the "project is not located within the Tribe's Traditional Use Area," they defer to more local tribes, and conclude their consultation effort (Attachment A in the Anza report).

As of October 11, 2019, no additional responses have been received.

3.9.2 Discussion and Mitigation Measures

Cultural Resources. a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

Answer: No Impact.

Discussion:

Anza conducted a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), Eastern Information Center (EIC) located at the University of California, Riverside on October 9, 2019, to identify all previous cultural resources work and previously recorded cultural resources within a one-mile radius of the Project site (Appendix A in Anza report). The CHRIS search included a review of the National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the ADOE list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5-, 15-, and 30-minute quadrangle maps.

Based on the records search, there are no historic resources within the Project site. Therefore, there would be no impacts to historic resources due to implementation of the Project and no further analysis or mitigation is required.

Cultural Resources. b. *Would the project cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

Although there were no archaeological sites discovered on the Project site, there is always the possibility of an inadvertent discovery of an unknown site during excavation. Therefore, WRCRWA will include the following mitigation measure in its contract documents for this Project.

- If previously unidentified cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted avoid adverse impacts. In the event that an identified cultural resource is of Native American origin, the qualified archaeologist will consult with WRCRWA to begin or continue Native American consultation procedures.

Cultural Resources. d. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

No human remains were discovered on-site. However, there is always the potential to inadvertently discover human remains during excavation. Therefore, WRCRWA will include the following in its standard contract documents for this Project.

- If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may

recommend scientific removal and non-destructive analysis of human remains and items associated with Native American burials.

3.9.3 Conclusion

Based on the disturbed nature of the Project site and results of the records search and Native American consultation, Anza recommends a finding of no impacts to historical and archaeological resources under CEQA. Although the current Project is highly unlikely to encounter previously unidentified cultural resources or human remains, implementation of the foregoing mitigation measures would ensure that any impact to cultural resources would be reduced to a level of less than significant.

3.10 Energy

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	◙
b. Conflict or obstruct a state of local plan for renewable energy or energy efficiency?	☐	☐	☐	◙

3.10.1 Environmental Setting

WRCRWA presently operates a solar photovoltaic (PV) facility at the WRCRWATP. This facility has a capacity of 1 megawatt (MW) which supplies approximately 25 percent of the existing treatment facilities electrical demand.

3.10.2 Discussion and Mitigation Measures

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

Answer: No Impact.

Discussion:

The Project includes the installation, operation and maintenance of odor control facilities at the WRCRWATP.

During construction, it would be necessary to use diesel-powered equipment. This would not be considered a wasteful, inefficient or unnecessary consumption of energy resources.

During operation, the demand for electrical energy for the new facilities would be approximately 750 megawatt-hours (MWh) per year. Due to the fact that implementation of the Project would significantly reduce the odor complaints from the residents to the east of the WRCRWATP this utilization of electrical energy would not be considered a wasteful, inefficient or unnecessary consumption of energy resources.

Therefore, there would be no impacts to energy caused by implementation of the Project. Consequently, there would be no further analysis or mitigation required.

Energy. b. Would the project conflict or obstruct a state of local plan for renewable energy or energy efficiency?

Answer: No Impact.

Discussion:

WRCRWA purchases electrical energy from Southern California Edison (SCE) to meet its electrical demands that cannot be me by the solar facilities. SCE is working to provide its customers with an 80 percent carbon free energy portfolio. Implementation of the WRCRWA Odor Mitigation Project would not impact SCE's efforts to meet its goals. Consequently, no further analysis or mitigation is required.

3.10.3 Conclusion

No adverse impacts were identified; therefore, no further analysis or mitigation is required.

3.11 Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. 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? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	◙	☐
i. Strong seismic ground shaking?	☐	☐	◙	☐
ii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	◙
iii. Landslides?	☐	☐	☐	◙
b. Result in substantial soil erosion or the loss of topsoil?	☐	◙	☐	☐
c. 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?	☐	☐	☐	◙
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	◙
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	◙
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	◙	☐	☐

3.11.1 Environmental Setting

The following information on geology and seismicity was gleaned from the Geotechnical Evaluation for the proposed WRCRWATP site dated August 25, 1995, by Ninyo & Moore Geotechnical and Environmental Sciences Consultants and summarized in SFC Consultants July 22, 2008 Mitigated Negative Declaration.

Geologic Setting

The WRCRWATP site is located in the southerly portion of the Peninsular Ranges Geomorphic Province. The geomorphic province, one of the largest in North America, encompasses an area that extends 125 miles from the Transverse Ranges and the Los Angeles Basin south to the Mexican Border and beyond another 775 miles to the tip of Baja California, Mexico. In general, the province consists of rugged mountains underlain by Mesozoic rocks to the east and a dissected coastal plain underlain by Cenozoic sediments to the west. The geomorphic province varies in width from approximately 30 to 100 miles and is traversed by a group of sub-parallel faults and fault zones trending roughly northwest.

The Chino Basin is a sedimentary basin bounded by major faults and resistant hills. This basin, underlain by the fault-bounded Perris block, lies southwest of the active San Jacinto fault zone and east of the Puente Hills and Chino segments of the active Elsinore fault zone. In the Chino Basin, alluvial deposits reach depths as great as 1,100 feet, with an average thickness of 500 feet.

Seismicity

Seismic hazards at the Project site can be attributed to ground shaking related to events on nearby active faults. The principal seismic considerations in southern California are surface rupture, ground shaking and damage caused by seismically induced settlement. The probability of damage due to ground rupture at the site appears to be low. Research and field reconnaissance did not indicate the presence of any known active faults at the site.

Based on Ninyo & Moore's report, geological and fault maps of the area, no active faults have been mapped underlying or immediately adjacent to the Project site. However, there are several faults in the southern California area that could generate significant ground acceleration and ground shaking at the Project site.

Based on the maximum credible and probable earthquake magnitudes for the faults in the area, as well as the distance of the site from these faults, the most significant seismic event that could affect the site would be the Maximum Credible Earthquake of magnitude 7.5 of the Whittier-Elsinore Fault system. The Chino Fault, which is considered part of the Whittier-Elsinore Fault system, is located approximately 4 miles southeast of the Project site. The estimated peak horizontal bedrock acceleration due to gravity (g) produced at the Project site by such an event would be 0.53g. Based on Ploessel and Slosson (1974), a repeatable high ground acceleration of 0.34g can be assigned to the Project site.

Soils

Based on the USDA NRCS, Web Soil Survey, the Project site is historically underlain by the following soil units: Ramona sandy loam (5 to 8 percent slopes) and Ramona sandy loam (2 to 5 percent slopes). Due to existing development, undeveloped/native surface soils are no longer present.

3.11.2 Discussion and Mitigation Measures

Geology and Soils. a. i. *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? Refer to Division of Mines and Geology Special Publication 42.*

Answer: No impact.

Discussion:

The Alquist-Priolo Earthquake Fault Zoning Act identifies special study zones for areas where existing known faults are located. The main purpose of the act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The act also required the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. As discussed previously, there are no Earthquake Fault Zones in the Project area. Therefore, no further analysis or mitigation is required.

Geology and Soils. a. ii. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

Answer: Less than Significant.

Discussion:

The potential for strong seismic ground shaking in the Project area is similar to that in surrounding areas. Because the proposed Project consists of facilities that are not intended for human habitation, the proposed Project will not expose people or critical structures to adverse effects resulting from seismic-related ground failure, including liquefaction. In addition, the proposed Project facilities are specifically designed to withstand seismic conditions anticipated to occur at the proposed Project site. Seismic conditions expected to occur in the proposed Project area can be mitigated by special design using reasonable construction and/or maintenance practices common to the Riverside County area. Any potential impacts would be considered less than significant and no further analysis or mitigation is required.

Geology and Soils. a. iii. *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?*

Answer: Less than Significant.

Discussion:

According to the Ninyo and Moore report, the risk of ground shaking and liquefaction (transformation of water-saturated granular soils to a liquid state during ground shaking) in the Project area is considered low. Any potential impacts would be considered less than significant; therefore, no further analysis or mitigation is required.

Geology and Soils. a. 4. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

Answer: No Impact.

Discussion:

Seismically triggered landslides or other types of ground failure, including expansive soils (those that swell when wet and shrink when dry) and subsidence (gradual settling or sinking of an area with little or no horizontal movement) are not considered a significant hazard in the Project area. Therefore, no further analysis or mitigation is required.

Geology and Soils. b. *Would the project result in substantial soil erosion or the loss of topsoil?*

Discussion:

The soil types in the Project area have a moderate potential for wind erosion. Less than 0.5 acres of these soils could be exposed during installation of the odor control equipment. However, strict adherence to WRCRWA's best management practices for air quality control would ensure that these potential impacts were less than significant.

Geology and Soils. c. *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?*

Answer: No Impact.

Discussion:

As stated previously, the Project area is not located on a geologic unit or soil that would become unstable. Therefore, no further analysis or mitigation is required.

Geology and Soils. d. *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

Answer: No Impact.

Discussion:

Expansive soils are largely composed of clay which expand in volume when water is absorbed and shrink when dried. The soils at the Project site are loams which are not susceptible to expansion and shrinking. Therefore, there would be no impacts and no further analysis or mitigation is required.

Geology and Soils. e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

Discussion:

The Project does not include the use of septic tanks or alternative wastewater disposal systems. Therefore, there are no impacts associated with the use of septic tanks or alternative wastewater disposal systems and no mitigation is required.

Geology and Soils. f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

There is always the possibility of an inadvertent discovery of paleontological resources during construction. However, WRCRWA's construction documents for the Project will include the following best management practice:

- In the unlikely event that potentially significant paleontological materials (e.g., fossils) are encountered during construction of the Project, all work shall be halted in the vicinity of the paleontological discovery until a qualified paleontologist can visit the site of discovery, assess the significance of the paleontological resource, and provide proper management recommendations. If the discovery proves to

be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of paleontological material that might be discovered during excavation shall be in accordance with applicable laws and regulations.

3.11.3 Conclusion

Strict adherence to WRCRWA's best management practices outlined herein would insure that no significant impacts to geology and soils would occur; therefore, no further analysis or additional mitigation is required.

3.12 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?	☐	☐	◙	☐
b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emission of greenhouse gases?	☐	☐	☐	◙

3.12.1 Environmental Setting

Under Assembly Bill 32 (AB 32) greenhouse gases (GHGs) are defined as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (NO_2), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6), Global warming potential (GWP) is a measure of how much a given mass of greenhouse gas is estimated to contribute to global warming. It is a relative scale that compares the gas in question to the same mass of CO_2 (whose GWP by definition is 1). A GWP is calculated over a specific time interval and the value of this must be stated whenever a GWP is quoted or else the value is meaningless. A substance's GWP depends on the time span over which the potential is calculated. A gas which is quickly removed from the atmosphere may initially have a large effect but for longer time periods as it has been removed becomes less important. For the purposes of a CEQA analysis, especially an analysis of operating emissions, the maximum GWP is typically used, regardless of the actual atmospheric lifetime. This approach simplifies the analysis and provides a very conservative analysis, especially for the fluorinated gases. The GWP of the six Kyoto Protocol[5] GHGs is shown in Table 3.12-1 [U.S. EPA (www.epa.gov)].

Table 3.12-1
Global Warming Potential of Kyoto GHGs

Gas	Atmospheric Lifetime	GWP
Carbon Dioxide (CO_2)	50 – 200	1
Methane (CH_4)	12 ± 3	21
Nitrous Oxide (NO_2)	120	310
HFC-23 (Hydrofluorocarbons)	264	11,700
HFC-32	5.6	650
HFC-125	32.6	2,800
HFC-134a	14.6	1,300
HFC-143a	48.3	3,800
HFC-152a	1.5	140
HFC-227ea	36.5	2,900
HFC-236fa	209	6,300
HFC-4310mee	17.1	1,300
CF_4 (Perfluorocarbons)	50,000	6,500

[5] The United Nations Framework Convention on Climate Change (UNFCCC) calls for the stabilization of greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with the climate system. The Kyotol Protocol to the Convention comments its parties to binding targets on as a 'basket' of six GHGs listed in Table 3.12-1.

Gas	Atmospheric Lifetime	GWP
C_2F_6	10,000	9,200
C_4F_{10}	2,600	7,000
C_6F_{14}	3,200	7,400
Sulfur Hexafluoride (SF_6)	3,200	23,900

Source: U.S. EPA (www.epa.gov)

According to the CARB's *California Greenhouse Gas Emission for 2000 to 2016 Trends of Emissions and Other Indicators,* California uses the annual statewide GHG emission inventory to track progress toward meeting statewide GHG targets. The inventory for 2016 shows that California's GHG emissions continue to decrease, a trend observed since 2007. In 2016, emissions from routine GHG emitting activities statewide were 429 million metric tons (MT) of CO_2 equivalent ($MMTCO_2e$), 12 $MMTCO_2e$ lower than 2015 levels. This puts total emissions just below the 2020 target of 431 million MT. Emissions vary from year-to-year depending on the weather and other factors, but California will continue to implement its greenhouse gas reductions program to ensure the State remains on track to meet its climate targets in 2020 and beyond. These reductions come while California's economy grows and continues to generate jobs. Compared to 2015, California's gross domestic product grew three percent while the carbon intensity of its economy declined by six percent.

- The largest reductions came from the electricity sector which continues to see decreases as a result of the State's climate policies, which led to growth in wind generation and solar power, including growth in both rooftop and large solar array generation.
- The abundant precipitation in 2016 provided higher hydropower to the State.
- The industrial sector shows a slight decrease in emissions in the past two years.
- The transportation sector remains the largest source of GHG emissions in the state and saw a two percent increase in emissions in 2016.
- Emissions from the remaining sectors are relatively constant in recent years, although emissions from high GWP gases also continued to increase as they replace O_3 Depleting Substances (ODS) banned under the 1987 Montreal Protocol.

3.12.2 Discussion and Mitigation Measures

Greenhouse Gas Emissions. a. *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?*

Answer: Less than Significant.

Discussion:

WRCRWA plans to begin construction of by March 2021. Construction on the project is scheduled to be completed by March 2022[6]. As shown in the Air Quality section, construction of the Project would generate exhaust emissions, including GHGs. from the construction equipment and on-road vehicles. The CO_2 equivalent of those emissions (CO_2 and CH_4) are estimated at 31 MT during 2020, 403 MT during 2021, and 102 during 2022. SCAQMD has established a significance threshold of 10,000 MT per year for GRGs for industrial projects. Based on this threshold limit, emissions

[6] This is the projected completion date for containment of cascading weir odors and consolidating and relocating the scrubber stack only.

of GHGs during construction of the Project would be less than significant. Therefore, no further analysis or mitigation is required.

Operation of the Project would not directly generate GHGs. However, generation of power to operate the equipment could generate GHGs. As stated previously in the Energy section, WRCRWA generates one MW of electricity on site with its solar PV facility. The remainder of the power demand is purchased from SCE which has an 80 percent carbon free energy portfolio. Therefore, this indirect impact would be considered less than significant and no further analysis of mitigation is required.

Greenhouse Gas Emissions. b. *Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emission of greenhouse gases?*

Answer: No Impact.

Discussion:

Implementation of the Project would not conflict or obstruct implementation of any plan to reduce the emission of GRGs. Consequently, no further analysis or mitigation is required.

3.12.3 Conclusion

No significant impacts were identified; therefore, no further analysis or mitigation is required.

3.13 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	☐	☐	☐	◙
b. Create a significant hazard to the public or the environment through reasonably upset accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	◙
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	◙
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	◙
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, and if so, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	◙
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	◙
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	◙

3.13.1 Environmental Setting

Hazards

Seismic and Geologic Hazards

Seismic and geologic hazards were discussed in Section 3.11.

Fire

According to the County of Riverside's online geographic information system (GIS) database, the Project site is not within a fire hazard zone or a fire responsibility zone.

Flooding

The Project site is shown on the Federal Emergency Management Agency's Flood Insurance Rate Map 06065C0686G as an Area of Minimal Flood Hazard (Zone X).

Hazardous Materials

Several standard environmental record services are available to determine the potential for recognized environmental conditions in an area. Those databases are briefly described in the following paragraphs.

Superfund Enterprise Management System (SEMS)

In 2014, the Superfund Program implemented a new information system, the Superfund Enterprise Management System (SEMS). SEMS integrates multiple legacy systems (e.g., CERCLIS, ICTS, SDMS) into a comprehensive tracking and reporting tool, providing data on the inventory of active and archived hazardous waste sites evaluated by the Superfund program. It contains sites that are either proposed to be, or are on, the National Priority List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. SEMS also includes information from the California Department of Toxic Substances Control's (DTSC) Envirostor database. The SEMS search did not reveal any sites near the Project site.

Envirostor

Envirostor is a database maintained and primarily used by the DTSC to determine the location of all hazardous waste sites. The Envirostor search did not reveal any active sites near the Project site.

Geotracker

Geotracker is the State Water Resources Control Board's (SWRCB) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense Site Cleanup Program) as well as permitted facilities such as operating underground storage tanks and land disposal sites. The Geotracker search did not reveal any active sites near the Project site.

Leaking Underground Storage Tank Information System (LUSTIS)

The SWRCB administers the Leaking Underground Storage Tank Information System (LUSTIS). The LUSTIS database includes all reported leaks from underground storage tanks. The LUSTIS database is now reported in the Geotracker results.

Site Mitigation Program Property Database (formerly CalSites)

The California Environmental Protection Agency's DTSC administers the CalSites program. Information in the CalSites database is preliminary in nature; therefore, most sites listed in the database need additional work to determine if contamination exists. There are no sites in the CalSites database within the Project area.

Hazardous Waste and Substances Sites List(Cortese)

California's Government Code §65962.5 requires the DTSC to develop, at least annually, an updated list of Hazardous Waste and Substances Sites. This list, known as the Cortese List, is a planning document used by the State, local agencies and developers to comply with the CEQA requirements in providing information about the location of hazardous materials release sites. DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local agencies are required to provide additional hazardous materials release information for the Cortese List. The Cortese List is to be submitted to the Secretary of the California Environmental Protection Agency. There are no sites on the Cortese List within the Project area.

Solid Waste Information System (SWIS)

The Solid Waste Information System (SWIS) is a database provided by the California Department of Resources Recycling and Recovery (CalRecycle) which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations. There are no active sites in the SWIS database within the Project area.

3.13.2 Discussion and Mitigation Measures

Hazards and 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?*

Answer: No Impact.

Discussion:

WRCRWA presently utilizes hazardous materials (i.e., chemicals) at its WRCRWATP as part of its routine treatment process. These chemicals are handled in accordance with the provisions of WRCRWA's Hazardous Materials Business Plan prepared pursuant to Chapter 6.95, Division 20 of the Health and Safety Code (§§ 25500—25519.)

Implementation of the proposed Project would not change the existing operational procedures. Therefore, no impacts are anticipated and no mitigation is required.

Hazards and Hazardous Materials. b. *Would the project create a significant hazard to the public or the environment through reasonably upset accident conditions involving the release of hazardous materials into the environment?*

Answer: No Impact.

Discussion:

As stated previously, all hazardous materials are handled in accordance with the provisions of WRCRWA's Hazardous Materials Business Plan prepared pursuant to Chapter 6.95, Division 20 of the Health and Safety Code (§§ 25500—25519.)

Implementation of the proposed Project would not change the existing operational procedures. Therefore, no impacts are anticipated and no mitigation is required.

Hazards and Hazardous Materials. 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?*

Answer: No Impact.

Discussion:

There are no known schools, existing or proposed, within one-quarter mile of the Project site. Therefore, no further analysis or mitigation is required.

Hazards and Hazardous Materials. d. *Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

Answer: No Impact.

Discussion:

Several standard environmental record services are available to determine the potential for recognized environmental conditions in an area. Those databases include:

- SEMS
- Envirostor
- Geotracker
- Site Mitigation Program Property Database (formerly CalSites)
- Hazardous Waste and Substances Sites List (Cortese)
- SWIS

These databases were searched for the presence of hazardous materials sites within the Project area. According to those databases, there are no active sites in the Project area. Therefore, no further analysis or mitigation is required.

Hazards and Hazardous Materials. e. *Would the project be 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, and if so, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

Answer: No Impact.

Discussion:

There are no public airports or public use airports within two miles of the Project site. Therefore, there would be no impacts and no further analysis or mitigation is required.

Hazards and Hazardous Materials. f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Answer: No Impact.

Discussion:

Implementation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan as it would not be constructed within public rights-of-way. Therefore, there would be no impacts and no further analysis or mitigation is required.

Hazards and Hazardous Materials. h. *Would the project expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?*

Answer: No Impact.

Discussion:

The Project area is not within a high fire hazard area nor a fire responsibility area. Therefore, there would be no impacts and no further analysis or mitigation is required.

3.13.3 Conclusion

No impacts were identified; therefore, no further environmental review or mitigation is required.

3.14 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	◙
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable ground management of the basin?	☐	☐	☐	◙
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site;	☐	☐	☐	◙
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☐	◙
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	◙
iv. Impede or redirect flood flows?	☐	☐	☐	◙
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	◙
	☐	☐	☐	◙

3.14.1 Environmental Setting

The WRCRWATP site is adjacent to the Santa Ana River approximately three miles upstream of Prado Dam.

The Santa Ana River watershed above Prado Dam encompasses 2,255 square miles. Rainfall over the basin averages about 20 inches per year; however, it varies considerably from year to year. There are no active streamflow recording stations near the Project site. The closest stream gage is upstream at the Metropolitan Water District's crossing which has a tributary drainage area of 852 square miles (USGS Station No. 11066460 at elevation 685 feet. Mean monthly flows at this station vary from a low of 73 cubic feet per second (cfs) to a high of 388 cfs.

3.14.2 Discussion and Mitigation Measures

Hydrology and Water Quality. a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Answer: No Impact.

Discussion:

It is anticipated that less than one acre of soils would be disturbed during construction of the Project. Therefore, the Project would not be subject to the provisions of the National Pollutant Discharge Elimination System (NPDES) Construction Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities

[NPDES No. CAS000002 (SWRCB Order No. 2009-0009-DWQ)]. Consequently, no impacts are anticipated and no further analysis or mitigation is required.

Hydrology and Water Quality. b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable ground management of the basin?*

Answer: No Impact.

Discussion:

The proposed Project includes the installation of odor control facilities and does not include any facilities to extract groundwater. It will not result in the use of groundwater and thus will not substantially deplete groundwater supplies or interfere with groundwater recharge. Therefore, no further analysis or mitigation is required.

Hydrology and Water Quality. c.i. *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 off-site?*

Answer: No Impact.

Discussion:

The Project site is essentially level and will require only a minimum amount of grading. The new facilities will be installed on existing impervious surfaces and have a negligible effect on runoff from the site. Therefore, no impacts to the existing drainage pattern of the site would occur. Consequently, no further analysis or mitigation is required.

Hydrology and Water Quality. c.ii. *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 flooding on- or off-site?*

Answer: No Impact.

Discussion:

As discussed previously, no impacts to the existing drainage pattern of the site would occur. Consequently, no further analysis or mitigation is required.

Hydrology and Water Quality. c.iii. *Would the project 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?*

Answer: No Impact.

Discussion:

As discussed above, no impacts to the existing drainage pattern of the site would occur. Consequently, no further analysis or mitigation is required.

Hydrology and Water Quality. c.iv. *Would the project impede or redirect flood flows?*

Answer: No Impact.

Discussion:

As discussed previously, no impacts to the existing drainage pattern of the site would occur. Consequently, no further analysis or mitigation is required.

Hydrology and Water Quality. d. *Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

Answer: No Impact.

Discussion:

According to the Federal Emergency Management Agency's Flood Insurance Rate Map 06065C0686G, the proposed Project site is within an Area of Minimal Flood Risk (Zone X). Therefore, there would be no impacts and no further analysis or mitigation is required.

Hydrology and Water Quality. e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Answer: No Impact.

Discussion:

As shown previously, the Project would have no effect on water quality and therefore would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Consequently, no further analysis or mitigation is required.

3.14.3 Conclusion

No impacts are anticipated; therefore, no further analysis or mitigation is required.

3.15 Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	◙
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	◙

3.15.1 Environmental Setting

The proposed Project site is within the confines of the existing WRCRWATP. The treatment plant site is presently zoned public facilities (PF) and is designated in the City of Eastvale's General Plan.

3.15.2 Discussion and Mitigation Measures

Land Use and Planning. a. *Would the project physically divide an established community?*

Answer: No Impact.

Discussion:

As stated above, the Project site is within the confines of the WRCRWATP site; therefore, implementation of the Project would not physically divide an established community. Consequently, no further analysis or mitigation is required.

Land Use and Planning. b. *Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

Answer: No Impact.

Discussion:

As stated previously, the Project site is zoned public facilities. Therefore, no further analysis or mitigation is required.

3.15.3 Conclusions

No significant effects were identified; therefore, no further analysis or mitigation is required.

3.16 Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known resource that would be of value to the region and the residents of the state?	☐	☐	☐	◙
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?	☐	☐	☐	◙

3.16.1 Environmental Setting

According to the City of Eastvale Land Use Map, there are no mineral resources sites within the Project area.

3.16.2 Discussion and Mitigation Measures

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

Answer: No Impact.

Discussion:

There are no known mineral resources in the Project area that would be of value to the region and the residents of the State. Therefore, there would be no impacts anticipated and no mitigation is required.

Mineral Resources. b. *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?*

Answer: No Impact.

Discussion:

There are no locally-important mineral resource recovery sites delineated on the applicable local general plans, specific plan or other land use plan in the Project area. Therefore, there would be no impacts anticipated and no mitigation is required.

3.16.3 Conclusion

No impacts are anticipated; therefore, no further analysis or mitigation is required.

3.17 Noise

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	◙
b. Generation of excessive groundbourne vibration or groundbourne noise levels?	☐	☐	☐	◙

3.17.1 Environmental Setting

The ambient noise level of a region is the total noise generated within the specific environment and is usually composed of sounds emanating from natural and manmade sources. Noise levels monitored in a region tend to have wide spatial and temporal variation due to the great diversity of contributing sources. This is especially true for the greater project area with its blend of rural land uses adjacent to a mix of residential and industrial uses.

Characterization of the Project area noise levels is difficult due to the lack of actual field measurements. Very little noise measurement data are available for the Project area in general. However, typical noise levels for areas like the Project area are in the range of 45 to 55 decibels on the A-scale [dB(A)].

Generally, the noise levels in the Project area are affected by natural and manmade sources. However, the sound levels are more strongly influenced by human rather than natural sound sources. Within the Project area, the major sources of noise include aircraft and vehicular traffic.

3.17.2 Discussion and Mitigation Measures

Noise. a. *Would the project result in 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?*

Answer: No Impact.

Discussion:

The City of Eastvale's Noise Regulation is codified in Section 8.52 of its Municipal Code. Section 8.52.020 of that Code states:

> *Sound emanating from the following sources is exempt from the provisions of this chapter:*
>
> *(1) Facilities owned or operated by or for a governmental agency.*
>
> *(2) Capital improvement projects of a governmental agency.*

WRCRWA is a governmental agency; therefore, the City's Noise Regulations do not apply to the proposed Project. Consequently, no further analysis or mitigation is required.

Noise. b. *Would the project result in generation of excessive groundbourne vibration or groundbourne noise levels?*

Answer: No Impact.

Discussion:

Construction activities associated with the Project could result in some minor amount of ground vibration. The California Department of Transportation (Caltrans) has developed a vibration manual. According to that manual, the use of large bulldozers, vibratory rollers, and loaded trucks during grading activities could produce vibration. Depending on the level of vibration, the vibration could cause annoyance or damage structures within the Project vicinity. Caltrans has developed a screening tool to determine if vibration from construction equipment is substantial enough to impact surrounding uses. Those thresholds are presented in Tables 3.17-1 and 3.17-2.

Table 3.17-1
Vibration Damage Potential Threshold Criteria

Structural Integrity	Maximum Peak Particle Velocity (inches/second)	
	Transient	Continuous
Historic and some older buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial and commercial structures	2.00	0.50

Table 3.17-2
Vibration Annoyance Potential Threshold Criteria

Human Response	Maximum Peak Particle Velocity (inches/second)	
	Transient	Continuous
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.90	0.10
Severely perceptible	2.00	0.40

Construction equipment, such as bulldozers, are repetitive sources of vibration; therefore, the continuous threshold should be used in the vibration analysis for this Project. The nearest residences to any part of the Project site is approximately 150 feet. As shown in Table 3.17-3, the ground vibration from small bulldozers and loaded trucks would not be perceptible to those residences within 150 feet of the construction activity.

Table 3.17-3
Construction Vibration Impacts

Equipment	Peak Particle Velocity ref	Distance (feet)	Peak Particle Velocity (inches/second)
Small Bulldozer	0.003	150	0.0004
Loaded Truck	0.076	150	0.0106

Therefore, no impacts would occur and no further analysis or mitigation is required.

3.17.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.,

3.18 Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	◙
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	◙

3.18.1 Environmental Setting

The Project area is within the City of Eastvale. According to the U.S. Census, the 2010 population was 55,598 with a housing stock of 13,590 units.

3.18.2 Discussion and Mitigation Measures

Population and Housing. a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

Answer*: No Impact****.***

Discussion:

The Project includes the installation of odor control facilities at the WRCRWATP. It does not include construction of homes, businesses or other infrastructure that would induce unplanned population growth. Therefore, no further analysis or mitigation is required.

Population and Housing. b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

Answer: No Impact.

Discussion:

The Project facilities would be constructed within the confines of the WRCRWATP that does not include housing and therefore would not displace people or housing. Consequently, no further analysis or mitigation is required.

3.18.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

3.19 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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:				
1. Fire Protection?	☐	☐	☐	◙
2. Police Protection?	☐	☐	☐	◙
3. Schools?	☐	☐	☐	◙
4. Parks?	☐	☐	☐	◙
5. Other Public Facilities?	☐	☐	☐	◙

3.19.1 Environmental Setting

Several entities provide public services to residents in the Project area. They include:

- Police Protection:
  - City of Eastvale Police Department
  - Riverside County Sheriff's Department
- Fire Protection:
  - City of Eastvale Fire Department
  - Riverside County Fire Department
  - California Department of Forestry and
  - Fire Protection Sierra Valley Fire Protection District
- Schools:
  - Corona-Norco Unified School District

3.19.2 Discussion and Mitigation Measures

Public Services. a.1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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* ***fire protection services****?*

Discussion:

Implementation of the Project would not result in the need for additional fire protection services because the Project involves a negligible expansion of operations for which fire protection services would be required. Therefore, there would be no impacts anticipated and no mitigation is required.

Public Services. a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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* ***police protection services****?*

Answer: No Impact.

Discussion:

Implementation of the Project would not result in the need for additional police protection services because the Project involves a negligible expansion of operations for which police services would be required. Additional police protection services (e.g., equipment, sworn officers) would not be required. Therefore, there would be no impacts anticipated and no mitigation is required.

Public Services. a.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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 schools****?*

Answer: No Impact.

Discussion:

Implementation of the Project would not result in a need for additional schools because the Project does not include the development of residential uses for which school services would be required. Therefore, there would be no impacts anticipated and no mitigation is required.

Public Services. a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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 parks****?*

Answer: No Impact.

Discussion:

Implementation of the Project would not result in a need for additional park facilities because the Project does not include the development of uses for which public parks would be required. Therefore, there would be no impacts anticipated and no mitigation is required.

Public Services. a.5. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental 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* ***other public services****?*

Answer: No Impact.

Discussion:

Implementation of the Project would not result in a need for expansions to other public services. Therefore, there would be no impacts anticipated and no mitigation is required.

3.19.3 Conclusion

There were no significant impacts identified; therefore, no further analysis or mitigation is required.

3.20 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	◙
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	◙

3.20.1 Environmental Setting

There are many acres of public lands as well as several parks, golf courses and water-oriented recreational facilities in the greater Project area.

3.20.2 Discussion and Mitigation Measures

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?*

Answer: No Impact.

Discussion:

The proposed Project would not increase the use or demand for park or recreational facilities because the Project does not include the development of uses that would place demands on these facilities, such as residential dwellings or office employment. Therefore, there would be no impacts anticipated and no further analysis or mitigation is required.

Recreation. b. *Would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?*

Answer: No Impact.

Discussion:

The Project does not include recreational facilities. Therefore, there would be no impacts anticipated and no further analysis or mitigation is required.

3.20.3 Conclusion

No significant impacts were identified; therefore, no further analysis or mitigation is required.

3.21 Transportation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian paths?	☐	☐	☐	◙
b. For a land use project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?	☐	☐	☐	◙
c. For a transportation project, would the project conflict with CEQA Guidelines section 15064.3, subdivision (b)(3)?	☐	☐	☐	◙
d. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	◙
e. Result in inadequate emergency access?	☐	☐	☐	◙

3.21.1 Environmental Setting

Regional access to the Project site is from the Riverside Freeway (Highway 91), Main Street in Corona, and River Road.

The California Department of Transportation Caltrans's latest traffic counts (2008) for State Highway 91 at Main Street in Corona are as shown in Table 3.21-1.

Table 3.21-1
Traffic Counts on State Highway 91 at Main Street in Corona (2008)

Eastbound			Westbound		
Peak Hour	Peak Month	Average Annual Daily Traffic	Peak Hour	Peak Month	Average Annual Daily Traffic
16,000	259,000	247,000	15,000	245,000	233,000

Source: Caltrans 2009, www.dot.ca.gov (11/09/2019)

The City of Corona also takes traffic counts on city streets. The latest counts on Main Street indicate an AADT annual average daily traffic count of 34,200.

The County of Riverside also takes traffic counts of county roads. The latest counts for River Road east of Hellman Avenue indicate an average daily traffic count of 4,095.

3.21.2 Discussion and Mitigation Measures

Transportation. a. *Would the project conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian paths?*

Answer: No Impact.

Discussion:

The Project consists of the installation of odor control facilities at the WRCRWATP site. Therefore, the Project would not conflict with a plan, ordinance or policy addressing the circulation system. Consequently, no further analysis or mitigation is required.

Transportation. b. *For a land use project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?*

Answer: No Impact.

Discussion:

The Project is not a land use project; therefore, this potential impact category would not apply to the Project. Consequently, there would be no impacts anticipated and no further analysis or mitigation is required.

Transportation. c. *For a transportation project, would the project conflict with CEQA Guidelines section 15064.3, subdivision (b)(3)??*

Answer: No Impact.

Discussion:

The Project is not a transportation project; therefore, this potential impact category would not apply to the Project. Consequently, there would be no impacts anticipated and no further analysis or mitigation is required.

Transportation. d. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Answer: No Impact.

Discussion:

Implementation of the Project would not substantially increase other hazards due to a geometric design feature or incompatible uses. Therefore, there would be no impacts anticipated and no further analysis or mitigation is required.

Transportation. e. *Would the project result in inadequate emergency access?*

Answer: No Impact.

Discussion:

Implementation of the Project would not result in inadequate emergency access. Therefore, there would be no impacts anticipated and no further analysis or mitigation is required.

3.21.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

3.22 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:				
1) Listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code §5020.1(k), or	☐	☐	☐	◙
2) A resource determined by a 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 §5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.	☐	☐	☐	◙

3.22.1 Environmental Setting

AB 52 Coordination

On September 7, 2019, KSDA sent a request to the Native American Heritage Commission to perform a search of its Sacred Lands file. Subsequently, on September 24, 2019, Steven Quinn, Associate Governmental Program Analyst, responded in an email to Keith S. Dunbar in which he stated:

> *A record search of the Native American Heritage Commission (NAHC) Sacred Lands file (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the tribes on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.*

Mr. Quinn's contact list included the following tribes:

- Aqua Caliente Band of Cahuilla Indians
- Augustine Band of Cahuilla Mission Indians
- Cabazon Band of Mission Indians
- Cahuilla Band of Indians
- Los Coyotes Band of Cahuilla and Cupeño Indians
- Morongo Band of Mission Indians
- Pechanga Band of Luiseño Indians
- Ramona Band of Cahuilla
- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseño Indians
- Torres-Martinez Desert Cahuilla Indians

Also, on September 7, 2019, KSDA emailed AB 52 Notifications to the following based on requests for notification filed with the WRCRWA:

- Aqua Caliente Band of Cahuilla Indians
- Morongo Band of Mission Indians
- Pechanga Band of Luiseńo Indians
- Rincon Band of Mission Indians
- San Manuel Band of Mission Indians
- Soboba Band of Luiseńo Indians
- Torres-Martinez Desert Cahuilla Indians

On September 9, 2019, Travis Armstrong, Tribal Historic Preservation Officer, Morongo Band of Mission Indians sent an email to Keith Dunbar in which he stated:

> *Our office has no additional comments at this time. We may conclude AB 2 consultation on the condition that if a cultural report is produced that our office receives a copy of it for our records.*

Subsequently, on October 7, 2019, Lacy Padilla of the Aqua Caliente Band of Cahuilla Indians sent an email to Keith Dunbar in which she stated:

> *A records check of the Tribal Historic preservation office's cultural resources registry revealed that this project is not located within the Tribe's Traditional Use Area. Therefore, we defer to the other tribes in the area. This letter shall conclude our consultation efforts.*

During the preparation of its cultural resources assessment for the Project, Anza Resource Consultants performed a records search at the Eastern Information Center at the University of California, Riverside. Based on that search, no historic or cultural resources have been previously identified on the Project site. Anza's complete report is contained in Appendix D.

3.22.2 Discussion and Mitigation Measures

Tribal Cultural Resources. 1). *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as 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, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code §5020.1(k),*

Answer: No Impact.

Discussion:

Based on record searches at the California Historic Resources Information System, field surveys and Native American consultation, there are no tribal cultural resources within the proposed Project area. Therefore, no further analysis or mitigation is required.

Tribal Cultural Resources. 2). *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code §5023.1(c), and considering the significance of the resource to a California Native American tribe.*

Answer: No Impact.

Discussion:

Based on record searches at the California Historic Resources Information System, field surveys and Native American consultation, there are no tribal cultural resources within the proposed Project area. Therefore, no further analysis or mitigation is required.

3.22.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

3.23 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	◙
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	◙
c. Result in a determination by the wastewater treatment provider which serves 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?	☐	☐	☐	◙
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?	☐	☐	☐	◙
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	◙

3.23.1 Environmental Setting

Several entities provide utilities and service systems within the Project area including:

- Water — Jurupa Community Services District
- Wastewater — WRCRWA
- Electricity — Southern California Edison.
- Natural Gas — Southern California Gas.

3.23.2 Discussion and Mitigation Measures

Utilities and Service Systems. a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?*

Answer: No Impact.

Discussion:

The Project includes the construction and operation of odor control facilities at the WRCRWATP site. It will not result in the relocation or construction of new or expanded services. Therefore, there would be no impacts and no further analysis or mitigation is required.

Utilities and Service Systems. 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?*

Answer: No Impact.

Discussion:

WRCRWA's present water supplies are adequate to meet the demand of the odor control facilities. Therefore, there would be no impacts and no further analysis or mitigation is required.

Utilities and Service Systems. c. *Would the project result in a determination by the wastewater treatment provider which serves 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?*

Answer: No Impact.

Discussion:

The Project will not require wastewater service. Therefore, there would be no impacts and no further analysis or mitigation is required.

Utilities and Service Systems. 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?*

Answer: No Impact.

Discussion:

The Project will not generate solid waste. Therefore, there would be no impacts and no further analysis or mitigation is required.

Utilities and Service Systems. e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Answer: No Impact.

Discussion:

The Project would comply with all federal, state and local regulations related to solid waste. Therefore, there would be no impacts and no further analysis or mitigation is required.

3.23.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

3.24 Wildfire

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Impair and adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	◙
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?	☐	☐	☐	◙
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risks or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	◙
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	◙

3.24.1 Environmental Setting

According to the County of Riverside's GIS database, the Project site is not within a high fire hazard area or a fire responsibility area.

3.24.2 Discussion and Mitigation Measures

Wildlife. a. *Would the project impair an adopted emergency response plan or emergency evacuation plan?*

Answer: No Impact.

Discussion:

As discussed in the Transportation section, the Project would not impair an adopted emergency response plan. Therefore, no further analysis or mitigation is required;

Wildlife. 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?*

Answer: No Impact.

Discussion:

The Project site is flat with only a minimum risk of wildland fires. Therefore, there would be no adverse impacts and no further analysis or mitigation is required.

Wildlife. c. *Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risks or that may result in temporary or ongoing impacts to the environment?*

Answer: No Impact.

Discussion:

The Project would not require the installation of additional infrastructure. Therefore, there would be no impacts and no further analysis or mitigation is required.

Wildlife. 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 instability, or drainage changes?*

Discussion:

The Project area is relatively flat and not subject to flooding or landslides. Therefore, there would be no adverse impacts and no further analysis or mitigation is required.

3.24.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

3.25 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. 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 population 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 prehistory?	☐	◙	☐	☐
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	◙	☐	☐
c. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	◙	☐	☐

3.25.1 Discussion and Mitigation Measures

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 population 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 prehistory?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

Compliance with the mitigation measures included in Sections 3.5 through 3.26 will ensure that implementation of the proposed Project does not have the potential to significantly degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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 prehistory.

Mandatory Findings of Significance. b. *Would the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

Compliance with the mitigation measures included in Sections 3.5 through 3.26 will ensure that implementation of the proposed Project does not have impacts that are individually limited, but cumulatively considerable. WRCRWA is not aware of any other projects in the area that could result in cumulative construction impacts.

Mandatory Findings of Significance. c. *Would the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

Compliance with the mitigation measures included in Sections 3.5 through 3.26 will ensure that implementation of the proposed Project does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

3.25.2 Conclusion

All potential significant impacts associated with the proposed Project can be mitigated to a less than significant level. Therefore, no further environmental review or mitigation is required.

4 Persons and Organizations Consulted

On August 4, 2020, Western Municipal Water District (WRCRWA's Administrator) mailed copies of the Notice of Intent to Adopt a Mitigated Negative Declaration with a link to WRCRWA's website where the IS and Mitigated Negative Declaration could be electronically downloaded to the following:

4.1 Federal Agencies

Karin Cleary-Rose, Chief
U.S. Fish and Wildlife Service
Palm Springs Fish and Wildlife Office
777 E. Tahquitz Canyon Way, Suite 208
Palm Springs, California 92262

Mark Cohen
Regulatory Division
Los Angeles District
U.S. Army Corps of Engineers
915 Wilshire Boulevard, Suite 930
Los Angeles, California 90017

US Army Corps of Engineers
Riverside Field Office
1451 Research Park Drive, Suite 100
Riverside, CA

Javin Moore, Superintendent Southern California Agency
Bureau of Indian Affairs
1451 Research Park Drive, Suite 100
Riverside, California 92507-2154

4.2 State Agencies

Scott Morgan, Director State Clearinghouse
Governor's Office of Planning and Research
Post Office Box 3044
Sacramento, California 95812-3044

Leslie McNair
Inland Deserts Region
California Department of Fish and Wildlife
3602 Inland Empire Boulevard, Suite C-220
Ontario, California 91764

Hope Smythe, Executive Officer
California Regional Water Quality Control Board, Santa Ana Region

3737 Main Street, Suite 500
Riverside, California 92501-3339

Julianne Planco
Headquarters
California Department of Parks and Recreation
Post Office Box 942896
Sacramento, California 94296-0001

Wade Crowfoot, Secretary
California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, California 95814

Christina Snider, Executive Secretary
California Native American Heritage Commission
1550 Harbor Boulevard, Suite 100
West Sacramento, California 95691

Mark Roberts, Chief IGR/CEQA Review
California Department of Transportation
464 West Fourth Street, 6th Floor
San Bernardino, California 92401

4.3 Regional Agencies

Lijin Sun, J.D.., Program Supervisor
Planning, Rule Development & Area Sources
South Coast Air Quality Management District
Post Office Box 4939
Diamond Bar, California 91765-0939

Planning, Rule Development & Area Sources
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

4.4 County Agencies

Mekbib Degaga
Chief of Regulatory Division
Riverside County Flood Control and Water Conservation District
1995 Market Street
Riverside, California 92501

Juan C. Perez, P.E., T.E. Department of Transportation County of Riverside
Post Office Box 1090
Riverside, California 92502-1090

Steve Weiss, Director Planning Department
County of Riverside Post Office Box 1409
Riverside, California 92502-1409

4.5 City Agencies

Bryan Jones, City Manager City of Eastvale
12363 Limonite Avenue, Suite 910
Eastvale, California 91752

4.6 Interested Entities

Paul Macarro, Cultural Coordinator Cultural Resources Center
Pechanga Band of Luiseño Indians
Post Office Box 1477
Temecula, California 92593

Joseph Ontiveros, Director Cultural Resources Department
Soboba Band of Luiseño Indians
Post Office Box 487
San Jacinto, California 92581

Destiny Colocho, Manager Rincon Cultural Resources Department
Rincon Band of Luiseño Indians
1 West Tribal Road
Valley Center, California 92082

Cheryl Madrigal, Cultural Resources Manager
One Government Center Lane
Valley Center, CA 92082

Travis Armstrong
Tribal Historic Preservation Officer
Morongo Band of Mission Indians
12700 Pumarra Road
Banning, California 92220

Raymond Huaute
Cultural Resources Specialist
Morongo Band of Mission Indians
12700 Pumarra Road

Banning, CA 92220

Katie Croft, Archaeologist
Aqua Caliente Band of Cahuilla Indians
5401 Dinah Shore Drive
Palm Springs, California 92264

Patricia Garcia, Director of Tribal Preservation Office
5401 Dina Shore Drive
Palm Springs Ca 92264

Michael Mirelez, Cultural Resources Coordinator
Torres Martinez Desert Cahuilla Indians
P.O. Box 1160
Thermal, CA 92274

Daniel F. McCarthy, Director -CRM Department
San Manuel Band of Mission Indians
26569 Community Center Drive
Highland, CA 92346

4.7 Utilities

Louis Davis
Local Public Affairs Region Manager Southern California Edison
24487 Prielipp Drive
Wildomar, California 92595

Verizon
Subpoena Compliance
2701 South Johnson Street M/C TXD01613
San Angelo, Texas 76904

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ELMT Consulting

(Biological Resources) Thomas J. McGill, Managing Director

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5.2 Report Contributors

Western Riverside County Regional Wastewater Authority

Ronald Palacios, P.E., Senior Engineer CIP

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Appendix A

Mitigated Negative Declaration

WESTERN RIVERSIDE COUNTY
REGIONAL WASTEWATER AUTHORITY

Mitigated Negative Declaration

Odor Mitigation Project

Western Riverside County Regional Wastewater Authority Treatment Plant

1. Name of project:	Odor Mitigation Project – Western Riverside County Regional Wastewater Authority Treatment Plant		
2. Project location – Identify street address and cross streets or attach a map showing the project site (preferably a USGS 7½' or 15' topographical map identified by quadrangle name):	See attachment.		
3. Entity or Person undertaking project:			
A. Entity			
(1) Name:	Western Riverside County Regional Wastewater Authority		
(2) Address:	14634 River Rd. Eastvale, CA 92880		
B. Other (Private)			
(1) Name:			
(2) Address:			

Western Riverside County Regional Wastewater Authority, having reviewed the Initial Study of this proposed project, having reviewed the recommendations of the Western Riverside County Regional Wastewater Authority's staff, does hereby find and declare that the proposed project will not have a significant effect on the environment. A brief statement of the reasons supporting the Western Riverside County Regional Wastewater Authority's findings are as follows:

The Initial Study concluded that all significant impacts can be reduced to a level of less than significant by implementation of the Mitigation Monitoring and Reporting Program developed for this Project.

Note: The Project name has been changed from "Odor Management Project" to "Odor Mitigation Project."

The Western Riverside County Regional Wastewater Authority finds that the Mitigated Negative Declaration reflects its independent judgment. A copy of the Initial Study and Mitigation Monitoring and Reporting Program are attached.

The location and custodian of the documents and any other materials which constitute the record of proceedings upon which the Western Riverside County Regional Wastewater Authority based its decision to adopt this Mitigated Negative Declaration are as follows:

Custodian:	Ron Palacios, P.E. Senior Engineer, CIP	Location:	Western Municipal Water District 14205 Meridian Parkway Riverside, California 92518
Phone:	(951) 571-7124		

08/04/2020	Ron Palacios
Date:	Signature

Overview of the Proposed Project

During 1998, The Western Riverside County Regional Wastewater Authority (WRCRWA) commenced operation of its Western Riverside County Regional Wastewater Treatment Plant (WRCRWTP) located at 14634 River Road, in the City of Eastvale, California (33º55'41.67"N, -117º36'13.42"W). That facility is now capable of producing up to 14 million gallons per day (MDG) of recycled water for reuse or for discharge to Reach 3 of the Santa Ana River, upstream of Prado Dam. The facility is owned by WRCRWA and operated by the Western Municipal Water District (WMWD). It receives municipal wastewater from five different entities including the City of Corona, City of Norco, Jurupa Community Services District, Home Gardens Sanitary District and WMWD.

When the WRCRWATP was originally constructed, the area around it was comprised of dairy farms, a green waste composting facility and the Santa Ana River. However, with the subsequent development activity in Eastvale, the dairies and composting facility were sold, and homes were built in their place. As such, the neighborhood to the east of the plant represents sensitive receptors that are susceptible to odor emissions from the plant.

Since the completion of the recent expansion, WRCRWA personnel have observed that odor complaints have increased from the neighborhood to the east. These complaints have been reported to the South Coast Air Quality Management District (SCAQMD) and are considered of utmost importance to WRCRWA. In its attempt to solve this problem, WRCRWA retained the services of CH_2M (now Jacobs) to develop an odor mitigation project for the WRCRWATP. Jacobs recommended the following to meet the Future Endorsed More Stringent Offsite Odor Goal of 5 dilutions to threshold (D/T) (Figure 1):

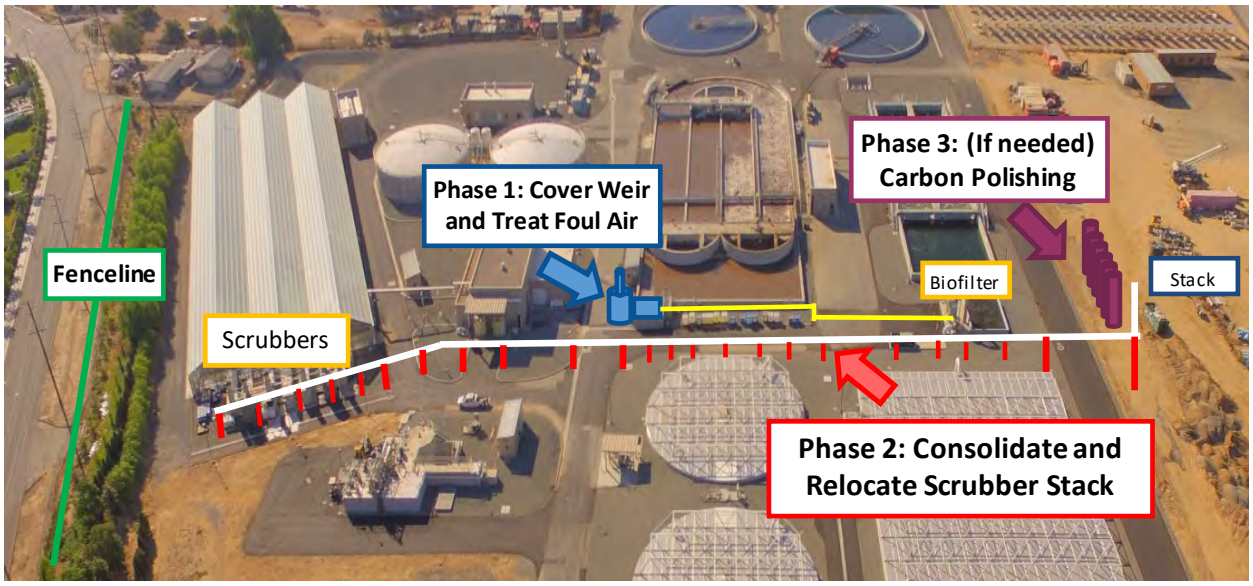


Figure 1 Recommended Odor Mitigation Project

- Initial Implementation Project No. 1: Alternative 4 (containment and treatment of cascading weir odors). This project may include a stand-alone treatment system or treating cascading weir odors at the retrofitted biofilter.
- Future Implementation Project No. 2: Alternative 2b (consolidated stack remotely located over by the existing biofilter). This project may include either fiberglass reinforced plastic (FRP) ducting, high-density polyethylene (HDPE) ducting, Stainless Steel ducting, whichever is more suitable for the project.. Together with Project No. 1, the two projects are equivalent to Mitigation Alternative 6. After start-up and commissioning of Project No. 2, additional baseline sampling and AERMOD modeling should be completed.

to validate results. In addition, a period of time of offsite assessment should be completed to determine if further mitigation (Project No. 3) is needed.

- Future Implementation Project No. 3 (if needed): Addition of carbon polishing units near the Alternative 2b stack location. This project would entail installing booster fans and carbon vessels with stacks. Some advantages to this project include:
  - Suitable treatment back-up in case of chemical scrubber upset or peak inletconditions.
  - Different treatment technology targeting different odorous compounds versus wet based technologies.

Appendix B
Air Modeling Results

ODOR MITIGATION PROJECT AT WESTERN RIVERSIDE COUNTY REGIONAL WASTEWATER TREATMENT PLANT

Western Riverside County Regional Wastewater Authority

Estimated Construction Emissions from Off-Road Heavy Duty Construction Equipment

2020 Construction Year

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Reactive Organic Gases (ROG)					
Air Compressors	0.489	0.00107709	1	78	0.48	4	0.16	
Cranes	0.3837	0.00084515	2	226	0.29	1	0.11	
Sweepers	0.5199	0.00114515	1	64	0.46	1	0.03	
Tractors/Loaders/Backhoes	0.331	0.00072907	2	98	0.37	6	0.32	
Water Trucks	0.2461	0.00054207	1	189	0.38	2	0.08	
Welder	0.455	0.00100220	1	60	0.45	4	0.11	
Totals							0.81	

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Carbon Monoxide (CO)					
Air Compressors	3.698	0.00814537	1	78	0.48	4	1.22	
Cranes	1.7904	0.00394361	2	226	0.29	6	3.10	
Sweepers	3.82572	0.00842670	1	64	0.46	1	0.25	
Tractors/Loaders/Backhoes	3.60147	0.00793275	2	98	0.37	6	3.45	
Water Trucks	1.41417	0.00311491	1	189	0.38	2	0.45	
Welder	3.605	0.00794053	1	60	0.45	4	0.86	
Totals							9.33	

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Oxides of Nitrogen (NO_x)					
Air Compressors	3.4	0.00748899	1	78	0.48	4	1.12	0.95
Cranes	4.56329	0.01005130	2	226	0.29	6	7.91	6.72
Sweepers	4.4821	0.00987247	1	64	0.46	1	0.29	0.25
Tractors/Loaders/Backhoes	3.32571	0.00732535	2	98	0.37	6	3.19	2.71
Water Trucks	2.34677	0.00516910	1	189	0.38	2	0.74	0.63
Welder	3.554	0.00782819	1	60	0.45	4	0.85	0.72
Totals							14.09	11.98

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Oxides of Sulfur (SO_x)					
Air Compressors	0.006	0.00001322	1	78	0.48	4	0.00	
Cranes	0.0049	0.00001079	2	226	0.29	6	0.01	
Sweepers	0.0049	0.00001079	1	64	0.46	1	0.00	
Tractors/Loaders/Backhoes	0.0049	0.00001079	2	98	0.37	6	0.00	
Water Trucks	0.0049	0.00001079	1	189	0.38	2	0.00	
Welder	0.006	0.00001322	1	60	0.45	4	0.00	
Totals							0.02	

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
Respirable Particulate Matter (PM_{10})								
Air Compressors	0.224	0.00049339	1	78	0.48	4	0.07	0.011083559
Cranes	0.1881	0.00041432	2	226	0.29	6	0.33	0.048877826
Sweepers	0.3601	0.00079317	1	64	0.46	1	0.02	0.003502647
Tractors/Loaders/Backhoes	0.2103	0.00046322	2	98	0.37	6	0.20	0.030233173
Water Trucks	0.0855	0.00018833	1	189	0.38	2	0.03	0.004057672
Welder	0.216	0.00047577	1	60	0.45	4	0.05	0.007707489
Totals							0.70	0.11

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
Fine Particulate Matter ($PM_{2.5}$)								
Air Compressors	0.224	0.00049339	1	78	0.48	4	0.07	0.011083559
Cranes	0.1731	0.00038128	2	226	0.29	6	0.30	0.044980073
Sweepers	0.3513	0.00077379	1	64	0.46	1	0.02	0.00341705
Tractors/Loaders/Backhoes	0.1935	0.00042621	2	98	0.37	6	0.19	0.027817969
Water Trucks	0.0787	0.00017335	1	189	0.38	2	0.02	0.003734956
Welder	0.216	0.00047577	1	60	0.45	4	0.05	0.007707489
Totals							0.66	0.10

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Carbon Dioxide (CO_2)					
Air Compressors	568.229	1.25160573	1	78	0.48	4	187.44	
Cranes	472.9488	1.04173744	2	226	0.29	6	819.31	
Sweepers	474.1157	1.04430771	1	64	0.46	1	30.74	
Tractors/Loaders/Backhoes	475.1543	1.04659537	2	98	0.37	6	455.39	
Water Trucks	474.5787	1.04532753	1	189	0.38	2	150.15	
Welder	568.299	1.25175991	1	60	0.45	4	135.19	
Totals							1778.23	

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Methane (CH_4)					
Air Compressors	0.044	0.00009692	1	78	0.48	4	0.01	
Cranes	0.153	0.00033700	2	226	0.29	6	0.27	
Sweepers	0.1533	0.00033767	1	64	0.46	1	0.01	
Tractors/Loaders/Backhoes	0.1557	0.00034295	2	98	0.37	6	0.15	
Water Trucks	0.1535	0.00033811	1	189	0.38	2	0.05	
Welder	0.041	0.00009031	1	60	0.45	4	0.01	
Totals							0.50	

ODOR MITIGATION PROJECT
Estimated Emissions from On-Road Construction Traffic
Based on EMFAC 2014 Emission Factors

Heavy Duty Diesel Tractor Trucks 2020

Pollutant	Emission Factor grams per mile	Emission Factor pounds per mile	Number of Trucks	Miles Per Day	Emissions lbs/day
ROG		0.00110621	2	100	0.22
CO		0.00532242	2	100	1.06
NO_x		0.01274755	2	100	2.55
SO_x		0.00003957	2	100	0.01
PM_{10}		0.00064574	2	100	0.13
$PM_{2.5}$		0.00050590	2	100	0.10
CO_2		4.20541416	2	100	841.08
CH_4		0.00005216	2	100	0.01

Medium Duty Truck (GVWR 6000 to 8500 pounds) Emissions - Construction Inspection 2020

Pollutant	Emission Factor grams per mile	Emission Factor pounds per mile	Number of Trucks	Miles Per Day	Emissions lbs/day
ROG		0.00052463	2	100	0.10
CO		0.00444247	2	100	0.89
NO_x		0.00040506	2	100	0.08
SO_x		0.00001073	2	100	0.00
PM_{10}		0.0000955	2	100	0.02
$PM_{2.5}$		0.00006279	2	100	0.01
CO_2		1.10456157	2	100	220.91
CH_4		0.00004495	2	100	0.01

Medium Duty Truck (GVWR 6000 to 8500 pounds) Emissions - Commute Vehicles

2020

Pollutant	Emission Factor grams per mile	Emission Factor pounds per mile	Number of Trucks	Miles Per Day	Emissions lbs/day
ROG		0.00052463	10	50	0.26
CO		0.00444247	10	50	2.22
NO_x		0.00040506	10	50	0.20
SO_x		0.00001073	10	50	0.01
PM_{10}		0.0000955	10	50	0.05
$PM_{2.5}$		0.00006279	10	50	0.03
CO_2		1.10456157	10	50	552.28
CH_4		0.00004495	10	50	0.02

Appendix C
Biological Resources
Supporting Information

October 4, 2019

K.S. DUNBAR & ASSOCIATES, INC.
Contact: Keith Dunbar
45375 Vista Del Mar
Temecula, California 92590

SUBJECT: Biological Due Diligence for Western Riverside County Regional Wastewater Authority's Odor Management Plan – Western Riverside County Regional Wastewater Treatment Plant Project

Introduction

This report contains the findings of ELMT Consulting's (ELMT) biological due diligence for Western Riverside County Regional Wastewater Authority's (WRCRWA) Odor Management Plan project (project site or site) located in the City of Eastvale, Riverside County, California. The habitat assessment was conducted by biologist Jacob H. Lloyd Davies on September 26, 2019 to document baseline conditions and assess the potential for special-status[1] plant and wildlife species to occur within the project site that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of the project site to support special-status plant and wildlife species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), and other electronic databases as potentially occurring in the general vicinity of the project site.

Project Location

The project site is generally located north of State Route 91, west of Interstate 15, east of State Route 71, and south of State Route 60 in the City of Eastvale, Riverside County, California. The project site is depicted on the Corona North quadrangle of the United States Geological Survey's (USGS) 7.5-minute map series within an unsectioned portion of Township 3 South, Range 7 West. Specifically, the site is located at 14634 River Road, in the City of Eastvale, California. Refer to Exhibits 1 and 2 in Attachment A.

Project Description

In 1998, the WRCRWA commenced operation of its Western Riverside County Regional Wastewater Treatment Plant (WRCRWTP) located at 14634 River Road, in the City of Eastvale, California (33º55'41.67"N, 117º36'13.42"W). That facility is now capable of producing up to 14 million gallons per day (MDG) of recycled water for reuse or for discharge to Reach 3 of the Santa Ana River, upstream of Prado Dam. The facility is owned by WRCRWA and operated by the Western Municipal Water District (WMWD). It receives municipal wastewater from five different entities including the City of Corona, City

1 As used in this report, "special-status" refers to plant and wildlife species that are federally and State listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

of Norco, Jurupa Community Services District, Home Gardens Sanitary District and WMWD.

When the WRCRWTP was originally constructed, the area around it was comprised of dairy farms, a green waste composting facility and the Santa Ana River. However, with the subsequent development activity in Eastvale, the dairies and composting facility were sold and homes were built in their place. As such, the neighborhood to the east of the plant represents sensitive receptors that are susceptible to odor emissions from the plant.

Since the completion of the recent expansion, WRCRWA personnel have observed that odor complaints have increased from the neighborhood to the east. These complaints have been reported to the South Coast Air Quality Management District (SCAQMD) and are considered of utmost importance to WRCRWA. In its attempt to solve this problem, WRCRWA retained the services of CH2M (now Jacobs) to develop an odor management plan for the WRCRWTP (refer to Attachment B, *Proposed Site Plan*). Jacobs recommended the following to meet the Future Endorsed More Stringent Offsite Odor Goal of 5 dilutions to threshold (D/T):

- Initial Implementation Project No. 1: Alternative 4 (containment and treatment of cascading weir odors). This project may include a stand-alone treatment system or treating cascading weir odors at the retrofitted biofilter.
- Future Implementation Project No. 2: Alternative 2b (consolidated stack remotely located over by the existing biofilter). This project may include either fiberglass reinforced plastic (FRP) ducting or high-density polyethylene (HDPE) ducting, whichever is less costly. Together with Project No. 1, the two projects are equivalent to Mitigation Alternative 6. After start-up and commissioning of Project No. 2, additional baseline sampling and AERMOD modeling should be completed to validate results. In addition, a period of time of offsite assessment should be completed to determine if further mitigation (Project No. 3) is needed.
- Future Implementation Project No. 3 (if needed): Addition of carbon polishing units near the Alternative 2b stack location. This project would entail installing booster fans and carbon vessels with stacks. Some advantages to this project include:
    - Suitable treatment back-up in case of chemical scrubber upset or peak inlet conditions.
    - Different treatment technology targeting different odorous compounds versus wet based technologies.

Methodology

A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site. In addition to the literature review, a general habitat assessment or field investigation of the project site was conducted to document existing conditions and assess the potential for special-status biological resources to occur within the project site.

Literature Review

Prior to conducting the field investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the CDFW's QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site were reviewed to understand existing site conditions and note the extent of any disturbances that have occurred within the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

Habitat Assessment/Field Investigation

Following the literature review, biologist Jacob H. Lloyd Davies inventoried and evaluated the condition of the habitat within the project site on September 26, 2019. Plant communities and land cover types identified on aerial photographs during the literature review were verified by walking meandering transects throughout the project site. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that may support the movement of wildlife through the area. These areas identified on aerial photography were then walked during the field investigation.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Plant species observed during the field investigation were identified by visual characteristics and morphology in the field. Unusual and less familiar plant species were photographed during the field investigation and identified in the laboratory using taxonomical guides. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities and land cover types, and presence of potential jurisdictional drainage and/or wetland features were noted.

Existing Site Conditions

The proposed project site is located in a completely developed area at the WRCRWTP. The greater WRCRWTP facility is bordered to the north and west by vacant land, to the east by residential development, and to the south by Riverview Recreation Park and Santa Ana River. The proposed project will cross the northern portion of the developed WRCRWTP from east to west and is surrounded by existing development associated with wastewater processing operations.

Elevation ranges from approximately 591 to 595 feet above mean sea level and generally slopes from west to east. Based on the United States Department of Agriculture (USDA) Natural Resource Conservation

Service (NRCS), Web Soil Survey, the project site is historically underlain by the following soil units: Ramona sandy loam (5 to 8 percent slopes) and Ramona sandy loam (2 to 5 percent slopes). Due to existing development, undeveloped/native surface soils are no longer present.

The proposed project footprint will be installed within the existing developed WRCRWTP. This area is classified as developed which encompass all paved, impervious surfaces. No native plant communities or natural communities of special concern occur within or adjacent to the proposed project footprint. As a result, no plant communities will be affected from project implementation. The only plant species observed on-site were ruderal/non-native weedy plant species. Plant species observed onsite included flax-leaved horseweed (*Erigeron bonarienses*) and Mediterranean grass (*Schismus arabicus*).

Wildlife

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. Due to the overall lack of vegetation within the project site, only animal species highly adapted to anthropogenic disturbance could be expected to occur on-site. This section provides a discussion of those wildlife species that were observed or are expected to occur within the project site. The discussion is to be used a general reference and is limited by the season, time of day, and weather conditions in which the field investigation was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation. The project site provides limited habitat for wildlife species except those adapted to a high degree of anthropogenic disturbances and development.

No fish, amphibians or hydrogeomorphic features (e.g., creeks, ponds, lakes, reservoirs) with frequent sources of water that would support populations of fish or amphibians were observed on or within the vicinity of the project site. Therefore, no fish or amphibians are expected to occur and are presumed absent from the project site.

The project site provides minimal foraging and cover habitat for reptile species adapted to high anthropogenic disturbance. The only reptile species observed during the field investigation was western side-blotched lizard (*Uta stansburiana elegans*). Other reptilian species that could be expected to occur include Great Basin fence lizard (*Sceloporus occidentalis longipes*), and alligator lizard (*Elgaria multicarinata*).

The project site provides minimal foraging for bird species adapted to high anthropogenic disturbance. Bird species detected during the field investigation include northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), European starling (*Sturnus vulgaris*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), and house finch (*Haemorhouse mexicanus*).

No mammals were observed during the field investigation. Common mammalian species adapted to high anthropogenic disturbance that could potentially occur on-site include opossum (*Didelphis virginiana*) and raccoon (*Procyon lotor*).

Nesting Birds

No active nests or birds displaying nesting behavior were observed during the field investigation. The project site and surrounding area provides foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. The project site has the potential to provide suitable nesting opportunities for birds that nest on the open ground and those acclimated to routine disturbances. Additionally, the trees that border the project site provide suitable nesting opportunities. A pre- construction nesting bird clearance survey should be conducted within three (3) days prior to ground disturbance to ensure no nesting birds will be impacted from site development.

Migratory Corridors and Linkages

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The proposed project footprint will be confined to existing developed land, which has removed natural plant communities from the surrounding area. Due to on-site conditions and surrounding development, no migratory corridors or linkages are present on-site. Further, the entire WRCWRTP is surrounded by tall barbed-wire fencing that would preclude most large animal species, such as coyote (*Canis latrans*) from accessing the property. As a result, implementation of the proposed project will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

Jurisdictional Areas

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Within the proposed limits of disturbance, no discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the Corps, Regional Board, or CDFW were observed. Based on the proposed site plan, project activities will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required.

Special-Status Biological Resources

The CNDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Corona North USGS 7.5-minute quadrangle. The habitat assessment

evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified seven (7) special-status plant species, sixty-nine (69) special-status wildlife species, and three (3) sensitive plant communities as having the potential to occur within the Corona North 7.5-minute quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the project site are presented in Attachment D*: Potentially Occurring Special-Status Biological Resources*.

Special-Status Plants

According to the CNDDB and CNPS, seven (7) special-status plant species have been recorded in the Corona North quadrangle (refer to Attachment D). No special-status plant species were observed onsite during the habitat assessment. The entirety of the project site has been subject to anthropogenic disturbances from existing development activities. Onsite disturbances have reduced the suitability of the habitat to support special-status plant species known to occur in the general vicinity of the project site. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and are presumed to be absent from the project site. No focused surveys are recommended.

Special-Status Wildlife

According to the CNDDB, sixty-nine (69) special-status wildlife species have been reported in the Corona North quadrangle (refer to Attachment D). No special-status wildlife species were observed onsite during the habitat assessment. Onsite development has greatly reduced potential foraging and nesting/denning opportunities for wildlife species onsite. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed project site does not provide suitable habitat for any of the special-status wildlife species known to occur in the area and all are presumed to be absent from the project site. No focused surveys are recommended.

Special-Status Plant Communities

According to the CNDDB, three (3) special-status plant communities are reported to occur in the Corona North USGS 7.5-minute quadrangle: Southern California Arroyo Chub/Santa Ana Sucker Stream, Southern Cottonwood Willow Riparian Forest, and Southern Sycamore Alder Riparian Woodland. Based on the results of the field investigation, no special-status plant communities were observed onsite.

Critical Habitats

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or

not. All federal agencies are required to consult with the USFWS regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a Clean Water Act Permit from the United States Army Corps of Engineers). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within federally designated Critical Habitat. The nearest designated Critical Habitat is located approximately 1,020 feet south of the project site for least Bell's vireo (*Vireo bellii pusillus*). Therefore, the loss or adverse modification of Critical Habitat from site development will not occur and consultation with the USFWS for impacts to Critical Habitat will not be required for implementation of the proposed project.

Recommendations

Migratory Bird Treaty Act and Fish and Game Code

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season.

If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Conclusion

Based on the proposed project footprint and existing site conditions discussed in this report, none of the

special-status plant or wildlife species known to occur in the general vicinity of the project site are expected to be directly or indirectly impacted from implementation of the proposed project. With completion of the recommendations provided above, no impacts to year-round, seasonal, or special-status avian residents will occur from implementation of the proposed project. Therefore, it was determined that implementation of the project will have "no effect" on federally or State listed species known to occur in the general vicinity of the project site. Additionally, the development of the project will not impact designated Critical Habitats or regional wildlife movement corridors/linkages.

Please do not hesitate to contact Tom McGill at (951) 285-6014 or tmcgill@elmtconsulting.com or Travis McGill at (909) 816-1646 or travismcgill@elmtconsulting.com should you have any questions this report.

Sincerely,

Thomas J. McGill, Ph.D.
Managing Director

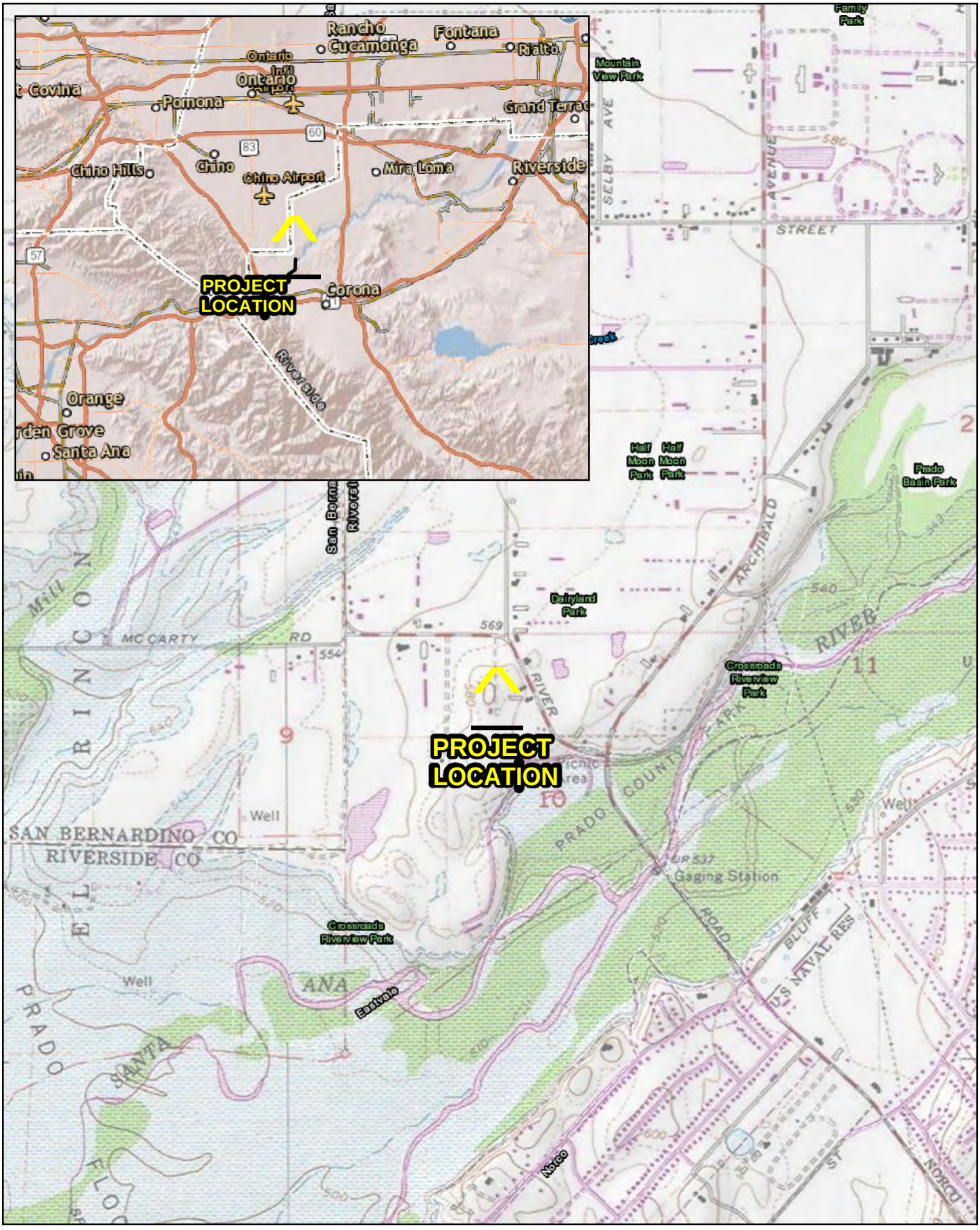
Travis J. McGill
Director

Attachments:

A. *Project Exhibits*
B. *Proposed Site Plan*
C. *Site Photographs*
D. *Potentially Occurring Special-Status Biological Resources*

Attachment A

Project Exhibits



WRCRWA ODOR MANAGEMENT PLAN
BIOLOGICAL DUE DILIGENCE

Regional & Site Vicinity

0 0.25 0.5 1 Miles

Source: Federal Highway Administration, US Department of Transportation, USA Topographic Map

Exhibit 1

WRCRWA ODOR MANAGEMENT PLAN
BIOLOGICAL DUE DILIGENCE

Project Site

ELMT CONSULTING

0 125 250 500 Feet

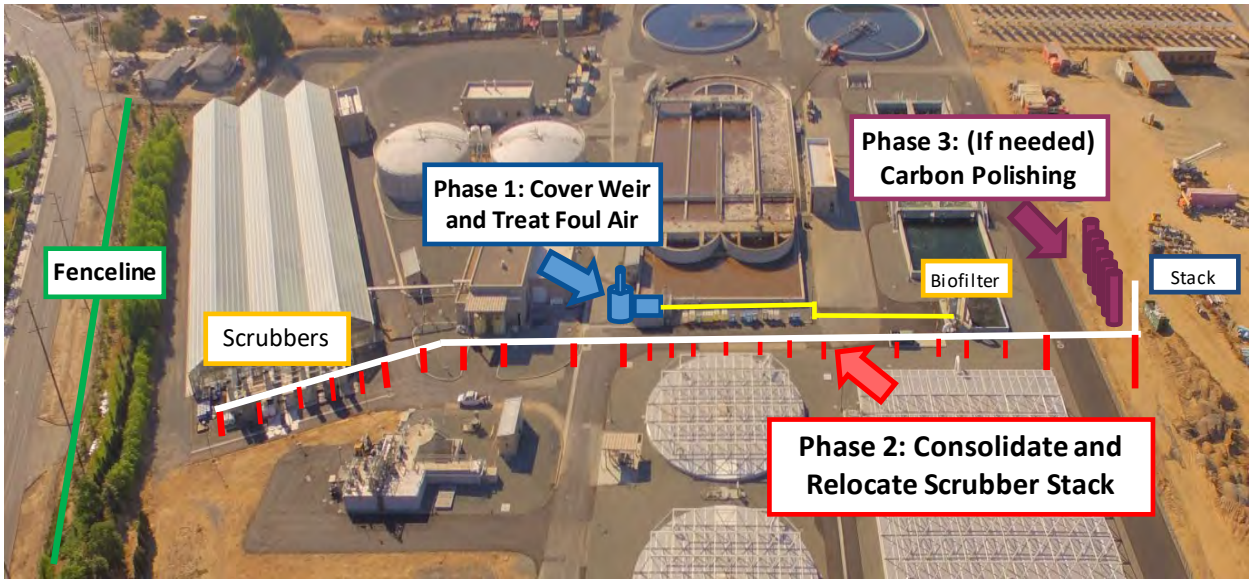
Source: ESRI Aerial Imagery, Riverside County

Exhibit 2

Attachment B

Proposed Site Plan

Proposed Site Plan



Attachment C

Site Photographs

Photograph 1: Looking west from the eastern boundary of the project site. Note that this location serves as the eastern terminus of Phase 2 of the Odor Management Plan.

Photograph 2: Looking east from the middle of the project site.

Photograph 3: Looking west from the middle of the project site.

Photograph 4: Looking east from the western portion of the project site. Note that Phase 1 will take place on the right side of the photograph near the stairs.

Photograph 5: Looking east from the western boundary of the project site. Note that this location serves as the western terminus of Phase 2. This also includes the potential location of Phase 3 of the project, if Phase 3 is deemed necessary.

Photograph 6: Looking north across the disturbed area adjacent to the northeast boundary of the project site.

Photograph 7: Looking northwest across the disturbed area adjacent to the western boundary of the project site.

Photograph 8: Looking southwest across the disturbed area adjacent to the western boundary of the project site.

Attachment D

Potentially Occurring Special-Status Biological Resources

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
WILDLIFE SPECIES				
Accipiter cooperii Cooper's hawk	Fed: None CA: WL	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests, but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	No	**Presumed absent.** No suitable habitat is present on-site.
Accipiter striatus sharp-shinned hawk	Fed: None CA: WL	Found in pine, fir and aspen forests. They can be found hunting in forest interior and edges from sea level to near alpine areas. Can also be found in rural, suburban and agricultural areas, where they often hunt at bird feeders. Typically found in southern California in the winter months.	No	**Presumed absent.** No suitable habitat is present on-site.
Agelaius tricolor tricolored blackbird	Fed: None CA: SSC	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes [*Schoenoplectus* sp.]), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.	No	**Presumed absent.** No suitable habitat is present on-site.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	Fed: None CA: WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (*Artemisia californica*), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	No	**Presumed absent.** No suitable habitat is present on-site.
Anniella stebbinsi southern California legless lizard	Fed: None CA: SSC	Occurs in sparsely vegetated habitat types including coastal sand dunes, chaparral, pine-oak woodland, desert scrub, open grassland, and riparian areas. Requires sandy or loose loamy substrates conducive to burrowing.	No	**Presumed absent.** No suitable habitat is present on-site.
Anodonta californiensis California floater	Fed: None CA:	Limited to fresh water shallow muddy or sandy habitat in large rivers, reservoirs, and lakes.	No	**Presumed absent.** No suitable habitat is present on-site.
Antigone canadensis lesser sandhill crane	Fed: None CA: SSC	Nest in open grasslands, such as wet meadows, and freshwater marshes or bogs. Prefer to be far from human habitation.	No	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Aquila chrysaetos golden eagle	Fed: None CA: FP; WL	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	No	**Presumed absent.** No suitable habitat is present on-site.
Ardea alba great egret	Fed: None CA:	Yearlong resident throughout California, except for the high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures.	No	**Presumed absent.** No suitable habitat is present on-site.
Ardea herodias great blue heron	Fed: None CA:	Forages along streams, marshes, lakes, and meadows. Nests colonially in tall trees (typically *Eucalyptus* sp.), on cliffsides, or in isolated spots in marshes.	No	**Presumed absent.** No suitable habitat is present on-site.
Artemisiospiza belli Bell's sage sparrow	Fed: None CA: WL	Generally prefers semi-open habitats with evenly spaced shrubs 1 – 2 meters in height. Dry chaparral and coastal sage scrub. Less common in tall dense, old chaparral.	No	**Presumed absent.** No suitable habitat is present on-site.
Aspidoscelis hyperythra orangethroat whiptail	Fed: None CA: SSC	Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	No	**Presumed absent.** No suitable habitat is present on-site.
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: None CA:	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	No	**Presumed absent.** No suitable habitat is present on-site.
Athene cunicularia burrowing owl	Fed: None CA: SSC	Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Dependent upon fossorial mammals for burrows, most notable ground squirrels.	No	**Presumed absent.** No suitable habitat is present on-site.
Bombus crotchii Crotch bumble bee	Fed: None CA: None	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.	No	**Presumed absent.** No suitable habitat is present on-site.
Botaurus lentiginosus American bittern	Fed: None CA:	Inhabit freshwater wetlands, with tall emergent vegetation.	No	**Presumed absent.** No suitable habitat is present on-site.
Buteo regalis ferruginous hawk	Fed: None CA: WL	Occurs primarily in open grasslands and fields, but may be found in sagebrush flats, desert scrub, low foothills, or along the edges of pinyon-juniper woodland. Feeds primarily on small mammals and typically found in agricultural or open fields.	No	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Buteo swainsoni Swainson's hawk	Fed: None CA: **THR**	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	No	**Presumed absent.** No suitable habitat is present on-site.
Calypte costae Costa's hummingbird	Fed: None CA:	Desert and semi-desert, arid brushy foothills and chaparral. A desert hummingbird that breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.	No	**Presumed absent.** No suitable habitat is present on-site.
Catostomus santaanae Santa Ana sucker	Fed: **THR** CA: CSC	Occur in the watersheds draining the San Gabriel and San Bernardino Mountains of southern California. Steams that Santa Ana Sucker inhabit are generally perennial streams with water ranging in depth from a few inches to several feet and with currents ranging from slight to swift.	No	**Presumed absent.** No suitable habitat is present on-site.
Chaetodipus fallax northwestern San Diego pocket mouse	Fed: None CA: SSC	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	No	**Presumed absent.** No suitable habitat is present on-site.
Chaetura vauxi Vaux's swift	Fed:CA: None SSC	Prefers redwood and Douglas-fir habitats with nest-sites in large hallow trees and snags, especially tall, burned-out snags. Fairly common migrant throughout most of the state in April and May, and August and September.	No	**Presumed absent.** No suitable habitat is present on-site.
Charadrius montanus mountain plover	Fed: None CA: SSC	Found in short grasslands, freshly-plowed fields, newly-sprouting grain fields, and sometimes in sod farms. Prefers short vegetation or bare ground with flat topography, particularly grazed areas or areas with fossorial rodents.	No	**Presumed absent.** No suitable habitat is present on-site.
Circus hudsonius northern harrier	Fed: None CA: SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	No	**Presumed absent.** No suitable habitat is present on-site.
Cistothorus palustris clarkae Clark's marsh wren	Fed: None CA: SSC	Restricted to freshwater and brackish marshes dominated by bulrushes or cattails. Has a narrow distribution along the coast of southern California from Los Angeles basin south to the Mexican border.	No	**Presumed absent.** No suitable habitat is present on-site.
Coccyzus americanus occidentalis western yellow-billed cuckoo	Fed: **THR** CA: **END**	In California, the breeding distrution is now thought to be restricted to isolated sites in Sacramento, Amargosa, Kern, Santa Ana, and Colorado River valleys. Obligate riparian species with a primary habitat association of willow-cottonwood riparian forest.	No	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**		**Habitat**	**Observed On-site**	**Potential to Occur**
Coleonyx variegatus abbotti San Diego banded gecko	Fed: CA:	None	Occurs in coastal and cismontane southern California from interior Ventura County south, although it is absent from the extreme outer coast. It is uncommon in coastal scrub and chaparral, most often occurring in granite or rocky outcrops in these habitats.	No	**Presumed absent.** No suitable habitat is present on-site.
Contopus cooperi olive-sided flycatcher	Fed: CA:	None SSC	Uncommon to common, summer resident in a wide variety of forest and woodland habitats below 9,000 ft throughout California exclusive of the deserts, the Central Valley, and other lowland valleys and basins. Preferred nesting habitats include mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir, and lodgepole pine.	No	**Presumed absent.** No suitable habitat is present on-site.
Coturnicops noveboracensis yellow rail	Fed: CA:	None CSC	Shallow marshes, and wet meadows; in winter, drier fresh-water and brackish marshes, as well as dense, deep grass, and rice fields.	No	**Presumed absent.** No suitable habitat is present on-site.
Crotalus ruber red-diamond rattlesnake	Fed: CA:	None SSC	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	No	**Presumed absent.** No suitable habitat is present on-site.
Diadophis punctatus modestus San Bernardino ringneck snake	Fed: CA:	None	Common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	No	**Presumed absent.** No suitable habitat is present on-site.
Dipodomys stephensi Stephens' kangaroo rat	Fed: CA:	**END** **THR**	Occur in arid and semi-arid habitats with some grass or brush. Prefer open habitats with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil.	No	**Presumed absent.** No suitable habitat is present on-site.
Egretta thula snowy egret	Fed: CA:	None	Widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. In southern California, common yearlong in the Imperial Valley and along the Colorado River.	No	**Presumed absent.** No suitable habitat is present on-site.
Elanus leucurus white-tailed kite	Fed: CA:	None FP	Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover.	No	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Empidonax traillii willow flycatcher	Fed: None CA: END	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	No	**Presumed absent.** No suitable habitat is present on-site.
Empidonax traillii brewsteri little willow flycatcher	Fed: None CA: **END**	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats (2,000 to 8,000 feet) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	No	**Presumed absent.** No suitable habitat is present on-site.
Empidonax traillii extimus southwestern willow flycatcher	Fed: **END** CA:	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	No	**Presumed absent.** No suitable habitat is present on-site.
Emys marmorata western pond turtle	Fed: None CA: SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 feet (1,800 m).	No	**Presumed absent.** No suitable habitat is present on-site.
Eremophila alpestris actia California horned lark	Fed: None CA: WL	Generally found in shortgrass prairies, grasslands, disturbed fields, or similar habitat types along the coast or in deserts. Trees are shrubs are usually scarce or absent. Generally rare in montane, coniferous, or chaparral habitats. Forms large flocks outside of the breeding season.	No	**Presumed absent.** No suitable habitat is present on-site.
Eumops perotis californicus western mastiff bat	Fed: None CA: SSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	**Presumed absent.** No suitable habitat is present on-site.
Falco columbarius merlin	Fed: None CA: WL	Nest in forested openings, edges, and along rivers across northern North America. Found in open forests, grasslands, and especially coastal areas with flocks of small songbirds or shorebirds.	No	**Presumed absent.** No suitable habitat is present on-site.
Falco mexicanus prairie falcon	Fed: None CA: WL	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	No	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Falco peregrinus anatum American peregrine falcon	Fed: DL , CA: FP	Uncommon winter resident of the inland region of southern California. Active nesting sites are known along the coast north of Santa Barbara, in the Sierra Nevada, and in other mountains of northern California. Breeds mostly in woodland, forest, and coastal habitats. Riparian areas and coastal and inland wetlands are important habitats yearlong, especially in nonbreeding seasons.	No	**Presumed absent.** No suitable habitat is present on-site.
Gila orcuttii arroyo chub	Fed: None CA: CSC	Warm streams of the Los Angeles Plain, which are typically muddy torrents during the winter, and clear quiet brooks in the summer, possibly drying up in places. They are found both in slow-moving and fast-moving sections, but generally deeper than 40 cm.	No	**Presumed absent.** No suitable habitat is present on-site.
Gonidea angulata Western ridged mussel	Fed: None CA:	Occurs on the benthos of streams, rivers, and lakes with substrates that vary from gravel to firm mud, and include at least some sand, silt or clay.	No	**Presumed absent.** No suitable habitat is present on-site.
Gopherus agassizii desert tortoise	Fed: **THR** CA:	Widely distributed in the Mojave, Sonoran and Colorado deserts from below sea level to 7,220 feet. Most common in desert scrub, desert wash, and Joshua tree habitats, but occurs in almost every desert habitat except those on the most precipitous slopes.	No	**Presumed absent.** No suitable habitat is present on-site.
Haliaeetus leucocephalus bald eagle	Fed: Delisted CA: **END**; FP	Occur primarily at or near seacoasts, rivers, swamps, and large lakes. Need ample foraging opportunities, typically near a large water source.	No	**Presumed absent.** No suitable habitat is present on-site.
Hydroprogne caspia Caspian tern	Fed: None CA:	Occurs near large lakes, coastal waters, beaches, and bays. Found on both fresh and salt water, favoring protected waters such as bays and lagoons, rivers, not usually foraging over open sea. Nests on open ground on islands, coasts.	No	**Presumed absent.** No suitable habitat is present on-site.
Icteria virens yellow-breasted chat	Fed: None CA: SSC	Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. It winters south the Central America.	No	**Presumed absent.** No suitable habitat is present on-site.
Lanius ludovicianus loggerhead shrike	Fed: None CA: SSC	Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting.	No	**Presumed absent.** No suitable habitat is present on-site.
Lasiurus xanthinus western yellow bat	Fed: None CA: SSC	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	**Presumed absent.** No suitable habitat is present on-site.
Laterallus jamaicensis coturniculus California black rail	Fed: None CA: **THR,** FP	Shallow marshes, and wet meadows; in winter, drier fresh-water and brackish marshes, as well as dense, deep grass.	No	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Lepus californicus bennettii San Diego black-tailed jackrabbit	Fed: None CA: SSC	Occurs in diverse habitats, but primarily is found in arid regions supporting shortgrass habitats. Openness of open scrub habitat is preferred over dense chaparral.	No	**Presumed absent.** No suitable habitat is present on-site.
Lynx rufus pallescens pallid bobcat	Fed: None CA:	Found on the western edge of the great basin habitat in extreme northeast California. Live in a variety of habitats including forests, deserts, mountains, swamps and farmland.	No	**Presumed absent.** No suitable habitat is present on-site.
Neotoma lepida intermedia San Diego desert woodrat	Fed: None CA: SSC	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.	No	**Presumed absent.** No suitable habitat is present on-site.
Nycticorax black-crowned night heron	Fed: None CA:	Fairly common, yearlong resident in lowlands and foothills throughout most of California, including the Salton Sea and Colorado River areas, and very common locally in large nesting colonies. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and rarely, on kelp beds in marine sub tidal habitats. Nests and roosts in dense-foliaged trees and dense emergent wetlands.	No	**Presumed absent.** No suitable habitat is present on-site.
Nyctinomops femorosaccus pocketed free-tailed bat	Fed: None CA: SSC	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis.	No	**Presumed absent**. No suitable habitat is present.
Oncorhynchus mykiss irideus pop. 10 steelhead – southern California DPS	Fed: **END** CA: None	Found in permanent coastal streams from San Diego to the Smith River.	No	**Presumed absent.** No suitable habitat is present on-site.
Pandion haliaetus osprey	Fed: None CA: WL	Remain close to still or slow-moving bodies of water including oceans, rivers, lakes, mangroves, coastal wetlands, lagoons, reefs, estuaries and marshes. Generally nest in high places, such as trees, power poles, or cliffs.	No	**Presumed absent.** No suitable habitat is present on-site.
Phalacrocorax auritus double-crested cormorant	Fed: None CA: WL	Common yearlong resident in southern California. Occurs widely in freshwater and marine habitats along coastlines. Require open water where they can forage for schooling fish.	No	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Phrynosoma blainvillii coast horned lizard	Fed: None CA: SSC	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e. fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	No	**Presumed absent.** No suitable habitat is present on-site.
Plegadis chihi white-faced ibis	Fed: None CA: WL	Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded partures and croplands. Nests in dense, fresh emergent wetland.	No	**Presumed absent.** No suitable habitat is present on-site.
Polioptila californica coastal California gnatcatcher	Fed: **THR** CA: SSC	Obligate resident of sage scrub habitats that are dominated by California sagebrush (*Artemisia californica*). This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. Ranges from the Ventura County, south to San Diego County and northern Baja California and it is less common in sage scrub with a high percentage of tall shrubs. Prefers habitat with more low-growing vegetation.	No	**Presumed absent.** No suitable habitat is present on-site.
Selasphorus rufus rufous hummingbird	Fed: None CA:	Found in forests, on seed tree harvest units, riparian scrub, and spruce fir habitats. Typically breed in open or shrubby areas, forest openings, yards, and parks, and sometimes in forests, thickets, swamps, and meadows from sea level to about 6,000 feet.	No	**Presumed absent.** No suitable habitat is present on-site.
Setophaga petechia yellow warbler	Fed: None CA: SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	**Presumed absent.** No suitable habitat is present on-site.
Spinus lawrencei Lawrence's goldfinch	Fed: None CA:	Open woodlands, chaparral, and weedy fields. Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water.	No	**Presumed absent.** No suitable habitat is present on-site.
Taricha torosa Coast Range newt	Fed: None CA: SSC	Occurs in wet forests, oak forests, chaparral, and rolling grasslands. In southern California, drier chaparral, oak woodland, and grassland are used.	No	**Presumed absent.** No suitable habitat is present on-site.
Thamnophis sirtalis **pop. 1** south coast gartersnake	Fed: None CA: SSC	Utilizes a variety of habitats including forests, mixed woodlands, grassland, chaparral, and farmlands. Often found near ponds, marshes, or streams.	No	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Vireo bellii pusillus least Bell's vireo	Fed: **END** CA:	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	No	**Presumed absent.** No suitable habitat is present on-site.
PLANT SPECIES				
Abronia villosa var. aurita chaparral sand-verbena	Fed: None CA: CNPS: 1B.1	Found on the coastal side of the southern California mountains in chaparral and coastal sage scrub plant communities in areas of full sun and sandy soils. Found at elevations ranging from 262 to 5,249 feet. Blooming period is from January to September.	No	**Presumed absent.** No suitable habitat is present on-site.
Centromadia pungens ssp. laevis smooth tarplant	Fed: None CA: CNPS: 1B.1	Occurs in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland habitats. Grows in elevation from 0 to 2,100 feet. Blooming period ranges from April to September.	No	**Presumed absent.** No suitable habitat is present on-site.
Deinandra paniculata paniculate tarplant	Fed: None CA: CNPS: 4.2	Occurs in coastal scrub, vernal pools, and valley/foothill grassland habitats. Found at elevations ranging from 82 to 3,084 feet above msl. Blooming period is from April to November.	No	**Presumed absent.** No suitable habitat is present on-site.
Dudleya multicaulis many-stemmed dudleya	Fed: None CA: CNPS: 1B.2	Often occurs on clay soils and around granitic outcrops in chaparral, coastal sage scrub, and grasslands. Found at elevations ranging from 0 to 2,592 feet. Blooming period is from April to July.	No	**Presumed absent.** No suitable habitat is present on-site.
Eriastrum densifolium ssp. sanctorum Santa Ana River woollystar	Fed: **END** CA: CNPS: 1B.1	Grows in sandy or gravelly soils within chaparral and coastal scrub habitat. Found at elevations ranging from 299 to 2,001 feet. Blooming period is from April to September.	No	**Presumed absent.** No suitable habitat is present on-site.
Juglans californica southern California black walnut	Fed: None CA: CNPS: 4.2	Occurs in alluvial soils in chaparral, cismontane woodland, coastal scrub, and riparian woodlands. From 15 to 5,875 feet in elevation. Blooming period is from May to June.	No	**Presumed absent.** No suitable habitat is present on-site.
Lepidium virginicum var. robinsonii Robinson's pepper-grass	Fed: None CA: CNPS: 4.3	Dry soils on chaparral and coastal sage scrub. Found at elevations ranging from 3 to 2,904 feet. Blooming period is from January to July.	No	**Presumed absent.** No suitable habitat is present on-site.

CDFW SENSITIVE HABITATS				
Southern California Arroyo Chub/Santa Ana Sucker Stream	CDFW Sensitive Habitat	Characterized by a functioning hydrological system that experiences peaks and ebbs in the water volume throughout the year; a mosaic of loose sand, gravel, cobble, and boulder substrates in a series of riffles, runs, pools and shallow sandy stream margins; water depths greater than 1.2 inches and water bottom velocities of more than 0.01 feet per second; non-turbid conditions or only seasonally turbid water; water temperatures less than 86° Fahrenheit; and stream habitat that includes algae, aquatic emergent vegetation, macroinvertebrates, and riparian vegetation.	No	**Absent.** Does not occur on-site.
Southern Cottonwood Willow Riparian Forest	CDFW Sensitive Habitat	Dominated by cottonwood (*Populus* sp.) and willow (*Salix* sp.) trees and shrubs. Considered to be an early successional stage as both species are known to germinate almost exclusively on recently deposited or exposed alluvial soils.	No	**Absent.** Does not occur on-site.
Southern Sycamore Alder Riparian Woodland	CDFW Sensitive Habitat	Below 2,000 meters in elevation, sycamore and alder often occur along seasonally-flooded banks; cottonwoods and willows also are often present. Poison-oak, mugwort, elderberry and wild raspberry may be present in the understory.	No	**Absent.** Does not occur on-site.

U.S. Fish and Wildlife Service (Fed) - Federal
END- Federal Endangered
THR- Federal Threatened

California Department of Fish and Wildlife (CA) - California
END- California Endangered
THR- California Threatened
Candidate- Candidate for listing under the California Endangered Species Act
FP- California Fully Protected
SSC- Species of Special Concern
WL- Watch List

California Native Plant Society (CNPS)
California Rare Plant Rank
1B Plants Rare, Threatened, or Endangered in California and Elsewhere
2B Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3 Plants About Which More Information is Needed – A Review List
4 Plants of Limited Distribution – A Watch List

CNPS Threat Ranks
0.1- Seriously threatened in California
0.2- Moderately threatened in California
0.3- Not very threatened in California

Appendix D
Cultural Resources
Supporting Information

October 11, 2019
Project No. 19-0018

Keith S. Dunbar
K. S. Dunbar and Associates, Inc.
45375 Vista Del Mar
Temecula, CA 92590
Via email: ksdpe67@gmail.com

Subject: Cultural Resources Technical Memorandum for the Western Riverside County Regional Wastewater Treatment Plant Odor Management Plan, Eastvale, Riverside County, California

Dear Mr. Dunbar,

Anza Resources Consultants (Anza) was retained by K. S. Dunbar and Associates, Inc. (KSDA) to provide cultural resources services for the Western Riverside County Regional Wastewater Treatment Plant (WRCRWTP) Odor Management Plan (project), in the City of Eastvale, Riverside County, California (Figure 1). Anza understands that the project is subject to the California Environmental Quality Act (CEQA and Western Riverside County Regional Wastewater Authority (WRCRWA) is the CEQA lead agency.

The project proposes to make odor management improvements within the approximately 60-acre WRCRWTP Anza completed a cultural resource records search, reviewed and summarized Native American scoping efforts conducted by KSDA on behalf of WRCRWA, and prepared this technical memorandum summarizing the results in support of the environmental document for this project. This memorandum was prepared following the cultural resources guidelines of CEQA.

Project Description

During 1998, The WRCRWA commenced operation of WRCRWTP located at 14634 River Road, in the City of Eastvale, California (33º55'41.67"N, 117º36'13.42"W). That facility is now capable of producing up to 14 million gallons per day of recycled water for reuse or for discharge to Reach 3 of the Santa Ana River, upstream of Prado Dam. The facility is owned by WRCRWA and operated by the Western Municipal Water District (WMWD). It receives municipal wastewater from five different entities including the City of Corona, City of Norco, Jurupa Community Services District, Home Gardens Sanitary District and WMWD.

When the WRCRWTP was originally constructed, the area around it comprised dairy farms, a green waste composting facility and the Santa Ana River. However, with the subsequent development activity in Eastvale, the dairies and composting facility were sold, and homes were built in their place. As such, the neighborhood to the east of the plant represents sensitive receptors that are susceptible to odor emissions from the plant.

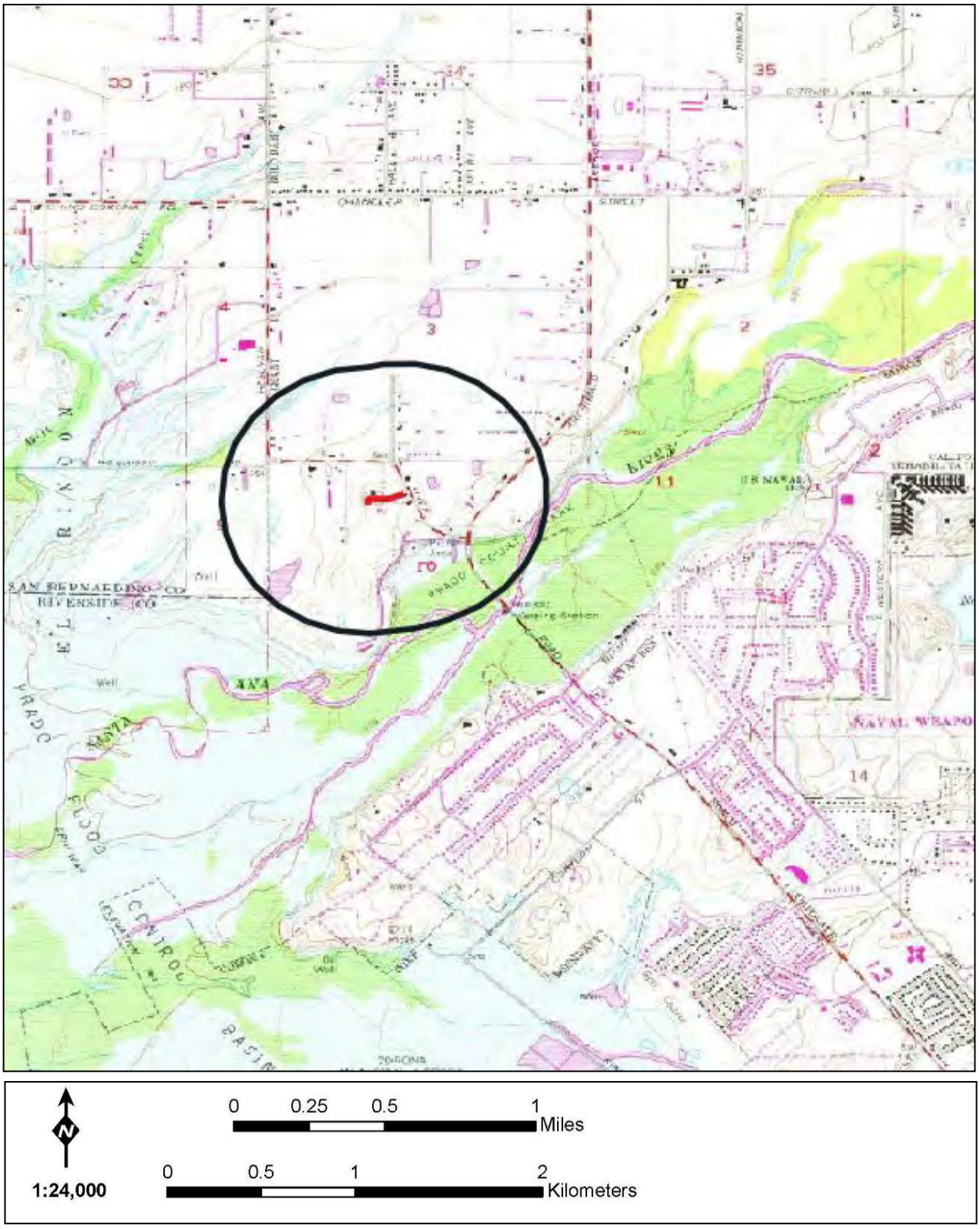


Figure 1. WRCRWTP Odor Management Plan Project Site (in red)

Since the completion of the recent expansion, WRCRWA personnel have observed that odor complaints have increased from the neighborhood to the east. These complaints have been reported to the South Coast Air Quality Management District and are considered of utmost importance to WRCRWA. In its attempt to solve this problem, WRCRWA retained the services of CH2M (now Jacobs) to develop an odor management plan for the WRCRWTP. Jacobs recommended the following to meet the Future Endorsed More Stringent Offsite Odor Goal of 5 dilutions to threshold (Figure 2):

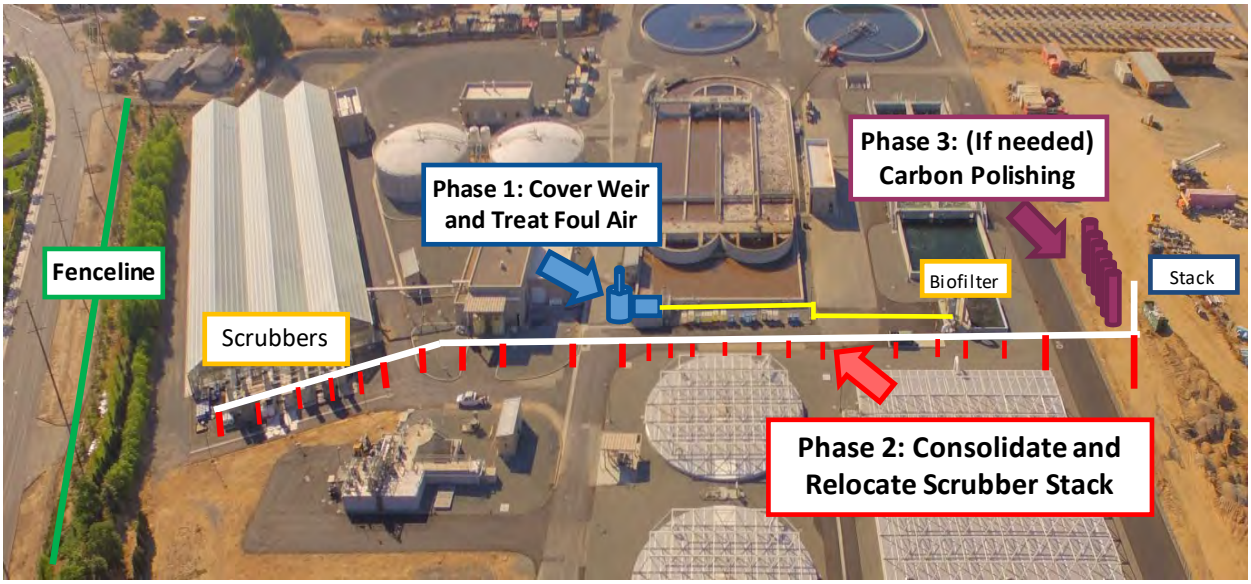


Figure 2. Recommended Phased Odor Management Plan

- Initial Implementation Project No. 1: Alternative 4 (containment and treatment of cascading weir odors). This project may include a stand-alone treatment system or treating cascading weir odors at the retrofitted biofilter.
- Future Implementation Project No. 2: Alternative 2b (consolidated stack remotely located over by the existing biofilter). This project may include either fiberglass reinforced plastic ducting or high-density polyethylene ducting, whichever is less costly. Together with Project No. 1, the two projects are equivalent to Mitigation Alternative 6. After start-up and commissioning of Project No. 2, additional baseline sampling and AERMOD modeling should be completed to validate results. In addition, offsite assessment should be completed for a period of time to determine if further mitigation (Project No. 3) is needed.
- Future Implementation Project No. 3 (if needed): Addition of carbon polishing units near the Alternative 2b stack location. This project would entail installing booster fans and carbon vessels with stacks. Some advantages to this project include:
    - Suitable treatment back-up in case of chemical scrubber upset or peak inlet conditions.

- Different treatment technology targeting different odorous compounds versus wet based technologies.

California Historical Resource Information System

Anza conducted a records search of the California Historical Resources Information System (CHRIS) at the Eastern Information Center (EIC) located at University of California, Riverside, on October 9, 2019. The search was conducted to identify previous cultural resources studies and previously recorded cultural resources within a 0.5-mile radius of the project site. The CHRIS searches included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5-, 15-, and 30-minute quadrangle maps.

Previous Studies

The EIC records search identified ten cultural resources studies that were conducted within a 0.5-mile radius of the project site, one of which (RI-09472) was adjacent to or very close to the project site (Table 1). Six (6) additional studies provide regional overviews in the general project vicinity (Table 1).

Table 1. Previous Cultural Resource Studies within a 0.5-Mile Radius of the Project Site

Report Number	Author	Year	Title	Proximity to Project Site
RI-00061	Paul E. Langenwalter, II and James Brock	1985	Phase II Archaeological Studies Prado Basin and The Lower Santa Ana River	Outside
RI-00535	Lowell John Bean, Sylvia Brakke Vane, Matthew C. Hall, Harry Lawton, Richard Logan, Lee Gooding Massey, John Oxendine, Charles Rozaire, and David P. Whistler	1979	Cultural Resources and the Devers-Mira 500 kV Transmission Line Route (Valley to Mira Loma Section)	Overview
RI-01697	Christopher Drover	1982	Environmental Impact Evaluation: Archaeological Assessment of the Proposed Norco Wastewater Management Facilities	Outside
RI-01954	E. Jane Rosenthal and Steven J. Schwarz	1981	A Cultural Resource Survey of the Proposed Santa Ana River Hiking/Biking Trail in the Prado Flood Control Basin	Outside
RI-02429	Stickel, E. Gary and Terence D'Altroy	1980	Santa Ana River and Santiago Creek: A Cultural Resource Survey	Outside
RI-02593	Drover, Christopher E.	1989	An Archaeological Assessment of the Archibald Sewage Treatment Plant Norco, Riverside County, California	Outside
RI-02902	Mark T. Swanson and Roger G. Hatheway	1989	The Prado Dam and Reservoir, Riverside and San Bernardino Counties, California	Overview
RI-03490	McIntosh, Beverly Childs	1991	The Juan Bautista De Anza Trail Past, Present and Future, Baja to Riverside, California	Overview
RI-03604	Carleton S. Jones	1992	The Development of Cultural Complexity Among the Luiseno: A Thesis Presented to the Department of Anthropology, California State University, Long Beach in Partial Fulfillment of the Requirements for the Degree, Master of Arts	Overview

Report Number	Author	Year	Title	Proximity to Project Site
RI-03629	Gregory Seymour and David Doak	1992	An Archaeological Survey for the Western Riverside Regional Wastewater Treatment System in Corona and Norco, Riverside County.	Outside
RI-04762	Barker, Leo R. and Ann E. Huston, editors	1990	Death Valley to Deadwood; Kennecott to Cripple Creek. Proceedings of the Historic Mining Conference, January 23-27, 1989, Death Valley National Monument	Overview
RI-05049	McKenna et al.	2003	Archaeological Survey Report: A Phase I Cultural Resources Investigation for the Proposed Eastvale Water and Sewer Master Plan, Riverside County, California	Outside
RI-05964	Bai Tang, Michael Hogan, Josh Smallwood, and Daniel Ballester	2003	Historical/Archaeological Resources Survey Report, Tentative Tract Map No. 31406, Near the City of Norco, Riverside County, CA	Outside
RI-09472	Virginia Clifton	2016	A Cultural Resources Assessment of the Proposed Waste Water/RS0359 New Tower Site, located at 14700 River Road, Eastvale, Riverside County, California	Adjacent or very close to north, within the WRCRWTP
RI-10311	Christopher Duran and Breana Campbell	2017	Addendum to the Proposition 1 Reclaimed Water Distribution System Project Cultural Resource Assessment, Riverside County, California	Outside
RI-10691	Alan Curl	1979	Phase I Survey of the City of Riverside Final Report	Overview

Source: EIC, October 2019

RI-09472

Virginia Clifton of EBI Consulting prepared "A Cultural Resources Assessment of the Proposed Waste Water/RS0359 New Tower Site, located at 14700 River Road, Eastvale, Riverside County, California" in February 2016. This study regarded a proposed cellular communications tower site and linear alignment within the WRCRWTP approximately 335 feet north of the current project site. The study included a cultural resources records search, Native American scoping, pedestrian survey, and review of historical maps and aerial photographs. The study was negative for cultural resources and concluded that the WRCRWTP possesses low sensitivity for both prehistoric and historic archaeological resources. This conclusion was based on both the high level of disturbance from construction of the WRCRWTP and analysis of the landform and resource distribution prior to its development.

Previously Recorded Resources

The EIC records search identified two cultural resources that were recorded within a 0.5-mile radius of the project site (Table 2). Neither resource was within or adjacent to the project site.

Table 2. Previously Recorded Cultural Resources within 0.5- Mile of the Project Site

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded By and Year	Relationship to Project Site
P-33-000652	CA-RIV-652	Prehistoric lithic artifact scatter; at least partially destroyed	Insufficient information	1983 (J. Brock and P. Langenwalter)	Approximately 0.5-mile south
P-33-013408		Prehistoric isolate – bifacially ground mano	Presumed not eligible	1975 (M. Hall)	Approximately 0.25-mile south

Source: EIC, October 2019

Native American Scoping

KSDA initiated government-to-government Native American tribal outreach on behalf of WRCRWA on September 7, 2019 by requesting a search of the Native American Heritage Commission's (NAHC) Sacred Lands File (SLF). The NAHC responded on September 24, 2019 stating that the SLF search results were positive (i.e., sacred lands or resources important to a Native American tribal group are recorded in the vicinity of the project site). The NAHC also provided a list of 17 Native American representatives for KSDA to contact (Attachment A).

Travis Armstrong, Tribal Historic Preservation Officer of the Morongo Band of Mission Indians (Morongo), responded to KSDA via email on September 9, 2019. Mr. Armstrong stated that "[Morongo's] office has no additional comments at this time" and that AB 52 consultation may be concluded assuming Morongo receives a copy of any cultural resources study produced for the project (Attachment A).

Lacy Padilla, Archaeologist with the Agua Caliente Band of Cahuilla Indians, responded to KSDA via email on October 7, 2019. Ms. Padilla stated that the "project is not located within the Tribe's Traditional Use Area," they defer to more local tribes, and conclude their consultation effort (Attachment A).

As of October 11, 2019, no additional responses have been received.

Discussion and Recommendations

The proposed project includes the construction of odor management equipment and features within the existing WRCRWTP and would require minimal (i.e., less than five feet deep) of ground disturbance. All proposed features would be constructed within the paved portion of the plant, which has been previously disturbed by construction of existing facilities. The cultural resources record search was negative for cultural resources within or adjacent to the project site and Native American consultation did not identify specific resources within or near the project site. Based on the disturbed nature of the project site and results of the records search and Native American consultation, Anza recommends a finding of no impacts to historical and archaeological resources under CEQA. Although the current project is highly unlikely to encounter previously unidentified cultural resources or human remains, the recommendations below are provided in the event of unanticipated discoveries.

Unanticipated Discovery of Cultural Resources

If previously unidentified cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted avoid adverse impacts. In the event that an identified cultural resource is of Native American origin, the qualified archaeologist will consult with the WRCRWRA to begin or continue Native American consultation procedures.

Unanticipated Discovery of Human Remains

If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Please do not hesitate to contact Anza Resource Consultants if you have any questions regarding these findings or recommendations.

Sincerely,

ANZA RESOURCE CONSULTANTS

Kevin Hunt
Senior Cultural Resources Specialist/Principal
Anza Resource Consultants
603 Seagaze Drive, #1018
Oceanside, CA 92054

Attachment A: Native American Scoping

Attachment A: Native American Scoping

STATE OF CALIFORNIA **GAVIN NEWSOM, Governor**
NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

September 24, 2019

Keith Dunbar
K.S. Dunbar & Associates

VIA Email to: ksdpe67@gmail.com

RE: Odor Management Plan – Western Riverside County Regional Wastewater Treatment Plant Project, Riverside County

Dear Mr. Dunbar:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the tribes on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: steven.quinn@nahc.ca.gov.

Sincerely,

Steven Quinn
Associate Governmental Program Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Riverside County
9/24/2019

Agua Caliente Band of Cahuilla Indians
Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive — Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6907
Fax: (760) 699-6924
ACBCI-THPO@aguacaliente.net

Agua Caliente Band of Cahuilla Indians
Jeff Grubbe, Chairperson
5401 Dinah Shore Drive — Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6800
Fax: (760) 699-6919

Augustine Band of Cahuilla Mission Indians
Amanda Vance, Chairperson
P.O. Box 846 — Cahuilla
Coachella, CA, 92236
Phone: (760) 398 - 4722
Fax: (760) 369-7161
hhaines@augustinetribe.com

Cabazon Band of Mission Indians
Doug Welmas, Chairperson
84-245 Indio Springs Parkway — Cahuilla
Indio, CA, 92203
Phone: (760) 342 - 2593
Fax: (760) 347-7880
jstapp@cabazonindians-nsn.gov

Cahuilla Band of Indians
Daniel Salgado, Chairperson
52701 U.S. Highway 371 — Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 5549
Fax: (951) 763-2808
Chairman@cahuilla.net

Los Coyotes Band of Cahuilla and Cupeño Indians
Shane Chapparosa, Chairperson
P.O. Box 189 — Cahuilla
Warner Springs, CA, 92086-0189
Phone: (760) 782 - 0711
Fax: (760) 782-0712

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Rroad — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

Morongo Band of Mission Indians
Denisa Torres, Cultural Resources Manager
12700 Pumarra Rroad — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

Pechanga Band of Luiseno Indians
Paul Macarro, Cultural Resources Coordinator
P.O. Box 1477 — Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6306
Fax: (951) 506-9491
pmacarro@pechanga-nsn.gov

Pechanga Band of Luiseno Indians
Mark Macarro, Chairperson
P.O. Box 1477 — Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6000
Fax: (951) 695-1778
epreston@pechanga-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Odor Management Plan - Western Riverside County Regional Wastewater Treatment Plant, Riverside County.

Native American Heritage Commission
Native American Contact List
Riverside County
9/24/2019

Ramona Band of Cahuilla
Joseph Hamilton, Chairperson
P.O. Box 391670 Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
admin@ramona-nsn.gov

Ramona Band of Cahuilla
John Gomez, Environmental Coordinator
P. O. Box 391670 Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
jgomez@ramona-nsn.gov

Santa Rosa Band of Cahuilla Indians
Steven Estrada, Chairperson
P.O. Box 391820 Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
mflaxbeard@santarosacahuilla-nsn.gov

Santa Rosa Band of Cahuilla Indians
Mercedes Estrada,
P. O. Box 391820 Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
mercedes.estrada@santarosacahuilla-nsn.gov

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 Cahuilla
San Jacinto, CA, 92581 Luiseno
Phone: (951) 663 - 5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

Soboba Band of Luiseno Indians
Scott Cozart, Chairperson
P. O. Box 487 Cahuilla
San Jacinto, CA, 92583 Luiseno
Phone: (951) 654 - 2765
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

Torres-Martinez Desert Cahuilla Indians
Michael Mirelez, Cultural Resource Coordinator
P.O. Box 1160 Cahuilla
Thermal, CA, 92274
Phone: (760) 399 - 0022
Fax: (760) 397-8146
mmirelez@tmdci.org

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Odor Management Plan - Western Riverside County Regional Wastewater Treatment Plant, Riverside County.

Gmail Keith Dunbar <ksdpe67@gmail.com>

AB 52 Notification

2 messages

Keith Dunbar <ksdpe67@gmail.com> Sat, Sep 7, 2019 at 12:29 PM
To: THPO@morongo-nsn.gov, Heath McMahon <hmcmahon@wmwd.com>

Travis,

Greetings,

The AB 52 Notification for Western Riverside County Regional Wastewater Authority's Odor Management Plan for its Western Riverside Regional Wastewater Treatment Plant is attached.

All construction work associated with this project will be limited to the confines of the treatment plant property that has previously been disturbed.

Thank you,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, CA 92590-4314
(951) 699-2082
Cell: (949) 412-2634
ksdpe67@gmail.com

AB 52 Tribal Consultation Notification Morongo.pdf
344K

Tribal Historic Preservation Office <thpo@morongo-nsn.gov> Mon, Sep 9, 2019 at 9:45 AM
To: Keith Dunbar <ksdpe67@gmail.com>, Tribal Historic Preservation Office <thpo@morongo-nsn.gov>, Heath McMahon <hmcmahon@wmwd.com>

Hello Keith,

Thank you for the notification.

Our office has no additional comments at this time. We may conclude AB 52 consultation on the condition that if a cultural report is produced that our office receives a copy of it for our records.

Sincerely,

Travis Armstrong

Tribal Historic Preservation Officer

Morongo Band of Mission Indians

951-755-5259

Email: thpo@morongo-nsn.gov

[Quoted text hidden]

The information contained in this communication is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, or distribution of this information is strictly prohibited and may be unlawful.

For your safety, the contents of this email have been scanned for viruses and malware.

Gmail Keith Dunbar <ksdpe67@gmail.com>

AB 52 Notification

2 messages

Keith Dunbar <ksdpe67@gmail.com> Sat, Sep 7, 2019 at 12:18 PM
To: THPO Consulting <ACBCI-THPO@aguacaliente.net>, Heath McMahon <hmcmahon@wmwd.com>

Katy,

Greetings,

The AB 52 Notification for Western Riverside County Regional Wastewater Authority's Odor Management Plan for its Western Riverside Regional Wastewater Treatment Plant is attached.

All construction work associated with this project will be limited to the confines of the treatment plant property that has previously been disturbed.

Thank you,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

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ksdpe67@gmail.com

AB 52 Tribal Consultation Notification Aqua Caliente.pdf
345K

Padilla, Lacy (TRBL) <lpadilla@aguacaliente.net> Mon, Oct 7, 2019 at 9:50 AM
To: Keith Dunbar <ksdpe67@gmail.com>

Greetings,

A records check of the Tribal Historic preservation office's cultural registry revealed that this project is not located within the Tribe's Traditional Use Area. Therefore, we defer to the other tribes in the area. This letter shall conclude our consultation efforts.

Thank you,

Lacy Padilla

Archaeologist

Agua Caliente Band of Cahuilla Indians

5401 Dinah Shore Drive Palm Springs, CA 92264

D: 760-699-6956 | C: 760-333-5222

[Quoted text hidden]

Appendix E

AB 52 Consultation

WESTERN RIVERSIDE COUNTY
REGIONAL WASTEWATER AUTHORITY

14205 Meridian Parkway
Riverside, California 92518

AB 52 Tribal Consultation Notification

Date:	September 7, 2019
To:	Katie Croft, Archaeologist
Tribe:	Aqua Caliente Band of Cahuilla Indians
Subject	Notification for Early Tribal Consultation
Project Name:	Odor Mitigation Project – Western Riverside County Regional Wastewater Treatment Plant
Lead Agency	Western Riverside County Regional Wastewater Authority

Introduction

The Western Riverside County Regional Wastewater Authority (WRCRWA) is presently planning its Odor Management Plan for the Western Riverside County Regional Wastewater Treatment Plant that may be located within a geographical area that is traditionally and culturally affiliated with the Aqua Caliente Band of Cahuilla Indians.

Request for Consultation

State law under Assembly Bill (AB) 52 (Public Resources Code §21080.3.1) now allows California Native American Tribes 30 days to request consultation regarding possible significant effects that implementation of a proposed project may have on tribal cultural resources. The request must be in writing and must identify a lead contact person. WRCRWA will begin the consultation process within 30 days of receipt of the tribe's request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts to tribal cultural resources, and, if necessary, project alternatives or appropriate mitigation measures for preservation or mitigation that the tribe may recommend.

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K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082

Comments may also be submitted electronically to Mr. Dunbar at ksdpe67@gmail.com Confidential information transmitted electronically cannot be ensured. WRCRWA recommends that transmittal of confidential information, such as the specific location of a cultural resource, is done by formal letter. The tribes request to consult on the above-mentioned project must be received no later than October 7, 2019.

Overview of the Proposed Project

During 1998, The Western Riverside County Regional Wastewater Authority (WRCRWA) commenced operation of its Western Riverside County Regional Wastewater Treatment Plant (WRCRWTP) located at 14634 River Road, in the City of Eastvale, California (33º55'41.67"N, -117º36'13.42"W). That facility is now capable of producing up to 14 million gallons per day (MDG) of recycled water for reuse or for discharge to Reach 3 of the Santa Ana River, upstream of Prado Dam. The facility is owned by WRCRWA and operated by the Western Municipal Water District (WMWD). It receives municipal wastewater from five different entities including the City of Corona, City of Norco, Jurupa Community Services District, Home Gardens Sanitary District and WMWD.

When the WRCRWTP was originally constructed, the area around it was comprised of dairy farms, a green waste composting facility and the Santa Ana River. However, with the subsequent development activity in Eastvale, the dairies and composting facility were sold and homes were built in their place. As such, the neighborhood to the east of the plant represents sensitive receptors that are susceptible to odor emissions from the plant.

Since the completion of the recent expansion, WRCRWA personnel have observed that odor complaints have increased from the neighborhood to the east. These complaints have been reported to the South Coast Air Quality Management District (SCAQMD) and are considered of utmost importance to WRCRWA. In its attempt to solve this problem, WRCRWA retained the services of CH_2M (now Jacobs) to develop an odor management plan for the WRCRWTP. Jacobs recommended the following to meet the Future Endorsed More Stringent Offsite Odor Goal of 5 dilutions to threshold (D/T) (Figure 1):

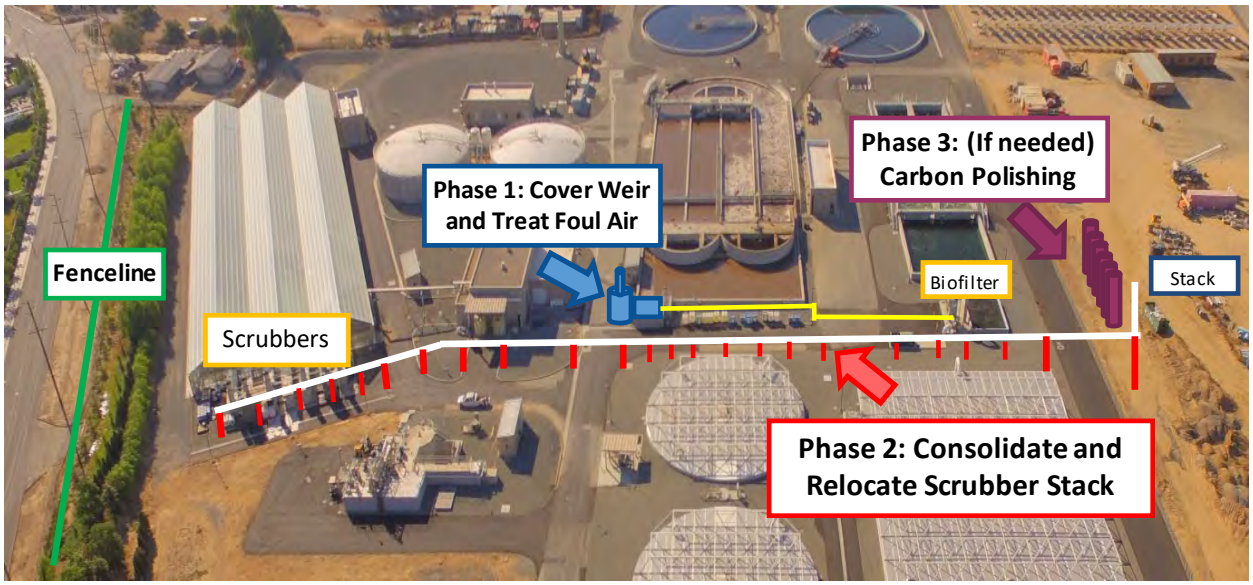

Figure 1 Recommended Phased Odor Management Plan

- Initial Implementation Project No. 1: Alternative 4 (containment and treatment of cascading weir odors). This project may include a stand-alone treatment system or treating cascading weir odors at the retrofitted biofilter.
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- Future Implementation Project No. 3 (if needed): Addition of carbon polishing units near the Alternative 2b stack location. This project would entail installing booster fans and carbon vessels with stacks. Some advantages to this project include:
  - Suitable treatment back-up in case of chemical scrubber upset or peak inlet conditions.
  - Different treatment technology targeting different odorous compounds versus wet based technologies.

Gmail Keith Dunbar <ksdpe67@gmail.com>

AB 52 Notification

2 messages

Keith Dunbar <ksdpe67@gmail.com> Sat, Sep 7, 2019 at 12:18 PM
To: THPO Consulting <ACBCI-THPO@aguacaliente.net>, Heath McMahon <hmcmahon@wmwd.com>

Katy,

Greetings,

The AB 52 Notification for Western Riverside County Regional Wastewater Authority's Odor Management Plan for its Western Riverside Regional Wastewater Treatment Plant is attached.

All construction work associated with this project will be limited to the confines of the treatment plant property that has previously been disturbed.

Thank you,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

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ksdpe67@gmail.com

AB 52 Tribal Consultation Notification Aqua Caliente.pdf
345K

Padilla, Lacy (TRBL) <lpadilla@aguacaliente.net> Mon, Oct 7, 2019 at 9:50 AM
To: Keith Dunbar <ksdpe67@gmail.com>

Greetings,

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Thank you,

Lacy Padilla

Archaeologist

Agua Caliente Band of Cahuilla Indians

5401 Dinah Shore Drive Palm Springs, CA 92264

D: 760-699-6956 | C: 760-333-5222

[Quoted text hidden]

WESTERN RIVERSIDE COUNTY
REGIONAL WASTEWATER AUTHORITY

14205 Meridian Parkway
Riverside, California 92518

AB 52 Tribal Consultation Notification

Date:	September 7, 2019
To:	Travis Armstrong, Tribal Historic Preservation Officer
Tribe:	Morongo Band of Mission Indians
Subject	Notification for Early Tribal Consultation
Project Name:	Odor Mitigation Project – Western Riverside County Regional Wastewater Treatment Plant
Lead Agency	Western Riverside County Regional Wastewater Authority

Introduction

The Western Riverside County Regional Wastewater Authority (WRCRWA) is presently planning its Odor Management Plan for the Western Riverside County Regional Wastewater Treatment Plant that may be located within a geographical area that is traditionally and culturally affiliated with the Morongo Band of Mission Indians.

Request for Consultation

State law under Assembly Bill (AB) 52 (Public Resources Code §21080.3.1) now allows California Native American Tribes 30 days to request consultation regarding possible significant effects that implementation of a proposed project may have on tribal cultural resources. The request must be in writing and must identify a lead contact person. WRCRWA will begin the consultation process within 30 days of receipt of the tribe's request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts to tribal cultural resources, and, if necessary, project alternatives or appropriate mitigation measures for preservation or mitigation that the tribe may recommend.

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K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
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Overview of the Proposed Project

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When the WRCRWTP was originally constructed, the area around it was comprised of dairy farms, a green waste composting facility and the Santa Ana River. However, with the subsequent development activity in Eastvale, the dairies and composting facility were sold and homes were built in their place. As such, the neighborhood to the east of the plant represents sensitive receptors that are susceptible to odor emissions from the plant.

Since the completion of the recent expansion, WRCRWA personnel have observed that odor complaints have increased from the neighborhood to the east. These complaints have been reported to the South Coast Air Quality Management District (SCAQMD) and are considered of utmost importance to WRCRWA. In its attempt to solve this problem, WRCRWA retained the services of CH_2M (now Jacobs) to develop an odor management plan for the WRCRWTP. Jacobs recommended the following to meet the Future Endorsed More Stringent Offsite Odor Goal of 5 dilutions to threshold (D/T) (Figure 1):

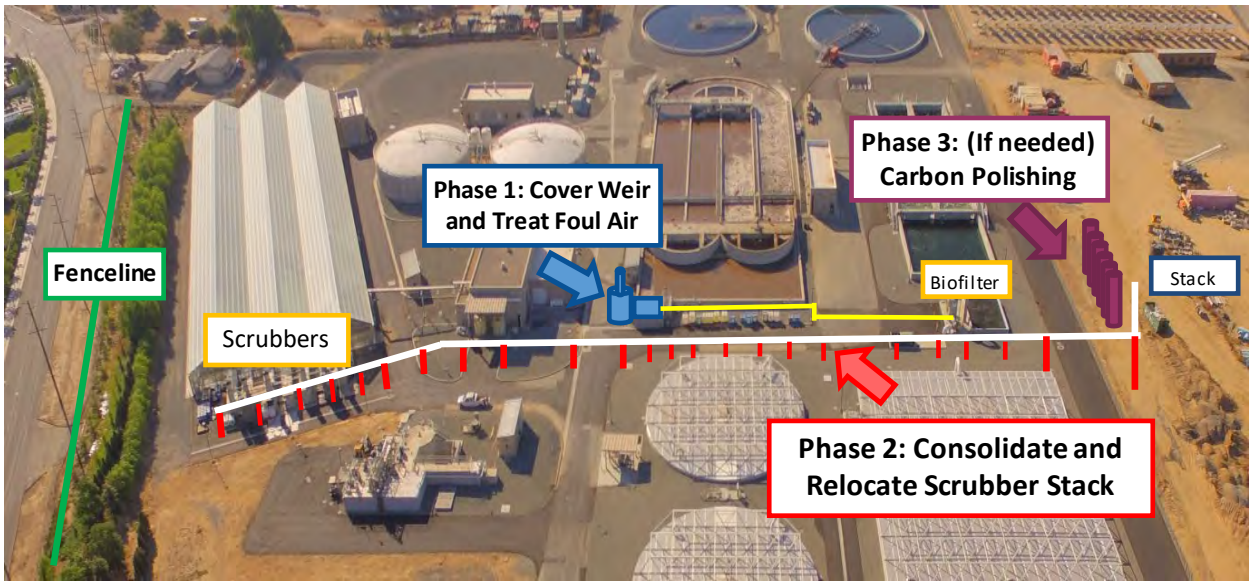

Figure 1 Recommended Phased Odor Management Plan

- Initial Implementation Project No. 1: Alternative 4 (containment and treatment of cascading weir odors). This project may include a stand-alone treatment system or treating cascading weir odors at the retrofitted biofilter.
- Future Implementation Project No. 2: Alternative 2b (consolidated stack remotely located over by the existing biofilter). This project may include either fiberglass reinforced plastic (FRP) ducting, high-density polyethylene (HDPE), or Stainless Steel ducting, whichever is less costly. Together with Project No. 1, the two projects are equivalent to Mitigation Alternative 6. After start-up and commissioning of Project No. 2, additional baseline sampling and AERMOD modeling should be completed to validate results. In addition, a period of time of offsite assessment should be completed to determine if further mitigation (Project No. 3) is needed.
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  - Suitable treatment back-up in case of chemical scrubber upset or peak inlet conditions.
  - Different treatment technology targeting different odorous compounds versus wet based technologies.

Gmail Keith Dunbar <ksdpe67@gmail.com>

AB 52 Notification

2 messages

Keith Dunbar <ksdpe67@gmail.com> Sat, Sep 7, 2019 at 12:29 PM
To: THPO@morongo-nsn.gov, Heath McMahon <hmcmahon@wmwd.com>

Travis,

Greetings,

The AB 52 Notification for Western Riverside County Regional Wastewater Authority's Odor Management Plan for its Western Riverside Regional Wastewater Treatment Plant is attached.

All construction work associated with this project will be limited to the confines of the treatment plant property that has previously been disturbed.

Thank you,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, CA 92590-4314
(951) 699-2082
Cell: (949) 412-2634
ksdpe67@gmail.com

AB 52 Tribal Consultation Notification Morongo.pdf
344K

Tribal Historic Preservation Office <thpo@morongo-nsn.gov> Mon, Sep 9, 2019 at 9:45 AM
To: Keith Dunbar <ksdpe67@gmail.com>, Tribal Historic Preservation Office <thpo@morongo-nsn.gov>, Heath McMahon <hmcmahon@wmwd.com>

Hello Keith,

Thank you for the notification.

Our office has no additional comments at this time. We may conclude AB 52 consultation on the condition that if a cultural report is produced that our office receives a copy of it for our records.

Sincerely,

Travis Armstrong

Tribal Historic Preservation Officer

Morongo Band of Mission Indians

951-755-5259

Email: thpo@morongo-nsn.gov

[Quoted text hidden]

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WESTERN RIVERSIDE COUNTY
REGIONAL WASTEWATER AUTHORITY

14205 Meridian Parkway
Riverside, California 92518

AB 52 Tribal Consultation Notification

Date:	September 7, 2019
To:	Paul E. Macarro, Cultural Coordinator
Tribe:	Pechanga Band of Luiseńo Mission Indians
Subject	Notification for Early Tribal Consultation
Project Name:	Odor Mitigation Project – Western Riverside County Regional Wastewater Treatment Plant
Lead Agency	Western Riverside County Regional Wastewater Authority

Introduction

The Western Riverside County Regional Wastewater Authority (WRCRWA) is presently planning its Odor Management Plan for the Western Riverside County Regional Wastewater Treatment Plant that may be located within a geographical area that is traditionally and culturally affiliated with the Pechanga Band of Luiseńo Mission Indians.

Request for Consultation

State law under Assembly Bill (AB) 52 (Public Resources Code §21080.3.1) now allows California Native American Tribes 30 days to request consultation regarding possible significant effects that implementation of a proposed project may have on tribal cultural resources. The request must be in writing and must identify a lead contact person. WRCRWA will begin the consultation process within 30 days of receipt of the tribe's request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts to tribal cultural resources, and, if necessary, project alternatives or appropriate mitigation measures for preservation or mitigation that the tribe may recommend.

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K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082

Comments may also be submitted electronically to Mr. Dunbar at ksdpe67@gmail.com Confidential information transmitted electronically cannot be ensured. WRCRWA recommends that transmittal of confidential information, such as the specific location of a cultural resource, is done by formal letter. The tribes request to consult on the above-mentioned project must be received no later than October 7, 2019.

Overview of the Proposed Project

During 1998, The Western Riverside County Regional Wastewater Authority (WRCRWA) commenced operation of its Western Riverside County Regional Wastewater Treatment Plant (WRCRWTP) located at 14634 River Road, in the City of Eastvale, California (33º55'41.67"N, -117º36'13.42"W). That facility is now capable of producing up to 14 million gallons per day (MDG) of recycled water for reuse or for discharge to Reach 3 of the Santa Ana River, upstream of Prado Dam. The facility is owned by WRCRWA and operated by the Western Municipal Water District (WMWD). It receives municipal wastewater from five different entities including the City of Corona, City of Norco, Jurupa Community Services District, Home Gardens Sanitary District and WMWD.

When the WRCRWTP was originally constructed, the area around it was comprised of dairy farms, a green waste composting facility and the Santa Ana River. However, with the subsequent development activity in Eastvale, the dairies and composting facility were sold and homes were built in their place. As such, the neighborhood to the east of the plant represents sensitive receptors that are susceptible to odor emissions from the plant.

Since the completion of the recent expansion, WRCRWA personnel have observed that odor complaints have increased from the neighborhood to the east. These complaints have been reported to the South Coast Air Quality Management District (SCAQMD) and are considered of utmost importance to WRCRWA. In its attempt to solve this problem, WRCRWA retained the services of CH_2M (now Jacobs) to develop an odor management plan for the WRCRWTP. Jacobs recommended the following to meet the Future Endorsed More Stringent Offsite Odor Goal of 5 dilutions to threshold (D/T) (Figure 1):

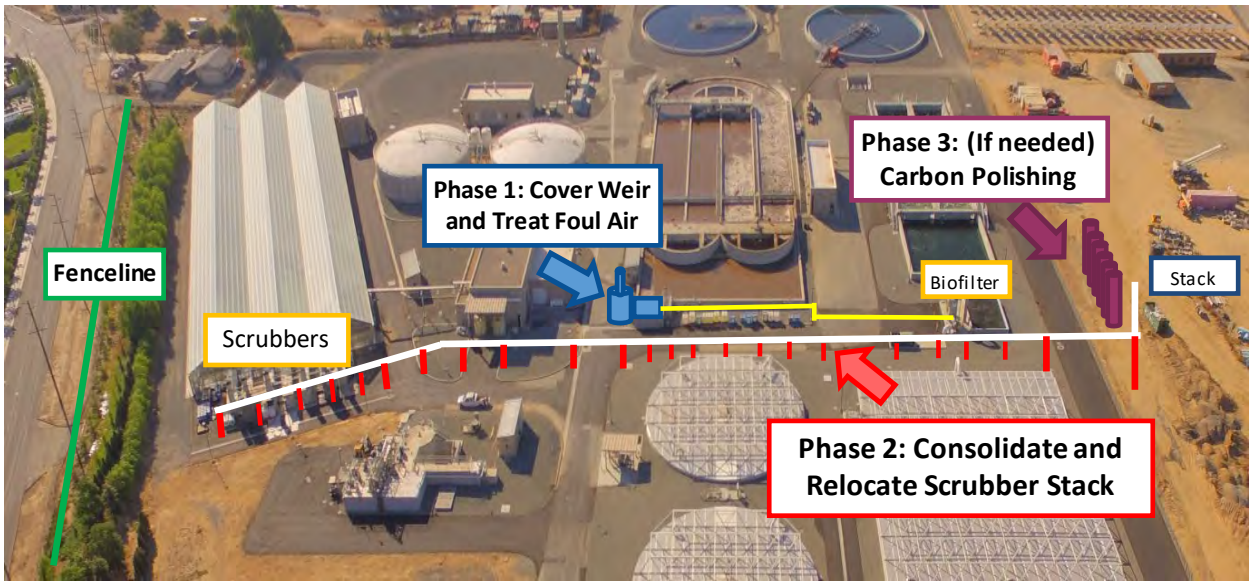

Figure 1 Recommended Phased Odor Management Plan

- Initial Implementation Project No. 1: Alternative 4 (containment and treatment of cascading weir odors). This project may include a stand-alone treatment system or treating cascading weir odors at the retrofitted biofilter.
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  - Different treatment technology targeting different odorous compounds versus wet based technologies.

WESTERN RIVERSIDE COUNTY
REGIONAL WASTEWATER AUTHORITY

14205 Meridian Parkway
Riverside, California 92518

AB 52 Tribal Consultation Notification

Date:	September 7, 2019
To:	Destiny Colocho, Manager, Rincon Cultural Resources
Tribe:	Rincon Band of Luiseño Indians
Subject	Notification for Early Tribal Consultation
Project Name:	Odor Management Plan – Western Riverside County Regional Wastewater Treatment Plant
Lead Agency	Western Riverside County Regional Wastewater Authority

Introduction

The Western Riverside County Regional Wastewater Authority (WRCRWA) is presently planning its Odor Management Plan for the Western Riverside County Regional Wastewater Treatment Plant that may be located within a geographical area that is traditionally and culturally affiliated with the Rincon Band of Luiseño Indians.

Request for Consultation

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Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082

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Overview of the Proposed Project

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When the WRCRWTP was originally constructed, the area around it was comprised of dairy farms, a green waste composting facility and the Santa Ana River. However, with the subsequent development activity in Eastvale, the dairies and composting facility were sold and homes were built in their place. As such, the neighborhood to the east of the plant represents sensitive receptors that are susceptible to odor emissions from the plant.

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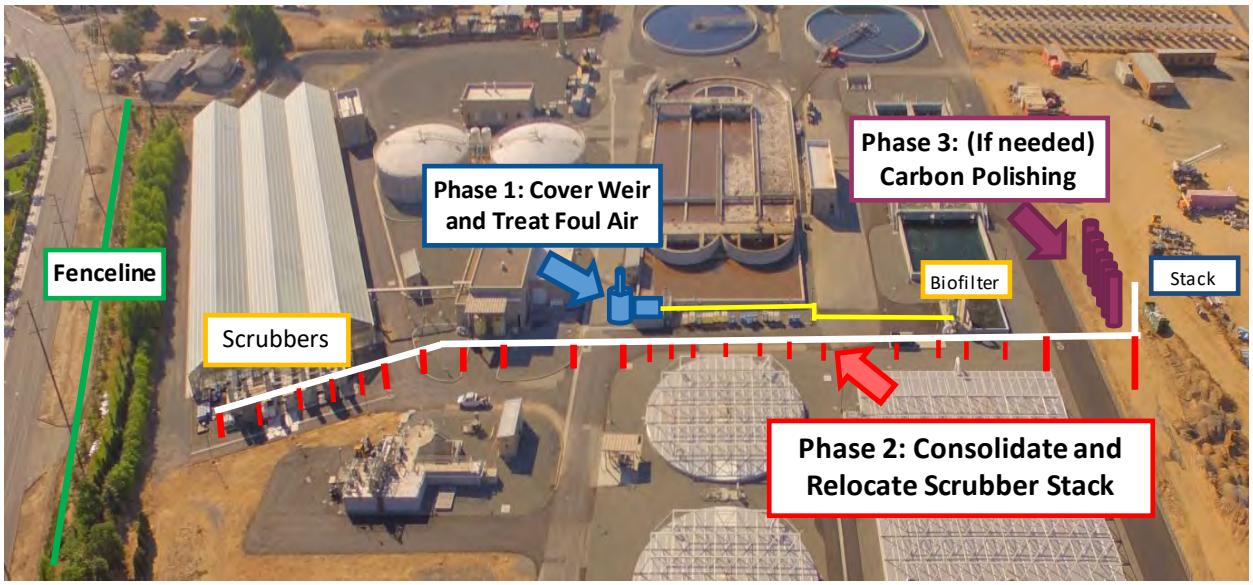

Figure 1 Recommended Phased Odor Management Plan

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WESTERN RIVERSIDE COUNTY
REGIONAL WASTEWATER AUTHORITY

14205 Meridian Parkway
Riverside, California 92518

AB 52 Tribal Consultation Notification

Date:	September 27, 2019
To:	Dan Little, Chief Intergovernmental and Tribal Affairs Officer
Tribe:	San Manuel Band of Mission Indians
Subject	Notification for Early Tribal Consultation
Project Name:	Odor Management Plan – Western Riverside County Regional Wastewater Treatment Plant
Lead Agency	Western Riverside County Regional Wastewater Authority

Introduction

The Western Riverside County Regional Wastewater Authority (WRCRWA) is presently planning its Odor Management Plan for the Western Riverside County Regional Wastewater Treatment Plant that may be located within a geographical area that is traditionally and culturally affiliated with the San Manuel Band of Mission Indians.

Request for Consultation

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Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
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Overview of the Proposed Project

During 1998, The Western Riverside County Regional Wastewater Authority (WRCRWA) commenced operation of its Western Riverside County Regional Wastewater Treatment Plant (WRCRWTP) located at 14634 River Road, in the City of Eastvale, California (33º55'41.67"N, -117º36'13.42"W). That facility is now capable of producing up to 14 million gallons per day (MDG) of recycled water for reuse or for discharge to Reach 3 of the Santa Ana River, upstream of Prado Dam. The facility is owned by WRCRWA and operated by the Western Municipal Water District (WMWD). It receives municipal wastewater from five different entities including the City of Corona, City of Norco, Jurupa Community Services District, Home Gardens Sanitary District and WMWD.

When the WRCRWTP was originally constructed, the area around it was comprised of dairy farms, a green waste composting facility and the Santa Ana River. However, with the subsequent development activity in Eastvale, the dairies and composting facility were sold and homes were built in their place. As such, the neighborhood to the east of the plant represents sensitive receptors that are susceptible to odor emissions from the plant.

Since the completion of the recent expansion, WRCRWA personnel have observed that odor complaints have increased from the neighborhood to the east. These complaints have been reported to the South Coast Air Quality Management District (SCAQMD) and are considered of utmost importance to WRCRWA. In its attempt to solve this problem, WRCRWA retained the services of CH_2M (now Jacobs) to develop an odor management plan for the WRCRWTP. Jacobs recommended the following to meet the Future Endorsed More Stringent Offsite Odor Goal of 5 dilutions to threshold (D/T) (Figure 1):

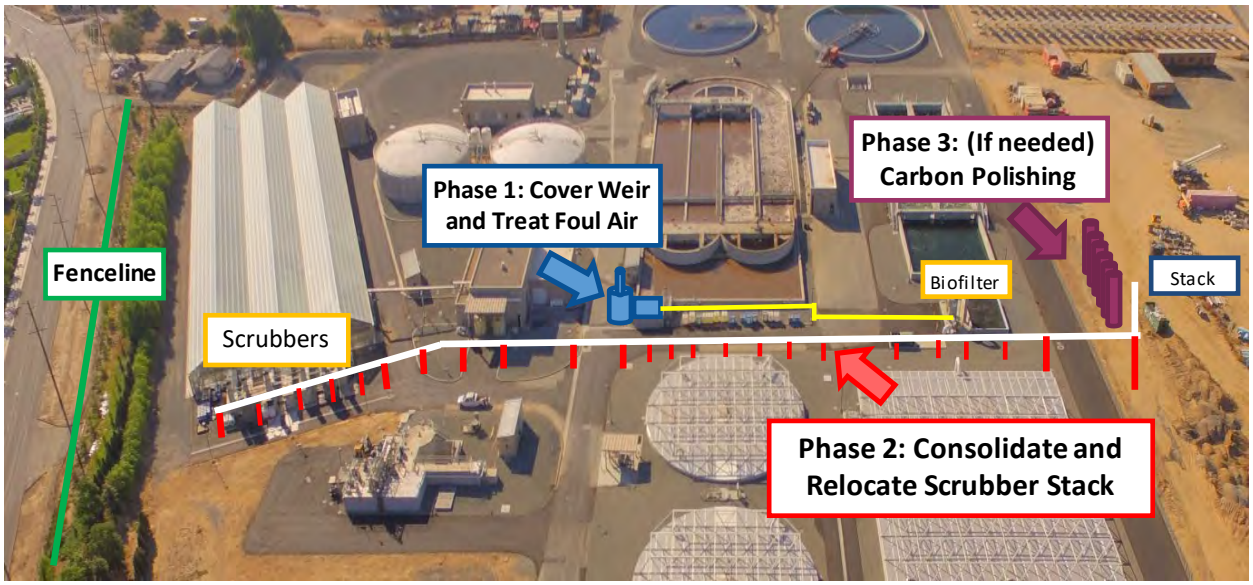

Figure 1 Recommended Phased Odor Management Plan

- Initial Implementation Project No. 1: Alternative 4 (containment and treatment of cascading weir odors). This project may include a stand-alone treatment system or treating cascading weir odors at the retrofitted biofilter.
- Future Implementation Project No. 2: Alternative 2b (consolidated stack remotely located over by the existing biofilter). This project may include either fiberglass reinforced plastic (FRP) ducting or high-density polyethylene (HDPE) ducting, whichever is less costly. Together with Project No. 1, the two projects are equivalent to Mitigation Alternative 6. After start-up and commissioning of Project No. 2, additional baseline sampling and AERMOD modeling should be completed to validate results. In addition, a period of time of offsite assessment should be completed to determine if further mitigation (Project No. 3) is needed.
- Future Implementation Project No. 3 (if needed): Addition of carbon polishing units near the Alternative 2b stack location. This project would entail installing booster fans and carbon vessels with stacks. Some advantages to this project include:
  - Suitable treatment back-up in case of chemical scrubber upset or peak inlet conditions.
  - Different treatment technology targeting different odorous compounds versus wet based technologies.

WESTERN RIVERSIDE COUNTY
REGIONAL WASTEWATER AUTHORITY

14205 Meridian Parkway
Riverside, California 92518

AB 52 Tribal Consultation Notification

Date:	September 7, 2019
To:	Joe Ontiveros, Tribal Historic Preservation Officer
Tribe:	Soboba Band of Luiseño Indians
Subject	Notification for Early Tribal Consultation
Project Name:	Odor Management Plan – Western Riverside County Regional Wastewater Treatment Plant
Lead Agency	Western Riverside County Regional Wastewater Authority

Introduction

The Western Riverside County Regional Wastewater Authority (WRCRWA) is presently planning its Odor Management Plan for the Western Riverside County Regional Wastewater Treatment Plant that may be located within a geographical area that is traditionally and culturally affiliated with the Soboba Band of Luiseño Indians.

Request for Consultation

State law under Assembly Bill (AB) 52 (Public Resources Code §21080.3.1) now allows California Native American Tribes 30 days to request consultation regarding possible significant effects that implementation of a proposed project may have on tribal cultural resources. The request must be in writing and must identify a lead contact person. WRCRWA will begin the consultation process within 30 days of receipt of the tribe's request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts to tribal cultural resources, and, if necessary, project alternatives or appropriate mitigation measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to WRCRWA regarding the significance of tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe believes are appropriate to mitigate the potential impact. If you wish to informally submit information, written comments may be sent to:

Keith S. Dunbar, PE., BCEE, Hon.D.WRE., F. ASCE
K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082

Comments may also be submitted electronically to Mr. Dunbar at ksdpe67@gmail.com Confidential information transmitted electronically cannot be ensured. WRCRWA recommends that transmittal of confidential information, such as the specific location of a cultural resource, is done by formal letter. The tribes request to consult on the above-mentioned project must be received no later than October 7, 2019.

Overview of the Proposed Project

During 1998, The Western Riverside County Regional Wastewater Authority (WRCRWA) commenced operation of its Western Riverside County Regional Wastewater Treatment Plant (WRCRWTP) located at 14634 River Road, in the City of Eastvale, California (33º55'41.67"N, -117º36'13.42"W). That facility is now capable of producing up to 14 million gallons per day (MDG) of recycled water for reuse or for discharge to Reach 3 of the Santa Ana River, upstream of Prado Dam. The facility is owned by WRCRWA and operated by the Western Municipal Water District (WMWD). It receives municipal wastewater from five different entities including the City of Corona, City of Norco, Jurupa Community Services District, Home Gardens Sanitary District and WMWD.

When the WRCRWTP was originally constructed, the area around it was comprised of dairy farms, a green waste composting facility and the Santa Ana River. However, with the subsequent development activity in Eastvale, the dairies and composting facility were sold and homes were built in their place. As such, the neighborhood to the east of the plant represents sensitive receptors that are susceptible to odor emissions from the plant.

Since the completion of the recent expansion, WRCRWA personnel have observed that odor complaints have increased from the neighborhood to the east. These complaints have been reported to the South Coast Air Quality Management District (SCAQMD) and are considered of utmost importance to WRCRWA. In its attempt to solve this problem, WRCRWA retained the services of CH_2M (now Jacobs) to develop an odor management plan for the WRCRWTP. Jacobs recommended the following to meet the Future Endorsed More Stringent Offsite Odor Goal of 5 dilutions to threshold (D/T) (Figure 1):

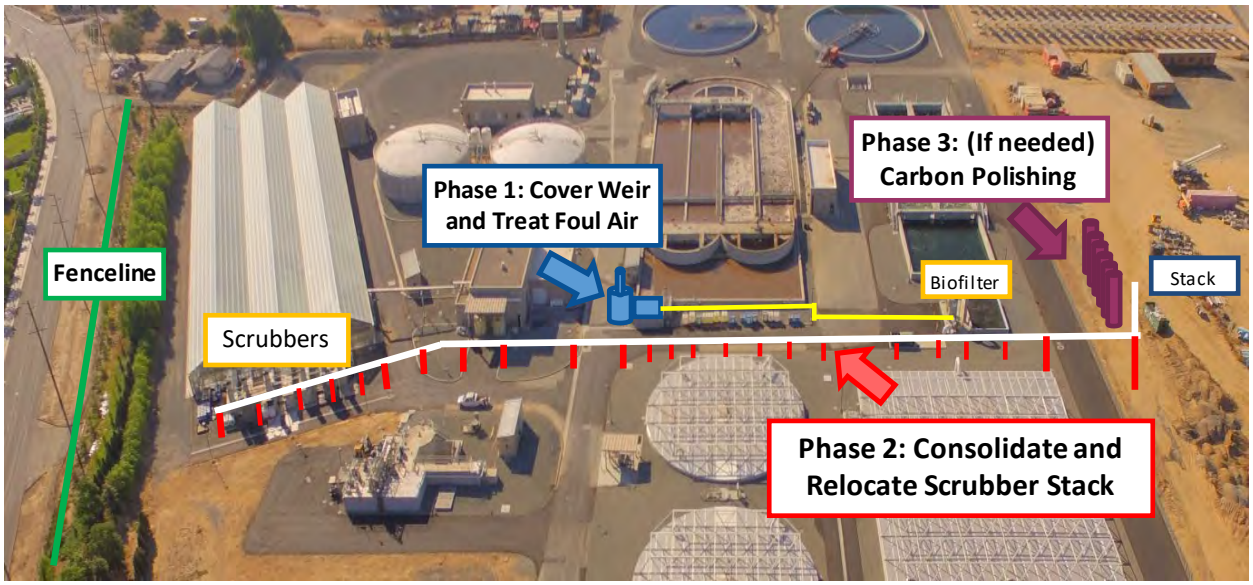

Figure 1 Recommended Phased Odor Management Plan

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WESTERN RIVERSIDE COUNTY
REGIONAL WASTEWATER AUTHORITY

14205 Meridian Parkway
Riverside, California 92518

AB 52 Tribal Consultation Notification

Date:	September 27, 2019
To:	Michael Mirelez, Cultural Resource Coordinator
Tribe:	Torres-Martinez Desert Cahuilla Indians
Subject	Notification for Early Tribal Consultation
Project Name:	Odor Management Plan – Western Riverside County Regional Wastewater Treatment Plant
Lead Agency	Western Riverside County Regional Wastewater Authority

Introduction

The Western Riverside County Regional Wastewater Authority (WRCRWA) is presently planning its Odor Management Plan for the Western Riverside County Regional Wastewater Treatment Plant that may be located within a geographical area that is traditionally and culturally affiliated with the Torres-Martinez Desert Cahuilla Indians.

Request for Consultation

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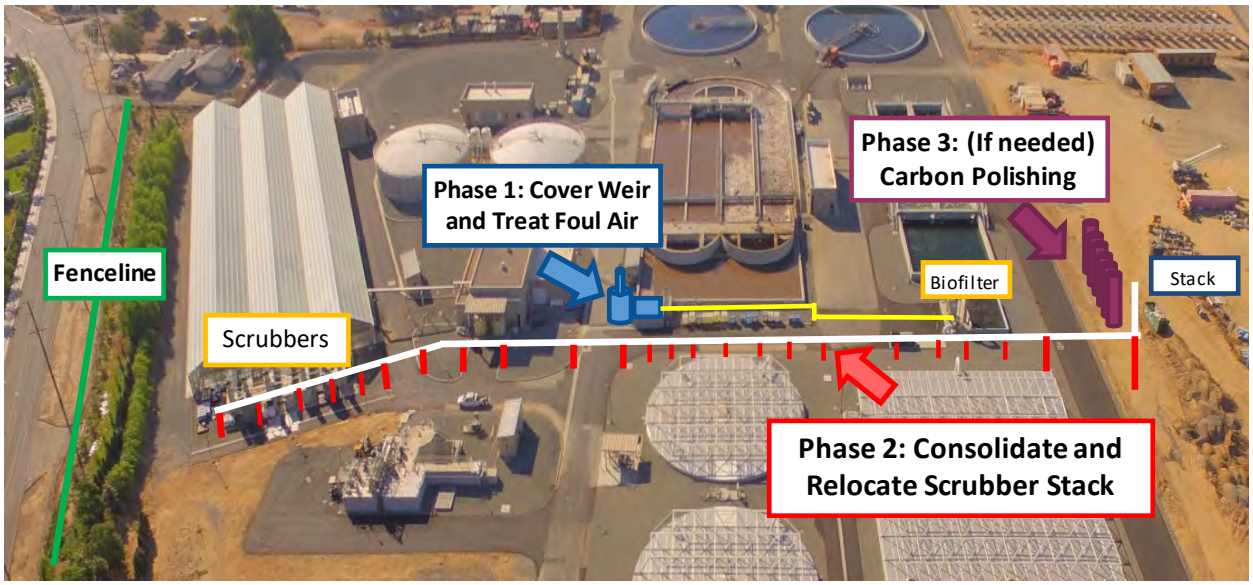

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Appendix F
Mitigation Monitoring and Reporting Program

Western Riverside County Regional Wastewater Authority

Mitigation Monitoring and Reporting Program

Odor Mitigation Project

Western Riverside County Regional Wastewater Authority Treatment Plant

Prepared by:

K.S. Dunbar & Associates, Inc.
Environmental Engineering

August 2020

K.S. DUNBAR & ASSOCIATES

Mitigation Monitoring and Reporting Program

Odor Mitigation Plan

Western Riverside County Regional Wastewater Authority Treatment Plant

The California Environmental Quality Act (CEQA) requires that when a public agency completes an environmental document which includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a reporting or monitoring program. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring program must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6).

In compliance with Public Resources Code Section 21081.6, the following Mitigation and Monitoring and Reporting Checklist has been prepared for the Odor Mitigation Project for the Western Riverside County Regional Wastewater Authority Treatment Plant (WRCRWATP). The facility is owned by the Western Riverside County Wastewater Authority (WRCRWA) and operated by Western Municipal Water District (WMWD).This Mitigation Monitoring and Reporting Checklist is intended to provide verification that all applicable Conditions of Approval relative to significant environmental impacts are monitored and reported. Monitoring will include: 1) verification that each mitigation measure has been implemented, 2) recordation of the actions taken to implement each mitigation, and 3) retention of records in the Odor Mitigation Project for the WRCRWATP project file.

This Mitigation Monitoring and Reporting Program delineates responsibilities for monitoring the project, but also allows the WRCRWA flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures were implemented.

Reporting consists of establishing a record that a mitigation measure is being implemented and generally involves the following steps:

- WRCRWA distributes reporting forms to the appropriate persons for verification of compliance.
- Departments/agencies with reporting responsibilities will review the Environmental Impact Report or Initial Study and Mitigated Negative Declaration, which provides general background information on the reasons for including specified mitigation measures.
- Problems or exceptions to compliance will be addressed to WRCRWA, as appropriate.
- Periodic meetings may be held during project implementation to report on compliance of mitigation measures.
- Responsible parties provide WRCRWA with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented. Monitoring compliance may be documented through existing review and approval programs such as field inspection reports and plan review.
- WRCRWA prepares a reporting form periodically during the construction phase and an annual reporting summarizing all project mitigation monitoring efforts.
- Appropriate mitigation measures will be included in construction documents and/or conditions of permits/approvals.

Minor changes to the Mitigation Monitoring and Reporting Program, if required, would be made in accordance with CEQA and would be permitted after further review and approval by the WRCRWA. Such changes could include reassignment of monitoring and reporting responsibilities, program redesign to make any appropriate improvements, and/or modification, substitution or deletion of mitigation measures subject to conditions described in State CEQA Guidelines Section 15162. No change will be permitted unless the Mitigation Monitoring and Reporting Program continues to satisfy the requirements of Public Resources Code Section 21081.6.

Mitigation Monitoring and Reporting Program Checklist

Odor Mitigation Plan

Western Riverside County Regional Wastewater Authority Treatment Plant

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)	Date Completed
Biological Resources				
Standard Construction Practices/Design Features WRCRWA's contract documents for this project will include the following: ❖ If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds shall be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a no-disturbance buffer. The size of the no-disturbance buffer (generally 300 feet for migratory and non-migratory song birds and 500 feet for raptors and special-status species) will be determined by the wildlife biologist, in coordination with the California Department of Fish and Wildlife, and will depend on the level of noise and/or surrounding disturbances, line of sight between the nest and the construction activity, ambient noise, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.	Project Records.	Prior To Construction.	Project Manager.	By: Date:

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)	Date Completed
Cultural Resources				
Standard Construction Practices/Design Features WRCRWA's contract documents for this project will include the following: ❖ In the event of an accidental discovery or recognition of any human remains, the County Coroner shall be notified and construction activities at the affected work site shall be halted. If the coroner determines the remains to be Native American: (1) the coroner shall contact the Native American Heritage Commission (NAHC) within 24-hours, and (2) the NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American. The treatment and disposition of human remains that might be discovered during excavation shall be in accordance with applicable laws and regulations.	Project Records.	Prior To Construction.	Project Manager.	By: Date:
Mitigation Measure	**Monitoring Process**	**Monitoring Timing**	**Responsible Person(s)**	**Date Completed**
Geology and Soils				
Standard Construction Practices/Design Features WRCRWA's contract documents for this project will include the following: ❖ In the unlikely event that potentially significant paleontological materials (e.g., fossils) are encountered during construction of the project, all work shall be halted in the vicinity of the paleontological discovery until a qualified paleontologist can visit the site of discovery, assess the significance of the paleontological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of paleontological material that might be discovered during excavation shall be in accordance with applicable laws and regulations.	Project Records	Prior to Construction	Project Manager	By: Date: