2017/18 Non-Potable Water Connections Project

Final Initial Study – Mitigated Negative Declaration

prepared for

Coachella Valley Water District
75-515 Hovley Lane East
Palm Desert, California 92211
Contact: William Patterson

prepared with the assistance of

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August 2018

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Chapter 1: Introduction

1.1 Project Title

2017/18 Non-Potable Water Connections Project

1.2 Lead Agency Name and Address

Coachella Valley Water District
75-515 Hovley Lane East
Palm Desert, California 92211

1.3 Contact Person

William Patterson
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1.4 Project Background and Overview

The Coachella Valley Water District (CVWD) delivers water for domestic consumption, landscape and agricultural irrigation, and fire protection across approximately 1,000 square miles of service area. CVWD also collects and treats wastewater, provides regional stormwater protection, replenishes the groundwater basin, and promotes water conservation. CVWD's service area has a population of approximately 300,000 people, served through approximately 108,000 service connections. CVWD overlies the Coachella Valley Groundwater Basin, which it uses as its primary source of domestic water supply. Imported Colorado River water is used for irrigation and groundwater replenishment. Additionally, CVWD serves recycled water (tertiary treated municipal wastewater) for irrigation use.

The 2017/18 Non-Potable Water Connections Project ("proposed project") involves the construction and operation of approximately 9.5 miles of non-potable water (NPW) pipeline segments and connections to provide irrigation water for seven local golf courses, one RV resort, one planned future development, and replacement of an existing pump station for a total online pumping capacity of approximately 24,000 gallons per minute (gpm), split between 12,000 gpm for the NPW low pressure system and 12,000 gpm for the NPW high pressure system, and a standby pumping capacity of 8,000 gpm. The proposed project would deliver a blend of NPW from CVWD's existing Water Reclamation Plant No. 10 (WRP10) facility and Colorado River water from the Mid-Valley Pipeline (MVP).

WRP10 is equipped with a tertiary treatment design capacity of 15 million gallons per day (MGD). During the winter months, when current demand for recycled water is less than the available supply, a portion of the NPW is disposed through onsite percolation-evaporation ponds. As more NPW users are connected to the MVP system, CVWD will eliminate percolation of treated wastewater at WRP10. (CVWD 2016a)

A detailed description of the proposed project, including figures showing the pipeline alignment, is provided in Chapter 2, Project Description.

1.5 Project Location

The project alignment is located in central Riverside County, within the West Valley portion of the Coachella Valley. The majority of the project alignment would be situated in the city of Palm Desert, with a segment extending east along Hovley Lane East into the unincorporated community of Bermuda Dunes. A portion of this segment along Hovley Lane East (approximately 1.5 miles in length) is located adjacent to the city of Indian Wells. In order to comprehensively evaluate the environmental impacts of the proposed project, this analysis incorporates ordinances and policies from the cities of Palm Desert Indian Wells, and Riverside County, where appropriate. A detailed description of the pipeline alignment, including figures, is provided in Chapter 2, Project Description.

1.6 Recycled Water Supply

Coachella Valley Water Management Plan 2010 Update

In September 2002, CVWD adopted the *Coachella Valley Water Management Plan* (WMP), which was compiled to reliably "meet current and future water demands in a cost-effective and sustainable manner." In January 2012, the WMP was updated to address changing conditions such as increased water demands and evolving federal and state laws and regulations. The 2002 WMP and 2010 WMP Update, also collectively referenced as WMP in this document, include the following five major elements:

- Water conservation (urban, golf course, and agricultural)
- Increasing surface water supplies for the Valley from outside sources
- Substitution of surface water supplies for groundwater (source substitution)
- Groundwater recharge
- Monitoring and evaluation of subsidence and groundwater levels and quality to provide the information needed to manage the Valley's groundwater resources

The proposed project described herein is part of the source substitution element of the WMP. As stated in the 2010 WMP Update, "Source substitution is the delivery of an alternate source of water to users that currently pump groundwater. The substitution of an alternate water source reduces groundwater extraction and allows the groundwater to remain in storage, thus reducing overdraft." The source substitution element is described in additional detail in Section 6.5 of the 2010 WMP Update (CVWD 2012a).

The proposed project is part of this near-term effort to reduce groundwater overdraft in accordance with the water management goals and objectives of both the 2002 WMP and the 2010 WMP Update.

Existing Non-Potable Water Facilities

Recycled water, also referred to as reclaimed water, is defined in the California Code of Regulations (Title 22, Chapter 3) and refers to water produced by the three-stage (tertiary) treatment of municipal wastewater. CVWD owns and operates five water reclamation plants (WRPs), two of

which (WRP7 and WRP10) generate recycled water for irrigation of golf courses and large landscaped areas (CVWD 2016a).

At WRP-7, tertiary treated recycled water is blended with Colorado River water from the Coachella Canal and is served to two 18-hole golf courses and an additional nine holes on another course. At WRP10, tertiary treated water is blended with Colorado River water from the MVP before being distributed to golf courses and other large landscape customers. The WRPs discharge the remaining secondary effluent into percolation ponds. CVWD provides the blend of recycled water and Colorado River water, each and collectively referred to as NPW, to water impoundments and the conveyance system for irrigation purposes to multiple customers across the service area (CVWD 2016a).

CVWD delivers NPW containing recycled water for approved uses including golf course and landscape irrigation, agricultural irrigation, fish farms, and duck clubs. The proposed project will facilitate the use of NPW for irrigation at seven existing golf courses, an RV resort, and a planned future development; and is overall intended to enhance the existing NPW system within the Palm Desert area.

1.7 Existing Setting and Surrounding Land Uses

Land uses in and around the project area are predominantly residential and recreational. The pipeline alignment primarily traverses public roads and through gated residential areas.

1.8 General Plan Land Use Designation

The project corridor is within the vicinity of the following General Plan land use designations for the city of Palm Desert, the city of Indian Wells, and the County of Riverside: Resort Entertainment, Conventional Suburban Neighborhood, Town Center Neighborhood, Suburban Retail Center, Public Facilities/ Institutional, Employment, Open Space, Small Town Neighborhood, Golf Course & Resort Neighborhood, Very Low Density Residential, and Community Development Foundation.

1.9 Required Approvals

CVWD is the lead agency under the California Environmental Quality Act (CEQA) with responsibility for approving the project. Table 1 lists the other approvals that would likely be required for the project.

Table 1 Summary of Potentially Required Approvals

Regulating Agency	Potential Permit/Approval
State Water Resources Control Board, in federal/state partnership with the United States Environmental Protection Agency	State Revolving Fund Program
State Water Resources Control Board (SWRCB), Regional Water Quality Control Board (RWQCB) – Colorado River Basin Region	National Pollutant Discharge Elimination System Stormwater (NPDES) Construction General Permit
County of Riverside Department of Transportation	Encroachment Permit
City of Palm Desert	Encroachment Permit
Coachella Valley Water District	CEQA Lead Agency Approval of IS-MND & MMRP NPW Service Agreement(s)
South Coast Air Quality Management District (SCAQMD)	Permit to Construct and Permit to Operate[1]

[1] A Fugitive Dust Control Plan will be submitted by the construction contractor to the SCAQMD prior to grading/excavation.

1.10 Scope and Use of this Document

This Initial Study-Mitigated Negative Declaration (IS-MND) provides an assessment of the potential impacts to environmental resources that would result from implementing the proposed project. The discussion and level of analysis are commensurate with the expected magnitude and severity of each impact to environmental resources. This document primarily addresses the environmental effects of constructing and operating recycled water conveyance and storage infrastructure and the effects of using the water supplies under consideration. The analyses in Chapter 3 are based on technical reports and studies prepared for the project, supplemented with other public information sources as provided in the list of references.

This document evaluates the potential for impacts to resources areas identified in Appendix G of the *State CEQA Guidelines*. These resources areas include:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- 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 and Traffic
- Utilities and Service Systems
- Tribal Cultural Resources
- Mandatory Findings of Significance

Mitigation measures have been developed where necessary to reduce potential impacts to a less than significant level. The Mitigation Monitoring and Reporting Program (Appendix I) for the proposed project specifies the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment.

1.10.1 Administration of the Clean Water State Revolving Fund Program in California

The Federal Water Pollution Control Act (Clean Water Act or CWA), as amended in 1987, established the Clean Water State Revolving Fund (CWSRF) program. The CWSRF program offers low interest financing agreements for water quality projects. The proposed project may be partially funded with a loan from the CWSRF Loan Program. The program is administered, nationally, by the United States Environmental Protection Agency (USEPA), and in certain instances the administration has been delegated to the states. In California, administration of the CWSRF program has been delegated to the SWRCB. In turn, the SWRCB requires that all projects being considered under the CWSRF program must comply with CEQA and certain federal environmental protection laws. SWRCB requires compliance with the Federal Endangered Species Act (FESA; Section 7), the National Historic Preservation Act (NHPA; Section 106), the General Conformity Rule for the Federal Clean Air Act (FCAA), and other executive orders and federal regulations. Collectively, the SWRCB refers to these requirements as "CEQA-Plus." Therefore, this IS-MND has been prepared in accordance with the State Environmental Review Process for the Clean Water State Revolving Fund Program (SWRCB 2017) and is expanded beyond the typical content requirements of an IS-MND to include additional CEQA-Plus information. The SWRCB, as a responsible agency for the project, will consider this CEQA document prior to CWSRF loan authorization.

1.10.2 Impact Terminology

The anticipated environmental impacts are identified for each of the resource areas listed above. The level of significance for each resource area uses CEQA terminology as specified below:

- **Potentially Significant**. Adverse environmental consequences that have the potential to be significant according to the threshold criteria identified for the resource, even after mitigation strategies are applied and/or an adverse effect that could be significant and for which no mitigation has been identified. If any potentially significant impacts are identified, an Environmental Impact Report (EIR) must be prepared to meet the requirements of CEQA.
- **Potentially Significant Unless Mitigation is Incorporated.** Adverse environmental consequences that have the potential to be significant, but can be reduced to less than significant levels through the application of identified mitigation strategies that have not already been incorporated into the proposed project.
- **Less than Significant.** Potential adverse environmental consequences have been identified. However, they are not so adverse as to meet the significance threshold criteria for that resource. Therefore, no mitigation measures are required.
- **No Impact.** No adverse environmental consequences have been identified for the resource or the consequences are negligible or undetectable. Therefore, no mitigation measures are required.

1.10.3 Recommended Level of Environmental Documentation

Based on the analysis presented herein, an MND is the appropriate level of environmental documentation for the project.

1.11 Comments Received on the Public Draft Initial Study

The Draft IS-MND was circulated for a period of 30 days, beginning on May 16, 2018 and concluding on June 15, 2018. The Draft IS-MND was available for public review during normal business hours at CVWD's Palm Desert facility located at 75-515 Hovley Lane East, Palm Desert, California 92211 and at the Coachella Administration facility located at 51501 Tyler Street, Coachella, California 92236. Beginning on May 16, 2018, the Draft IS-MND was also made available online at: http://www.cvwd.org.

CVWD received one comment letter on the Draft IS-MND from the California Department of Toxic Substances Control (DTSC), dated May 30, 2018.The DTSC comment letter and CVWD's responses are provided in Appendix H. The DTSC comment letter provided five numbered comments related to the identification, testing, handling, and disposal of hazardous materials. The responses to each comment identify the number of the comment to which they are responding. In response to DTSC's comments on the Draft IS-MND, information was added to Section 3.8, Hazards and Hazardous Materials, to clarify the proximity and contamination type of known hazardous waste cleanup sites and to provide detail on CVWD's standard contractor specifications. Changes to the Draft IS-MND that were made in response to comments on the document are shown here in ~~strikethrough~~ and underline. None of the comments received on the Draft IS-MND identified a potential significant impact, an increase in the severity of an identified less than significant impact, or the need for additional mitigation measures.

Chapter 2: Project Description

The proposed project involves the construction and operation of approximately 9.5 miles of NPW pipeline segments and connections to provide irrigation water for seven local golf courses, one RV resort, one planned future development, and replacement of an existing pump station for a total online pumping capacity of approximately 12,000 gpm for the low pressure system and 12,000 gpm for the high pressure system, as well as a standby capacity of 8,000 gpm. The proposed NPW end users currently use groundwater or CVWD-supplied potable water for irrigation. The proposed project would deliver a blend of NPW from CVWD's existing WRP10 facility and Colorado River water from the MVP terminus at WRP10. CVWD's WRP10 facility is located at 43000 Cook Street in Palm Desert.

The project corridor is located in Palm Desert and the unincorporated community of Bermuda Dunes in Riverside County. The Assessor Parcel Numbers transected by the project alignment are listed below. Refer to Figure 1 Regional Project Location, Figure 2 Project Site Vicinity, and Figure 3 Jurisdictional Boundaries for depictions of the proposed project alignment in a regional and local context, including in relation to city and county boundaries.

- 609122052
- 609280035
- 609103037
- 624310004
- 632250047
- 632210002
- 632540031
- 632422009
- 632422002
- 632422006
- 632422004
- 632422005
- 632422001
- 632422007
- 632422008
- 632422003
- 632770005
- 632108049
- 634150015
- 632310041
- 632422010
- 632421024
- 632540034
- 632540036
- 632361005
- 632770003
- 632422012
- 632770004
- 632422013
- 632770001
- 632540032
- 632770063
- 632770002
- 632540037
- 632361006
- 632560040
- 632540038
- 632540033
- 632540035
- 632422011
- 632210004
- 634200004
- 634200003
- 634150016
- 694350009
- 609280019
- 632050027
- 632050012
- 632050025
- 632050015
- 634030016
- 632030044
- 632050022
- 634480035
- 632100010
- 609171034
- 634200020
- 694350051
- 609171035
- 609261002
- 634030017
- 694160010
- 634480036
- 634280018

Figure 1 Regional Project Location

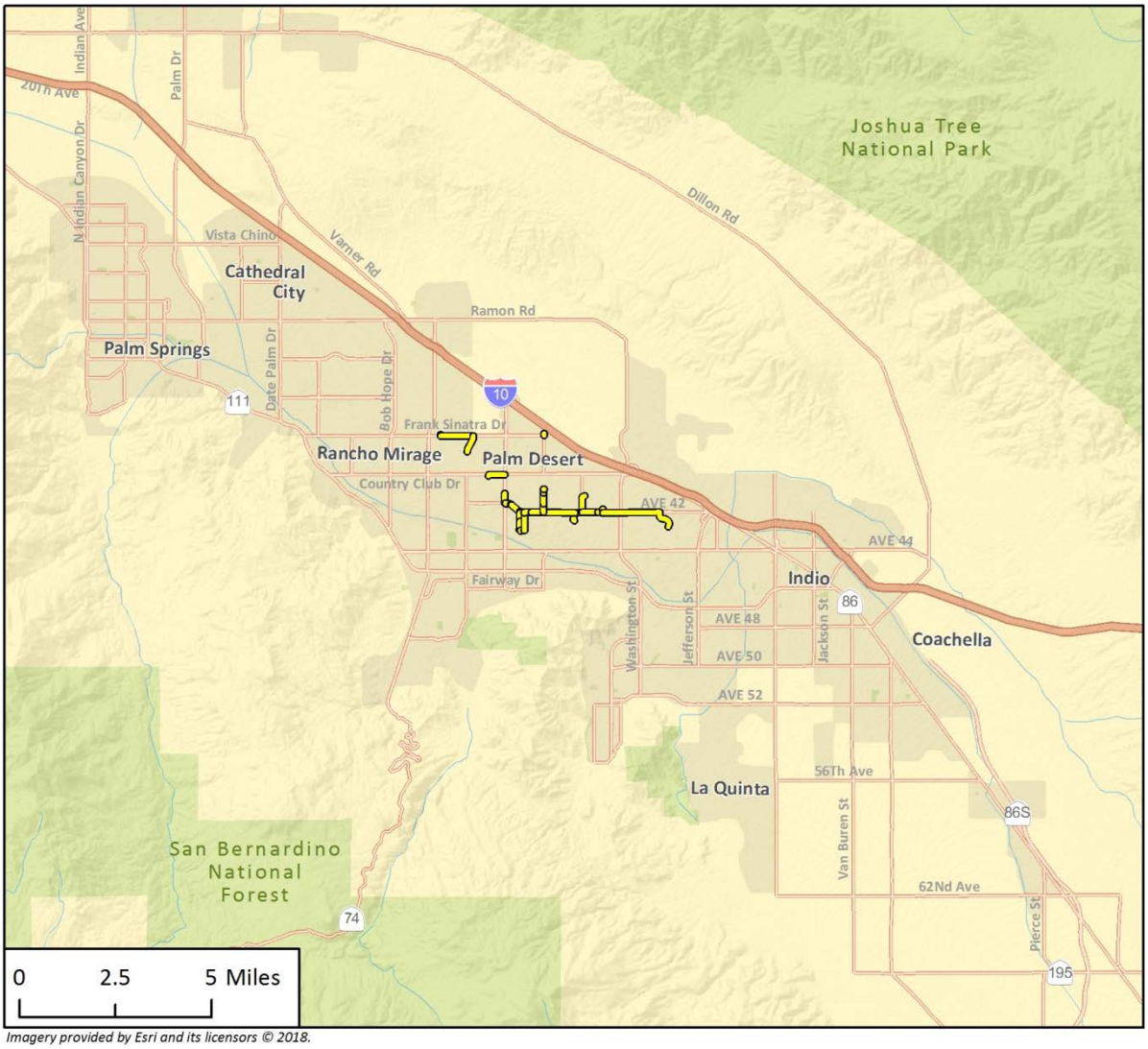
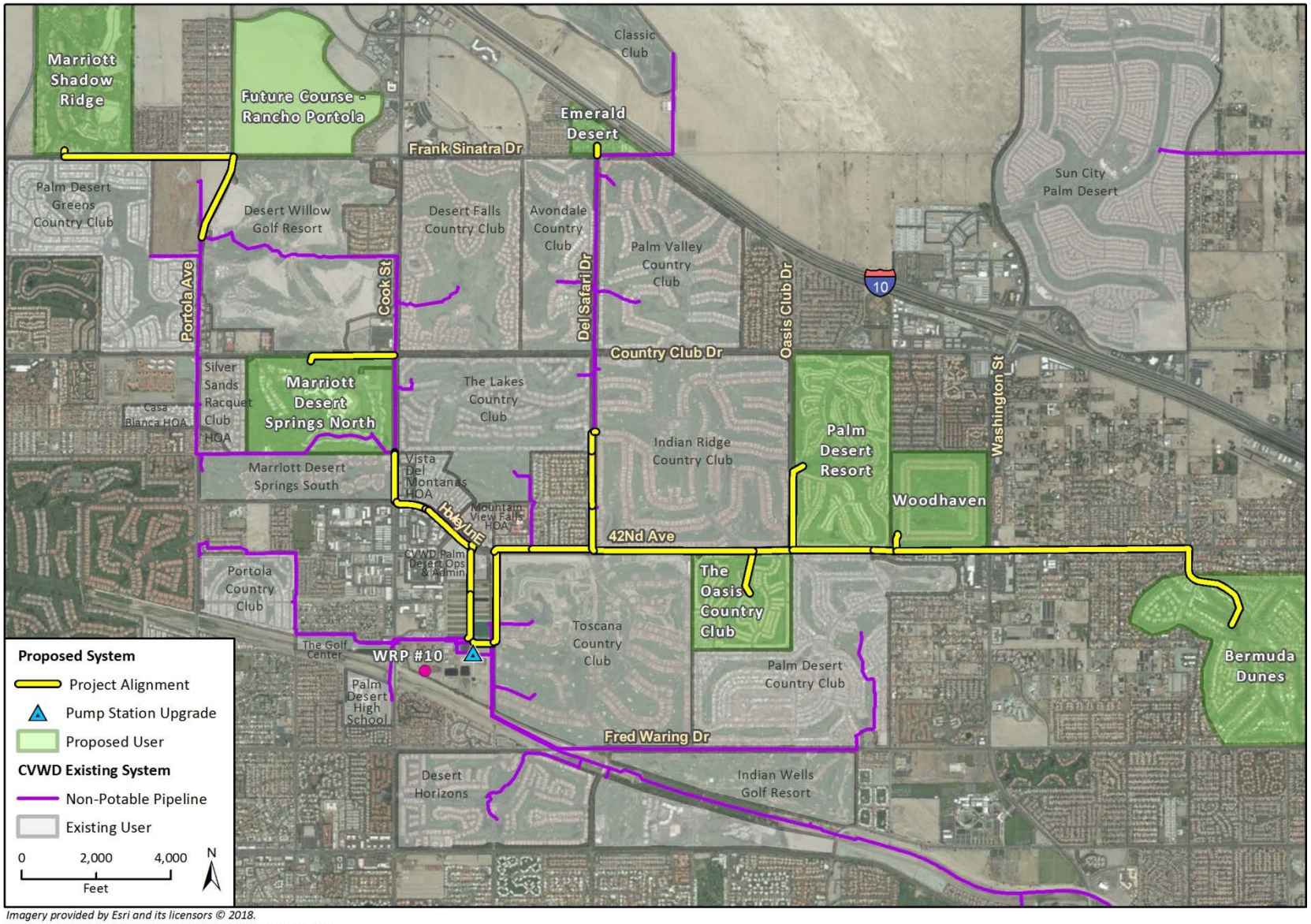


Fig 1 Regional Project Location 20180308

Figure 2 Project Site Vicinity



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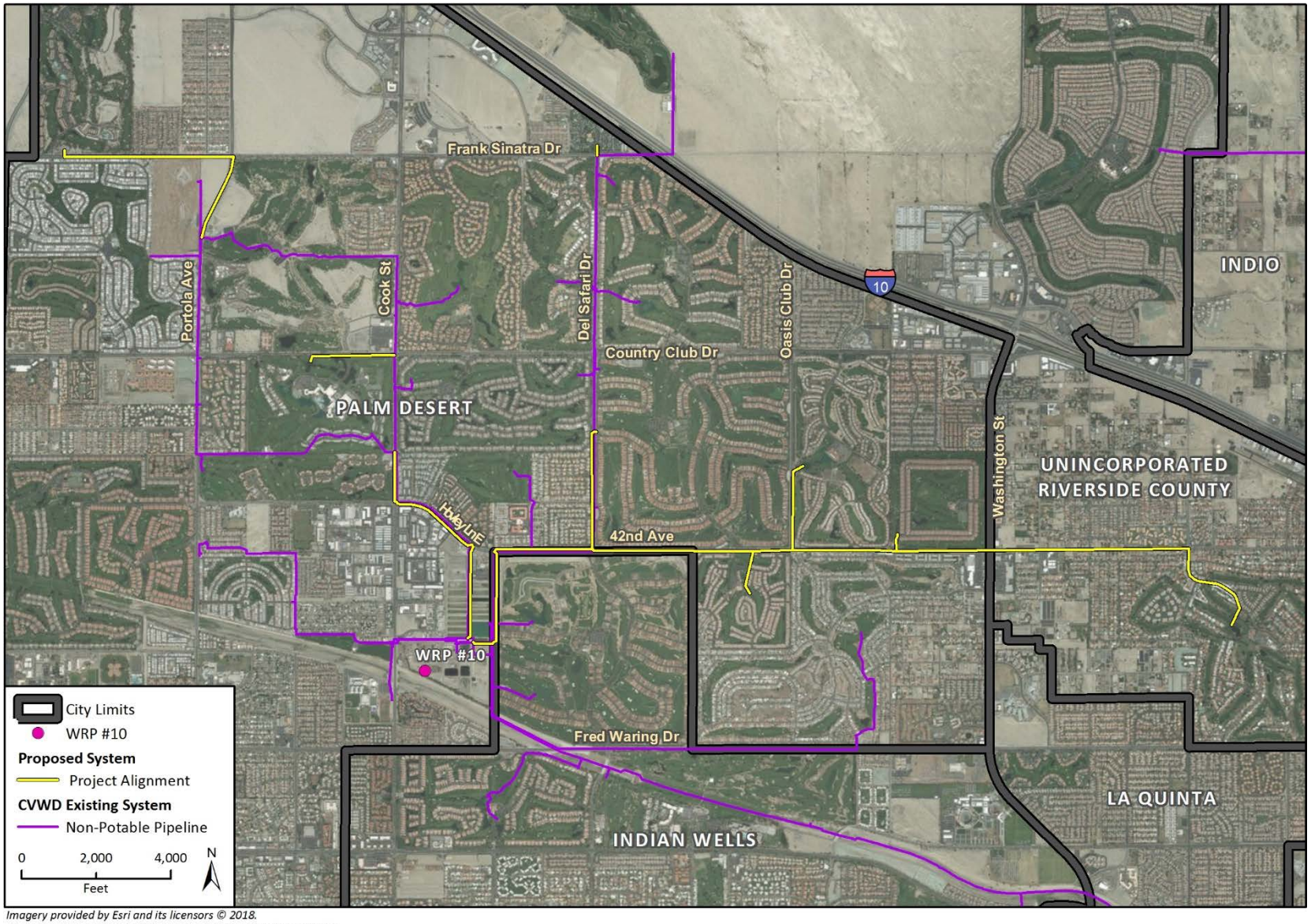
Additional data provided by Coachella Valley Water District, 2018.

Figure 3 Jurisdictional Boundaries



Imagery provided by Esri and its licensors © 2018.
Additional data provided by Coachella Valley Water District, 2018.

2.1 Purpose of the Project

CVWD's 2002 WMP and 2010 WMP Update set forth several groundwater source substitution projects, including the provision of NPW for irrigation of golf courses that currently pump groundwater for irrigation use. The proposed project is part of the source substitution element. The proposed project would reduce groundwater overdraft in accordance with the water management goals and objectives of both the 2002 WMP and the 2010 WMP Update.

In keeping with the goals identified in the WMP, the purpose of the proposed project is to:

- Provide up to 6,500 acre-feet per year (AFY) of NPW for irrigation use in CVWD's service area
- Reduce groundwater overdraft in accordance with the water management goals and objectives of both the 2002 WMP and the 2010 WMP Update

2.2 Pipeline Construction and Infrastructure

The proposed project would install approximately 50,000 linear feet (LF) of non-potable pipeline within public right-of-way and private lands in Palm Desert and unincorporated Bermuda Dunes. The majority of the pipeline alignment (approximately 40,000 LF) would be placed in Palm Desert, with approximately 10,000 LF of pipeline extending east into unincorporated Bermuda Dunes. In locations where new NPW distribution pipes would be installed parallel to existing NPW pipelines, those new pipelines would serve to increase capacity of the NPW distribution system. The new pipelines would increase the NPW distribution network from approximately 26.6 miles to approximately 36.1 miles.

The proposed new NPW users to be served under the proposed project are listed below:

1. Marriott Shadow Ridge
2. Marriott Desert Springs Resort (North)
3. Emerald Desert RV Resort
4. Oasis Country Club
5. Palm Desert Resort Country Club
6. Woodhaven Country Club
7. Bermuda Dunes Country Club

Additionally, an eighth terminal will be located near the intersection of El Dorado Drive and Tomahawk Drive. This terminal will increase capacity for NPW deliveries to an existing NPW user: Indian Ridge Country Club.

The proposed NPW pipelines would extend adjacent to Rancho Portola, a planned future development in Palm Desert. Additional NPW pipeline may be constructed at a later date to connect the planned NPW distribution system to a lake on the property of this future user.

The proposed NPW pipeline would supply NPW to existing and future customers through CVWD's low and high pressure NPW delivery systems. Two pump stations within WRP10 would provide pressure to move NPW through the proposed NPW system expansions. Figure 4 shows the WRP10 facility. The existing T-1 pump station would be replaced and expanded for a total online pumping capacity of approximately 12,000 gpm for the low pressure system and 12,000 gpm for the high pressure system. The expanded T-1 pump station would also include a standby pumping capacity of

8,000 gpm. The existing T-2 pump station, which will not be upgraded as part of the proposed project but will provide pressure to move NPW through the NPW system expansions, has a total capacity of 15,000 gpm for the low pressure system and 15,000 gpm for the high pressure system.

Construction is anticipated to commence in the last quarter of 2018 and last approximately three years. Each of the proposed connections would entail removal of existing ground cover (landscaping, asphalt, or concrete), open trenching along the NPW pipeline alignment, placement of bedding within the trench, placement of NPW pipeline, backfilling of trenches and soil compaction, and installation of meters and motor actuated valves. The pipeline would be constructed via open trench measuring approximately five feet in width and up to eight feet in depth. Figure 5 shows a typical CVWD pipeline trenching work site. The total disturbed area is therefore assumed to be approximately 250,000 square feet.

Project construction activities would involve the removal of approximately six inches of depth of existing asphalt along the project corridor, yielding approximately 125,000 cubic feet of asphalt export. Where the project alignment transects unpaved golf course land, it is assumed that six inches of grass and soil would be removed in lieu of asphalt. Another six inches of soil and gravel would be removed during trenching to make room for the pipelines. Some native soil would remain on-site to be used as backfill. Surplus soil would be exported. It is assumed that approximately 250,000 cubic feet, or approximately 9,260 cubic yards, of material would be exported in total. Finally, six inches of new asphalt and six inches of clean gravel would be imported to backfill and re-pave the project footprint within public rights-of-way. It is assumed that approximately 250,000 cubic feet, or approximately 9,260 cubic yards, of material would be imported.

Table 2 provides an overview of the equipment that would be installed as part of the proposed project.

Table 2 Summary of Project Equipment

Equipment	Quantity
Pumps	
400-Horsepower Pumps[1]	5
300-Horsepower Pumps[2]	4
Motor-Actuated Valves	7
CVWD Meters	7

[1] Rated for 3,000 gallons per minute (gpm)

[2] Rated for 4,000 gpm

Operation and maintenance of the proposed project would include conveyance of NPW from CVWD's existing WRP10 facility to each of the proposed connections to provide landscape irrigation water. The proposed pipeline would provide NPW into water impoundments (surface lakes) located onsite at each golf course and the Emerald Desert RV Resort facility. Figure 6 shows an example lake discharge. Each delivery would be equipped with one motor actuated valve located in a belowground vault, adjacent to the lake discharge. The motor actuated valve will allow each terminal user to control delivery of NPW to the on-site water impoundment. Deliveries will be measured via CVWD-owned meters, located immediately outside of right-of-way within an easement obtained from the respective customer. Each meter vault will be equipped with an antenna and telemetry panel. The delivery of NPW would require pump station operation and motor-actuated valve operation.

Figure 4 Water Reclamation Plant No. 10 (WRP10) Facility

Figure 5 Typical Non-Potable Pipeline Trenching Work Site

Figure 6 Conceptual Non-Potable Water Lake Discharge

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

Determination

Statement to support findings. 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 with implementation of mitigation measures identified within the Mitigation Monitoring and Reporting Program. 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 based on 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 potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable 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.

Prepared by: _____ 08/02/18
Matthew Long, Senior Environmental Scientist — Date
Rincon Consultants

Reviewed by: _____ 8-2-18
William Patterson, Environmental Supervisor — Date
CVWD

Submitted By: _____ 8/2/18
Steve Bigley, Director of Environmental Services — Date
CVWD

Environmental Assessment Committee Determination

Concurrence by: _____ 8.6.18
Sylvia Bermudez — Date
EAC Chairperson and Clerk of the Board
CVWD

General Manager Determination

Approved by: _____ 8.06.2018
J.M. Barrett — Date
General Manager
CVWD

Chapter 3: Environmental Checklist

3.1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Substantial adverse effect on a scenic vista	☐	☐	■	☐
b. Substantial damage to scenic resources, including but not limited to trees, rock outcroppings, and historic buildings along a state scenic highway	☐	☐	☐	■
c. Substantially degrade the existing visual character or quality of the site and its surroundings	☐	☐	■	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area	☐	☐	■	☐

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

The project corridor is located in Palm Desert and the unincorporated community of Bermuda Dunes in Riverside County. A segment of proposed pipeline starting at WRP10 and extending onto Hovley Lane East (approximately 1.5 miles in length) is located adjacent to the city of Indian Wells. The easternmost section of the pipeline extends approximately 1.5 miles into the community of Bermuda Dunes. The project site is situated in the relatively flat Coachella Valley, surrounded by undeveloped mountainous areas to the northeast and southwest. The Coachella Valley's general visual character is typified by golf-oriented and tourist resort communities, desert oasis areas, date groves and agricultural uses, wind turbines, and desert and mountain vistas (County of Riverside 2014). Please see Figure 2, *Project Site Vicinity*, and Figure 3, *Jurisdictional Boundaries*, in Chapter 2, *Project Description*, for a depiction of the project alignment, the surrounding area, and the jurisdictions crossed by the project corridor.

The scenic vistas along the project alignment consist primarily of mountain vistas, open desert, and landscaped areas including golf courses. Land uses in and around the project area are predominantly residential and recreational. The proposed project involves the construction of an underground NPW pipeline and improvements to an existing, aboveground pump station facility located within CVWD's WRP10 facility.

During construction, these scenic vistas would be temporarily impaired; however, once construction is complete, the pipeline would not be visible and not be expected to result in permanent changes that affect scenic vistas. Areas along the proposed project alignment that are currently landscaped would be returned to a similar pre-construction setting; therefore, impacts to scenic vistas from construction and operation of the proposed project would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

In Riverside County, scenic vistas and natural features are often enjoyed via highway. In an effort to preserve scenic resources along roadways, the State of California and the County of Riverside both have the authority to designate scenic highways. Development along the designated scenic highways and roadways is managed to protect scenic resources. (County of Riverside 2014)

The closest officially designated State scenic highway is State Route (SR) 74, located approximately 2.8 miles southwest of the project alignment at the nearest point. The proposed project consists of a belowground pipeline, valves, and appurtenances; belowground vault and motor operated valve; and upgrades to an existing pump station. Upon completion of construction, no visible evidence of the proposed project would be present near SR 74. Therefore, the project would not result in a substantial adverse effect on a scenic resource visible from a State scenic highway and no impact would occur.

NO IMPACT

c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Construction of the proposed project would be visible from surrounding land uses and would temporarily alter the existing visual character and quality of the project area and vicinity.

A temporary change in visual character would result from the presence of construction equipment and material, stockpiles of soil, and construction vehicles during installation of the NPW pipeline. Construction activities may include grading, excavation, trenching, and erection of safety barriers and temporary exclusion fencing. These activities may temporarily obstruct or degrade the viewshed for residents, golfers, and motorists along the project alignment, but this change would end once project construction is complete and the project site is restored to pre-construction conditions. Construction of the proposed project would occur in sections of approximately 200 LF. Each section of the pipeline alignment would be excavated, constructed, and backfilled within approximately one day. Therefore, the visual impacts of construction activity at any given location would be limited to a few days at most. As described above, there are no State scenic highways visible from the project alignment. Due to the temporary nature of construction activities at any given location, and the lack of visible project components following construction (with the exception of the expanded pump station within WRP10 and the NPW pipeline outlets at the user termini), construction and operation of the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Construction of the proposed project components may create light and glare during construction due to the presence of construction vehicles and equipment. The proposed project would not create a new source of light or glare once construction is complete, as the pipelines would be located underground.

Construction would occur primarily during the daytime hours, though late afternoon activities during the winter could require that some lighting be used and in some cases nighttime construction may be required. This light may be visible from surrounding roadways and residential and other land uses, but the lighting would not face toward adjacent uses and would be directed towards pipeline installation activities.

For the portion of the project that would occur in unincorporated Riverside County, all construction activities would be subject to the County of Riverside's Ordinances No. 655 (Regulating Light Pollution). Ordinance No. 655 defines lighting sources, establishes the type and manner of installation and operation of lighting, and details lighting prohibitions in order to restrict undesirable nighttime light rays which have a detrimental effect on astronomical observation and research at the Palomar Observatory in Riverside County. The project site would be located in Lighting Policy Area Zone B. Ordinance No. 655 restricts certain types of lighting between 11:00 p.m. and sunrise in Zones A and B. No construction activities are planned during this time period.

Project construction activities in Palm Desert would generally occur during normal work hours, consistent with the weekday construction hours established by the City of Palm Desert (7:00 a.m. to 5:30 p.m. on Monday through Friday). The County of Riverside's noise ordinance prohibits construction within one-quarter mile of an occupied residence unless it occurs between the hours of 6:00 a.m. and 6:00 p.m. (June through September) or between the hours of 7:00 a.m. and 6:00 p.m. (October through May). The segment of the project corridor located in unincorporated Riverside County abuts residential neighborhoods and is therefore subject to these restrictions. Construction activities located in unincorporated Riverside County would occur within these hours. No construction would occur on Saturdays or Sundays. In addition, construction activities within golf course communities would be scheduled in collaboration with the appropriate HOA in order to minimize disruptions to residents and recreational users.

Compliance with the above ordinances would ensure that light and glare from construction activities would not substantially disturb sensitive receptors. Furthermore, construction activities would be temporary, lasting no more than a few days at any given location. Therefore, potential impacts during construction associated with light or glare would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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3.2 Agriculture and Forest Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on 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 51104(g))	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use	☐	☐	☐	■
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use	☐	☐	☐	■

a. *Would the project convert Prime Farmland, Unique Farmland, 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. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

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))?*

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

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?*

The project corridor is not currently in agricultural production and does not contain Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or land with a Williamson Act contract (California Department of Conservation [DOC] 2016). No part of the site is located on forest land or timber land (County of Riverside 2014).

The project would also not cause the loss of forest land or conversion of forest land to non-forest use. Due to the absence of agricultural land at the project site or in the surrounding area, the project would not involve changes to the existing environment which could result in conversion of Farmland to a non-agricultural use. No impact to agricultural or forest resources would occur.

NO IMPACT

3.3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Conflict with or obstruct implementation of the applicable air quality plan	☐	☐	☐	■
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation	☐	☐	■	☐
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)	☐	☐	■	☐
d. Expose sensitive receptors to substantial pollutant concentrations	☐	☐	■	☐
e. Create objectionable odors affecting a substantial number of people	☐	☐	■	☐

The project area is within the Salton Sea Air Basin (SSAB) which is bounded by the San Jacinto Mountains to the west, Mojave Desert to the north and east, and the Mexico border to the south. The SSAB includes Imperial County and most of the low desert areas of central Riverside County. The Riverside County portion of the SSAB, in which the proposed project is located, is under the regulatory jurisdiction of the South Coast Air Quality Management District (SCAQMD). The local air quality management agency is required to monitor air pollutant levels to ensure that National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are met and, if they are not met, to develop strategies to meet the standards.

Depending on whether or not the standards are met or exceeded, the SSAB is classified as being in "attainment" or "nonattainment." The SCAQMD's 2016 Air Quality Management Plan (AQMP) assesses the attainment status of the Coachella Valley portion of the SSAB. The NAAQS and CAAQS attainment statuses for the Coachella Valley portion of the SSAB are listed in Table 3. As shown therein, the SSAB is in nonattainment for the State standards for 1-hour ozone, both the federal and State standards for 8-hour ozone and particulate matter less than 10 microns in size (PM_{10}; SCAQMD 2017a). Thus, the Coachella Valley portion of the SSAB currently exceeds several State and federal ambient air quality standards and is required to implement strategies that would reduce pollutant levels to recognized acceptable standards. The SCAQMD has adopted an AQMP that provides a strategy for the attainment of State and federal air quality standards.

Table 3 Coachella Valley Portion of the Salton Sea Air Basin Attainment Status

Pollutant	Standard	Designation
1-Hour Ozone	NAAQS CAAQS	Attainment Nonattainment
8-Hour Ozone	NAAQS CAAQS	Nonattainment (Severe-15)[1] Nonattainment
CO	NAAQS CAAQS	Unclassifiable/Attainment Attainment
NO_2	NAAQS CAAQS	Unclassifiable/Attainment Attainment
SO_2	NAAQS CAAQS	Designations Pending/Unclassifiable/Attainment[2] Attainment
PM_{10}	NAAQS CAAQS	Nonattainment (Serious) Nonattainment
$PM_{2.5}$	NAAQS CAAQS	Unclassifiable/Attainment Attainment
Lead	NAAQS CAAQS	Unclassifiable/Attainment Attainment
Hydrogen Sulfide	CAAQS	Unclassified[3]
Sulfates	CAAQS	Attainment

NAAQS: National Ambient Air Quality Standards

CAAQS: California Ambient Air Quality Standards

CO: carbon monoxide

PM_{10}: particulate matter less than 10 microns in size

$PM_{2.5}$: particulate matter less than 2.5 microns in size

NO_2: nitrogen dioxide; SO_2: sulfur dioxide

[1] Designated Nonattainment (Severe-15) for the 1997 and 2008 8-Hour Ozone NAAQS. Designation is pending for the 2015 8-Hour Ozone NAAQS, but Nonattainment (Severe) is expected.

[2] Designated Unclassifiable/Attainment for the Annual SO_2 NAAQS. Designations pending for the 1-Hour SO_2 NAAQS with SSAB expected to be designated Unclassifiable/Attainment.

[3] Three full years of data are not yet available for a designation, but Nonattainment is anticipated in at least part of the Coachella Valley.

Sources: SCAQMD 2017a

In an effort to monitor the various concentrations of air pollutants throughout the SSAB, the SCAQMD has divided the region into 38 source receptor areas (SRAs) in which over 30 monitoring stations operate. The project is located within SRA 30, which covers the Coachella Valley area. Ambient air pollutant concentrations within SRA 30 are monitored in Palm Springs.

The SCAQMD provides numerical thresholds to analyze the significance of a project's construction and operational emissions to regional air quality. These thresholds are designed such that a project consistent with the thresholds would not have an individually or cumulatively significant impact to the SSAB's air quality. These thresholds are listed in Table 4.

Table 4 SCAQMD Air Quality Significance Thresholds for Coachella Valley

Pollutant	Mass Daily Thresholds	
	Operation Thresholds (pounds/day)	Construction Thresholds (pounds/day)
NO_X	100	100
ROG[1]	75	75
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550
Lead	3	3

NO_X: nitrogen oxides; PM_{10}: particulate matter less than 10 microns in size; $PM_{2.5}$: particulate matter less than 2.5 microns in size; SO_X: sulfur oxides; CO: carbon monoxide; ROG: reactive organic gases; VOC: volatile organic compounds

[1] Reactive Organic Gases are formed during combustion and evaporation of organic solvents. Reactive Organic Gases are also referred to as Volatile Organic Compounds

Note: For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds

Source: SCAQMD 2015

In addition to the above thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the CEQA Air Quality Handbook. LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for nitrogen oxides, (NO_X), carbon monoxide (CO), PM_{10} and particulate matter less than 2.5 microns in size ($PM_{2.5}$). LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or State ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each SRA, distance to the sensitive receptor, and project size. LSTs only apply to emissions within a fixed stationary location and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2008). According to the SCAQMD's publication, *Final Localized Significant Thresholds Methodology*, the use of LSTs is voluntary, to be implemented at the discretion of local agencies.

The project site is located in SRA-30, Coachella Valley (SCAQMD 2008). LSTs have been developed for emissions within construction areas up to five acres in size. The SCAQMD provides lookup tables for sites that measure up to one, two, or five acres. The entire project corridor is 5.7 acres. However, this analysis assumes that approximately 200 LF of pipeline (equating to a construction site smaller than 0.1 acres in size) would be under active construction at any one time Pursuant to SCAQMD guidance, LSTs for the one-acre site should be used for sites that are less than one acre in size. In rare cases, ground disturbance may exceed the estimated approximate total of 200 LF; however, in no case would the project area under active construction at any one time exceed one acre. LSTs for construction on a one-acre site in SRA-30 are shown in Table 5.

LSTs are provided for receptors at a distance of 25 to 500 meters (82 to 1,640 feet) from the project site boundary. The closest sensitive receptors to the project site are located adjacent to the pipeline. The pipeline alignment transects several residential communities. In addition, the project

corridor would be situated directly north of the James Monroe Elementary School. According to the SCAQMD's LST methodology, projects with boundaries closer than 25 meters (82 feet) to the nearest receptor should use the LSTs for receptors located at 25 meters (SCAQMD 2008).

Table 5 SCAQMD LSTs for Construction

Pollutant	Allowable emissions from a one-acre site in SRA-30 for a receptor within 25 meters, or 82 feet (pounds/day)
Gradual conversion of NO_x to NO_2	132
CO	878
PM_{10}	4
$PM_{2.5}$	3

SRA: Source Receptor Area; NO_X: nitrogen oxides; NO_2: nitrogen dioxide; PM_{10}: particulate matter less than 10 microns in size; $PM_{2.5}$: particulate matter less than 2.5 microns in size; CO: carbon monoxide

Source: SCAQMD 2008

General Conformity with the State Implementation Plan is a FCAA regulatory process that applies to most federal actions. For CWSRF funded projects, a FCAA general conformity analysis applies only to projects in a nonattainment area or an attainment area subject to a maintenance plan and is required for each criteria pollutant for which an area has been designated nonattainment or maintenance. The General Conformity Rule ensures that actions taken by federal agencies in nonattainment and maintenance areas do not interfere with the State's plans to meet NAAQS. 40 Code of Federal Regulations (CFR) Part 93.153 defines *de minimis* levels, which are the minimum threshold for which a conformity determination must be performed. If the proposed project's annual emissions are below the applicable *de minimis* levels, the project is not subject to a general conformity determination.

Based on the federal attainment statuses for the SSAB, the *de minimis* levels that apply to the SSAB are listed in Table 6. These levels apply to all direct and indirect annual emissions generated during construction and operation of the project.

Table 6 General Conformity De Minimis Emission Rates for the Salton Sea Air Basin

Pollutant	SSAB NAAQS Attainment Status Designation	De Minimis Emission Rate (tons/year)
Ozone (VOCs or NO_x)	Severe Nonattainment	25
PM_{10}	Serious Nonattainment	70

SSAB: Salton Sea Air Basin; NAAQS: National Ambient Air Quality Standards; VOC: volatile organic compounds; NO_X: nitrogen oxides; PM_{10}: particulate matter less than 10 microns in size;

Sources: USEPA 2017; SCAQMD 2017a

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

A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. The 2016 AQMP relies on local city general plans and the Southern California Association of Governments'

(SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy forecasts of regional population, housing, and employment growth in its projections for managing SSAB air quality.

The proposed project involves the expansion of a recycled water system to serve non-potable demands for outdoor golf course irrigation. Provision of recycled water would not directly induce population growth because it would not produce additional water supply; rather, it would utilize locally treated water that is currently produced at CVWD's WRP10 in Palm Desert and is currently discharged to ground in times of low demand. Moreover, it would provide up to 6,500 AFY of NPW for irrigation use in CVWD's service area for the purposes of replacing existing groundwater demand and reducing groundwater overdraft. The project does not include new housing or businesses, nor would operation and maintenance of the proposed project require new employees; therefore, the project would not generate population, housing, or employment growth. The project would not exceed SCAG's projected growth forecasts, and thus, would not conflict with or obstruct implementation of the AQMP. No impact would occur.

NO IMPACT

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

c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

The project would generate short-term emissions associated with project construction and long-term emissions associated with operation of the pump station. Construction and operational project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. CalEEMod was developed by the SCAQMD and is used by jurisdictions throughout the state to quantify criteria pollutant emissions.

For the purposes of modeling, the analysis relied upon the following assumptions:

- Pipeline would be constructed via open trench measuring five feet in width
- Construction of the proposed project would disturb approximately 5.7-acres in total, with approximately 200 LF of pipeline constructed per day
- Approximately 9,260 cubic yards (cy) of material would be exported and approximately 9,260 cy of material would be imported
- Construction likely would start in the fourth quarter of 2018, and last approximately three years, with crews working five days per week
- Construction activities would comply with SCAQMD Rules 403 and 403.1, existing regulations controlling fugitive dust emissions (discussed in more detail below)
- No heavy duty equipment would be required for pump station upgrades

Project construction activities would comply with SCAQMD Rule 403 (Fugitive Dust) and Rule 403.1 (Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources). Rules 403 and 403.1 require construction projects to implement measures to suppress fugitive dust emissions, such as watering of exposed soils and the preparation of a Fugitive Dust Control Plan. A Fugitive Dust Control Plan would be submitted to SCAQMD prior to any grading or excavation activities.

Construction Emissions

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust and exhaust emissions from heavy construction vehicles. The excavation phase of the project would involve the largest use of heavy equipment and generation of fugitive dust. Table 7 summarizes maximum daily pollutant emissions during construction of the project.

Table 7 Construction Emissions Compared to SCAQMD Thresholds

	Estimated Maximum Daily Emissions (pounds/day)					
	ROG	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Maximum	3.9	42.7	23.6	<0.1	4.5	3.1
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Threshold Exceeded?	No	No	No	No	No	No
Maximum (On-site only)[1]	2.8	32.1	14.9	<0.1	3.6	2.4
Local Significance Thresholds (On-site only)	n/a	132	878	n/a	4	3
Threshold Exceeded?	n/a	No	No	n/a	No	No

SCAQMD: South Coast Air Quality Management District; ROG: reactive organic gases; NO_X: nitrogen oxides; CO: carbon monoxide; SO_X: sulfur oxides; PM_{10}: particulate matter less than 10 microns in size; $PM_{2.5}$: particulate matter less than 2.5 microns in size

[1]Maximum on-site emissions are reported from either the grading or paving phases. Although these phases overlap temporally, grading and paving activities would not overlap spatially (i.e. they may occur at the same time but not at the same place).

See Appendix A for modeling details and CalEEMod results.

Notes: Emissions presented are the highest of the winter and summer modeled emissions. Numbers may not add up due to rounding. Emission data is sourced from "mitigated" results, which include measures that will be implemented during project construction, such as watering of soils during construction required under SCAQMD Rule 403.

As shown in Table 7, project construction emissions would not exceed the SCAQMD's regional thresholds or LSTs. Therefore, impacts to regional air quality and local receptors due to construction emissions would be less than significant.

Operational Emissions

The pipeline would not require regular maintenance and therefore, would not generate any new, ongoing maintenance trips or activities. The upgraded pump station would incrementally increase daily electricity use, but this energy demand would be offset by the reduction in groundwater pumping and potable water treatment and delivery. Moreover, CalEEMod only calculates direct emissions of criteria pollutants from energy sources that combust on-site, such as natural gas used in a building (SCAQMD 2017b). CalEEMod does not calculate or attribute emissions of criteria pollutants from electricity generation to individual projects because fossil fuel power plants are existing stationary sources permitted by air districts and/or the USEPA, and they are subject to local, state and federal control measures. Criteria pollutant emissions from power plants are associated with the power plants themselves, and not individual projects or electricity users.

The upgraded pump station would not generate substantial operational emissions and emissions would not exceed the SCAQMD thresholds for any criteria pollutant. Therefore, operational emissions would be negligible and would have a less than significant impact on regional air quality.

General Conformity Assessment

Table 8 summarizes the project's total annual construction emissions and compares those to the applicable *de minimis* threshold for the SSAB region. As shown in Table 8, the project's criteria air pollutant emissions would not exceed the applicable *de minimis* thresholds. Therefore, the general conformity requirements do not apply to these pollutants, and the project is exempt from a conformity determination.

Table 8 Maximum Annual Project Emissions Compared to De Minimis Threshold

	Estimated Annual Emissions (tons/year)		
Emissions Source	**VOC**	**NO_X**	**PM_{10}**
Maximum Construction Emissions	0.5	5.1	0.6
De Minimis Thresholds	25	25	70
Threshold Exceeded?	No	No	No

VOC: volatile organic compounds; NO_X: nitrogen oxides; PM_{10}: particulate matter less than 10 microns in size

Source: USEPA 2017

See Appendix A for modeling details and CalEEMod results. Emission data is sourced from "mitigated" results, which include measures that will be implemented during project construction, such as watering of soils during construction required under SCAQMD Rule 403.

LESS THAN SIGNIFICANT IMPACT

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

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Sensitive receptors are defined as land uses that are more likely to be used by these population groups and include health care facilities, retirement homes, school and playground facilities, and residential areas. As described above, the pipeline alignment is primarily surrounded by golf course residential neighborhoods. As discussed under items (b) and (c) above, the project's construction emissions would not exceed the SCAQMD regional thresholds or LSTs, which are designed to be protective of public health. Furthermore, these emissions would be temporary. Construction activities would install approximately 200 LF of pipeline per day before moving to the next segment of pipeline. Sensitive receptors would therefore only be exposed to local emissions while adjacent construction activities are actively installing pipeline. After nine days, construction activities and their associated emissions would have moved 1,800 feet (i.e. past the maximum receptor distance regulated by LSTs of 500 meters).

Traffic-congested roadways and intersections have the potential for the generation of localized CO levels (i.e., CO hotspots). In general, CO hotspots occur in areas with poor circulation or areas with heavy traffic. As discussed above, the proposed project would not require regular maintenance trips. Therefore, the project would not result in CO hotspots on adjacent roadways. The project would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project create objectionable odors affecting a substantial number of people?

Recycled water pipelines would be placed belowground and would not create objectionable odors. The project would generate oil or diesel fuel odors during construction from equipment as well as odors related to asphalt paving. The odors would be limited to the construction period and would be temporary. As a result, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

3.4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	☐	■	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	☐	☐	☐	■
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (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?	☐	☐	☐	■

In March of 2018, Rincon Consultants, Inc. conducted a Biological Resources Assessment, including a literature review and field reconnaissance survey to document existing site conditions and the potential presence of special-status biological resources, including plant and wildlife species, plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. The following summarizes the findings of the assessment. The complete Biological Resources Assessment is contained in Appendix C of this document.

The project site is within the Sonoran Desert Region (DSon) geographic subdivision of California. The DSon subdivision is a component of the larger Desert Province (D) geographic region, which occurs within the even larger California Floristic Province (Baldwin et al. 2012). The project alignment is shown overlain on aerial imagery in Figure 3a through Figure 3f in Appendix C.

The majority of the proposed alignment is within previously developed urban areas. The vegetation community type identified within the project study area is Urban/Developed lands. Urban/Developed lands include areas that have been constructed upon or are otherwise physically altered to an extent that native vegetation is no longer supported or only exists in very small remnant patches. Typically, Urban/Developed lands are characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that require irrigation. Also included are areas that have been physically disturbed (by previous human activity) and are no longer recognizable as a native or naturalized vegetation association, but continue to retain a soil substrate. Urban/Developed lands may also contain important stands of native or non-native trees within the developed or altered landscape, such as street trees, residential shade trees, privacy or windbreak trees, and trail/easement or median landscape trees.

The northwestern segment of the alignment primarily traverses along paved roads adjacent to residential communities and accompanying golf courses. However, where the alignment enters the Marriott Shadow Ridge Golf Club, disturbed native vegetation is present. The open shrub layer consists of arrowweed (*Pluchea sericea*), Acton encelia (*Encelia actoni*), and burrobush (*Ambrosia dumosa*), while the herbaceous layer is dominated by Arabian schismus (*Schismus arabicus*), Asian mustard (*Brassica tournefortii*), and cryptantha (*Cryptantha* sp.). The eastern portion of this segment is adjacent to an undisturbed parcel of land consisting of open sand and native desert vegetation. Multiple individuals of Coachella Valley milkvetch (*Astragalus lentiginosus* var. *coachellae*, federally endangered, CNPS 1B.2) were observed in this parcel within the 100-foot buffer of the survey area.

The central segment of the project alignment is located in an urban area, and is devoid of vegetation aside from ornamental trees that border portions of the access road and a sparse amount of disturbed vegetation that exists within a small unpaved corridor, which is approximately 30 feet wide by 2,300 feet long. Within the unpaved corridor, several common species were observed, including four-wing saltbrush (*Atriplex canescens*), Asian mustard, cryptantha, Russian thistle (*Salsola tragus),* and tiquilia (*Tiquilia* sp.). The southern segment of the alignment intersects the Oasis Country Club, which contains some ornamental grass, shrub and tree species. The eastern end of the alignment extends into the Bermuda Dunes Country Club (Figure 3f) along a paved road, and is devoid of vegetation aside from ornamental grass, shrubs, and trees that border the road. The majority (or central) portion of the alignment is located on Hovley Lane East, a 4-lane paved arterial road that contains ornamental shrub and tree species in planters in the medians and along the edges of the road, including acacias (*Acacia* spp.) and oleander (*Nerium oleander*).

The study area and surrounding areas provide habitat suitable for wildlife species that commonly occur in southern California suburban areas. Wildlife observed on or adjacent to the site included bird species commonly encountered in urban areas. Coyote (*Canis latrans*) scat as well as some

lizard and small animal burrows were observed within the previously mentioned unpaved corridor. Wildlife not observed but likely to occur include western fence lizard (*Sceloporus occidentalis*), common raven (*Corvus corax*), mourning dove (*Zenaida macroura*), and collared dove (*Streptopelia decaocto*). With the exception of artificially created golf course ponds, no permanent aquatic resources are present in the study area. No fish or amphibian species were observed during the field survey.

The project site lies within the boundary of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), which is an adopted, regional plan with the overall goal to enhance and maintain biological diversity and ecosystem processes while allowing future economic growth. The project site is not located within, or adjacent to, a conservation area associated with the CVMSMCP.

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

Special-status species are those plants and animals that are: 1) listed, proposed for listing, or candidates for listing as Threatened or Endangered by the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) under the FESA; 2) listed or proposed for listing as Rare, Threatened, or Endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act; 3) recognized as Species of Special Concern by the CDFW; 4) afforded protection under Migratory Bird Treaty Act (MBTA) and/or California Fish and Game Code (CFGC); and 5) occurring on lists 1 and 2 of the CDFW California Rare Plant Rank system per the following definitions:

- List 1A = Plants presumed extinct in California
- List 1B.1 = Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- List 1B.2 = Rare or endangered in California and elsewhere; fairly endangered in California (20 to 80 percent occurrences threatened)
- List 1B.3 = Rare or endangered in California and elsewhere, not very endangered in California (<20 percent of occurrences threatened or no current threats known)
- List 2 = Rare, threatened or endangered in California, but more common elsewhere

In addition, special-status species are ranked globally (G) and subnationally (S) 1 through 5 based on NatureServe's (2010) methodologies:

- G1 or S1 - Critically Imperiled Globally or Subnationally (state)
- G2 or S2 - Imperiled Globally or Subnationally (state)
- G3 or S3 - Vulnerable to extirpation or extinction Globally or Subnationally (state)
- G4 or S4 - Apparently secure Globally or Subnationally (state)
- G5 or S5 - Secure Globally or Subnationally (state)
- ? - Inexact Numeric Rank
- T - Infraspecific Taxon (subspecies, varieties, and other designations below the level of species)
- Q – Questionable taxonomy that may reduce conservation priority

Rincon biologists determined that the majority of the study area does not contain suitable habitat for any special status plant species based on a pedestrian survey of the alignment and various record searches (refer to Appendix C). While 13 special status plant species have been previously documented within a five-mile radius by the California Natural Diversity Data Base (CNDDB), the project site does not contain suitable habitat for 12 of these species based on a variety of factors, including: the disturbance history of the site, lack of suitable soils, inappropriate hydrologic conditions, absence of appropriate vegetation communities, or being outside the elevation range of the species. However, Coachella Valley milk-vetch was observed within the study area southwest of the intersection of Frank Sinatra Drive and Portola Avenue.

Rincon evaluated 13 wildlife species for their potential to occur within the project site (Appendix C). The assessment of the potential for these species to occur is based upon the presence of suitable habitat as identified during surveys and existing knowledge of species occurrences and distributions in the region. The site was determined not to provide suitable habitat for any of the 13 special status wildlife species previously documented within a five-mile radius by the CNDDB. Accordingly, these species do not have the potential to occur within the project site. No special status wildlife species were observed within the project area during the survey effort. Therefore, direct or indirect impacts to wildlife would be less than significant.

The project site provides general nesting bird habitat. Nesting birds are protected by the MBTA and the CFGC FGC: 3503 and 3503.5. The project area provides suitable nesting habitat for numerous species of birds, including common raptors such as red-tailed hawks (*Buteo jamaicensis*) and red-shouldered hawk (*Buteo lineatus*). Nesting birds are likely to be present within the project limits during the nesting season. If initial ground disturbance and vegetation/tree trimming or removal is required during the nesting bird season, the project may impact nesting birds through increased injury or mortality or disruption of normal adult behaviors resulting in the abandonment or harm to eggs and nestlings. Construction occurring within the vicinity of nesting birds may also indirectly impact individuals with construction noise and dust. A mitigation measure necessary to reduce this potential impact to a less than significant level is provided below.

Mitigation Measures

The following mitigation measures would reduce the impact to a less than significant level.

BIO-1 Nesting Birds

Project-related activities should occur outside of the bird breeding season (typically February 1 to August 31) to the extent practicable. If construction occurs within the bird breeding season (January 1 through September 15), then no more than one week prior to initiation of ground disturbance and/or vegetation removal, a nesting bird and raptor pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 300-foot buffer (500-foot for raptors), where practicable. If the proposed project is phased, a subsequent pre-construction nesting bird and raptor survey may be required prior to each phase of construction within the project site.

Pre-construction nesting bird and raptor surveys shall be conducted during the time of day when birds are active and should be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors onsite and within the designated vicinity.

If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for song birds, and up to 250 feet for raptors depending upon the species and the proposed work activity, shall be determined by a qualified biologist in consultation with CDFW, and

demarcated with bright orange construction fencing or other suitable flagging. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist in consultation with CDFW. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary.

Implementation of this measure would reduce the potential impact to nesting birds and raptors to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDB. Similar to special-status plant and wildlife species, vegetation alliances are ranked 1 through 5 based on NatureServe's (2010) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive.

According to the CNDDB, only one sensitive plant community, desert fan palm oasis, has been previously documented within a five-mile radius of the project site. No sensitive plant communities have been previously documented within the project site and no desert fan palm oases were observed onsite during the biological field survey. Consequently, the proposed project does not have the potential to result in direct or indirect impacts to sensitive vegetation communities. No impact would occur.

NO IMPACT

c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Areas potentially subject to United States Army Corps of Engineers, RWQCB, and CDFW jurisdiction were assessed during the literature review and field visit. Results of the research and field visit determined that no potentially jurisdictional waterways are present along the project site. As described in the Topography and Soils section within the Biological Resources Assessment, the two soil types found along the project alignment are not rated as hydric, and are considered well drained. The proposed alignment terminates at various artificial ponds within golf courses. These ponds are classified by the USFWS National Wetlands Inventory as excavated, unconsolidated bottom, permanently-flooded palustrine features. However, no excavation or construction will occur within the golf course ponds. The pipelines will be installed below grade within the golf courses, and water will be discharged through a new aboveground lake discharge, which will not result in impacts to the ponds. Please see Figure 5, *Non-Potable Water Lake Discharge*, in Chapter 2, *Project Description*, for an example of a typical above-ground lake discharge similar to what would be installed for the proposed project. No evidence of ponding water was observed along the proposed alignment, and no obligate or facultative wetland plant species were observed within the

project area. The project does not have the potential to result in direct impacts to jurisdictional areas, wetlands other waters, or riparian habitats. No habitat of quality to support native riparian plant/wildlife species is present. Federally protected wetlands or waters as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) do not occur onsite. As a result, no impact would occur.

NO IMPACT

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?

The project is located within an urbanized area; therefore, it is unlikely that wildlife utilize the immediate area for regional movement. Furthermore, CDFW does not include any mapped California Essential Habitat Connectivity areas within the study area, nor does it contain any Missing Linkages, as identified by South Coast Wildlands Network. Direct impacts to wildlife movement as a result of project implementation would not take place. The completed project will not impede the movement of wildlife through the region. Therefore, no impact would occur.

NO IMPACT

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

The proposed project will not conflict with any local policies or ordinances, due to the CVWD's participation in the CVMSHCP. In addition, no protected trees are proposed for removal. Therefore, no impacts would occur.

NO IMPACT

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?

The proposed project will not conflict with any local policies or ordinances, due to participation with the CVMSHCP. The proposed project is within the CVMSHCP plan area, but not within any specific CVMSHCP Conservation Area. It does, however, lie in close proximity to a CVMSHP Conservation Area. The proposed project would avoid direct impacts to this CVMSHCP Conservation Area and would not conflict with the CVMSHCP Conservation Objectives. The project would comply with CVMSHCP Section 4.5 Land Use Adjacency Guidelines to avoid and minimize indirect effects (Coachella Valley Association of Governments [CVAG] 2007). Thus, no impact would occur.

NO IMPACT

3.5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5	☐	☐	■	☐
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5	☐	☐	■	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature	☐	☐	■	☐
d. Disturb any human remains, including those interred outside of formal cemeteries	☐	☐	■	☐

Information in this section regarding cultural (i.e., archaeological and historical) and paleontological resources includes data from the cultural resources technical study (Appendix D) prepared by Rincon Consultants, Inc. and the paleontological resources assessment (Appendix E) conducted by Rincon Consultants, Inc. The significance of cultural and/or paleontological resources and impacts to those resources is determined by whether or not those resources can increase our collective knowledge of the past. The primary determining factors are site content and degree of preservation.

For the purpose of this analysis, a significant impact would occur if physical changes to these resources would result in the following conditions, listed in Appendix G of the *State CEQA Guidelines*:

1) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5
3) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature
4) Disturb any human remains, including those interred outside of formal cemeteries

A "substantial adverse change" in the significance of a historical resource is defined as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." State CEQA Guidelines Section 15064.5(b) states that the significance of an historical resource is "materially impaired" when a project does any of the following:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in the California Register of Historical Resources
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources or its identification in an historical resources survey, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA

State CEQA Guidelines Section 15064.5 also states that the term "historical resources" shall include the following:

1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in, the California Register of Historical Resources (Public Resources Code [PRC] Section 5024.1, Title 14 California Code of Regulations [CCR], Section 4850 et. seq.).
2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register of Historical Resources (PRC Section 5024.1, Title 14 CCR, Section 4852) as follows:
    - Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
    - Is associated with the lives of persons important in our past
    - Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
    - Has yielded, or may be likely to yield, information important in prehistory or history (State CEQA Guidelines Section 15064.5)

a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

b. Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?

The project is located in Palm Desert in Riverside County, California. The project would be constructed primarily within existing roads throughout previously developed residential neighborhoods and golf courses. NPW connections would be completely underground, and the landscaping and pavement is expected to return to preconstruction conditions. The results of the cultural resources records search, historical society group consultation, Native American outreach, and field survey did not identify any specific cultural resources within the APE. Due to an update in the project APE, cultural resources studies including the records search, Native American scoping, and field survey were undertaken on two separate occasions. Responses from the Native American scoping indicated that the vicinity of the APE is of interest to several groups and does encompass areas traditionally used by the Agua Caliente Band of Cahuilla Indians, the Torres-Martinez Desert Cahuilla Indians, and the Twenty-Nine Palms Band of Mission Indians.

Local historical group consultation coordination efforts were conducted with three organizations (Coachella Valley Historical Society/Coachella Valley History Museum, the Historical Society of Palm Desert, and the Palm Springs Historical Society) to inquire about their knowledge of historic properties in the immediate vicinity of the APE. Coachella Valley History Museum responded stating they had no comments regarding the proposed project. Palm Springs Historical Society Director, Jeri Vogelsang, stated that she does not have any knowledge of, or concerns about cultural resources in the project area. Harry Quinn of the Historical Society of Palm Desert responded stating the only area within the APE that might have supported occupation is the southwestern portion of the APE, though the area has been heavily impacted by earlier development and therefore has a low potential to contain any in-place cultural materials.

Cultural resources records searches of the California Historical Resources Information System were conducted at the Eastern Information Center (EIC) located at the University of California, Riverside. The searches were performed to identify all previously recorded cultural resources and previously recorded cultural resources studies within the project site and a 0.5-mile radius around it. The records search did not identify any cultural resources within the project site. Rincon requested a records search of the Sacred Lands File (SLF) from the Native American Heritage Commission (NAHC) to identify the potential for cultural resources within the project site and to provide contact information for Native Americans groups or individuals who may have knowledge of resources within the project site. The SLF search was returned with negative results. Rincon reached out to the 54 Native American contacts provided by the NAHC to inquire about any potential cultural resources that may be impacted by the project. Multiple contacts responded with interest in the project stating that the project area is within their Traditional Use Area and one contact recommended monitoring. The results of the Native American outreach are summarized below. The full results of the Native American outreach effort can be found in Appendix D and F.

Amanda Vance, Tribal Chairperson with the Augustine Band of Cahuilla Indians, responded to Rincon with a letter stating that they are unaware of specific cultural resources that may be affected by the proposed project and that they encourage Rincon to contact other Native American Tribes and individuals within the immediate vicinity of the project site that may have specific information concerning cultural resources in the area. Additionally, Ms. Vance encouraged CVWD to contract with a monitor who is qualified in Native American cultural resources identification and who is able to be present onsite full-time during the pre-construction and construction phases of the project.

Ms. Vance also requested that they be notified immediately should any cultural resources be discovered during the development of the project.

Patricia Garcia-Plotkin, Director, Tribal Historic Preservation Officer (THPO) of the Agua Caliente Band of Cahuilla Indians, and Katie Croft, Cultural Resources Manager of the Agua Caliente Band of Cahuilla Indians, responded requesting the results of the cultural resources records search and associated survey reports and site records from the EIC, a cultural resources inventory of the project by a qualified archaeologist prior to any development activities in the project area, and copies of any cultural resource documentation (report and site records) generated in connection with the project.

Michael Mirelez, Cultural Resource Coordinator for the Torres Martinez Desert Cahuilla Indians, responded stating that he has concerns with the location of the project area because the project area is within their traditional use area and that there are known villages in the area, but he did not provide specific locations of those villages. Mr. Mirelez also requested that a copy of the Cultural Resources report be sent to him following the completion of the project.

Sarah Bliss, Tribal Cultural Specialist with the Twenty-Nine Palms Band of Mission Indians, responded on behalf of Darrell Mike, Chairperson, and Anthony Madrigal Jr., THPO, stating that the Tribal Historic Preservation Office is not aware of any additional cultural resources or any Tribal Cultural Resources within the project area, however, the project is located in the vicinity of the Chemehuevi Traditional Use Area and therefore the Tribe is interested in the project and will request the completed report from the Lead Agency.

Please also refer to Section 3.17 Tribal Cultural Resources for additional discussion on Native American tribal outreach efforts for the proposed project.

Finally, Rincon conducted a field survey of the project site to identify any cultural resources (e.g., archaeological resources) that may exist within the project site. The pedestrian survey was negative for cultural resources. Based on the results of the records search, SLF search, Native American outreach, local historical group consultation, and field survey, no specific known cultural resources were identified within the current project site. Although no cultural resources have been identified within the project site during the study, there always remains a possibility of identifying unanticipated cultural resources during ground disturbing activities. Measure CR-1 is recommended as a standard best management practice to be implemented in the event of an unanticipated discovery of cultural resources during project construction in order to further reduce this already less than significant impact.

LESS THAN SIGNIFICANT IMPACT

Recommended Best Management Practice

The following best management practice is recommended in the event an unanticipated discovery of cultural resources occurs during project construction.

CR-1 Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources eligibility. If the discovery

proves to be significant under CEQA and cannot be avoided by the project, additional work such as data recovery excavation and Native American consultation and archaeological monitoring may be warranted to mitigate any significant impacts to cultural resources.

c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Significant paleontological resources are fossils or assemblages of fossils that are unique, unusual, rare, diagnostically important, or are common but have the potential to provide valuable scientific information for evaluating evolutionary patterns and processes, or which could improve our understanding of paleochronology, paleoecology, paleophylogeography or depositional histories. New or unique specimens can provide new insights into evolutionary history; however, additional specimens of even well represented lineages can be equally important for studying evolutionary pattern and process, evolutionary rates and paleophylogeography. Even unidentifiable material can provide useful data for dating geologic units if radiocarbon dating is possible. As such, common fossils (especially vertebrates) may be scientifically important and are therefore considered highly significant.

Paleontological Sensitivity

The Society of Vertebrate Paleontology (SVP; 2010) describes sedimentary rock units as having high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. While these standards were specifically written to protect vertebrate paleontological resources, all fields of paleontology have adopted these guidelines. The paleontological sensitivity of the project site is evaluated according to the following SVP (2010) categories: High Potential (sensitivity); Low Potential (sensitivity); Undetermined Potential (sensitivity); and No Potential. For further detail regarding these categories see Appendix E.

Geology and Paleontology of the Project Area

The project area is in the Coachella Valley northwest of the Salton Sea within the Colorado Desert geomorphic province of California (California Geological Survey [CGS] 2002). The Coachella Valley is located within the Salton Trough, a large structural depression that extends from the San Gorgonio Pass in the north to the Gulf of Mexico in the south. During the Pliocene, the Salton Trough formed due to spreading and subsidence associated with the rift system that opened the Gulf of California (Alles 2011). During the Pliocene to early Pleistocene, sedimentation along the Colorado River resulted in the build-up of a substantial delta, which eventually separated the marine waters of the Gulf of California from the brackish and fresh waters of the Salton Trough (Ingwall 2008). Since the late Pleistocene, the Salton Trough was periodically occupied by the freshwater Lake Cahuilla. The lake formed, drained, and reformed between approximately 37,000 to 300 years before present due to fluctuations in the course of the Colorado River and the subsequent diversion of the river's mouth from the Gulf of California to the Salton Trough (Deméré 2002; Norris 1979).

The project area is directly underlain by fine-grained Holocene windblown (eolian) dune sand and silt that overlies shallowly buried Quaternary alluvial gravel, sand, and, silt (Dibblee and Minch 2008). Based on the sedimentary and structural geology described in Alles (2011), Deméré (2002), Dibblee and Minch (2004), Norris (1979), Waters (1983), and Whistler et al. (1995), older Quaternary lacustrine deposits derived from ancient Lake Cahuilla are likely present at moderate depth (approximately 10 feet) within the project area below the Holocene surficial deposits. The

Quaternary Lake Cahuilla deposits are composed of weakly consolidated and interbedded sand, silt and clay, with tufa and travertine rock coatings; coarse alluvial deposits; and beach sands. The Quaternary Lake Cahuilla deposits range from several feet deep at the margin of the Coachella Valley to as much as 300 feet thick in the center of the Salton Trough (Arnal 1961; Norris 1979; Waters 1983).

Holocene sedimentary deposits, particularly those younger than 5,000 years old, are generally too young to contain fossilized material and have been assigned a low paleontological sensitivity, in accordance with SVP (2010) guidelines. The underlying Quaternary lacustrine deposits derived from ancient Lake Cahuilla have proven to yield scientifically significant fossil specimens of diatoms, spores, pollen, land plants, sponges, ostracods, freshwater gastropods, fresher bivalves, fish, and small terrestrial vertebrate, and have a high paleontological sensitivity.

Project excavation is expected to reach 8 feet below ground surface and sensitive Quaternary Lake Cahuilla deposits present at moderate depth (approximately 10 feet below ground surface) below younger surficial sand dune deposits are unlikely to be impacted by project development. As a result, the potential for encountering fossil resources during project-related ground disturbance is low and impacts to paleontological resources would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

While the project site is unlikely to contain human remains, the potential for the recovery of human remains is always a possibility during ground disturbing activities. However, based on the disturbed nature of the project alignment and the lack of any identified cultural resources within the study area, the potential to encounter human remains is considered low. If human remains are found, existing regulations outlined in the State of California Health and Safety Code Section 7050.5 state 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 NAHC, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of being granted access and provide recommendations as to the treatment of the remains to the landowner. Implementation of recommended best management practice CR-1, described above, would further reduce this already less than significant impact.

LESS THAN SIGNIFICANT IMPACT

3.6 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	■	☐
1. 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	☐	☐	■	☐
2. Strong seismic ground shaking	☐	☐	■	☐
3. Seismic-related ground failure, including liquefaction	☐	☐	■	☐
4. Landslides	☐	☐	■	☐
b. Result in substantial soil erosion or the loss of topsoil	☐	☐	■	☐
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse	☐	☐	■	☐
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, 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	☐	☐	☐	■

The Coachella Valley, which is flanked on three sides by the Little San Bernardino, Santa Rosa, and San Jacinto Mountains, is located within the Salton Trough, which is within the northern portion of the Colorado Desert Geomorphic Province of Southern California. The Salton Trough is a geologic structural depression resulting from large-scale regional faulting and represents the northward extension of the Gulf of California. The Colorado Desert Geomorphic Province is bounded on the

north by the Transverse Ranges (Little San Bernardino and Orocopia Mountains), on the west by the Peninsular Ranges (Santa Rosa and San Jacinto Mountains), and on the east by the Mojave Desert. The Valley floor ranges in elevation from 1,600 feet above mean sea level (MSL) in the northwest to about 230 feet below MSL at the Salton Sea. The province is a seismically active region characterized by alluviated basins, elevated erosion surfaces, and northwest-trending mountain ranges bounded by northwest-trending strike-slip faults. The most prominent of the nearby fault zones include the San Andreas and San Jacinto fault zones, both of which have been known to be active during Quaternary time (the most recent 2.6 million years of Earth's history). (CVWD 2016b)

In Riverside County, seismic events can result in groundshaking, liquefaction, landslides, subsidence, and seiche. The project site is located in the western portion of Riverside County. Earthquake risk in this area is very high due to the presence of three of California's most active faults: the San Andreas, the San Jacinto, and the Elsinore. The nearest known fault zone is the San Andreas fault, located approximately four miles to the northeast. The most likely earthquake event in Riverside County is considered to be the rupture of the San Jacinto Valley segment of the San Jacinto fault, located approximately 18 miles west of the project site. (County of Riverside 2014)

a1. Expose people or structures to 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?

a2. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

a3. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

a4. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Pursuant to state law, the CGS has designated Alquist-Priolo Earthquake Fault Zones for the three fault zones in Riverside County. The project site is situated between the San Jacinto Fault Zone and the San Andreas Fault Zone. It is not located within an Alquist-Priolo Earthquake Fault Zone or a County-designated fault zone. (County of Riverside 2014)

Although the proposed project is located in a seismically active area, it will not itself expose people or structures to seismically induced risk. The proposed project involves construction of a belowground pipeline, improvements to an existing pump station, and associated meters and valves; it does not involve any habitable structures. A large seismic event, such as a fault rupture, seismic shaking, or ground failure, could result in breakage of the pipelines, failure of joints, or underground leakage from the pipelines. In such an event, the pipelines would be inspected and repaired. Additionally, geotechnical analysis required as part of the California Building Standards Code (CCR Title 24) during the design phase would incorporate appropriate standard engineering practices and specifications in the facility design to minimize risk of structural failure in a seismic event and would reduce secondary impacts that may occur as a result.

In the event of a major earthquake, seismically induced landslides would be expected throughout Riverside County, particularly in areas with high slope angles. The County of Riverside (2014) ranks liquefaction susceptibility in the vicinity of the project site as "Moderate". However, the project area is generally flat and project development would consist of minimal aboveground structures, none of which are habitable. Design and construction of the project facilities would adhere to American

Water Works Association Standards for protection from thrust and earth movement. Construction activities would include the lining and appropriate backfilling of trenches in order to resist potential effects associated with subsidence.

The proposed project would not involve development of habitable structures, is not located within an Alquist-Priolo earthquake fault zone, and does not cross an active fault. Therefore, the project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, seismic-related ground failure, or landslides. Furthermore, the proposed project would reduce groundwater overdraft, which is expected to subsequently reduce ongoing land subsidence in the Coachella Valley.

Construction workers would be exposed to temporary ground shaking during construction activities; however, construction activities would limit risk to construction workers by complying with Occupational Safety and Health Administration (OSHA) rules for safety during excavation activities. With adherence to existing regulations, potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The project area is previously disturbed, and the majority of the project corridor is paved. However, construction activities involving soil disturbance, such as excavation, stockpiling, and grading could result in increased erosion and sediment transport by stormwater to surface waters. According to the Subsequent Project Environmental Impact Report (SPEIR) for the WMP Update, pipelines and pump stations constructed pursuant to the WMP Update would require measures to control soil erosion by wind and water to protect air quality and runoff quality during storm events (CVWD 2011).

The proposed project would minimize soil erosion via implementation of Best Management Practices (BMPs), in accordance with the Waste Discharge Requirement for Discharges from the Municipal Separate Storm Sewer System Within the Whitewater River Watershed Order No. R7-2013-0011 NPDES No. CAS617002 (MS4 Permit) and the Construction General Permit (Order Nos. 2009-0009-DWQ and 2010-0014-DWQ), issued by the SWRCB. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) to reduce erosion and topsoil loss from storm water runoff. Compliance with these two permits would ensure that the proposed project implements BMPs during construction and prevents substantial soil erosion or the loss of topsoil. The SWPPP would include BMPs to prevent erosion, such as use of silt fences or other barriers to prevent erosion and sedimentation into water bodies, covering of stockpiles, use of desilting basins, limitations on work during high-wind events, and post-construction revegetation and drainage requirements. Implementation of the required SWPPP and BMPs would ensure that this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Collapsible soils generally occur where Holocene-aged alluvial sediments have been deposited during rapid runoff events. In the event of a major earthquake, seismically induced landslides would be expected throughout Riverside County, particularly in areas with high slope angles. The County of Riverside ranks liquefaction susceptibility in the vicinity of the project site as “Moderate.”

Additionally, the area around the site is identified as a Susceptible Subsidence Area. (County of Riverside 2014)

The proposed project involves installation of an underground pipeline through existing developed urban land primarily within public rights-of-way, with the exception of an approximately 3,000-foot segment that would be located within an existing unpaved utility road leading to the WRP10 facility and the portions on golf courses. As discussed previously, although the proposed project would be located in a seismically active area, the project is not anticipated to adversely affect soil stability or increase the potential for local or regional landslides, subsidence, liquefaction, or collapse. Trenching activities would implement BMPs such as shoring during open trenching. As discussed above, a project-specific SWPPP would be implemented for the project, including BMPs to control erosion and discharge of polluted runoff. Additionally, compliance with CVWD's professional engineering standards would ensure that this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?

The project site is located in the Colorado Desert geomorphic province, between the Mojave Desert and the Peninsular Ranges geomorphic provinces (CGS 2015). Based on the United States Department of Agriculture (USDA) Soil Survey for the Coachella Valley Area, the project corridor contains four primary mapped soil units: Coachella fine sand (CpA), zero to two percent slopes; Gilman loamy fine sand (GbA), zero to five percent slopes; Myoma fine sand (MaD), zero to five percent slopes; and MaD, five to 15 percent slopes The MaD, which is the prevalent soil map unit within the project site, is listed on the Natural Resources Conservation Service Hydric Soils List within the Coachella Valley area. MaD is somewhat excessively drained alluvium derived from windblown sandy alluvium, situated within alluvial fans. (USDA 2016)

The expansion potential for these fine sandy and sandy soil types found on alluvial fans and floodplains is considered to be very low to low (USDA 2017). The project is not located on expansive soils and would not introduce risk to life or property as a result of expansive soils. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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?

The proposed project would not include the use of septic-tanks or alternative wastewater disposal systems. No impact would occur.

NO IMPACT

3.7 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment	☐	☐	■	☐
b. Conflict with any applicable plan, policy, or regulation adopted to reduce the emissions of greenhouse gases	☐	☐	☐	■

Climate change is the observed increase in the average temperature of the earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The term "climate change" is often used interchangeably with the term "global warming," but "climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. Per the United Nations Intergovernmental Panel on Climate Change (IPCC), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-twentieth century (IPCC 2007).

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), fluorinated gases such as hydrofluorocarbons (HFC) and perfluorocarbons (PFC), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills.

Man-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF_6 (California Environmental Protection Agency [CalEPA] 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years).

Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO_2e), and is the amount of a GHG emitted multiplied by its GWP. CO_2 has a 100-year GWP of one. By contrast, CH_4 has a GWP of 25, meaning its global warming effect is 25 times greater than CO_2 on a molecule per molecule basis (IPCC 2007).

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, Earth's surface would be about 34 degrees Celsius cooler (CalEPA 2014). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. The primary GHGs of concern include CO_2, CH_4, N_2O, and fluorinated gases (HFCs, PFCs, and SF_6). These all contribute to climate change on a global scale and climate change affects numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns.

Project implementation would generate greenhouse gas (GHG) emissions through the burning of fossil fuels or other emissions of GHGs, thus potentially contributing to cumulative impacts related to climate change. In response to an increase in man-made GHG concentrations over the past 150 years, California has implemented AB 32, the "California Global Warming Solutions Act of 2006." AB 32 codifies the Statewide goal of reducing emissions to 1990 levels by 2020 (essentially a 15% reduction below 2005 emission levels) and the adoption of regulations to require reporting and verification of statewide GHG emissions. Furthermore, on September 8, 2016, the governor signed Senate Bill 32 (SB 32) into law, which requires the State to further reduce GHGs to 40 percent below 1990 levels by 2030. SB 32 extends AB 32, directing the California Air Resources Board (CARB) to ensure that GHGs are reduced to 40 percent below the 1990 level by 2030.

On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) $CO2_e$ by 2030 and two MT $CO2_e$ by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

The City of Palm Desert completed its *Environmental Sustainability Plan* in 2010 and GHG inventory in 2008, which quantified electricity associated with wastewater provided by CVWD in a "water" sector not associated with buildings or residential. On December 13, 2007 the Palm Desert City Council adopted Resolution 07-78. It was a major first step by the City towards a systematic approach to reducing greenhouse gas emissions. Palm Desert opted to set its own reduction targets in line with the Kyoto Protocol, and to make a major commitment to meeting it. Over a five year period beginning in 2007, the Resolution called for cutting greenhouse gas emissions to a level

seven percent below 1990 levels. Thus by 2012, the City would exceed the AB 32 2020 goal of reducing emissions to 1990 levels.

In 2015, the County of Riverside adopted a Climate Action Plan (CAP) to establish goals and policies that incorporate sustainability and GHG reduction into its management processes. The first step in completing the CAP was to complete a GHG emissions inventory. Riverside County's 2008 inventory amounted to 7,012,938 metric tons (MT) CO_2e community-wide and 226,753 MT CO_2e from municipal operations. Following the State's adopted AB 32 GHG reduction target, the County of Riverside has set a goal to reduce emissions back to 1990 levels by the year 2020. This target was calculated as a 15% decrease from 2008 levels, as recommended in the AB 32 Scoping Plan.

In guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, the SCAQMD considered a tiered approach to determine the significance of projects. The draft tiered approach is outlined in meeting minutes dated September 29, 2010.

- **Tier 1**. If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2**. Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- **Tier 3**. Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 3,000 MT of CO_2e per year for land use projects.
- **Tier 4**. Establishes a service population threshold to determine significance. The Working Group has provided a recommendation of 4.8 MT of CO_2e per year for land use projects.

Since the proposed project is located in multiple jurisdictions, and the City of Palm Desert's *Environmental Sustainability Plan* does not constitute a qualifying local GHG reduction plan as it has not been analyzed under CEQA, Tier 3 is the most appropriate approach for determining significance. Therefore, this analysis relies on the GHG emission significance threshold of 3,000 MT of CO_2e per year for land use projects.

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

Project construction would generate GHG emissions from the operation of heavy machinery for pipeline installation, motor vehicles, and worker trips to and from the site. Construction GHG emissions would be temporary, however, and would cease upon completion of construction. During project operation, electricity used to operate the motor-actuated valves and the pump station to deliver NPW through project facilities would result in indirect GHG emissions from the generation of electricity by the electric service provider. These quantities would be minimal and would be at least partially offset by the reduction in electricity used by current groundwater pumping and potable water delivery from WRP10. As the project would reduce consumption of potable water, it would also reduce electricity used to treat water to potable standards. Therefore, project operation would not result in a substantial net increase in power consumption or greenhouse gas emissions.

Lastly, for information purposes, CalEEMod results indicate that the proposed project's maximum annual GHG emissions would be 533 CO_2e in 2019, generated from construction activities. GHG emissions would therefore not exceed SCAQMD's recommended 3,000 metric tons CO_2e per year threshold for land use projects. The GHG impacts of the proposed project would be less than significant and no mitigation is required.

LESS THAN SIGNIFICANT IMPACT

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

The City of Palm Desert's (2010) *Environmental Sustainability Plan* identifies city-wide water management principles and goals for improving regional sustainability and efficiency. Specifically, the *Environmental Sustainability Plan* calls for 100 percent of city golf courses to be irrigated with recycled water. The proposed project takes steps to implement that goal by extending non-potable pipeline to five existing golf courses in Palm Desert: Marriott Shadow Ridge, Marriott Desert Springs Resort (North), Oasis Country Club, Palm Desert Resort Country Club, and Woodhaven Country Club. The proposed NPW pipelines would also be extended adjacent to Rancho Portola, a planned future development in Palm Desert. Additional NPW pipeline may be constructed at a later date to connect the planned NPW distribution system to a lake on the property of this future user.

The County of Riverside's (2015) *Climate Action Plan* establishes GHG reduction measures to be incorporated at the county level. Measure R2-W2 calls for an increase in reclaimed water use. The proposed project would convey NPW to users within Riverside County, thereby supporting this GHG reduction measure.

The proposed project therefore promotes the principles and goals of the City of Palm Desert *Environmental Sustainability Plan* and the County of Riverside's *Climate Action Plan*. The project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases and no impact would occur.

NO IMPACT

3.8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
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 foreseeable upset and 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 0.25 mile of an existing or proposed school	☐	☐	■	☐
d. Be located on a site that is included on a list of hazardous material 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 in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area	☐	☐	■	☐
f. For a project near a private airstrip, would it result in a safety hazard for people residing or working in the project area	☐	☐	☐	■
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	☐	■	☐	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands	☐	☐	☐	■

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

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

Construction of the proposed project would temporarily increase the transport and use of hazardous materials in the area through the operation of construction vehicles and equipment. In addition, ground-disturbing activities could cause an accidental upset or accident condition. If such conditions cause a release of hazardous materials into the environment, potential impacts could occur. Limited quantities of miscellaneous hazardous substances, such as diesel fuel, oil, solvents, and other similar materials, would be brought onto the construction site, used, and stored during the construction period. These materials would be disposed of off-site in accordance with all applicable laws pertaining to the handling and disposal of hazardous waste.

In the unlikely event that unanticipated, existing soil or groundwater contamination is discovered during construction of the proposed project, CVWD has set forth construction contractor specifications that require appropriate treatment, handling, and notification of unanticipated hazardous materials. These construction specifications include requirements that the construction contractor promptly notify CVWD in writing regarding any material that the construction contractor believes may be material that is a hazardous waste. The construction specifications also require the construction contractor to promptly notify CVWD in writing regarding unknown physical conditions at the project site of any unusual nature, different materially from those ordinarily encountered. Upon such notification, CVWD shall promptly investigate the conditions at the project site. If the construction contractor encounters a hazardous environmental condition, the construction contractor shall immediately secure or otherwise isolate such condition, stop all work in connection with such condition and in any area affected thereby, and notify CVWD of the hazardous environmental condition. The construction contractor shall not be required to resume work in connection with such condition or in any affected area until after CVWD has obtained any required permits related thereto and delivered written notice to the construction contractor specifying that such condition and any affected area is or has been rendered safe for the resumption of work and specifying any special conditions under which such work may be resumed safely. The construction contractor is also required to comply with all applicable laws related to the work performed, including laws governing disposal of contaminated soil and import of clean fill.

Project construction activities would comply with all relevant regulations, including the enforcement of hazardous materials treatment, handling, notification, and transportation regulations and

implementation of BMPs as required by CVWD's construction contractor specifications. Nevertheless, upset or accident conditions could result in the unanticipated spill or release of hazardous materials such as vehicle and equipment fuels, potentially introducing a hazard to the public or the environment. To ensure an additional level of safety and reduce potential impacts to a less than significant level, Mitigation Measure HAZ-1 would be implemented.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Mitigation Measures

With implementation of the following mitigation measures, the potential impacts related to hazardous materials would be reduced to less than significant:

HAZ-1 Hazardous Materials Management and Spill Control Plan

Before construction begins, the construction contractor shall submit to CVWD for review and approval a Hazardous Materials Management and Spill Control Plan (HMMSCP) that includes a project-specific contingency plan for hazardous materials and waste operations. The HMMSCP shall establish policies and procedures consistent with applicable codes and regulations, including but not limited to the California Building and Fire Codes, as well United States Department of Labor OSHA and California OSHA regulations. The HMMSCP shall articulate hazardous materials handling practices to prevent the accidental spill or release of hazardous materials.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

James Monroe Elementary School and Bermuda Dunes Learning Center Preschool are located along the project alignment within the community of Bermuda Dunes. James Monroe Elementary is located at 42100 Yucca Lane (located at the SE intersection of 42nd Avenue and Yucca Lane; whereas Hovley Lane east of Washington Street becomes 42nd Avenue). Bermuda Dunes Learning Center is located at 42115 Yucca Lane (located at the SW intersection of 42nd Avenue and Yucca Lane).

As described above, there is potential that an accidental spill or release of hazardous or potentially hazardous materials such as vehicle and equipment fuels could occur during project construction. However, project activities would not occur on the school site, and implementation of mitigation measure MM HAZ-1 would ensure that significant impacts would be avoided. In addition, Section 3.16 Transportation/Traffic Mitigation Measure TRA-4 *Notification of Construction to Service Providers and Educational Institutions* requires the written notification to these schools and police and fire departments so that detour routes for emergency responses can be planned for the construction period.

Therefore, potential impacts associated with a potential emission or release of hazardous materials or wastes in proximity to a school would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on a site included on a list of hazardous material 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?

Government Code section 65962.5 requires the CalEPA to develop an updated Cortese List. The Department of Toxic Substance Control (DTSC) is responsible for a portion of the information

contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List (DTSC 2018). The analysis for this section included a review of the following resources on March 22, 2018 to provide hazardous material release information:

- SWRCB GeoTracker database
- DTSC EnviroStor database

There are no known active hazardous materials sites located within the project corridor. SWRCB's GeoTracker database lists a number of closed case cleanup sites in the vicinity of the project area. In 1990, CVWD identified and investigated a Leaking Underground Storage Tank (LUST) at the WRP10 site with potential diesel fuel leakage. The County of Riverside closed the case as of July 10th, 1992. (SWRCB 2018)

Table 9 lists the hazardous waste cleanup sites near the project area. The County of Riverside Department of Environmental Health, Hazardous Materials Management Division served as the cleanup oversight agency for all but two of the identified hazardous waste cleanup sites. The Colorado River Basin RWQCB served as the cleanup oversight agency for the SOCO and GTE Washington sites. Potential future remediation activities in the project area would be overseen by either the County of Riverside Department of Environmental Health, Hazardous Materials Management Division or the Colorado River Basin RWQCB.

All identified hazardous waste cleanups have been completed and closed. According to the environmental database review, the project corridor is not included on any lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impact would occur.

NO IMPACT

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

The closest public airport to the project is the Bermuda Dunes Airport, a privately-owned public-use airport located approximately 0.7 mile northeast of the project site. The proposed project would extend into Compatibility Zones D and E, south of the airport (County of Riverside 2004). The proposed pipeline would be installed belowground, and construction and operation of the pipeline do not represent incompatible uses in the vicinity of the airport. The project corridor does not extend onto airport property, so construction workers will not be exposed to safety hazards associated with airport operations. Also, although a portion of the project alignment extends into Compatibility Zones D and E, construction workers would be in these zones for relatively short periods of time and would not be subject to a substantial safety hazard from aircraft failures or accidents that could result in a crash landing along the project corridor. Therefore, the project would have a less than significant impact to safety hazards for people residing or working in the project area due to proximity to an airport.

LESS THAN SIGNIFICANT IMPACT

Table 9 Hazardous Waste Cleanup Sites Located in Vicinity of Project Site

Name	Address	Type of Site	Potential Contaminant of Concern	Distance from Project Alignment	Contamination Type	Clean-up Status	Date
CVWD – Cook St #91162	43000 Cook St, Palm Desert	LUST Cleanup Site	Diesel	800 feet	Soil contaminated by diesel tank discharge; subsequent investigations reported hydrocarbon levels below detection limit	Completed - Case Closed	7/10/1992
SOCO #7T2260012	77999 42nd Ave, Palm Desert	LUST Cleanup Site	Gasoline	<20 feet	No soil or groundwater contamination identified	Completed - Case Closed	8/11/1992
GTE WASHINGTON #7T2201030	42140 Washington, Bermuda Dunes	LUST Cleanup Site	Gasoline	400 feet	No soil or groundwater contamination identified	Completed - Case Closed	8/24/1992
Marriott's Desert Springs #2 #7T2260019	74855 Country Club Dr, Palm Desert	LUST Cleanup Site	~~Gasoline~~ Diesel	1,600 feet	Soil contaminated by diesel; post-cleanup investigations did not detect petroleum hydrocarbons; no groundwater contamination	Completed - Case Closed	5/15/1992
Palmer Cable Vision #7T2260013	41725 Cook St, Palm Desert	LUST Cleanup Site	Gasoline	650 feet	Soil contaminated by petroleum hydrocarbon via line leak; soil excavated and treated; post-cleanup investigations confirmed that no further action was required	Completed - Case Closed	8/2/1994
The Lakes Country Club #7T2260017	161 Old Branch Road, Palm Desert	LUST Cleanup Site	~~Gasoline~~ Diesel	100 feet	Soil contaminated by diesel; post-cleanup investigations did not detect diesel or gasoline	Completed - Case Closed	5/30/1997
Chevron #200016185	77920 Ave of the States, Palm Desert	LUST Cleanup Site	Gasoline	900 feet	Soil contaminated by gasoline release from piping that had accidentally been drilled through; vapor extraction conducted at site; post-cleanup investigation concluded that remediation efforts were successful and that future vapor intrusion is not expected	Completed - Case Closed	9/14/2001

Name	Address	Type of Site	Potential Contaminant of Concern	Distance from Project Alignment	Contamination Type	Clean-up Status	Date
Shell #200421073	77920 Ave of the States, Palm Desert	LUST Cleanup Site	Diesel, Waste Oil/ Motor/ Hydraulic/ Lubricating	900 feet	Soil contaminated via waste oil from spill bucket; site investigation results showed that hydrocarbons were limited to shallow soil; no groundwater contamination	Completed - Case Closed	9/9/2005

Source: SWRCB 2018

f. For a project near a private airstrip, would it result in a safety hazard for people residing or working in the project area?

The project is not located near a private airstrip. Therefore, the project would have no impact related to safety hazards for people residing or working in the project area due to proximity to a private airport.

NO IMPACT

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

Construction of the proposed pipeline may require temporary lane or road closures that could impede emergency response. The Traffic Management Plan required in Mitigation Measure TRA-1 (see Section 3.16, Transportation/Traffic) would implement safe and effective traffic control measures at all construction sites and would address any potential interference with emergency response and/or evacuation plans. With the Traffic Management Plan in place, the impact would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

h. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Construction and operation of the project would not introduce potentially flammable activities in fire-prone areas. The California Department of Forestry and Fire Protection (CAL FIRE) has identified the project area as located within the “Non-Very High Fire Hazard Severity Zone” in the Local Responsibility Area for incorporated cities which indicates the site is not subject to wildfire hazards (CAL FIRE 2009). The nearest fire station, Riverside County Fire Station 71, is located approximately 0.6 mile west of the proposed pipeline segment on Country Club Drive, and approximately 0.6 mile south of the proposed segment on Portola Road. The project corridor is located within existing streets and golf course lands within an urban area. The area does not contain wildlands and is not adjacent to wildlands. Therefore, no impact would occur.

NO IMPACT

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3.9 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Violate any water quality standards or waste discharge requirements	☐	☐	■	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)	☐	☐	☐	■
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	■	☐
d. Substantially alter the existing drainage pattern of the site or area, including the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or offsite	☐	☐	■	☐
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	☐	☐	■	☐
f. Otherwise substantially degrade water quality	☐	☐	■	☐
g. Place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map	☐	☐	☐	■

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
h. Place structures in a 100-year flood hazard area that would impede or redirect flood flows	☐	☐	☐	■
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including that occurring as a result of the failure of a levee or dam	☐	☐	☐	■
j. Result in inundation by seiche, tsunami, or mudflow	☐	☐	☐	■

The federal Clean Water Act establishes the framework for regulating discharges to Waters of the U.S. in order to protect their beneficial uses. The Porter-Cologne Water Quality Act regulates water quality within California and establishes the authority of the SWRCB and the nine RWQCBs. The SWRCB requires construction projects to provide careful management and close monitoring of runoff during construction, including onsite erosion protection, sediment management, and prevention of non-storm discharges. The SWRCB and RWQCBs issue NPDES permits to regulate specific discharges. The NPDES Construction General Permit regulates stormwater discharges from construction sites that disturb more than one acre of land.

The project site overlies the Coachella Valley Groundwater Basin, Indio Subbasin (also known as the Whitewater River Subbasin). The Indio Subbasin underlies the major portion of the Coachella Valley floor, and is bound by the Garnet Hill and San Andreas faults and the Santa Rosa and San Jacinto Mountains. Thick layers of silt and clay, remnants of ancient lake beds, impede percolation of water into the Indio Subbasin. CVWD began importing water for source substitution in 1949 to begin addressing groundwater overdraft. In 1973, CVWD and the Desert Water Agency began implementing large-scale recharge activities that have benefited groundwater levels in the Indio and Mission Creek Subbasins. Although the Palm Desert area as a whole continues to experience declining groundwater levels, the rates of decline have generally been decreasing. (CVWD 2016a)

The proposed project is part of a larger effort by CVWD as part of the WMP to reduce golf course groundwater pumping in the Palm Desert area through source substitution.

a. Would the project violate any water quality standards or waste discharge requirements?

f. Would the project otherwise substantially degrade water quality?

Excavation, grading, and other activities associated with construction of the proposed project would result in soil disturbance that could cause water quality violations through potential erosion and subsequent sedimentation of receiving water bodies. Construction activities could also cause water quality violations in the event of an accidental fuel or hazardous materials leak or spill. If precautions are not taken to contain contaminants, construction activities could result in contaminated stormwater runoff that could enter nearby waterbodies. Construction activities resulting in ground disturbance of one acre or more are subject to the permitting requirements of the NPDES General Permit for Stormwater Discharges associated with Construction and Land

Disturbance Activities (Construction General Permit Order No. 2009-0009-DWQ). The Construction General Permit requires the preparation and implementation of a SWPPP, which must be prepared before construction begins. The SWPPP includes specifications for BMPs implemented during project construction to minimize or prevent sediment or pollutants in stormwater runoff.

Project construction would comply with the requirements of the Construction General Permit. In addition, the contractor would be required to implement BMPs identified in the SWPPP to prevent construction pollution via stormwater and minimize erosion and sedimentation into waterways as a result of construction.

According to the SPEIR for the 2010 WMP Update, no adverse impacts to water quality were identified in association with the use of NPW for golf course irrigation in CVWD's service area. Therefore, the proposed project would not violate any water quality standards or waste discharge requirements, including those set forth in the current version of the Water Quality Control Plan for the Colorado River Basin RWQCB. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

The project site overlies the Coachella Valley Groundwater Basin, Indio Subbasin. In 2014, the California Department of Water Resources (DWR) published ranked prioritizations of the state's groundwater basins, to help identify, evaluate, and determine the need for additional groundwater level monitoring. DWR ranked the Indio Subbasin as a "Medium" priority basin (DWR 2014).

The proposed project does not involve the extraction or use of groundwater. Moreover, the proposed project would have a beneficial effect on groundwater recharge by providing NPW for irrigation use as a substitute for groundwater and potable water. By decreasing demand for groundwater, the proposed project will result in a net positive effect on groundwater levels in the area. Therefore, no impact would occur.

NO IMPACT

c. Would the project substantially alter the existing drainage pattern of the site or area, including by altering the course of a stream or river, in a manner that would result in substantial erosion or siltation on or offsite?

d. Would the project substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or offsite?

e. Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The proposed project would primarily consist of construction of underground pipelines generally located within existing paved public rights-of-way, with the exception of an approximately 3,000-foot segment that would be located within an existing unpaved utility road leading to the WRP10 facility and the portions on golf courses. Although construction activities would involve possible

trenching and other pipeline installation methods that would disturb both paved and unpaved roadways within the project corridor, this disturbance would be temporary. After construction, the project area would be restored to its original condition and any drainage pattern would be the same as it was prior to project construction activities. Therefore, the proposed project would not substantially alter the existing drainage pattern or the course of a stream or river and would not result in substantial erosion or siltation on or offsite.

Further, because the pipelines would be constructed underground within developed areas, they would not increase the rate or amount of surface runoff that would exceed the capacity of existing or planned drainage systems or provide additional sources of polluted runoff. Construction would be conducted in compliance with the State's Construction General Permit (Order No. 2009-0009-DWQ). Preparation of the SWPPP in accordance with the Construction General Permit would require erosion-control BMPs at the construction areas. Potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

g. Would the project place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?

The proposed project would not construct housing; therefore, it would have no impact related to placing housing within a 100-year flood zone.

NO IMPACT

h. Would the project place in a 100-year flood hazard area structures that would impede or redirect flood flows?

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), the project site is not located within a 100-year Flood Hazard Area (FEMA 2017). As the proposed pipelines would be located underground, they would not impede or redirect flows, nor expose people or structures to a significant risk of loss, injury or death involving flooding. No impact would occur.

NO IMPACT

i. Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding including that occurs as a result of the failure of a levee or dam?

The nearest floodway area is the Whitewater River Storm Channel, located approximately 0.25 miles south of the existing pump station improvement area at the WRP10 facility. The Whitewater River Storm Channel serves as a conduit for flood waters in the area. The project corridor is not located in an area at risk of flooding from the failure of a levee or dam. No impact would occur.

NO IMPACT

j. Would the project result in inundation by seiche, tsunami, or mudflow?

Due to distance from the ocean and lack of large water bodies within the project area, the project area is not subject to tsunamis or seiche. Further, the area is generally flat and would not be subject to inundation by mudflow. No impact would occur.

NO IMPACT

3.10 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts?				
a. Physically divide an established community	☐	☐	☐	■
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect	☐	☐	☐	■
c. Conflict with an applicable habitat conservation plan or natural community conservation plan	☐	☐	☐	■

The project alignment is located in central Riverside County, in the West Valley portion of the Coachella Valley. The majority of the pipeline alignment (approximately 40,000 LF) would be placed in Palm Desert, with approximately 10,000 LF of pipeline extending east into unincorporated Bermuda Dunes. A segment of proposed pipeline starting at WRP10 and extending north on a utility access road and then east onto Hovley Lane East (approximately 1.5 miles in length) is located adjacent to the city of Indian Wells.

a. Would the project physically divide an established community?

Once constructed, project facilities would consist of a belowground NPW pipeline, valves, and appurtenances, which do not have the potential to physically divide an established community. The proposed project includes the extension and installation of recycled water pipeline in a developed, primarily residential urban area. Staging would occur adjacent the proposed pipeline. The presence of construction-related equipment and workers would temporarily change the existing character of the vicinity to that of a construction zone. Construction staging would maintain local access for businesses and residences along the proposed alignment to the extent practicable throughout construction of the proposed project. Therefore, the project would not displace or divide an established community and no impact would occur.

NO IMPACT

b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan,

local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The goal of CVWD's WMP is to reliably meet current and future water demands in a cost-effective and sustainable manner. The proposed project is therefore consistent with the objectives of WMP for water conservation and source substitution of surface water supplies (such as recycled water) for urban and golf course uses in lieu of pumping groundwater.

The proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. The City of Palm Desert General Plan identifies objectives to implement and expand the use of recycled water within the city (City of Palm Desert 2016). The proposed project would be consistent with the following City of Palm Desert goals and policies:

Policy 1.5. Work with the CVWD to encourage existing golf courses to connect to its recycled water system.

Policy 3.5. Expand use of recycled water in existing and new development.

The County of Riverside's General Plan also identifies policies to expand the use of recycled water in the county. The proposed project would be consistent with the following policy:

Policy Land Use (LU) 18.5. Emphasize and expand the use of recycled water in conjunction with local water agencies.

The current City of Indian Wells General Plan also identifies goals and policies relating to the application of recycled water in the region. The proposed project would be consistent with the following identified policy:

Policy IIIA5.2. Encourage water-intensive land uses, such as golf courses, to utilize treated effluent for landscaping and irrigation needs.

There would be no conflicts with land use plans, policies, or regulations of the cities of Palm Desert and Indian Wells.

NO IMPACT

c. Would the project conflict with an applicable habitat conservation plan or natural community conservation plan?

The proposed project is within the CVMSHCP plan area, but not within or adjacent to any specific CVMSHCP Conservation Area. Thus, no impact would occur.

NO IMPACT

3.11 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
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?	☐	☐	☐	■

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

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?

Mineral resources in the region include clay, iron, sand, gravel, and limestone. CGS maps indicate that the project corridor is located in Mineral Resource Zone 1 (MRZ-1; CGS 2007). The Riverside County General Plan EIR also designates the area as MRZ-1. In MRZ-1 areas, the available geologic information indicates no significant mineral deposits are present or that there is little likelihood for their presence (County of Riverside 2014).

It should be noted that although CGS mapping and the Riverside County General Plan EIR identify Palm Desert as being located in an MRZ-1 area, the City of Palm Desert General Plan designates the entire City as being in an MRZ-3 classification (City of Palm Desert 2016). MRZ-3 areas are considered to have a moderate potential for the discovery of economic mineral resources.

There are no mines or quarries within the project corridor. Since there are no known mineral resources or mineral resource recovery sites in the vicinity of the project corridor, no impact would occur.

NO IMPACT

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3.12 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts?				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies	☐	☐	■	☐
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels	☐	☐	■	☐
c. A substantial permanent increase in ambient noise levels above those existing prior to implementation of the project	☐	☐	■	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above those existing prior to implementation of the project	☐	☐	■	☐
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels	☐	☐	☐	■
f. For a project near a private airstrip, would it expose people residing or working in the project area to excessive noise	☐	☐	☐	■

Noise Background

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). Because of the way the human ear interprets sound level, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3-dBA change in community noise levels is noticeable, while 1 to 2 dBA changes are typically not perceived. Quiet suburban areas generally have noise levels in the range of 40 to 50 dBA, while arterial streets are in

the 50 to 60+ dBA range. Normal conversational levels are in the 60 to 65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of about 6 dBA per doubling of distance from point sources (such as construction equipment). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance; while noise from a point source typically attenuates at about 6 dBA per doubling of distance. Noise levels may also be reduced by the introduction of intervening structures. For example, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm that breaks the line-of-sight reduces noise levels by 5 to 10 dBA. The construction style for dwelling units in California generally provides a reduction of exterior-to-interior noise levels of about 25 dB with closed windows (Federal Transit Administration [FTA] 2006).

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period. The highest root mean squared (RMS) sound pressure level within the measuring period is the Lmax. The lowest RMS sound pressure level within the measuring period is the Lmin.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than noise that occurs during the day. Two commonly used noise metrics – the Day-Night average level (Ldn) and the Community Noise Equivalent Level (CNEL) – recognize this fact by weighting hourly Leqs over a 24-hour period. The Ldn is a 24-hour average noise level that adds 10 dBA to actual nighttime (10 p.m. to 7 a.m.) noise levels to account for the greater sensitivity to noise during that time period. The CNEL is identical to the Ldn, except it also adds a 5 dBA penalty for noise occurring during the evening (7 p.m. to 10 a.m.).

In practice, CNEL and Ldn are often used interchangeably. The relationship between peak hourly Leq values and associated Ldn values depends on the distribution of traffic over the entire day. There is no precise way to convert a peak hourly Leq value to an Ldn value. However, in urban areas near heavy traffic, the peak hourly Leq value is typically 2-4 dBA lower than the daily Ldn value. In less heavily developed areas, such as suburban areas, the peak hourly Leq is often equal to the daily Ldn value. For rural areas with little nighttime traffic, the peak hourly Leq value will often be 3-4 dBA greater than the daily Ldn value.

Some land uses are more sensitive to ambient noise levels than other uses due to the amount of noise exposure and the types of activities involved. For example, residences, motels, hotels, schools, libraries, churches, nursing homes, auditoriums, museums, cultural facilities, parks, and outdoor recreation areas are more sensitive to noise than commercial and industrial land uses.

Vibration Background

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). This phenomenon is caused by the coupling of the acoustic energy at frequencies

that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the United States.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources inside buildings such as the operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads.

Project Site Setting

The project site is located in a developed, predominantly residential/county club urban area extending through Palm Desert, with a segment extending east along Hovley Lane East into unincorporated Riverside County. The nearest country clubs include the Marriott Shadow Ridge Golf Course, Marriott Desert Spring, the Oasis Country Club, Palm Desert Resort, Woodhaven, Bermuda Dunes, Indian Ridge Country Club, and the Toscana Country Club. The nearest highways are Interstate 10, located approximately 0.2 mile east of the project site, and Highway 111, located approximately 0.5 mile south of the project site. The project site includes construction along the following roadways: Frank Sinatra Drive, Portola Avenue, Country Club Drive, Cook Street, Hovley Lane, Eldorado Way, Casbah Way, Oasis Country Club Drive, Adams Street, and Emerald Desert Drive. Noise levels at the project site are typical of residential and commercial areas. Primary sources of noise can be attributed to the generally free-flowing roadway traffic along the aforementioned roadways. Traffic in these areas ranges from infrequent in the residential neighborhoods in the country clubs and on golf course properties and moderate frequencies in the commercial districts along Hovley Lane East. The public roadways have speed limits up to 55 miles per hour.

There are three airports in an 11-mile radius of the project site, including Palm Springs International Airport, Jacqueline Cochran Regional Airport, and Bermuda Dunes Airport. Palm Springs International Airport is approximately 6.9 miles northwest from the project site, Jacqueline Cochran Regional Airport is approximately 9.9 miles southeast, and Bermuda Dunes Airport is approximately 0.7 mile northeast from the project site. According to the Riverside County Airport Land Use Commission Compatibility Plan, the project site is not within the existing (2003) 65, 60, or 55 CNEL noise contours, or the 70, 65, 60, or 55 dB CNEL noise contours for future (2023) average peak daily season day noise at the Bermuda Dunes Airport (Riverside County Airport Land Use Commission 2004). Additionally, because of the distance from the Palm Springs International Airport and Jacqueline Cochran Regional Airport, airport noise is not expected to contribute to noise levels at the project site.

Five noise measurements were taken at various points along the project site. One 10-minute noise measurement was taken during the evening peak traffic hours of 4:00 p.m. and 6:00 p.m. on December 1, 2017. The measurement was taken at the southwest corner of the intersection of Sandcastle Lane and Eldorado Drive. The Leq for 10 minutes has been calculated, as shown in Table 10. Two 15-minute noise measurements were taken on March 14, 2018 during mid-day on Frank Sinatra Drive at the Marriott Shadow Ridge Golf Course and the Bermuda Dunes Country Club on Adams Drive. Additionally, noise measurements taken for another CVWD project, the Palm Desert Groundwater Replenishment Project, located near the proposed project alignment were used in this

analysis. The two noise measurements from the Palm Desert Groundwater Replenishment Project were taken in 15-minute increments on May 10, 2017 on the northwest corner of the intersections of Tava Lane East and Hovley Lane East and the western edge of the Via Cortona cul-de-sac in the Toscana Country Club (located adjacent to and east of WRP10). Figure 7 shows the locations of the measurements and Table 10 shows the recorded noise measurements. Please see Table 11 through Table 14, below, for relevant noise thresholds for the proposed project.

Table 10 Noise Measurements

Measurement Number	Measurement Location	Sample Times (p.m.)	Leq (dBA)[4]	Lmin (dBA)[5]	Lmax (dBA)[6]
NM 1[1]	Sandcastle Lane & El Dorado Drive	5:25 p.m. – 5:35 p.m.	66.7	45.8	80.4
NM 2[2]	Tava Lane East & Hovley Lane East	12:15 p.m. – 12:30 p.m.	72.4	47.0	79.3
NM 3[2]	Via Cortona cul-de-sac	11:45 a.m. – 12:00 p.m.	51.4	36.7	63.0
NM 4[3]	Frank Sinatra Drive at Marriott Shadow Ridge	11:15 a.m. – 11:30 a.m.	70.0	42.4	80.7
NM 5[3]	Adams Road at Bermuda Dunes	12:56 p.m. – 1:11 p.m.	61.5	52.5	74.6

[1] Measurement taken December 1, 2017. For this measurement, the Leq was over a 10-minute period (Leq[10]).

[2] Measurement taken May 10, 2017.

[3] Measurement taken March 14, 2018.

[4] A-weighted decibel (dBA) is defined as a decibel (dB) adjusted to be consistent with human response. The equivalent noise level (Leq) is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level).

[5] Lmin is the minimum sound level experienced within the recorded measurement with A-weighted frequency response

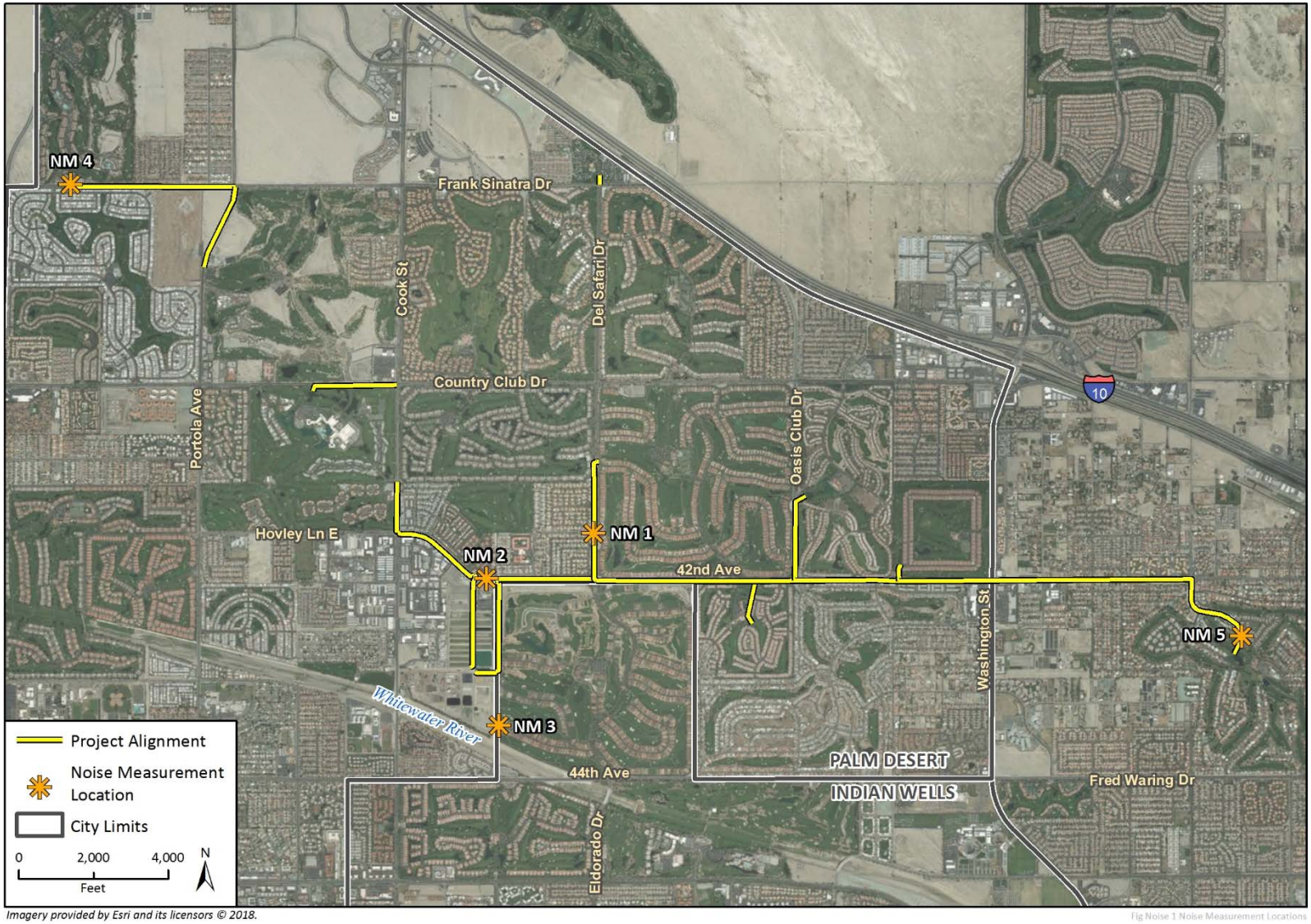
[6] Lmax is the maximum sound level experienced within the recorded measurement with A-weighted frequency response

Source: Rincon Consultants, field visits on May 10, 2017, December 1, 2017, and March 14, 2018 using ANSI Type 2 Integrating sound level meter. See Appendix G for noise monitoring data

Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The City of Palm Desert General Plan Noise Element identifies particular land uses as sensitive to noise, including housing, schools, senior care facilities, parks, and libraries (City of Palm Desert 2016). The noise sensitive land uses nearest to project site are residences/country clubs located in close proximity to the project site, as well as, James Monroe Elementary and Bermuda Dunes Learning Center, located along the proposed pipeline at Hovley Lane East/42nd Ave and Yucca Lane (east of Washington Street).

Figure 7 Noise Measurement Locations



Regulatory Setting

City of Palm Desert

NOISE ORDINANCE (MUNICIPAL CODE)

Chapter 9.24, Noise Control, of the Palm Desert Municipal Code provides sound level limits, a list of prohibited noises, exemptions to the noise ordinance, and hour limitations to specific uses and activities. Section 9.24.030, *Sound level limits,* provides the 10-minute average sound level limits for identified zones within the city, as summarized in Table 11.

Table 11 City of Palm Desert Sound Level Limits

Zone	Time	Applicable 10-Minute Average Decibel Limit (dBA)[1,2]
Residential – All Zones	7:00 a.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	45
Public Institutional	7:00 a.m. to 10:00 p.m.	65
	10:00 p.m. to 7:00 a.m.	55
Commercial	7:00 a.m. to 10:00 p.m.	65
	10:00 p.m. to 7:00 a.m.	55
Manufacturing Industrial	7:00 a.m. to 10:00 p.m.	70
Agricultural	10:00 p.m. to 7:00 a.m.	55

Notes: dBA = a-weighted decibel
[1]If the measured ambient noise level exceeds the applicable limit, the allowable average sound level shall be the ambient noise level
[2]The sound level limit between two zoning districts shall be measured at the higher allowable district
Source: City of Palm Desert 2017b

Additionally, Section 9.24.070, *Construction activities*, sets hours of construction in the city, as summarized in Table 12; and Section 9.24.060, *Special provisions – Exemptions,* states, under subsection K, that noise sources associated with construction activities are exempt from the provisions of the Noise Ordinance.

Table 12 Permitted Construction Hours in the City of Palm Desert

Applicable Dates	Permitted Hours
October 1st through April 30th	
Monday through Friday	7:00 a.m. to 5:30 p.m.
Saturday	8:00 a.m. to 5:00 p.m.
Sunday	None
Government code holidays[1]	None
May 1st through September 30th	
Monday through Friday	5:30 a.m. to 7:00 p.m.
Saturday	8:00 a.m. to 5:00 p.m.
Sunday	None
Government code holidays[1]	None

[1]Per Section 6700 of the Government Code, California holidays include: every Sunday, January 1st, Dr. Martin Luther King, Jr. Day (third Monday in January), Lincoln Day (February 12th), the third Monday in February, Cesar Chavez Day (March 31st), the last Monday in May, July 4th, the first Monday in September, Admission Day (September 9th), Native American Day (fourth Friday in September), Columbus Day (second Monday in October), Veterans Day (November 11th), December 25th, Good Friday from 12 noon to 3 p.m., and every day appointed by the President or Governor for a public fast, thanksgiving, or holiday, except for the Thursday in November appointed as Thanksgiving Day.

Source: City of Palm Desert 2017a, 2017b

GENERAL PLAN

The Noise Compatibility Matrix in the City of Palm Desert General Plan defines the acceptable noise levels for different land uses in the City. This matrix is identical to the State's land use compatibility guidelines, as provided in the Governor's Office of Planning and Research General Plan Guidelines (2017).

Additionally, the General Plan Noise Element provides goals and policies for land use planning and design, in relation to noise. The applicable goals and policies to the proposed project are summarized below (City of Palm Desert 2016):

Goal 2 Stationary Sources of Noise. A city with minimal noise from stationary sources.

Policy 2.1 Noise Ordinance. Minimize noise conflicts between neighboring properties through enforcement of applicable regulations such as the City's Noise Control Ordinance.

Policy 2.4 Industrial Uses. Ensure that industrial uses engage in responsible operational practices that minimize noise impacts on adjacent residences and other noise-sensitive receptors, and require mitigation as needed for development of industrial uses near noise-sensitive receptors.

Policy 2.5 Noise Barriers for Industrial/Commercial Sources. If necessary, and after implementation of measures utilizing architectural features and building design and construction consistent with Policy 1.2, require certain industrial and heavy

commercial uses to use absorptive types of noise barriers or walls to reduce noise levels generated by these uses. To be considered effective, the noise barrier should provide at least a 5-dBA-CNEL noise reduction.

City of Indian Wells

Although the proposed project is not located in Indian Wells, the project is adjacent to the city boundaries, and noise generated by the proposed project construction could impact the city's noise-sensitive receptors. Therefore, the City's noise regulations are included for informational purposes though no permits or approvals from the City are being sought.

The City of Indian Wells has adopted noise policies in its General Plan Noise Element, as well as the City of Indian Wells noise ordinance, codified under Chapter 9.06, *Noise* (City of Indian Wells 2017, 2015). The City's noise ordinance is used to control unnecessary, excessive, and annoying noise in the city as specified in the Ordinance. The City of Indian Wells Municipal Code does not have any applicable regulations for vibration.

NOISE ORDINANCE (MUNICIPAL CODE)

Chapter 9.06, *Noise*, of the Indian Wells Municipal Code provides noise standards, exceptions to those standards, specific noise regulations regarding schools, hospitals, churches, and residential stationary sources (e.g., pumps, fans, and air conditioners), off-road vehicles, waste disposal vehicles, construction or landscape maintenance noise, and golf courses. Additionally, restrictions and waivers to the noise ordinance, including special conditions permits, and general noise regulations are also provided.

Section 9.06.040, *Noise standards,* provides the exterior and interior sound limits for residential properties. These standards include sound level limits for all land uses, when noise generated is in proximity to residential uses. These standards as summarized in Table 13 below.

Table 13 City of Indian Wells Noise Standards

Land Use	Time/Cumulative Period	Applicable Decibel Limit (dBA)[1,2]
Exterior		
Residential Properties	7:01 a.m. to 10:00 p.m.	55
	10:01 p.m. to 7:00 a.m.	50
Land Uses in Proximity to Residential Uses	30 minutes/hour	+3[1]
	15 minutes/hour	+5[1]
	5 minutes/hour	+10
	1 minute/hour	+15
	Not to be exceeded	+20[2]
Interior		
Residential Properties	10:00 p.m. to 7:00 a.m./more than 5 minutes/hour	45[3]
	10:00 p.m. to 7:00 a.m./more than 1 minute/hour	50[3]
	10:00 p.m. to 7:00 a.m./any period of time	55[4]

Notes: dBA = a-weighted decibel

[1]If the measured ambient noise level exceeds the applicable limit, the allowable noise limit shall be increased in 5 dBA increments in each category to encompass the ambient noise level

[2]If the measured ambient noise level exceeds the applicable limit, the maximum allowable noise level shall be the ambient noise level plus 20 dBA

[3]If the measured ambient noise level exceeds the applicable noise limit, the cumulative period applicable shall be increased to reflect said ambient noise level

[4]In the event the ambient noise level exceeds the noise limit of 55 dBA, the maximum allowable noise level shall be increased to reflect the maximum ambient noise level

Source: City of Indian Wells 2017, 2015

Exceptions to the noise standards in Table 13 that are applicable to the project include "noise sources associated with construction or landscape maintenance activities during the hours specified by Section 9.06.047(b); provided, however, that the operation of an internal combustion engine shall not be exempt pursuant to this subsection if such engine is not equipped with suitable exhaust and intake silencers which are in good working order. The Planning Director may permit work to be done during the hours not exempt by this subsection in the case of urgent necessity and in the interest of public health and welfare for a period not to exceed three (3) days. Application for this exemption may be made in conjunction with the application for the work permit or during progress of the work."

Section 9.06.047, *Construction or landscape maintenance noise*, sets hours of construction and landscape maintenance in the City, as summarized in Table 14. Section 9.06.049, *Restrictions and waivers,* states example waivers that can be issued. However, the waiver that the Planning Director may issue is not to allow the operation of heavy equipment, internal combustion engines, pneumatic tools, or power equipment before 7:00 a.m.

Table 14 Permitted Construction and Landscape Maintenance Hours in Indian Wells

Applicable Days	Permitted Hours
Monday through Friday	7:00 a.m. to 5:00 p.m.
Saturday	8:00 a.m. to 5:00 p.m.
Sunday	None
Holidays[1]	None

[1]Per Section 9.06.047 of the City's Municipal Code, holidays include: New Year's Day, Martin Luther King Day, President's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving, and Christmas Day.

Source: City of Indian Wells 2017

GENERAL PLAN

The Noise Compatibility Matrix in the city of Indian Wells General Plan defines the acceptable noise levels for different land uses in the City. This matrix is the same as State guidelines and the City of Palm Desert, as shown in Table 13.

Additionally, the General Plan Circulation Element and Noise Element provide goals and policies for land use planning and design, in relation to noise. The applicable goals and policies to the proposed project are summarized below (City of Indian Wells 2013).

Goal IVB1 Minimize the impact of traffic-generated noise on residential and other noise sensitive land uses.

Policy IVB1.3 Truck traffic shall be limited to specific routes and designated hours of travel, as defined by the City Planning and Engineering Departments.

Policy IVB2.3 Enforce the City's noise ordinance which specifies restrictions on construction noise and other short-term noise events (i.e., concerts, sporting events) and mitigation measures for development in noise-sensitive areas.

Additionally, the City of Indian Wells General Plan Noise Element (2013) provides implementation procedures to help achieve the goals and policies listed above. The procedures applicable to the proposed project include the following:

1 All projects and activities shall conform to the City's Noise Ordinance

CITY OF INDIAN WELLS PUBLIC WORKS DEPARTMENT

As described in Policy IVB1.3 of the Indian Wells General Plan, the City has a Truck Route Map that identifies restricted roadways and time restricted roadways for trucks. Fred Waring Drive, Miles Avenue, Cook Street, and El Dorado Drive are limited to trucks on the road between the hours of 9:00 a.m. and 9:00 p.m. Highway 111 and Washington Street have no time limitations (City of Indian Wells 2010).

County of Riverside

Consistent with State law, the County of Riverside has adopted noise policies in its General Plan Noise Chapter, as well as the County of Riverside's noise ordinance, codified under Chapter 9.52, *Noise Regulation* (County of Riverside 2018, 2015). The County's noise ordinance identifies noise standards for typical sources of noise in the county.

NOISE ORDINANCE (MUNICIPAL CODE)

Chapter 9.52, *Noise Regulation*, of the Riverside County Municipal Code provides sound level limits, a list of prohibited noises, exemptions to the noise ordinance, and hour limitations to specific uses and activities. Capital improvement projects of a governmental agency are exempted from the provisions of the noise ordinance; therefore, the county's noise ordinance would not apply to the proposed project.

Impact Analysis

a. *Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

c. *Would the project result in a substantial permanent increase in ambient noise levels above levels existing without the project?*

d. *Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Operation of the pipeline would not perceptibly increase noise levels on the project site above existing conditions. Operation of the upgraded pump station would also not perceptibly increase onsite noise levels as the facility would be entirely encased within a building that would substantially reduce any generated noise.

Construction activities associated with the project would result in temporary and intermittent noise increases at sensitive receptors near construction activities. The project site is almost entirely surrounded by sensitive receptors (residences) that would largely be within 25 feet of where construction would occur. In addition, James Monroe Elementary School is located approximately 618 feet from the proposed pipeline alignment and Brandman University is located approximately 2,000 feet from the proposed pump station. Construction of the project would involve the use of heavy equipment that could create occasional noise levels above applicable regulations if construction activities occur after exempt hours, as listed in the noise ordinance tables above. Construction noise primarily arises from the use of equipment, such as excavators, compactors, trucks, and other machinery. Noise would also be introduced in the form of trucks transporting excavated material from the construction site to staging areas and/or disposal sites. All of these noise sources would be intermittent and temporary, spanning the project's three year construction period. Approximately 200 LF of roadway would be disturbed per day for construction activities, including excavation, laying pipe, and backfilling as construction continues along the alignment path. Noise-generating construction activities would occur adjacent to a given sensitive receptor for only a few days at most, after which time the active construction area would be located more than 600 feet away. Residences near the disturbed areas would generally be exposed to construction activities for a couple or few days in total, limited to Monday through Friday.

The potential for temporary construction noise impacts are determined by the proximity of sensitive receptors to construction activities, estimated noise levels associated with construction activities, the potential for construction noise to interfere with daytime and nighttime activities, and whether construction noise at nearby receptors would exceed local noise ordinance standards. Typical construction activities associated with pipeline installation (e.g. the use of earthmoving equipment) would generate maximum noise levels (without noise controls) ranging from 70 dBA to 84 dBA at 50 feet from the source (Federal Highway Administration 2006). Table 15 provides the estimated noise levels for each phase of construction. As described in the noise setting above, the rate of attenuation (i.e., reduction) from point sources of noise is approximately 6 dBA for every doubling of distance.

Table 15 Estimated Noise Levels Generated during Construction Phases

Construction Phase	Combined Leq (dBA, CNEL)[1,2]
Single Family Residential (25 feet from closest construction)	
Site Preparation	87
Grading	86
Paving	89
Multi-Family Residential (70 feet from closest construction)	
Site Preparation	79
Grading	78
Paving	80
Single Family Residential (100 feet from closest construction)	
Site Preparation	76
Grading	75
Paving	78
Single Family Residential (150 feet from closest construction)	
Site Preparation	74
Grading	73
Building Construction	73
Paving	75

[1]A-weighted decibel (dBA) is defined as a decibel (dB) adjusted to be consistent with human response

[2]Community Noise Equivalent Level (CNEL) is the 24-hour average noise level of all hourly Leq measurements with a 10 dB penalty added to the night-time levels between 10 p.m. and 7 a.m. and a 5 dB penalty added to the evening levels between 7 p.m. and 10 p.m. to reflect people's extra sensitivity to noise during the night and the evening

Source: FHWA 2006, FTA 2006, City of Palm Desert 2017b

The project would be almost entirely located within 25 feet of residential property lines in the cities of Palm Desert, Indian Wells, and unincorporated Riverside County. It is possible that construction noise from pipeline installation could temporarily increase noise exposure to more than 60 dBA in residential areas, which exceeds the exterior noise standards for the cities of Palm Desert, Indian

Wells and the County of Riverside. However, as shown in Table 10, ambient noise levels near the sensitive receptors identified range between 51.4 dBA and 72.4 dBA. As stated in the City of Palm Desert's Municipal Code, the measured ambient noise level shall be the maximum allowable noise level when ambient noise levels exceed 55 dBA between the hours of 7:00 a.m. to 10:00 p.m. in residential areas (see Table 11). In most locations along the project alignment, it is anticipated that the temporary construction noise would exceed 55 dBA and potentially the ambient noise level as measured at the nearest sensitive receptor. Per Section 9.24.060.K of the City of Palm Desert Municipal Code and Section 9.06.041(e) of the City of Indian Wells Municipal Code, noise sources associated with construction during allowable hours, when internal combustion engines are equipped with suitable exhaust and intake silencers in good working order, are exempt from each City's noise ordinance. In addition, capital improvement projects of a governmental agency are exempted from the provisions of Riverside County's noise ordinance; therefore, the County's noise ordinance would not apply to the proposed project.

The rate of pipeline installation would limit the duration of pipeline construction along each approximately 200 LF stretch to one day, reducing the length of exposure of any particular noise receptors to a few days at most. Regardless of the existing regulatory framework, due to the range of equipment noise levels and the proximity to sensitive receptors, construction activities would temporarily subject sensitive receptors to a temporary increase in noise during daytime hours. Construction noise would be exempt in Riverside County and generally would occur during exempt hours in Palm Desert. Any increase in ambient noise levels from construction activities for a given sensitive receptor would be limited to a few days at most. Operation of the proposed project would not generate perceptible noise with the exception of the expanded pump station, which would be enclosed within a solid structure and would not substantially increase operational noise levels at WRP10. Therefore, due to the temporary and generally exempt noise increases associated with construction of the proposed project, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The FTA provides guidelines for when vibration impacts may be significant, depending on the frequency and sensitive receptor type. These guidelines are summarized in Table 16 below (FTA 2006).

Table 16 Groundborne Vibration Impact Criteria for General Assessment

Land Use Category	Groundborne Vibration Impact Levels (VdB)[1]		
	Frequent Events[2]	Occasional Events[3]	Infrequent Events[4]
Category 1: Buildings where vibration would interfere with interior operations[5]	65	65	65
Category 2: Residences and buildings where people normally sleep[6]	72	75	80
Category 3: Institutional land uses with primarily daytime use[7]	75	78	83

[1] VdB = vibration decibels

[2] "Frequent Events" is defined as more than 70 vibration events of the same source per day

[3] "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day

[4] "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day

[5] The limit of 65 VdB is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation vibration to define the acceptable vibration levels. Example Category 1 land uses include: sensitive research and manufacturing, hospitals with vibration-sensitive equipment, and university research operations

[6] This category covers all residential land uses and any buildings where people sleep, such as hotels and hospitals

[7] This category includes schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference

Construction-related vibration impacts would be less than significant for residential receptors if vibration levels are below the threshold of physical damage to buildings (95 VdB for extremely fragile historic buildings; 100 VdB other buildings) and if vibration events over 85 VdB would be infrequent with respect to the number of events per day.

Operation of the pipeline would not perceptibly increase groundborne vibration on the project site above existing conditions. Construction of the project could potentially increase groundborne vibration in the vicinity of the project site, but any effects would be temporary. The project site is almost entirely surrounded by sensitive receptors that would largely be within 25 feet of where construction would occur. Table 17 shows typical vibration levels associated with standard construction equipment that could be used for the project.

Table 17 Typical Vibration Levels Generated by Construction Equipment

Equipment[1]	Approximate VdB 25 Feet from the Source	Approximate VdB 50 Feet from the Source
Vibratory Roller	94	85
Large Bulldozer	58	78
Hoe Ram	87	78
Loaded Trucks	86	77
Jack Hammer	79	70

VdB: vibration decibels

[1]List not comprehensive of all equipment that would be used for the proposed project

Source: Harris Miller & Hanson, Inc. 1995

Based on the information presented in Table 17, residences at 25 feet from construction activities could be exposed to maximum vibration levels of approximately 94 VdB during construction.

As discussed above, 100 VdB is the general threshold where minor damage can occur in buildings. Because vibration levels would not reach 100 VdB, structural damage would not be expected to occur as a result of construction activities. Vibration levels during construction would exceed the FTA Guidelines' groundborne velocity level of 72 VdB at residences and buildings where people normally sleep. However, similar to the discussion under the noise analysis, construction activities would occur for only short durations as they move along the pipeline alignment and sensitive receptors near construction activities would experience only temporary increases in vibration levels. Further, as described in Section 2.0*, Project Description,* construction activities would generally be limited to between the hours of 7:00 a.m. and 5:00 p.m., which are outside of normal sleep hours. In addition, construction hours on golf courses would be coordinated with the appropriate Home Owner's Association (HOA) in order to minimize disturbance of residents and recreational users. Therefore, this impact would be less than significant.

LESS THAN SIGNIFICANT

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

f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?

The project site is located approximately 0.7 mile west of the Bermuda Dunes Airport, which is the only nearby airport. As stated in the *Project Site Setting* section above, the project site is not within the noise impact area for the airport (Riverside County Airport Land Use Commission 2004). There are no private airstrips near the project alignment. Construction of the proposed project would not expose workers to excessive noise levels. No impact would occur.

NO IMPACT

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3.13 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts?				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)	☐	☐	☐	■
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere	☐	☐	☐	■
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere	☐	☐	☐	■

a. Would the project induce substantial 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)?

The proposed project is intended to provide facilities to deliver non-potable irrigation water to seven existing golf courses, one RV resort, and one planned golf course development; recycled water used for golf course irrigation would supplant existing groundwater production and use. Provision of recycled water would not directly induce population growth, as it would not produce additional water supply for residential or commercial use. The proposed project would not result in the construction of new homes, new commercial or industrial uses, or a need for CVWD to hire additional employees. Therefore, no impact associated with direct or indirect population growth would occur.

NO IMPACT

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

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

The proposed project would primarily be constructed within existing roadways and does not include any features that would displace any existing housing or people. No impact would occur.

NO IMPACT

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3.14 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts?				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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	☐	☐	☐	■

a.1-5 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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, police protection, schools, parks, and/or other public facilities?

The proposed project does not include any features or facilities that would require additional or unusual fire or police protection resources. It is expected that construction workers would be local to Palm Desert, Indio, Indian Wells, and the surrounding Coachella Valley area, and construction would not generate new population growth. The existing CVWD workforce would operate the proposed project. In addition, the proposed project would not change existing demand for public services (e.g., schools, parks, or libraries) because population growth would not result from construction of the proposed project (see Section 3.13, *Population and Housing)*. Furthermore, the proposed project would reduce demands on groundwater, thereby enhancing the City of Palm Desert's ability to meet peak load water supplies during an emergency (City of Palm Desert 2016). No impact would occur.

NO IMPACT

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3.15 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts?				
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	☐	☐	☐	■
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment	☐	☐	☐	■

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?

As discussed in Section 3.13, *Population and Housing*, the proposed project would not directly or indirectly support population growth, and therefore, it would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. No impact would occur.

NO IMPACT

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

The proposed project does not propose recreational facilities and would not require the construction or expansion of any recreational facilities. As such, no impact would occur.

NO IMPACT

This page intentionally left blank.

3.16 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts?				
a. Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	☐	■	☐	☐
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	■	☐	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	■
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	☐	■
e. Result in inadequate emergency access?	☐	■	☐	☐
f. Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	☐	☐	☐	■

a. *Would the project conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?*

b. *Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?*

The Riverside County Transportation Commission (RCTC) is the designated Congestion Management Agency responsible for the development and implementation of the Congestion Management Program (CMP) in the project area. According to the current (year 2011) CMP, all regional roadways within the project area are operating at acceptable levels of service (RCTC 2011).

Construction staging would occur primarily within existing roadways and public rights-of-way within Palm Desert and the unincorporated Bermuda Dunes area in Riverside County. Construction activities would install approximately 200 LF of pipeline per day before moving to the next segment of pipeline. Any potential roadway lane closures would be temporary and phased as construction progresses along the pipeline alignment. Anticipated construction-related vehicle trips include construction workers traveling to and from the project work areas, haul trucks (including for import and export of excavated materials, as needed), and other trucks associated with equipment and material deliveries. During peak construction months, construction-related vehicle trips would number approximately 24 one-way trips per day. Any potential local traffic impacts from this increase in vehicle traffic would be temporary, as construction activities would move along the alignment.

Because construction is a short-term activity, and impacts will move as work progresses along the pipeline corridor, construction-related traffic impacts would not be substantial. However, to ensure appropriate traffic controls are implemented and potential traffic impacts are less than significant, the proposed project will implement several transportation mitigation measures, originally identified in the SPEIR for the 2010 WMP Update.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Mitigation Measures

TRA-1 Emergency Service Providers

The Project Manager shall notify emergency service providers (fire and police departments within a 0.5 mile radius of the alignment) with construction contact names, locations, schedules, and traffic plans, if applicable, prior to the start of construction.

TRA-2 Traffic Control Plan

To mitigate temporary traffic disruption and ensure public safety, the construction contractor will prepare a traffic control plan for construction areas located in or near roadways whose traffic volumes exceed Riverside County Levels of Service or the affected city's criteria. The construction contractors will provide the traffic control plans to CVWD's Construction Inspector.

TRA-3 High Volume Intersections

High volume intersections (those in which traffic volumes exceed city or county levels of service criteria) will be avoided if possible and identified in the Traffic Control Plan.

c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

As discussed in Section 8, *Hazards and Hazardous Materials*, the project corridor would be located approximately 0.7 mile southwest of the Bermuda Dunes Airport. The proposed project would extend into Zones D and E, south of the airport (County of Riverside 2004). The proposed pipeline would be installed belowground, and construction and operation of the pipeline do not represent incompatible uses in the vicinity of the airport. The proposed project does not involve any direct or indirect changes to air traffic patterns or frequency, runway alignments, or flight approach zones. No impact would occur.

NO IMPACT

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

Project facilities consist of NPW facilities, which would have no impact on street design. The proposed project would therefore not create or substantially increase a traffic hazard due to a design feature.

NO IMPACT

e. Would the project result in inadequate emergency access?

Lane closures and other potential traffic impacts caused by construction activities would have potential to impede emergency response to those areas, or to areas accessed via those routes. To ensure that project construction will not interfere with emergency response times or other performance public service objectives, the proposed project will implement Mitigation Measures TRA-1, TRA-2, and TRA-4. With mitigation, impacts would remain less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Mitigation Measures

The SPEIR for the Coachella Valley WMP identifies the following mitigation measure to prevent delays in emergency response times due to lane closures that may be needed during construction activities (CVWD 2011). In addition, the schools along the project alignment will be provided notification of construction activities.

TRA-4 Notification of Construction to Service Providers and Educational Institutions

Fourteen days prior to commencement of project construction, construction notifications will be sent to police departments, fire departments, hospitals, and schools located within a 0.5-mile radius of the project site so that detour routes for emergency responses can be planned for the construction period.

f. Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?

The proposed project involves construction and operation of recycled water infrastructure that would not conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities. The project corridor would be located in existing roadways, public rights-of-way, and golf courses; project facilities would be located primarily underground. Construction-related impacts would be temporary and roadways would be restored to match the surrounding road type once construction is complete. No impact would occur.

NO IMPACT

3.17 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	■	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	■	☐

a., b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is (a) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or (b) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?

Tribal cultural resources are defined in PRC 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." Assembly Bill 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code Section 21084.2). It further states that the lead agency shall establish measures to

avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (Public Resources Code Section 21084.3).

AB 52 establishes a formal project consultation process for California Native American tribes and lead agencies regarding tribal cultural resources, referred to as government-to-government consultation. Per Public Resources Code Section 21080.3.1(b), the AB52 consultation process must begin prior to release of a negative declaration, mitigated negative declaration, or environmental impact report. Native American tribes to be included in the formal consultation process are those that have requested notice of projects proposed within the jurisdiction of the lead agency. AB 52 provides dedicated timeframes for inquires and responses regarding consultation and information sharing. AB 52 also provides for confidential information sharing between the governments involved for a meaningful consultation process.

In April 2018, CVWD distributed AB 52 consultation letters for the proposed project; including project information, map, and contact information to each of the eight (8) Native American tribes previously requesting to consult on CVWD projects (a copy of the letter can be found in Appendix F). The tribal governments that were provided an AB 52 consultation letter (via certified mail) include the following list of recipients:

- Agua Caliente Band of Cahuilla Indians
- Augustine Band of Cahuilla Indians
- Cabazon Band of Mission Indians
- La Posta Band of Mission Indians
- Morongo Band of Mission Indians
- Soboba Band of Luiseno Indians
- Torres Martinez Desert Cahuilla Indians
- Twenty-Nine Palms Band of Mission Indians

Under AB 52, Native American tribes have 30 days to respond and request further project information and request formal consultation.

To date (of public circulation this Initial Study), the Agua Caliente Band of Cahuilla Indians and the Augustine Band of Cahuilla Indians have provided formal response. CVWD's environmental services staff will continue to work with the tribes, and have provided a copy of the cultural resources report prepared by a qualified professional archeologist, where requested.

Ground disturbance associated with the proposed project has the potential to unearth previously unknown cultural resources of Native American origin that could be considered tribal cultural resources. In addition, Section 106 consultation with local Native American tribes conducted for the project indicated that the project alignment is of interest to and within the Traditional Use Area of several Native American groups. However, no specific tribal cultural resources have been identified within the project alignment based on the records search completed at the Eastern Information Center, a records search of the Sacred Lands File through the NAHC, and consultation with Native American groups under Section 106. As described above, AB 52 consultation is ongoing and may result in identification of specific tribal cultural resources. However, no specific resources have been identified at this time.

Therefore, impacts to known tribal cultural resources would be less than significant. However, in order to reduce this potential impact, Measure CR-1, as described in Section 3.5, *Cultural Resources*,

is recommended as a standard best management practice to be implemented in the event of an unanticipated discovery of cultural resources, tribal or otherwise, during project construction.

LESS THAN SIGNIFICANT IMPACT

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3.18 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts?				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board	☐	☐	■	☐
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	☐	☐	■	☐
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	☐	☐	☐	■
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed	☐	☐	☐	■
e. 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	☐	☐	☐	■
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs	☐	☐	■	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste	☐	☐	■	☐

a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

b. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The proposed project would not generate sanitary wastewater or otherwise contribute to an increase in wastewater treatment. The proposed project itself would merely convey NPW from the WRP10 to users. Recycled water use would comply with SWRCB's adopted General Waste Discharge Requirements (WDRs) for Landscape Irrigation Uses of Municipal Recycled Water (Recycled Water General Permit) (Order No. 2010-0108). Compliance with the Recycled Water General Permit would ensure the reasonable protection of surface water and groundwater within the project area. With implementation of the required WDRs, the proposed project would not exceed wastewater treatment requirements of the SWRCB.

LESS THAN SIGNIFICANT IMPACT

c. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The proposed project would not result in significant new impervious surfaces. The project would not require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities. No impact would occur.

NO IMPACT

d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed

e. 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?

The proposed project consists of the construction and operation of NPW facilities. Given that the proposed project is designed to serve existing irrigation demands with currently available recycled water, and the proposed project itself includes expansion of infrastructure to meet those demands, there would be adequate capacity to serve the demands of the project area. Project construction water requirements will be met via CVWD's existing supplies and facilities.

The proposed project would not introduce a need for potable water or wastewater treatment, nor would it require new or expanded entitlements. Moreover, the proposed project would have a beneficial effect on potable water demands by providing NPW for irrigation use as a substitute for groundwater and potable water. No impact would occur.

NO IMPACT

f Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

g Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Burrtec Waste and Recycling Services provides solid waste and recycling collection services for western Riverside County. Solid waste is directed to the Badlands Sanitary Landfill, a Class III landfill operated by the Riverside County Department of Waste Resources. The Badlands Sanitary Landfill is located in Moreno Valley, approximately 45 miles northwest of the project site. According to the California Department of Resources Recycling and Recovery, the Badlands Sanitary Landfill has a permitted capacity of 34.4 million cubic yards and a maximum disposal capacity of 4,500 tons per day. As of January 2015, the remaining capacity at the landfill was approximately 15.7 million cubic yards. The landfill solid waste permit lists an estimated closure date of 2022. Badlands Sanitary Landfill accepts a variety of materials, including construction and demolition materials, contaminated soil, agricultural waste, wood waste, and mixed municipal waste. (CalRecycle 2017a)

The Riverside County Department of Waste Resources also operates the Mecca II Landfill, located in the unincorporated community of Mecca, approximately 14 miles south of the project site. The Mecca II Landfill has a permitted capacity of 452,182 cubic yards and a maximum disposal capacity of 400 tons per day. As of August 2014, the remaining capacity was approximately 6,371 cubic yards. The landfill solid waste permit lists an estimated closure date of 2098. The landfill accepts a variety of materials including construction and demolition materials, agricultural waste, green materials, and mixed municipal waste. (CalRecycle 2017b)

Construction activities may temporarily generate solid waste, which would be disposed of in accordance with all applicable federal, State, and local statutes and regulations. As described above, nearby landfills have the capacity to accept solid waste generated by project construction activities. Once constructed, project operation would not generate solid waste. Potential impacts would therefore be less than significant.

LESS THAN SIGNIFICANT IMPACT

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3.19 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, 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?	☐	☐	■	☐
b. Does 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)?	☐	☐	■	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	■	☐

a. Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, 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?

The majority of the proposed alignment is within previously developed urban area. The proposed project consists primarily of the construction of underground pipelines and an upgraded pump station at the WRP10 facility. As a result, the project would not have the potential to substantially reduce the habitat of fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. In addition, the project would not eliminate important examples of the major periods of California history or prehistory as none are present in the project area.

LESS THAN SIGNIFICANT IMPACT

b. Does 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)?

As described in the discussion of environmental checklist Sections 3.1 through 3.19, with respect to all environmental issues, the proposed project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated. Construction activities would install approximately 200 LF of pipeline per day before moving to the next segment of pipeline. The potential effects would be temporary and phased as construction progresses along the pipeline alignment. If other unforeseen projects happen to occur at the same time as the proposed project within the project corridor, adjacent sensitive receptors may be exposed to greater levels of impact from construction activities (e.g. noise). However, if other construction projects are occurring at the same time in the immediate area, any cumulative effects would also be short-term and temporary. Therefore, the proposed project would not result in a considerable contribution to any cumulative impact significant or otherwise.

LESS THAN SIGNIFICANT IMPACT

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

As detailed in the preceding sections, the proposed project would not result, either directly or indirectly, in substantial adverse effects. Where potential environmental impacts would occur, mitigation measures would be implemented to reduce or avoid an impact. With adherence to the mitigation program the proposed project would not result in substantial adverse effects on either the environment or human beings.

LESS THAN SIGNIFICANT IMPACT

Chapter 4: Federal Cross-Cutting Environmental Regulations Evaluation

The proposed project may receive funding under a state program that also has a federal funding component. Therefore, to assist in compliance with the federal environmental requirements for the funding program, this document includes analysis pertinent to several federal cross-cutting regulations (also referred to as federal cross-cutters or CEQA-Plus). The basic rules for complying with cross-cutting federal authorities are set-out in the Clean Water State Revolving Fund regulations at 40 CFR § 35.3145 and in the Drinking Water State Revolving Fund regulations at 40 CFR § 35.3575.

This section describes the status of compliance with relevant federal laws, executive orders, and policies, and the consultation that has occurred to date or will occur in the near future. The topics are based in part on the SWRCB's CWSRF Program Federal Cross-cutting Environmental Regulations Evaluation Form for Environmental Review and Federal Coordination. The CWSRF Program is partially funded by the USEPA. Therefore, the State Water Board must document that projects meet the federal cross-cutters requirements.

4.1 Federal Endangered Species Act

Section 7 of the FESA requires federal agencies, in consultation with the Secretary of the Interior, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of these species. Under Section 7, a project that could result in incidental take of a listed threatened or endangered species must consult with the USFWS to obtain a Biological Opinion (BO). If the BO finds that the project could jeopardize the existence of a listed species ("jeopardy opinion"), the agency cannot authorize the project until it is modified to obtain a "nonjeopardy" opinion.

For the purpose of this project, the SWRCB would act as the federal lead or responsible agency. The information contained within the Initial Study/Mitigated Negative Declaration and the Biological Resources Assessment (Rincon, 2018) may be used to support project compliance with the Federal Endangered Species Act and the Migratory Bird Treaty Act (MBTA),

Section 3.4, *Biological Resources*, describes that the project site does not contain suitable habitat for any special status plant or wildlife species. While 13 special status plant species have been intersection of Frank Sinatra Drive and Portola Avenue. The site was determined not to provide suitable habitat for any of the 13 special status wildlife species previously documented within a five-mile radius by the CNDDB. Accordingly, these species do not have the potential to occur within the project site. No special status plant or wildlife species were observed within the project area during the survey effort. While Coachella Valley milk-vetch was observed within the study area, it is located outside the disturbance footprint of the project, within sandy undisturbed land. All trenching near this population will occur within paved areas. Therefore, the proposed project is not expected to result in direct or indirect impacts to this special-status plant species.

Since the project site provides general nesting bird habitat, Mitigation Measure BIO-1 compliance with MBTA and CFGC requirements would be required to reduce impacts to nesting birds to a less

than significant level. Thus, the proposed project would not jeopardize any listed species and the lead agency would be in compliance with the FESA.

4.2 National Historic Preservation Act, Section 106

The purpose of the NHPA is to protect, preserve, rehabilitate, or restore significant historical, archaeological, and cultural resources. Section 106 requires federal agencies to take into account effects on historic properties. Section 106 review involves a step-by-step procedure described in detail in the implementing regulations (36 CFR Part 800).

As described in Section 3.5, *Cultural Resources*, a cultural resource assessment for the proposed project was conducted. The analysis includes a Section 106 evaluation for the proposed project and can be submitted as part of the consultation process with the State Historic Preservation Officer (SHPO). Concurrence by SHPO would ensure compliance with the NHPA. No cultural resources were identified within the project site during this study. Therefore, less than significant impacts to historical resources under CEQA and no effects to historic properties under the NHPA for the proposed project are expected. Along with adherence to existing regulations concerning the unanticipated discovery of human remains, CR-1 is recommended as a BMP in the event of an unanticipated discovery of cultural resources to further reduce the already less than significant impact to cultural resources.

4.3 Clean Air Act

U.S. Congress adopted general conformity requirements as part of the FCAA Amendments in 1990 and the USEPA implemented those requirements in 1993 (Sec. 176 of the FCAA (42 United States Code [U.S.C.] § 7506) and 40 CFR Part 93, Subpart B). General conformity requires that all federal actions "conform" with the State Implementation Plan as approved or promulgated by USEPA. The purpose of the general conformity program is to ensure that actions taken by the federal government do not undermine State or local efforts to achieve and maintain the national ambient air quality standards. Before a federal action is taken, it must be evaluated for conformity with the State Implementation Plan. All "reasonably foreseeable" emissions predicted to result from the action are taken into consideration. These include direct and indirect emissions, and must be identified as to location and quantity. If it is found that the action would create emissions above *de minimis* threshold levels specified in USEPA regulations (40 CFR § 93.153(b)), or if the activity is considered "regionally significant" because its emissions exceed 10 percent of an area's total emissions, the action cannot proceed unless mitigation measures are specified that would bring the proposed project into conformance.

As described in Section 3.3, *Air Quality*, the project area lies within the SSAB. The results of the air quality modeling showed that pollutant emissions would not exceed federal General Conformity *de minimis* thresholds (Appendices A and B). Accordingly, the lead agency would be in compliance with the FCAA.

4.4 Coastal Zone Management Act

The Coastal Zone Management Act (CZMA), passed by Congress in 1972 and managed by the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management, is designed to balance completing land and water issues in coastal zones. It also aims

to "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone." Within California, the CZMA is administered by the Bay Conservation and Development Commission, the California Coastal Conservancy, and the California Coastal Commission.

No portion of the proposed project is within the coastal zone. The project area is located approximately 70 miles east of the Pacific Coast. Therefore, the CMZA does not apply to the proposed project.

4.5 Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA) requires a federal agency to consider the effects of its actions and programs on the nation's farmlands. The FPPA is intended to minimize the impact of federal programs with respect to the conversion of farmland to nonagricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with State, local, and private programs and policies to protect farmland.

As described in Section 3.2, *Agriculture and Forestry Resources*, the project corridor is not currently in agricultural production and does not contain Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or land with a Williamson Act contract (DOC 2016). No part of the site is located on forest land or timber land (County of Riverside 2014). Therefore, the proposed project would not adversely affect any farmland areas and the lead agency would be in compliance with the FPPA.

4.6 Executive Order 11988 – Floodplain Management

Executive Order (EO) 11988 requires federal agencies to recognize the values of floodplains and to consider the public benefits from restoring and preserving floodplains.

As described in Section 3.9, *Hydrology and Water Quality*, the project corridor is not located within a 100-year Flood Hazard Area (FEMA 2017). As the proposed pipelines would be located underground, they would not interfere with floodplain management or expose people or structures to a significant risk of loss, injury or death involving flooding. As such, the lead agency would be in compliance with this EO.

4.7 Federal Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Executive Order 13168

The MBTA and the Bald and Golden Eagle Protection Act prohibit the take of migratory birds (or any part, nest, or eggs of any such bird) and the take and commerce of eagles. EO 13168 (Sep 22, 2000) requires that any project with federal involvement address impacts of federal actions on migratory birds.

As described in Section 3.4, *Biological Resources*, the proposed project would have less than significant impact on nesting birds with implementation of mitigation measure BIO-1 if construction cannot be avoided during nesting season. Thus, the lead agency would be in compliance with this EO.

4.8 Executive Order 11990 – Protection of Wetlands

Under EO 11990 (May 24, 1977), federal agencies must avoid affecting wetlands unless it is determined that no practicable alternative is available.

As described in Section 3.4, *Biological Resources*, the project site does not support federally protected wetlands as defined by CWA Section 404 and therefore no impacts would occur. Thus, the lead agency would be in compliance with EO 11990.

4.9 Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act was passed in 1968 to preserve and protect designated rivers for their natural, cultural, and recreational value.

There are no designated Wild and Scenic Rivers within the project area, nor will any designated rivers be adversely affected by the proposed project. As a result, the Wild and Scenic Rivers Act does not apply to the proposed project.

4.10 Safe Drinking Water Act – Source Water Protection

Section 1424(e) of the Safe Drinking Water Act established the USEPA's Sole Source Aquifer Program. This program protects communities from groundwater contamination from federally-funded projects.

Within USEPA's Region 9, which includes California, there are nine sole source aquifers. None of these sole source aquifers are located within the project area. Therefore, the Sole Source Aquifer Program does not apply to the proposed project, and the lead agency would be in compliance with Section 1424(e) of the Safe Drinking Water Act.

4.11 Executive Order on Trails for America in the 21st Century

The EO on Trails for America (Jan, 18, 2001) requires federal agencies to protect, connect, promote, and assist trails of all types throughout the United States. According to the City of Palm Desert's trail maps, no trails exist in the vicinity of the project corridor (City of Palm Desert 2018). In addition, no trails have been identified within the project corridor in unincorporated Riverside County. As a result, no adverse effects on trails would occur and the lead agency is in compliance with this EO.

4.12 Executive Order 13007 – Indian Sacred Sites

Sacred sites are defined in Executive Order 13007 (May 24, 1996) as "any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site."

The proposed project would not be located on or impact any federal lands and therefore would not affect any Indian sacred sites under this EO.

4.13 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) of 1976 as amended (16 U.S.C. § 1801 et seq.), is the primary act governing federal management of fisheries in federal waters, from the 3-nautical-mile state territorial sea limit to the outer limit of the U.S. Exclusive Economic Zone. It establishes exclusive U.S. management authority over all fishing within the Exclusive Economic Zone, all anadromous fish throughout their migratory range except when in a foreign nation's waters, and all fish on the continental shelf. The Act also requires federal agencies to consult with NMFS on actions that could damage Essential Fish Habitat (EFH), as defined in the 1996 Sustainable Fisheries Act (Public Law 104-297).

The proposed project would not be located in or impact any U.S. federal waters regulated under the Magnuson-Stevens Act. EFH includes those habitats that support the different life stages of each managed species. A single species may use many different habitats throughout its life to support breeding, spawning, nursery, feeding, and protection functions. EFH can consist of both the water column and the underlying surface (e.g., streambed) of a particular area. The project area is located primarily within existing roadways. As described in Section 3.4, *Biological Resources*, the project is not expected to have adverse effect on resident or migratory fish, wildlife species, or fish habitat in the project area.

4.14 Environmental Justice

This section describes the existing socioeconomic resources in the proposed project area and the regulatory setting pertaining to environmental justice-related issues. This section also evaluates the potential for the proposed project to disproportionately affect minority or low-income groups. The USEPA defines environmental justice as: "The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means no group of people, including racial, ethnic, or economic groups should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, State, local, and tribal programs and policies" (USEPA 2016).

Minority and Low Income Communities

According to USEPA guidelines, a minority population is present in a study area if the minority population of the affected area exceeds 50 percent, or if the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. The majority of the project alignment would be located in the City of Palm Desert. According to the United States Census Bureau's 2012 to 2016 American Community Survey (ACS) estimates, approximately 82.5 percent of the total population in Palm Desert is identified as white. Therefore, the area surrounding the project corridor does not have a minority population exceeding 50 percent.

USEPA guidelines recommend that analyses of low-income communities consider the United States Census Bureau's poverty level definitions, as well as applicable State and regional definitions of low-income and poverty communities. According to 2012 to 2016 ACS estimates, 12.4 percent of people in Palm Desert are considered to be in poverty, as defined by the United States Census Bureau. In comparison, the percentage of persons in poverty for the entire State of California was 14.3 percent for the same time period. (United States Census Bureau 2017)

The DWR defines a Disadvantaged Community (DAC) as a community with a median household income (MHI) less than 80 percent of the California MHI. According to 2012 to 2016 ACS data, the statewide MHI was $63,783. A DAC would therefore be a community with a MHI of $51,026 or less. For this time period, the Palm Desert's MHI was $53,701. Therefore, according to DWR's definition of low income/disadvantaged communities, the City of Palm Desert is not considered to be low income or disadvantaged. (United States Census Bureau 2017)

Conclusion

For the purposes of this analysis, an impact related to environmental justice would be significant if the proposed project would cause impacts to minority or low-income populations that are disproportionately high and adverse, either directly, indirectly, or cumulatively.

The proposed pipelines would deliver NPW from WRP10 to new NPW users in Palm Desert and the unincorporated community of Bermuda Dunes. Although the construction of the pipelines has the potential for short-term effects, the provision of recycled water for outdoor irrigation would have the long-term benefit of increasing the reliability of groundwater and potable water supplies for all CVWD customers.

Although construction would generate impacts (e.g., dust, traffic, and noise), such activities would be intermittent and temporary, and would cease upon completion of work activities. Where potential impacts could occur, mitigation measures have been identified to reduce such effects to less-than-significant levels. The proposed project would therefore not result in any disproportionately high impacts on minority or low income communities. Thus, no adverse environmental justice impacts would occur.

References

Bibliography

AEP (Association of Environmental Professionals). 2015. *Beyond 2020: The Challenges of Greenhouse Gas Reduction Planning by Local Governments in California.* March 16, 2015. https://www.califaep.org/images/climate-change/AEP_White_Paper_Beyond_2020.pdf

Alles, D. L. 2011. Geology of the Salton Trough. Western Washington University. http://fire.biol.wwu.edu/trent/alles/GeologySaltonTrough.pdf

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: vascular plants of California, second edition. University of California Press, Berkeley

California Geologic Survey (CGS). 2002. California Geomorphic Provinces. Note 36.

CalEPA (California Environmental Protection Agency). 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*. March 2006.

California Geological Survey (CGS). 2007. *Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the Palm Springs Production-Consumption (P-C) Region, Riverside County, California.* 2007. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_198/Plate%201.pdf

CalRecycle (California Department of Resources Recycling and Recovery). 2017a. *Facility/Site Summary Details: Badlands Sanitary Landfill (33-AA-0006).* 2017. http://www.calrecycle.ca.gov/SWFacilities/Directory/33-AA-0006/Detail/

_____. 2017b. Facility/Site Summary Details: Mecca Landfill II (33-AA-0071). 2017. http://www.calrecycle.ca.gov/SWFacilities/Directory/33-AA-0071/Detail/

Caltrans (California Department of Transportation). 2011. *California Scenic Highway Mapping System.* September 2011. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm

CAL FIRE (California Department of Forestry and Fire Protection). 2009. *Very High Fire Hazard Severity Zones in LRA: Western Riverside County*. December 24, 2009. http://frap.fire.ca.gov/webdata/maps/riverside_west/fhszl_map.60.pdf

CARB (California Air Resources Board). 2017. *California's 2017 Climate Change Scoping Plan*. December 14, 2017. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

CGS (California Geological Society). 2015. *GeoGem Note 53: Colorado Desert Geomorphic Province*. Sacramento, CA. 2015. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_230/Notes_LR/CGS_SR230_ColoradoDesert_GeomorphProvince_lr.pdf

CVAG (Coachella Valley Association of Governments), 2007. *Coachella Valley Multiple Species Habitat Conservation Plan.* Online at: http://www.cvmshcp.org/. Accessed November 2017.

CVWD (Coachella Valley Water District). 2016a. *2015 Urban Water Management Plan*. Prepared for CVWD by MWH. July 1, 2016. http://www.cvwd.org/ArchiveCenter/ViewFile/Item/516

_____. 2016b. *Chromium-6 Water Treatment Facilities Project Draft EIR.* April 2016. http://www.cvwd.org/350/Chromium-6-Environmental-Impact-Report

_____. 2012a. *Coachella Valley Water Management Plan 2010 Update.* Arcadia, CA. January 2012. http://www.water.ca.gov/wateruseefficiency/sb7/docs/2014/plans/CoachellaValley%20WD%202013_10_01_WaterManagementPlanFinalReport.pdf

_____. 2012b. *Final Subsequent Program Environmental Impact Report for the Coachella Valley Water Management Plan Update*. Coachella, CA. January 2012. http://www.cvwd.org/ArchiveCenter/ViewFile/Item/323

_____. 2011. *Administrative Draft Subsequent Program Environmental Impact Report SCH No. 2007091099*. Coachella, CA. July 2011. http://www.water.ca.gov/irwm/grants/docs/Archives/Prop84/Submitted_Applications/P84_2014Drought/Indio%20Water%20Authority%20(201498760026)/Attachment%203%20-%20References%20(provided%20by%20CD)/References/CVWD_2011_Draft%20EIR%20CVWMP%202010%20Update.pdf

Colorado River Basin RWQCB (Regional Water Quality Control Board). 2017. Water Quality Control Plan: Colorado River Basin – Region 7. https://www.waterboards.ca.gov/coloradoriver/water_issues/programs/basin_planning/docs/bp032014/entire_basinplan_combined.pdf

DOC (California Department of Conservation). 2016. *California Important Farmland Finder.* Sacramento, CA. https://maps.conservation.ca.gov/DLRP/CIFF/

DWR (California Department of Water Resources). 2014. *CASGEM Groundwater Basin Prioritization Results.* June 2014. http://www.water.ca.gov/groundwater/casgem/pdfs/lists/StatewidePriority_Abridged_05262014.pdf

Deméré, T. A. 2002. Silent Beaches – Ancient Lake Cahuilla and its geologic setting. Biodiversity Research Center of the Californias, Paleontology, June 2002, San Diego Natural History Museum. http://www.sdnhm.org/archive/research/paleontology/lakecahuilla.html

Department of Toxic Substances Control (DTSC). 2018. *EnviroStor Database*. http://www.envirostor.dtsc.ca.gov/public

Dibblee, T.W., Jr., and Minch, J.A. 2004. Geologic map of the Desert Hot Springs quadrangle, Riverside County, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-121, scale 1:24,000.

_____. 2008. Geologic map of the Palm Desert & Coachella 15-minute quadrangles, Riverside County, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-373, scale 1:62,500.

FEMA (Federal Emergency Management Agency). 2017. *Flood Insurance Rate Maps # 06065C2226H, 06065C2227H, 06065C2231H, 06065C1615G*. Riverside County, CA. April 19, 2017. http://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30&extent=-116.38618585782994,33.71399071399036,-116.27563593107229,33.7610988540299

Federal Highway Administration. 2006. "Construction Noise Handbook". Last modified: August 2006. https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/ Accessed November 2017.

Federal Transit Administration (FTA). 2006. *Transit Noise and Vibration Impact Assessment.* Washington, D.C. May 2006. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf

Governor's Office of Planning and Research. 2017. *State of California General Plan Guidelines.* Sacramento, CA. July 31, 2017. http://opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf

Harris Miller & Hanson, Inc. 1995. *Transit Noise and Vibration Assessment.* April 1995.

Indian Wells, City of. 2017. "Indian Wells Municipal Code." Last modified: July 2017. http://qcode.us/codes/indianwells/. Accessed January 2018.

_____. 2015. *Ordinance No. 684, An Ordinance of the City Council of the City of Indian Wells, California, Amending Chapter 9.06 Pertaining to Noise Violations and Enforcement.* Indian Wells, CA. February 5, 2015. http://www.cityofindianwells.org/civicax/filebank/blobdload.aspx?BlobID=16749

_____. 2013. *General Plan*. Indian Wells, CA. November 7, 2013. http://www.cityofindianwells.org/civicax/filebank/blobdload.aspx?blobid=15580

_____. 2010. *Truck Route Map.* [map]. Tabular digital data and vector digital data. No scale. Indian Wells, CA. July 31, 2010. http://www.cityofindianwells.org/civicax/filebank/blobdload.aspx?blobid=21454. Accessed January 2018.

Ingwall, R. 2008. Park Paleontology, Anza-Borrego Desert State Park. http://www.anzaborregopaleo.org/park_paleontology.html

National Park Service (NPS). 1983. Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines. Electronic document. Accessed June 2017. http://www.nps.gov/history/local-law-Arch_Standards.htm

Norris, R. M., 1979. Lake Cahuilla High Shorelines. In A.G. Sylvester, (ed.), Rifting, Transpression, and Neotectonics in the Mecca Hills, Salton Trough. Fall Field Trip Guide Book, September 25-26, 1999, Society for Sedimentary Geology, Pacific Section.

Palm Desert, City of. 2018. *Hiking Trails Map*. Palm Desert, CA. http://www.cityofpalmdesert.org/our-city/departments/parks-recreation/test-trails-standard-map

_____. 2016. *City of Palm Desert General Plan*. Palm Desert, CA. November 10, 2016. http://www.cityofpalmdesert.org/home/showdocument?id=16858

_____. 2010. *Environmental Sustainability Plan*. City of Palm Desert, CA. February 11, 2010. http://www.cityofpalmdesert.org/home/showdocument?id=10652

_____. 2008. *Palm Desert Greenhouse Gas Inventory*. City of Palm Desert, CA. 2008. http://www.cityofpalmdesert.org/home/showdocument?id=10651

Porras, L. and B. Vargas 2017 *Phase I Cultural Study for the Coachella Valley Water District Non-Potable Connections Project*. Rincon Consultants Project No. 17-04981. Report on file, Eastern Information Center, University of California, Riverside.

RCTC (Riverside County Transportation Commission). 2011. *Riverside County Congestion Management Program.*

Riverside, County of. 2014. *General Plan Update Project: General Plan Amendment No. 960. Environmental Impact Report No. 521.* Riverside, CA. March, 2014. http://planning.rctlma.org/ZoningInformation/GeneralPlan/GeneralPlanAmendmentNo960EIRNo521CAPMarch2014/DraftEnvironmentalImpactReportNo521.aspx

____. 2004. *Riverside County Airport Land Use Compatibility Plan*. Adopted by Riverside County Airport Land Use Commission. Santa Rosa, CA. October 14, 2004. http://planning.rctlma.org/Portals/0/genplan/general_plan_2016/appendices/Appendix%20L-1%20_120815Part-1.pdf?ver=2016-04-01-142051-443

Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. SVP Impact Mitigation Guidelines Revision Committee.

SCAQMD (South Coast Air Quality Management District). 2017a. *Air Quality Management Plan*. March 2017. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15

_____. 2017b. *California Emissions Estimator Model User Guide, Appendix A Calculations Details for CalEEMod.* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6

_____. 2008. *Final Localized Significance Threshold Methodology*. July 2008. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2

_____.2005. *Sample Construction Scenarios for Projects Less than Five Acres in Size.* February 2005. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-sample-construction-scenario-report.pdf?sfvrsn=2

SWRCB. (State Water Resources Control Board). 2018. *GeoTracker Database*. Accessed March 22, 2018. http://geotracker.waterboards.ca.gov/

_____. 2017. *State Environmental Review Process: State Water Resources Control Board Clean Water State Revolving Fund Program*. April 2017. https://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/policy0513/appendix_i_envguide.pdf

United States Census Bureau. 2017. *2012-2016 American Community Survey 5-year Estimates: City of Palm Desert, California.* https://www.census.gov/quickfacts/fact/table/CA,palmdesertcitycalifornia/PST045216

USDA (U.S. Department of Agriculture). 2017. *Web Soil Survey.* 2017. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

USEPA (U.S. Environmental Protection Agency). 2016. *Environmental Justice.* November 16, 2017. https://www.epa.gov/environmentaljustice

_____.2017. *General Conformity De Minimis Emission Levels*. August 4, 2017. https://www.epa.gov/general-conformity/de-minimis-emission-levels

Waters, M. R. 1983. Late Holocene lacustrine chronology and archaeology of ancient Lake Cahuilla, California. Quaternary Research, v. 19, Issue 3, p. 373–387.

Whistler, D. P., Lander, E. B., and Roeder, M. A. 1995. A diverse record of microfossils and fossil plants, invertebrates, and small vertebrates from the late Holocene Lake Cahuilla beds, Riverside County, California. In Remeika, P., and Sturz, V., (eds.), Paleontology and Geology of the Western Salton Trough Detachment, Anza-Borrego Desert State Park, California. San Diego Geological Society.

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