



Subsequent
Initial Study and Mitigated
Negative Declaration
Cactus Avenue Corridor
Groundwater Wells Project

State Clearinghouse # 2020030267

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Acronyms

Acronym	Definition
AB	Assembly bill
AFY	Acre-feet per year
AHPA	Archaeological and Historic Preservation Act
Basin Plan	Santa Ana Basin Water Quality Control Plan
BMPs	Best Management Practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalFire	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CMP	Congestion Management Plan
COCs	Contaminants of Concern
CZMA	Coastal Zone Management Act
DWSAP	Drinking Water Source Assessment Program
DWSRF	Drinking Water State Revolving Fund
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
EMWD	Eastern Municipal Water District
EOP	Emergency Operations Plan
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act

Acronym	Definition
FWCA	Fish and Wildlife Coordination Act
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
LHMP	Local Hazard Mitigation Plan
LOS	level of service
LRA	Local Responsibility Area
MARB	March Air Reserve Base
MND	Mitigated Negative Declaration
MMRP	Mitigation Monitoring and Reporting Program
MRZ	Mineral Resource Zone
MSHCP	Multiple Species Habitat Conservation Plan
NAAQS	National Ambient Air Quality Standards
ND	Negative Declaration
NHMLAC	Natural History Museum of Los Angeles County
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
O&M	operations and maintenance
OPR	California Governor's Office of Planning and Research
PRC	Public Resources Code
PVC	polyvinyl chloride
PCE	perchloroethylene
RCTC	Riverside County Transportation Commission
RCFCWCD	Riverside County Flood Control and Water Conservation District
RTA	Riverside Transit Agency
RWQCB	Regional Water Quality Control Board

Acronym	Definition
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SGMA	Sustainable Groundwater Management Act
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TDS	total dissolved solids
US EPA	United States Environmental Protection Agency
UWMP	Urban Water Management Plan
VHFHSZ	very high fire hazard severity zone
VMT	vehicle miles traveled
VOC	volatile organic compound

1. INTRODUCTION

This document is an Initial Study (IS) and Subsequent Mitigated Negative Declaration (MND) for the Raw Water Conveyance Pipeline Phase III, a component of the Cactus Avenue Corridor Groundwater Wells Project. An IS/MND for the Cactus Avenue Corridor Groundwater Wells Project was adopted in May 2020 and an Addendum to the MND was adopted in February 2021 (State Clearinghouse # 2020030267), which are referred to hereafter as the “2020 IS/MND and Addendum” or “original approved project”. This Subsequent IS/MND has been prepared pursuant to the California Environmental Quality Act (CEQA), Public Resources Code (PRC) Section 15162.

1.1 Project Background

The Eastern Municipal Water District (EMWD) Board of Directors adopted the IS/MND for the Cactus Avenue Corridor Groundwater Wells Project in May 2020, and Addendum Number 1 to the MND in February 2021. Later in 2021, EMWD identified the need to include additional facilities, referred to as the Raw Water Conveyance Pipeline Phase III, in the project analyzed under the 2020 IS/MND and Addendum. A Subsequent IS/MND has been identified as the appropriate CEQA document to address the proposed changes to the original approved project (see discussion in *Section 1.5* regarding CEQA Guidelines for a Subsequent MND).

1.2 Original Approved Project and Addendum

The 2020 IS/MND and Addendum evaluated the environmental impacts associated with construction and operation of groundwater extraction, treatment and distribution facilities in the Perris North Groundwater Management Zone. The project included construction and operation of extraction wells, raw water pipelines, a water treatment and blending facility, and treated water pipelines. EMWD considered several optional sites for the extraction wells and treatment facilities. Up to six extraction wells would be constructed, but the locations of the wells were not yet finalized (with the exception of the East Sub-Area well that would be located on Santiago Drive). As such, EMWD identified seven potential locations for the four North Sub-Area wells and four potential locations for the second East Sub-Area well. EMWD analyzed the environmental impacts that could be associated with all 11 of the site options in the 2020 IS/MND and Addendum. The 2020 IS/MND also evaluated construction and operation of a central treatment facility at three potential locations. In addition, the 2020 IS/MND and Addendum evaluated environmental impacts associated with construction of up to 35,000

linear feet of pipeline to convey raw water from the extraction wells to the treatment facility, and to convey treated water from the treatment facility to the distribution system.

The overall goal of the original approved project is to increase EMWD potable supplies while also cleaning up contamination areas of concern in the Perris North Groundwater Basin. The original approved project is expected to produce approximately 3,700 acre feet per year (AFY), which equates to approximately 2.5 percent of EMWD's total demand. The project is described in further detail on the EMWD website at: <https://www.emwd.org/moreno-valley-projects>.

1.3 Proposed Raw Water Conveyance Pipeline Phase III

EMWD identified the need to add approximately 12,500 linear feet of new pipeline to convey water to the proposed central treatment facility from Well 66¹. The 18-inch transmission pipeline would be installed along Ironwood Avenue from approximately the intersection with Kevin Street east to the intersection with Perris Boulevard, then along Perris Boulevard from the intersection with Ironwood Avenue south to the site of the central treatment facility located on the east side of Perris Boulevard between Bay Avenue and St. Christopher Lane (**Figure 2-2**). The new pipeline would involve open trench construction within City of Moreno Valley right-of-way in Ironwood Avenue and Perris Boulevard, and California Department of Transportation (Caltrans) right-of-way in Perris Boulevard, with a Caltrans undercrossing at California State Route 60/Moreno Valley Freeway.

1.4 Purpose of this Subsequent Document

This Subsequent IS/MND addresses potential environmental effects of construction and operation of the Raw Water Conveyance Pipeline Phase III segment of the Cactus Avenue Corridor Groundwater Wells Project. The 2020 IS/MND and Addendum and the Subsequent IS/MND, together with other project-related documents, incorporated by reference herein, serve as the environmental review of the proposed project, pursuant to the provisions of CEQA and the CEQA Guidelines, 14 California Code of Regulations (CCR) Section 15162 et seq. EMWD is the lead agency under CEQA for the proposed project. CEQA requires that the lead agency prepare an IS to determine whether an Environmental Impact Report (EIR), Negative Declaration (ND), or MND is needed. EMWD has prepared

¹ Well 66 was not part of the original approved project; the environmental impacts of Well 66 were addressed in an MND adopted by EMWD in 2014 (State Clearinghouse # 2014051001).

this IS to evaluate the potential environmental consequences associated with the Raw Water Conveyance Pipeline Phase III project, and to disclose to the public and decision makers the potential environmental effects of the proposed project. Based on the analysis presented herein, an MND is the appropriate level of environmental documentation for the proposed project. EMWD's review of the Raw Water Conveyance Pipeline Phase III Subsequent IS/MND is limited to the scope of the Raw Water Conveyance Pipeline Phase III and does not include reconsideration of the findings of the 2020 IS/MND and Addendum.

1.5 Rationale for a Subsequent Mitigated Negative Declaration

The basis for preparation of the Subsequent document is based on the CEQA Guidelines, Section 15162 which states:

(a) When...a negative declaration [has been] adopted for a project, no subsequent [negative declaration] may be required for the project unless the lead agency determines, on the basis of substantial evidence in light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which would require major revisions of the previous...negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which would require major revisions of the previous...negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous...negative declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous...negative declaration;

(B) Significant effects previously examined would be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects

of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

(b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise, the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.

(c) Once a project has been approved, the lead agency's role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subdivision (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted.

EMWD has assessed the proposed project in light of the requirements defined under Section 15162 of the CEQA Guidelines and determined that the addition of up to approximately 12,500 linear feet of new pipeline including a crossing under California State Route 60/Moreno Valley Freeway constitutes a "substantial change to the proposed project which would require major revisions of the MND due to the involvement of new potentially significant environmental effects" per Section 15162(a)(1). As a result, a Subsequent IS/MND is the appropriate CEQA document for analysis and consideration of the Raw Water Conveyance Pipeline Phase III.

1.6 Scope of this Document

This Subsequent IS/MND has been prepared in accordance with CEQA (as amended) (Public Resources Code §§21000 et. seq.), and the 2022 State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, §§15000 et. seq.). Where appropriate, this document makes reference to either the CEQA Statute or State CEQA Guidelines.

This Subsequent IS/MND for the Raw Water Conveyance Pipeline Phase III contains all of the contents required by CEQA, which includes a project description, a description of the environmental setting, potential environmental impacts, mitigation measures for any significant effects, consistency with plans and policies, and names of preparers.

This Subsequent IS/MND evaluates the potential for environmental impacts to resource areas identified in Appendix G of the State CEQA Guidelines (as amended in December 2018). The environmental resource areas analyzed in this document include:

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

To support compliance with the federal environmental review requirements of potential funding programs, this document includes analysis pertinent to federal regulations (also referred to as federal cross-cutters or CEQA-Plus). Guidelines for complying with cross-cutting federal authorities can be found in the Drinking Water State Revolving Fund (DWSRF) regulations at 40 Code of Federal Regulations (CFR) Section 35.3575.

The federal cross-cutters analyzed in this document include:

- Archaeological and Historic Preservation Act (AHPA)
- Clean Air Act (CAA)
- Coastal Zone Management Act (CZMA)
- Federal Endangered Species Act (FESA)
- Magnuson-Stevens Fishery Conservation and Management Act
- Migratory Bird Treaty Act
- National Historic Preservation Act (NHPA)
- Protection of Wetlands

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- Environmental Justice
 - Farmland Protection Policy Act
 - Fish and Wildlife Coordination Act (FWCA)
 - Floodplain Management: Executive Orders 11988, 12148, and 13690
 - Rivers and Harbors Act, Section 10
 - Safe Drinking Water Act, Sole Source Aquifer Protection
 - Wild and Scenic Rivers Act
 - Environmental Alternative Analysis

1.7 Impact Terminology

The level of significance for each resource area uses CEQA terminology as specified below:

No Impact. No adverse environmental consequences have been identified for the resource or the consequences are negligible or undetectable.

Less than Significant Impact. Potential adverse environmental consequences have been identified. However, they are not adverse enough to meet the significance threshold criteria for that resource. No mitigation measures are required.

Less than Significant with Mitigation 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.

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 EIR must be prepared to meet the requirements of CEQA.

1.8 CEQA Process

In accordance with CEQA Guidelines Section 15073, this Draft Subsequent IS/MND will be circulated for a 30-day public review period (December 7, 2022 – January 6, 2023) to local and state agencies, and to interested organizations and individuals who may wish to review and comment on the report. EMWD will circulate the Draft Subsequent IS/MND to the State Clearinghouse for distribution to State agencies. In addition, EMWD will circulate a Notice of Intent to Adopt a Mitigated Negative Declaration to the Riverside County Clerk, responsible agencies, and interested entities, as well as publish the Notice in the

local newspaper, the Press Enterprise. A copy of the Draft Subsequent IS/MND is available for review at: <https://www.emwd.org/emwd-construction-updates>.

Written comments can be submitted to EMWD by 5:00 p.m. on January 6, 2023 and addressed to:

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Following the 30-day public review period, EMWD will evaluate all comments received on the Draft Subsequent IS/MND and incorporate any substantial evidence that the proposed project could have an impact on the environment into the Final Subsequent IS/MND. Additionally, EMWD will revise/update the existing Mitigation Monitoring and Reporting Program (MMRP) adopted for the 2020 IS/MND, if needed.

The Subsequent IS/MND and MMRP will be considered for adoption by the EMWD Board of Directors in compliance with CEQA at a future publicly noticed hearing, which are held on the 1st and 3rd Wednesday of each month at EMWD's headquarters.

1.9 Summary of Findings

Original Approved Project

The 2020 IS/MND and Addendum analyzed all resource topics in accordance with CEQA and the State CEQA Guidelines and found the original approved project would result in no impacts, less than significant impacts, or less than significant impacts with mitigation incorporated. Consequently, the original approved project was found to not result in any environmental effects that would cause substantial adverse effects, directly or indirectly. The majority of the original approved project would be located within roadway rights-of-way and previously developed or disturbed areas. The 2020 IS/MND and Addendum concluded that with implementation of mitigation measures, the original approved project would not have the potential to substantially degrade the quality of the environment, reduce wildlife habitat, result in adverse impacts to wildlife populations or communities, eliminate important examples of major periods of California history or prehistory, or cause substantial adverse effects on human beings. The 2020 IS/MND and Addendum also analyzed pertinent federal cross-cutting regulations to meet grant

funding requirements and found that the original approved project would be in compliance with all applicable federal cross-cutting regulations.

Raw Water Conveyance Pipeline Phase III

The environmental analysis in this Subsequent IS/MND has concluded that, although the Raw Water Conveyance Pipeline Phase III segment constitutes a substantial change to the original approved project which would require major revisions of the 2020 IS/MND due to the involvement of new significant environmental effects, those effects would be less than significant with mitigation incorporated. All mitigation measures identified in the 2020 IS/MND and Addendum plus new mitigation measures in this Subsequent IS/MND would be required to minimize or reduce potential environmental impacts to less than significant levels. New mitigation measures would be required to minimize potential impacts from construction activities on protected species of lizards and mammals that have a low potential to occur at the project site.

2. PROJECT DESCRIPTION

2.1 Project Overview

The Raw Water Conveyance Pipeline Phase III (“project” or “proposed project”) involves construction and operation of approximately 12,500 linear feet of 18-inch diameter polyvinyl chloride (PVC) raw water transmission pipeline with air release valves within Ironwood Avenue and Perris Boulevard. The proposed project would convey raw groundwater from the Well 66 site, located on the south side of Ironwood Avenue at approximately the intersection with Kevin Street. Water from Well 65 is conveyed to the Well 66 site through an existing pipeline in Ironwood Avenue, then the combined flows would be conveyed to the proposed central treatment facility on Perris Boulevard between Bay Avenue and St. Christopher Lane via the proposed project. Please refer to *Section 2.5 Proposed Project Description* for a detailed description of the project components.

2.2 Project Purpose

The proposed project, together with the other facilities of the Cactus Avenue Corridor Groundwater Wells Project, is part of the Perris North Basin Contamination Prevention and Remediation Program, which has an overall goal of cleaning up contamination areas of concern in the Perris North Groundwater Basin while also increasing EMWD local potable supplies. Currently, groundwater in the Perris North Groundwater Management Zone is contaminated. Contaminants of Concern (COCs) include perchloroethylene (PCE), volatile organic compounds (VOCs), nitrate, perchlorate, total dissolved solids (TDS), fluoride, and manganese (co-mingled VOC-Nitrate Plume). Potential contamination sources were identified by EMWD through implementation of the Drinking Water Source Assessment Program (DWSAP), as well as the State Water Resources Control Board (SWRCB)’s GeoTracker and Department of Toxic Substances Control (DTSC)’s EnviroStor database research, in developing a map of the comingled plume. The project would convey extracted contaminated groundwater to a central facility for treatment.

The project, together with the other facilities of the Cactus Corridor Groundwater Wells Project, would also augment local water supply in the EMWD service area. In doing so, it would reduce EMWD’s need to purchase additional imported water. Currently, approximately 75 percent of EMWD’s potable water demand is supplied by imported water from MWD through its connections to the Colorado River Aqueduct and its connections to the State Water Project, while approximately 25 percent of EMWD’s drinking water comes from local EMWD groundwater wells. The majority of the groundwater produced by EMWD comes from its wells in the Hemet and San Jacinto

areas. EMWD also has existing wells in the Moreno Valley, Perris Valley, and Murrieta areas. In 2025, EMWD's potable and raw water demands were estimated to be approximately 100,000 AFY, according to its latest Urban Water Management Plan (EMWD 2021). The entire Perris North Program is expected to convey approximately 3,500 AFY from a total of six extraction wells; the two wells that will produce water to be conveyed by the Raw Water Conveyance Pipeline Phase III (Wells 65 and 66) will generate approximately 970 AFY, assuming a 90 percent online factor. This equates to approximately one percent of the total demand, off-setting the equivalent volume of imported supply.

2.3 Project Location

The proposed project is located in the City of Moreno Valley, in the western portion of Riverside County, California (see **Figure 2-1**). The project would be constructed entirely within the existing Ironwood Avenue and Perris Boulevard rights-of-way. The proposed raw water pipeline would extend east from Well 66 on Ironwood Avenue, at approximately the intersection with Kevin Street, then turn south and extend along Perris Boulevard until it reaches the planned central treatment facility located between Bay Avenue and St. Christopher Lane (see **Figure 2-2**).

2.4 Environmental Setting

The project area setting is generally built-out. Surrounding land uses include commercial, light industrial, churches, single and multi-family residential, and public facilities including parks and schools.

2.4.1 Sensitive Receptors

Sensitive receptors adjacent to the proposed pipeline alignment include single-family residences, multi-family residences, churches, day care centers, and a public park. Ramona Elementary School, Sunnymead Montessori School, and the Riverside Academy are located within one-quarter mile of the project. Ramona Elementary and Sunnymead Montessori are on Bay Avenue, 0.12 mile west of the intersection with Perris Boulevard. Riverside Academy is located south of the central treatment facility site, on the adjacent parcel. St Christopher Parish, which houses the St. Christopher preschool, is located on the southeast corner of Perris Boulevard and Cottonwood Avenue. Faith-based facilities are located on the southwest corner of Perris Boulevard and Eucalyptus Avenue, and on the south side of Ironwood Avenue, east of Indian Street, although it is unclear if they currently house a preschool. An in-home day care center may be present along Perris Boulevard at 12152 Odessa Drive. Sunnymead Park is located on the west side of Perris Boulevard, north of Fir Avenue. Both the Riverside County Regional Medical Center and

Kaiser Permanente Moreno Valley Medical Center are farther than one mile from the proposed project alignment.

2.4.2 Utilities

Electrical service and natural gas service in the proposed project area is provided by Southern California Edison (SCE) and the Southern California Gas Company, respectively. EMWD provides water and wastewater services in the project area. Solid waste services are provided by Waste Management of Inland Valley. Existing facilities for these utilities are located throughout the vicinity of the proposed project.

Drainage facilities within the project alignment include underground storm drains along Ironwood Avenue and Perris Boulevard. The proposed project alignment on Perris Boulevard parallels a Riverside County Flood Control and Water Conservation District (RCFCWCD) storm drain in Perris Boulevard and crosses RCFCWCD storm drains at Fir Avenue, Eucalyptus Avenue, Dracaea Avenue, and Cottonwood Avenue. The proposed project alignment would also cross the Sunnymead stormwater channel where the channel intersects Perris Boulevard north of the Highway 60/Moreno Valley Freeway. Other utilities in Perris Boulevard include two to three water pipelines, and one to two sewer pipelines, depending on the location. In Ironwood Avenue, the proposed project alignment crosses RCFCWCD storm drains at Indian Street and Hubbard Street. Other existing utilities in Ironwood Avenue include a water pipeline, sewer pipeline, gas pipeline, and fiber optic cable. There is also an existing storm drain in Ironwood Avenue.

2.4.3 Transportation

The project site is roughly 3.5 miles east of Interstate (I)-215 and intersects Highway 60/Moreno Valley Freeway along Perris Boulevard. The proposed alignment is located along the major roadways of Ironwood Avenue and Perris Boulevard, which are classified as a minor arterial and mixed-use boulevard, respectively. The proposed alignment is also entirely within the City of Moreno Valley's designated truck routes, which run east-west along Ironwood Avenue and north-south along Perris Boulevard (City of Moreno Valley 2019). In addition, Ironwood Avenue is also classified as a Class II bike lane (City of Moreno Valley, 2021). The nearest state-designated scenic highway is State Route 243, approximately 20 miles east of the project area (Caltrans 2018).

Active bus routes along the project alignment are operated by Riverside Transit Agency (RTA) and include Route 11 Moreno Valley Mapp – March ARB Loop Route and Route 19 Moreno Valley Mall to Perris Station Transit Center (RTA 2021).

The Riverside County Transportation Commission (RCTC) owns a rail line located west of the City, parallel to I-215 (roughly four miles west of the project site), which carries commuter rail service and a low volume of freight trains.

2.4.4 Airports

The March Air Reserve Base (MARB) is located southwest of the City of Moreno Valley. It is currently active as a center for military reserve activities and as a military communication center. The runways at the base are located along the western edge of the base, approximately 3.5 miles from the project alignment. The nearest municipal airport is the San Bernardino International Airport which is located over 10 miles north of the project area.

2.4.5 Air Quality and Water Quality

The project is located within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) within the South Coast Air Basin (SCAB). Under the National Ambient Air Quality Standards (NAAQS), the SCAB is in nonattainment status for ozone (1-hour and 8-hour) and particulate matter 2.5 (24-hour and annual). Under the California Ambient Air Quality Standards (CAAQS), the SCAB is in nonattainment status for ozone (1-hour and 8-hour), particulate matter 2.5 (annual), and particulate matter 10 (24-hour and annual) (SCAQMD 2022).

The project alignment lies within the San Jacinto River watershed of the Santa Ana River Basin. Water quality in the Santa Ana River Basin is regulated by the Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB) through the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan).

2.4.6 Geology

The project alignment is located within the north-central portion of the Perris Block region of the Peninsular Ranges Geomorphic Province of Southern California. The Perris Block is a relatively stable structural block bounded by the active Elsinore and San Jacinto fault zones to the west and east, and the Chino and Temecula basins to the north and south, respectively. The San Jacinto Fault zone is the closest fault zone, located four miles east of the project area and has been known to be active up to present day. The majority of the project alignment is underlain by very old alluvial fan deposits of consolidated silt, sand, gravel, and conglomerate; however, some portions (the northern and southern sections of Perris Boulevard and the eastern portion of Ironwood Avenue) are underlain by young alluvial fan deposits of silt, sand, pebbly cobbly sand, and boulders (Converse Consultants 2022).

2.4.7 Habitat Conservation Plan

The project area is within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP was developed by Riverside County to aid in maintaining biological and ecological diversity within the region, while addressing requirements of the California Endangered Species Act and Federal Endangered Species Act. The MSHCP defines a reserve system that includes existing and proposed core habitat blocks and habitat linkages to accommodate the needs of wildlife and plant species. The Plan was completed in 2003, and associated permits were issued in 2004. EMWD is not a signatory to the MSHCP. None of the project alignment is located within existing or proposed reserve or criteria areas of the MSHCP (RCA 2022).

Figure 2-1: Regional Location

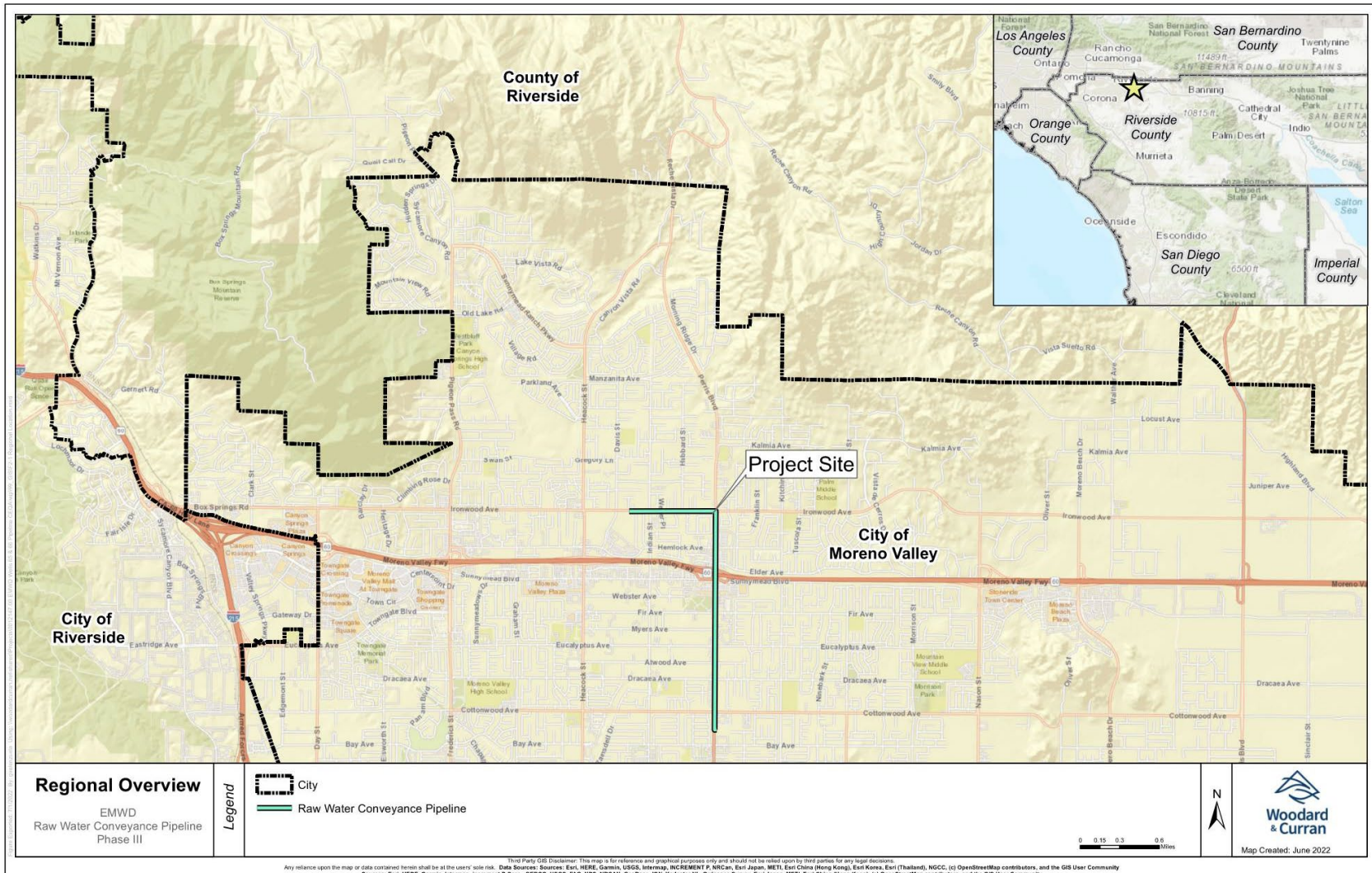
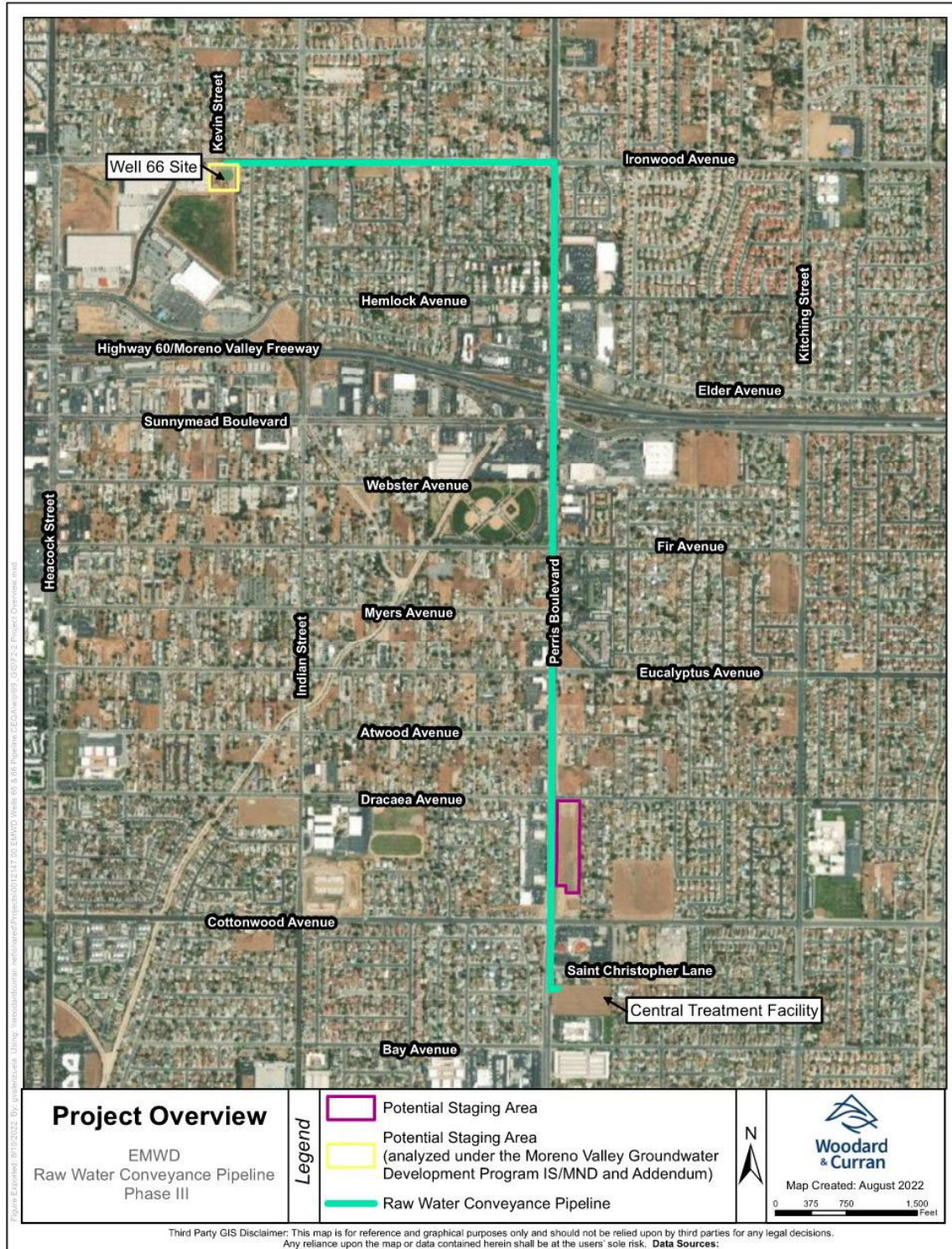


Figure 2-2: Project Overview



2.4.8 Existing Site Conditions

At the northwestern portion of the proposed project alignment, Ironwood Avenue consists of four lanes for vehicular traffic and a central turn lane. Ironwood Avenue has a bicycle lane on either side of the road, defined by pavement striping. Bus stops are located along the roadway. Pedestrian access consists of a sidewalk on both sides of the street. Ironwood Avenue is bordered by residential development on both sides. Several homes along Ironwood Avenue have driveway access to Ironwood Avenue. Many homes on Ironwood Avenue have fences or concrete masonry walls abutting Ironwood Avenue; however, many do not. **Figure 2-3** shows a representative photo of the existing conditions along Ironwood Avenue.

Figure 2-3: Ironwood Avenue at Marigold Avenue, view looking Northeast



The intersection of Ironwood Avenue and Perris Boulevard is surrounded by existing residential development. At the intersection, traffic is controlled by stoplights. Pedestrian crossings and sidewalks are present at all four crossings.

Figure 2-4 shows a representative photo of the existing conditions at the intersection.

Figure 2-4: Ironwood Avenue at Perris Boulevard, view looking southwest



Perris Boulevard consists of four lanes of vehicular traffic with a central turn lane and occasional raised median. Sidewalks are present on both sides of Perris Boulevard. California State Route 60 crosses Perris Boulevard via an overpass. The surrounding existing vicinity consists of commercial developments. **Figure 2-5** shows a representative photo of the existing conditions along Perris Boulevard.

Figure 2-5: Perris Boulevard at State Route 60, view looking south



Along the southern portion of the proposed project alignment, Perris Boulevard is bordered by residential and commercial development. Perris Boulevard has four lanes for vehicular traffic, a central turn lane and occasional raised median. Many homes and businesses have driveway access onto Perris Boulevard; however, some residences have concrete masonry walls along their property boundaries with Perris Boulevard. There are sidewalks and bus stops along Perris Boulevard. **Figure 2-6** shows a representative photo of the existing conditions along Perris Boulevard.

Figure 2-6: Perris Boulevard at St. Christopher Lane, view looking north



2.5 Proposed Project Description

The project would construct an 18-inch transmission pipeline and air release valves to convey raw, extracted groundwater to a central treatment facility. Details are provided in the following subsections.

2.5.1 Pipeline Construction

The proposed 12,500 linear foot pipeline would be installed within the paved Ironwood Avenue and Perris Boulevard roadway right of way using open-trench construction. The maximum trench width is expected to be 5.5 feet, while the depth is expected to range from 6-10 feet. The pipeline alignment would be designed to avoid conflict with existing utilities. The trenching cross section would resemble a "T" (see **Figure 2-7**) with the pipeline trench at the center being up to 42 inches wide and 6-10 feet deep. As required

by the City of Moreno Valley, the paving restoration area would be 12 inches wide and 8 inches deep on either side of the trench using a grind and overlay paving process (see **Figure 2-7**). The construction contractor would grind and overlay the equivalent of one lane width, or more, depending on the exact location where the alignment is positioned within the street. The width of resurfacing would be up to the nearest lane line or gutter in accordance with the City of Moreno Valley Trench Backfill and Roadway Repair Standard Plans.

The pipe under California State Route 60/Moreno Valley Freeway would be installed using an open cut trench technique within a casing. However, trenchless techniques may be required where the pipeline crosses under RCFCWCD storm drains. Where trenchless techniques are required, pipelines would be constructed using “bore and jack” methods. “Bore and Jack” employs a non-steerable system that drives an open-ended pipe laterally using a percussive hammer, thereby resulting in the displacement of soil limited to the wall thickness of the pipe. For this construction method, pits would be dug on either side of the surface feature to be avoided (e. g. storm channel or existing utilities). The pits would be 10-15 feet wide and 10-20 feet long for the receiving pit and up to 50 feet long for the jacking pit. The depth would depend on the feature to be avoided. At utility crossings, the depth is estimated to be 15 feet; however, for the purposes of this analysis, it is assumed bore and jack depth could be up to 40 feet. The boring equipment and pipe would be lowered into the pit and aligned at the appropriate depth and angle to achieve the desired exit location. A compressor would supply air to the pneumatic ramming tool to thrust the pipe forward. A cutting shoe may be welded to the front of the lead pipe to help reduce friction and cut through the soil. Depending on the size of the installation, spoil from inside the pipe would be removed with an auger, compressed air, water, or a combination of techniques. A seal cap would be installed on the starter pit side of the installation and spoil would be discharged into the receiver pit. Using this technique, ground surface disturbance would not occur, except at the pits.

2.5.2 Pipeline Appurtenances

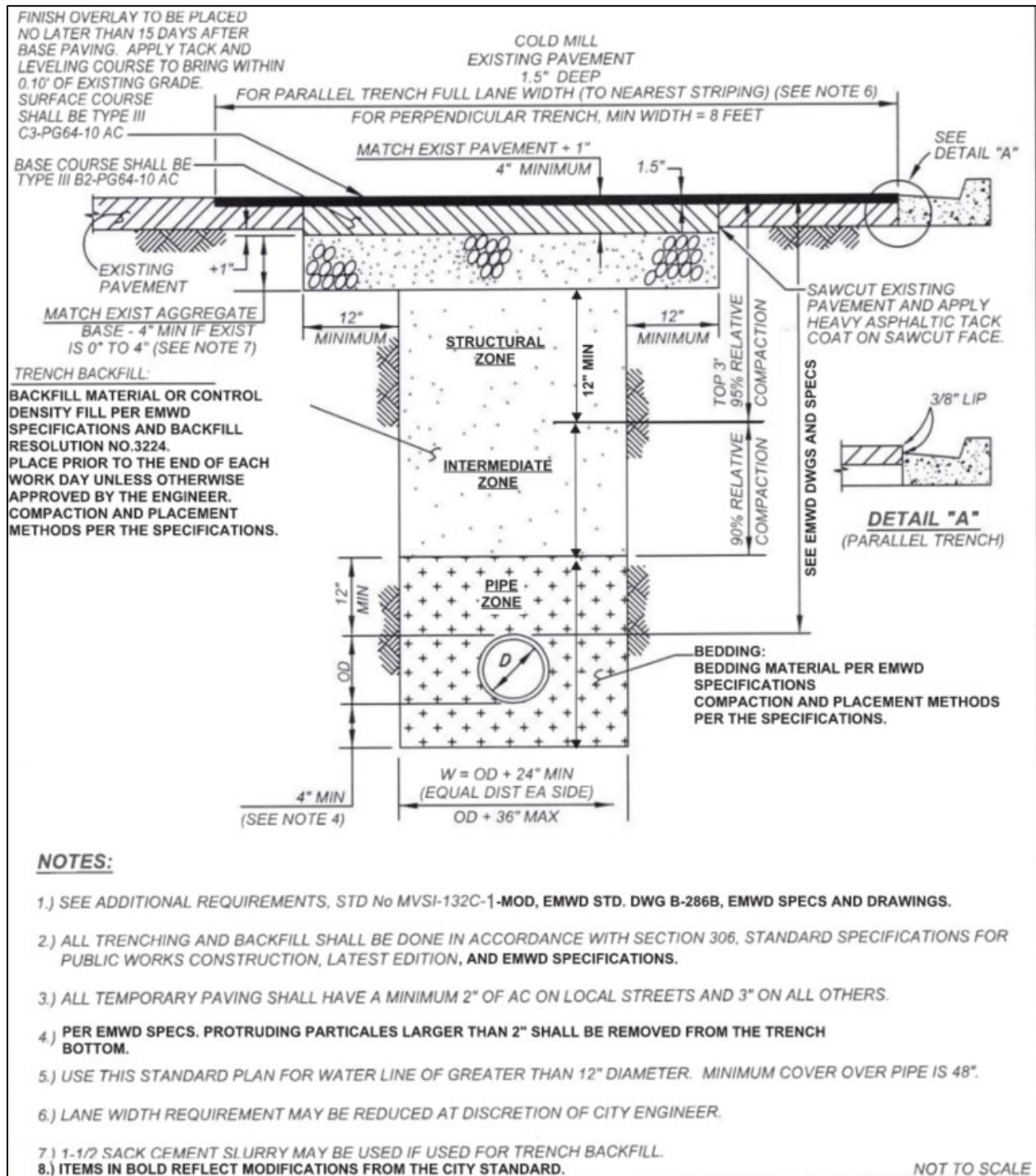
Valve and blowoff assemblies would be installed to control flow as desired based on system operations. The proposed pipeline would be constructed with the following appurtenances. For safety and protection, appurtenances would be located a practicable distance from traffic lanes.

- Valves. Isolation valves would be placed below-ground within the paved roadway, at a minimum every 2,500 feet along the transmission pipeline. Isolation valves are anticipated to be located within Ironwood Avenue and Perris Boulevard at the ends of the proposed pipeline. The isolation valves would be fitted with a riser and

removable valve cover, flush with the paved road for maintenance access. Isolation valves serve to isolate a section of the pipeline should a leak occur or should routine maintenance require the pipeline be shut down.

- Air release and vacuum valve assemblies. Combination air release and vacuum valve assemblies would be installed at high points of the pipeline segments and at the upgradient side of each valve. The above grade portion of the facilities would be enclosed in 18-inch-wide by 30-inch-tall valve enclosures painted and labeled to match the existing air release and vacuum valve assemblies and would be located approximately 20 feet east of the edge of the pavement in existing landscaped areas adjacent to the off-street sidewalk. Air release and vacuum valve assemblies serve to allow air to exit the pipe while the pipe is being filled, allow air to enter the pipe when the pipe is being emptied, allow air entrained in the water that collects at high points to exit the pipe to allow efficient pipe flow, and to protect the pipeline from damage due to surge pressures in the case of sudden valve closure or pump failure.
- Blowoff assemblies. The precise location and number of blowoff assemblies and hydrants would be determined in final design. Standard EMWD blowoff assemblies include an above-ground blow-off head, cap with chain ring, pipe, and flange that totals 26 inches above grade and is painted approved yellow. Standard EMWD blowoff assemblies are placed at a distance of 1.5 feet to 7.5 feet from the curb, depending on the size of the existing sidewalk. Blowoff assemblies and hydrants serve to drain the pipe when the pipeline needs maintenance by discharging water from the pipe, and, while the pipe is active, help remove sediment that may accumulate at low points within the pipe.

Figure 2-7: Proposed Alignment Representative Cross-Section



Source: City of Moreno Valley, Water Line (larger than 12" diameter) Trench Backfill and Roadway Repair – Modified MVSI-132F-1, December 3, 1984.

Construction of the pipeline would require the estimated construction equipment shown in **Table 2-1**.

Table 2-1: Construction Vehicle Fleet for Pipelines

Equipment	Number Required for Pipelines
Backhoe/Loader	1
Hydraulic Excavator	1
Crane	1
Bore Drill Rig	1
Utility Truck	1
Water Truck	1
Welder	1
Compressor	1
Pump	1
Pick-up Trucks	2
Dump Truck	2
Concrete Saw	1
Pavement Breaker	1
Sweeper	1
Paver	1
Generator	1

The total volume of material to be excavated from construction of the pipeline was estimated to be approximately 16,200 cubic yards (42-inch pipeline trench width x 10 feet pipeline trench depth x 12,500 feet long + 12 inch paving restoration area width x 8 inch paving restoration area depth x 12,500 feet long x 2 paving restoration areas on either side of trench). This total volume is conservative in that it assumes open trench construction methods would be used along the entire alignment. Trenchless techniques would be required to cross the California State Route 60/Moreno Valley Freeway at Perris Boulevard. Trenchless techniques may also be required where the pipeline crosses under RCFCWCD storm drains and other utilities. The amount of pipeline that would be constructed using trenchless techniques would be determined in final design. Trenchless techniques, in which a pit is excavated and then only the amount of soil required for the pipe is displaced, require much less material excavation, hauling, and fill than open trench methods. Excavated material may be reused onsite as trench backfill; however, this would not be determined until excavation starts. Therefore, it is conservatively assumed that all excavated material would be hauled offsite for disposal and all fill material would be imported onsite. After construction is complete, all pipeline construction areas would be

restored to pre-construction conditions (i.e., no permanent disturbance footprint). The width of resurfacing would be up to the nearest lane line or gutter in accordance with the City of Moreno Valley Trench Backfill and Roadway Repair Standard Plans.

2.5.3 Construction Schedule

Project construction is anticipated to begin in approximately April 2023 and continue until October 2024 (approximately 380 days). Construction would include the following phases:

- Mobilization/utility potholing – April 2023 to June 2023
- Trenching/Pipeline installation – June 2023 to June 2024. The pipelines would be constructed at an average rate of 50 to 100 linear feet per day, depending on the conditions, extent of existing utilities and traffic control, and permitted work hours.
- Appurtenance installation – July 2024
- Final paving/restoration – August 2024
- Demobilization – September-October 2024

Construction would take place Monday through Friday during daytime hours in accordance with the City of Moreno Valley Municipal Code. Construction activities would not be scheduled during nighttime hours (5:00 p.m. to 8:00 a.m.) or on weekends for the majority of the pipeline alignment. However, to avoid conflicts with transportation in the area around California State Route 60/Moreno Valley Freeway, construction activities are expected to be scheduled during nighttime hours (7:00 p.m. to 5:00 a.m.) on Perris Boulevard between Elder Avenue and Sunnymead Boulevard, with the possibility of extending 200 yards to the north and south beyond Elder Avenue and Sunnymead Boulevard on Perris Boulevard.

2.5.4 Equipment Staging Areas

The size, location, and number of staging areas would be finalized at a later project stage. The Well 66 site, which was evaluated under the Moreno Valley Groundwater Development Program IS/MND (SCH#2014051001), may be used for construction staging. The Well 66 site is heavily disturbed, with portions of it currently under construction. Additionally, vacant parcels along Perris Boulevard could be used for potential staging areas, including vacant parcels on the southeast corner of Perris Boulevard and Dracaea Avenue, extending along the east side of Perris Boulevard. If the identified staging area options cannot accommodate all equipment storage/staging for the proposed project, the construction contractor may use the Ironwood Avenue and

Perris Boulevard rights-of-way for the purposes of equipment storage, staging, and/or pipe stringing. Other existing EMWD property would be utilized as necessary for staging and intermediate storage for the installation of the water pipelines, or the contractor would be responsible for securing suitable temporary equipment storage/staging site(s) prior to construction and implementing applicable environmental commitments (see *Section 2.6*) at the staging area(s).

2.5.5 Operations

The pipeline and appurtenances would not be associated with long-term energy usage or additional EMWD operations and maintenance (O&M) activities. Project O&M activities would include inspection and repair, as necessary, of air vacuum valves and blowoff valves; valve exercising; and possible flushing and sampling of water quality. Inspection of the above ground appurtenances and exercise of the valves would be incorporated into EMWD's existing O&M activities.

2.6 Environmental Commitments

The following measures are EMWD construction best management practices (BMPs) that would be implemented as part of the project:

- The design and construction of the facilities would be based on the geotechnical investigation report (Converse Consultants 2022) to minimize geological risk.
- According to the geotechnical investigation report (Converse Consultants 2022), historical high groundwater along the pipeline alignment is not known with certainty but is anticipated to be deeper than approximately 18.70 feet below the existing ground surface. However, if groundwater is encountered during construction, it would be discharged to EMWD's sanitary sewer instead of the storm drains for treatment and reuse and to minimize chlorination of the potable water.
- Open trenches would be covered with recessed trench plates during non-construction periods in accordance with encroachment permits.
- Construction would comply with SCAQMD Rule 403 Fugitive Dust Control requirements.
- Specifications would require the contractor to prepare a Stormwater Pollution Prevention Plan (SWPPP). Construction would implement BMPs to control water quality of stormwater discharges offsite, according to the SWPPP, such as site management "housekeeping," erosion control, sediment control, tracking control and wind erosion control.

- Specifications would require the contractor to implement standard fire prevention measures. EMWD Specifications Detailed Provisions Section 02201 – Construction Methods & Earthwork of the Standard Detailed Provisions (EMWD 2015) include the entire work and site, including storage areas, is inspected at frequent intervals to verify that fire prevention measures are constantly enforced; fully charged fire extinguishers of the appropriate type, supplemented with temporary fire hoses wherever an adequate water supply exists, are furnished and maintained; and flammable materials are stored in a manner that prevents spontaneous combustion or dispersion.

2.7 Required Permits and Approvals

Anticipated permits and approvals are identified in **Table 2-2**.

Table 2-2: Permits and Approvals

Agency	Permit/Approval
City of Moreno Valley	Encroachment permit for work in public road right-of-way Approval of Traffic Control Plan
Riverside County Flood Control and Water Conservation District	Encroachment Permit for crossing storm drains Encroachment Permit for Sunnymead Channel
California Department of Transportation (Caltrans)	Encroachment Permit for work in Caltrans right-of-way
California Occupational Safety and Health Administration Mining and Tunneling Unit	Underground Classification (Jack & Bore Locations) and Trenching/Shoring Permit
State Water Resources Control Board (SWRCB)	National Pollutant Discharge Elimination System (NPDES) Construction General Permit for Storm Water Discharges
SWRCB California Division of Drinking Water	Pipeline separation waiver for compliance with California Waterworks Standards

3. ENVIRONMENTAL CHECKLIST FORM

- 1. Project title:** Raw Water Conveyance Pipeline Phase III
- 2. Lead agency name and address:** Eastern Municipal Water District
2270 Trumble Road
P.O. Box 8300
Perris, CA 92572-8300
- 3. Contact person and phone number:** Joseph Broadhead,
Principal Water Resources Specialist
broadhej@emwd
(951) 928-3777 ext. 4545
- 4. Project location:** City of Moreno Valley,
Riverside County, California
- 5. Project sponsor's name and address:** Same as Lead Agency
- 6. General plan designations:** Ironwood Avenue and Perris Boulevard
roadway rights-of-way, Corridor Mixed Use
- 7. Zoning:** Ironwood Avenue and Perris Boulevard
roadway rights-of-way, Office
- 8. Description of project:** The Raw Water Conveyance Pipeline Phase III project involves construction and operation of approximately 12,500 linear feet of 18-inch diameter PVC raw water transmission pipeline with air release valves within Ironwood Avenue and Perris Boulevard. The proposed project would convey raw groundwater from the Well 66 site, located on the south side of Ironwood Avenue at approximately the intersection with Kevin Street to the proposed central treatment facility on Perris Boulevard between Bay Avenue and St. Christopher Lane. The proposed project is part of the Perris North Basin Contamination Prevention and Remediation Program, which has an overall goal of cleaning up contamination areas of concern in the Perris North Groundwater Basin while also increasing EMWD's local potable supplies.
- 9. Surrounding land uses and setting:** The project would be constructed entirely within the existing Ironwood Avenue and Perris Boulevard rights-of-way. The project area setting is generally built-out. Surrounding land uses include commercial, light

industrial, churches, single and multi-family residential, and public facilities including parks and schools.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

- City of Moreno Valley: Encroachment Permit; Traffic Control Plan approval
- Riverside County Flood Control and Water Conservation District: Encroachment Permit(s)
- California Department of Transportation: Encroachment Permit
- California Occupational Safety and Health Administration: Underground Classification (Jack & Bore Locations), Trenching/Shoring Permit
- State Water Resources Control Board: NPDES Construction General Permit for Storm Water Discharges, Pipeline separation waiver for compliance with California Waterworks Standards

11. Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 2180.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

EMWD has previously consulted with Native American tribal representatives, based on a contact list of tribes who indicated to EMWD that they are interested in receiving notification. Tribes previously consulted included Pechanga Band of Luiseno Indians, Soboba Band of Luiseno Indians, Rincon Band of Luiseno Indians and Agua Caliente Band of Cahuilla Indians. EMWD sent out re-initiation letters on 8/19/22 to tribes that previously consulted on the Cactus Avenue Corridor Groundwater Wells Project. EMWD has not received a response to the re-initiation letters.

Environmental Factors Potentially Affected

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

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures 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 potentially 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.

Signature

12/6/2022

Date

Printed Name

Alfred Javier

Title

Director of Env. & Regulator Compliance

3.1 Aesthetics

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Except as provided in Public Resources Code Section 21099, would the Project:				
a) Have a substantial adverse effect on a scenic vista?	[]	[]	[X]	[]
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	[]	[]	[]	[X]
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?	[]	[]	[X]	[]
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	[]	[]	[X]	[]

Discussion

The 2020 IS/MND and Addendum describe the applicable aesthetic background, environmental setting, and regulatory setting. No background or setting information has changed since the 2020 IS/MND and Addendum were adopted.

The proposed project area is disturbed and generally built-out. The project would be constructed entirely within existing rights-of-way and primarily visible to immediately adjacent areas. There are no designated state scenic highways within the project area; the nearest state-designated scenic highway is State Route 243, approximately 20 miles east of the project area (Caltrans 2018). No other new information or changed circumstances have arisen since the 2020 IS/MND and Addendum were adopted.

a) Less than Significant

Similar to the original approved project, construction of the proposed project would cause temporary short-term impacts to scenic vistas near the project alignment through placement of construction equipment such as cranes and excavators along and adjacent to roadways. However, once constructed, the pipeline would be underground, and the area of temporary disturbance would be restored to its original condition. While the pipeline appurtenances would be installed above ground, they would be painted and labeled in standard EMWD colors to match the existing appurtenances in the project vicinity and would not block views. Thus, the proposed project would have a less than significant impact on scenic vistas.

b) No Impact

Similar to the original approved project, none of the proposed project alignment would be located within the viewshed of a state scenic highway. Therefore, there would be no impact.

c) Less than Significant

Similar to the original approved project, the proposed project is located within a built-out area of Moreno Valley and would temporarily impact the visual character and quality of the project area during construction activities. Public views of project construction include those from adjacent roadways, sidewalks, and parks. Public views of the project from roadways and sidewalks would be fleeting – on the order of seconds or minutes – while public views from parks would be longer lasting. However, once construction is complete, all construction related visual impacts would be removed. The pipelines would be constructed underground within existing roadways and appurtenances would be located away from traffic lanes. The above ground appurtenances would be visible from public vantage points of the project area, but would be painted and labeled standard in EMWD colors to match the existing visual character of appurtenances in the project vicinity, and the impact on visual quality would be minimal. The project would have a less than significant impact on the visual quality of public views in the project area.

d) Less than Significant

Similar to the original approved project, while most of the construction for the proposed project would occur during the day and not require lighting, nighttime construction may be used when the project alignment is located in commercial land use areas to avoid conflicts with transportation. During these nighttime construction activities, lights would be required for equipment and security. However, this impact would be temporary and

would cease upon completion of construction. No permanent exterior lights would be installed for the above ground pipeline appurtenances. Therefore, the proposed project would not create a new permanent source of light or glare that would adversely affect day or nighttime views within the project area. Impacts would be less than significant.

Mitigation Measures: None required or recommended.

3.2 Agriculture and Forestry Resources

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	[]	[]	[]	[X]
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	[]	[]	[]	[X]
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))?	[]	[]	[]	[X]
d) Result in the loss of forest land or conversion of forest land to non-forest use?	[]	[]	[]	[X]

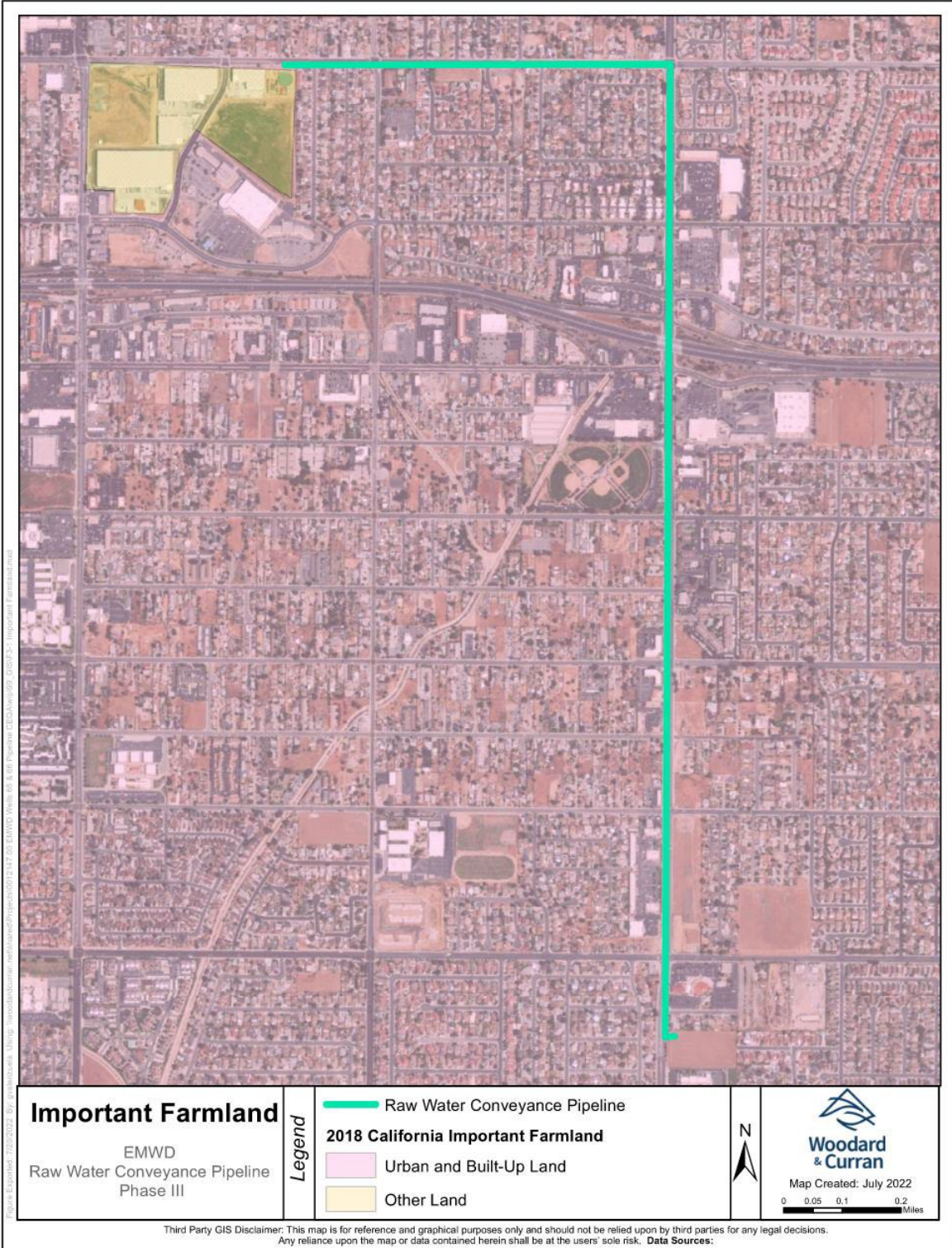
- | | | | | |
|--|-----|-----|-----|-----|
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | [] | [] | [X] | [] |
|--|-----|-----|-----|-----|

Discussion

The 2020 IS/MND and Addendum describe the applicable agricultural and forestry background, environmental setting, and regulatory setting. Since the 2020 IS/MND and Addendum were approved, the West San Jacinto Groundwater Basin Groundwater Sustainability Plan (GSP) was adopted by the EMWD Board of Directors, acting as the West San Jacinto Groundwater Sustainability Agency Board of Directors, on September 15, 2021. No other background or setting information has changed since the 2020 IS/MND and Addendum were adopted.

As shown in **Figure 3-1**, the proposed project area is entirely composed of built-up, urban, and other land. There are no exclusive agricultural zones, Williamson Act contract lands, designated forest lands, or timberland within the project area. No other new information or changed circumstances have arisen since the 2020 IS/MND and Addendum were adopted.

Figure 3-1: Farmland Mapping and Monitoring Program Map



a) No Impact

The proposed project pipeline would be installed within City of Moreno Valley rights-of-way, and potential staging areas would include vacant City of Moreno Valley and EMWD owned land. None of the project alignment, above ground appurtenances, or staging areas are within land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

Similar to the original approved project, the proposed project would install below-grade pipelines and would restore all surfaces to pre-construction conditions. Above ground appurtenances would be installed within disturbed and vacant land. The project would not result in land use changes and would not convert important farmland to a nonagricultural use, conflict with zoning regulations, or result in other changes that would indirectly result in conversion of nearby farmland to non-agricultural use. Therefore, there would be no impact to important farmland.

b) No Impact

Similar to the original approved project, none of the proposed project alignment, above ground appurtenances, or staging areas are located on land zoned for agricultural use or protected by a Williamson Act Contract (City of Moreno Valley 2019b; City of Moreno Valley 2021a). Therefore, the project would have no impact.

c) No Impact

Similar to the original approved project, there is no land zoned for forest land or timberland within the proposed project area. Therefore, the proposed project would have no impact.

d) No Impact

Similar to the original approved project, there is no designated forest land within the proposed project area. Therefore, the proposed project would have no impact related to the loss of forest land or conversion of forest land to non-forest use.

e) Less Than Significant Impact

The 2020 IS/MND and Addendum found that the original approved project, which would produce an estimated 4,113 AFY of groundwater, would be conducted in a manner consistent with the EMWD Groundwater Sustainability Plan (GSP), and thus would not substantially decrease groundwater supplies for private wells or impede the ability of farmers to pump groundwater for irrigation use. Since the 2020 IS/MND and Addendum

were adopted, the GSP was adopted by the EMWD Board of Directors, acting as the West San Jacinto Groundwater Sustainability Agency Board of Directors, on September 15, 2021. Adoption and implementation of the West San Jacinto Groundwater Basin GSP will ensure sustainable use of groundwater supplies in the Perris North Groundwater Basin, the basin from which the original approved project produces groundwater. The West San Jacinto Groundwater Basin GSP accounted for the Perris North Basin Contamination Prevention and Remediation Program, of which the original approved project and proposed project are components.

Although the proposed project, which is a transmission pipeline, would not directly result in groundwater extraction, the proposed project would allow for conveyance and eventual treatment of groundwater production.

Groundwater extraction and conveyance associated with the original approved project and the proposed project would be conducted in a manner consistent with the West San Jacinto Groundwater Basin GSP, which took into account the Perris North Basin Contamination Prevention and Remediation Program. Therefore, similar to the original approved project, the proposed project would not substantially decrease groundwater supplies or induce other changes in the environment that would result in conversion of agricultural land to non-agricultural use. The proposed project would have a less-than-significant impact.

Mitigation Measures: None required or recommended.

3.3 Air Quality

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	[]	[]	[X]	[]

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non- attainment under an applicable federal or state ambient air quality standard?	[]	[]	[X]	[]
c) Expose sensitive receptors to substantial pollutant concentrations?	[]	[]	[X]	[]
d) Result in other emissions (such as those leading to odors or adversely affecting a substantial number of people?)	[]	[]	[X]	[]

Discussion

The 2020 IS/MND and Addendum describe the applicable air quality background, environmental setting, and regulatory setting. The SCAQMD is in the process of updating the 2022 Air Quality Management Plan (AQMP) as of the writing of this Initial Study. The 2022 AQMP focuses on strategies to meet the United States Environmental Protection Agency’s (US EPA) primary and secondary NAAQS for ground-level ozone (O₃), which was revised to 70 parts per billion on October 1, 2015. The 2022 AQMP is currently in draft form; however, it is relevant to the environmental and regulatory setting of the proposed project because it incorporates the most recent information on regional growth and population from the Southern California Association of Governments (SCAG), the California Air Resources Board (CARB), and the US EPA. No other background or setting information has changed since the 2020 IS/MND and Addendum were adopted.

a) Less than Significant Impact

The SCAQMD’s 2022 AQMP, which assesses the attainment status of the Moreno Valley and EMWD area of the SCAB and provides a strategy for attainment of state and federal air quality standards, is the applicable air quality plan. The AQMP strategies are developed based on population, housing, and employment growth forecasts anticipated under local city general plans and regional transportation plans.

A project would conflict with or obstruct an applicable air quality plan if it would lead to population, housing or employment growth that exceeds the forecasts used in the development of the applicable air quality plan. The proposed project would construct 12,500 linear feet of pipeline to augment EMWD’s water portfolio with additional groundwater production to service existing customers currently connected to EMWD water, as well as future customers from planned growth in the area as identified in local

general plans. Therefore, the proposed project would not lead to unplanned population, housing or employment growth that exceeds the forecasts used in the development of the AQMP. Potential for conflicts with the AQMP would be less than significant.

b) Less than Significant Impact

Similar to the original project, the proposed project would result in emissions of criteria pollutants from short-term construction activities. The pipeline and appurtenances would not be associated with long-term energy usage or additional EMWD O&M activities. Inspection of the pipeline, above ground appurtenances and exercise of the valves would be incorporated into EMWD's existing O&M activities. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) 2020.4.0, which was developed by the California Air Pollution Control Officers Association and is used throughout California to quantify criteria pollutants and greenhouse gas emissions (GHGs).

The CalEEMod emissions scenarios were based on project-specific information, found in *Section 2 Project Description*. In instances where project-specific information was not available (e.g. construction equipment horsepower, length of worker trips, soil moisture content), the analysis relied on CalEEMod default values for construction activities. As explained in *Section 2 Project Description*, it is assumed that construction would begin in April 2023 and have a duration of 18 months. SCAQMD's Rule 403 (Fugitive Dust) requires 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. The construction contractor would be required to have a Fugitive Dust Control Plan approved by either the SCAQMD or Riverside County prior to grading or excavation activities. As such, dust control measures were incorporated into the modeling of the proposed project's emissions.

Construction Emissions

Similar to the original approved project, air emissions of criteria pollutants during construction of the proposed project would result from the use of construction equipment with internal combustion engines, and offsite vehicles to transport workers, deliver materials to the site, and haul import and export material to and from the site. Project construction would also result in fugitive dust emissions, which would be lessened through the implementation of the fugitive dust control measures required by SCAQMD Rule 403 (Fugitive Dust). **Table 3-1** summarizes the maximum daily pollutant emissions during construction of the proposed project. As shown in **Table 3-1**, project construction would not exceed SCAQMD regional thresholds for any criteria pollutant.

Table 3-1: Proposed Project Maximum Mass Daily Construction Emissions (pounds/day)

Emissions Source	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Construction Equipment	4	31	36	<1	1.4	1.3
Offsite emissions	<1	1	2	<1	0.6	0.2
Onsite fugitive dust (with required fugitive dust controls)	--	--	--	--	0.6	0.2
Total Maximum Mass Daily Emissions	4	32	38	<1	2	1.5
<i>SCAQMD Regional Thresholds</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold exceeded?	No	No	No	No	No	No

Note: In CalEEMod, environmental commitments, including measures to comply with required SCAQMD fugitive dust controls, must be added as "mitigation measures." Therefore, these results reflect the mitigated scenario in the output tables in Appendix A.

Additionally, while the use of SCAQMD Local Significance Thresholds (LSTs) is voluntary, the proposed project emissions were compared to LSTs for the project area and are provided in **Table 3-2**. LSTs are only applicable to emissions within a fixed, stationary location, such as construction sites, and vary based on project site size. **Table 3-2** provides LSTs that are applicable to the onsite construction activities, including pipeline trenching, installation of pipeline and appurtenances, and roadway resurfacing. Because the proposed project would disturb less than one acre per day during construction, as the construction fleet moves along the alignment at a rate of 50 to 100 linear feet of pipe per day, the LST for construction of a one acre project was used.

Table 3-2: Proposed Project Maximum Mass Daily Emissions Compared to Localized Significance Thresholds (pounds/day)

Emissions Source	NO _x	CO	PM ₁₀	PM _{2.5}
On-site construction equipment	31	36	1.4	1.3
<i>LST (one-acre LST)</i>	<i>118</i>	<i>602</i>	<i>4</i>	<i>3</i>
Threshold exceeded?	No	No	No	No

Operational Emissions

The proposed project would not be associated with long-term energy usage or additional EMWD O&M activities. Inspection and maintenance of the pipeline and above ground appurtenances, and exercise of the valves would be incorporated into EMWD's existing O&M activities. Thus, no new emissions would be associated with operation of the proposed project.

c) Less than Significant Impact

Sensitive receptors are typically defined as schools (preschool–12th grade), hospitals, resident care facilities, senior housing facilities, day care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. Sensitive receptors near the project alignment are described in *Section 2.4.1 Sensitive Receptors*. As discussed under “b” above, the proposed project’s construction and operational emissions would not exceed SCAQMD regional thresholds or LSTs. Therefore, sensitive receptors would not be subjected to substantial pollutant concentrations and impacts would be less than significant.

d) Less than Significant Impact

Similar to the original approved project, the proposed project would involve emissions of sulfur compounds from use of oil and diesel fuel during construction, which would potentially result in unpleasant odors. Construction would be temporary and odorous emissions from construction equipment tend to dissipate quickly within short distances from construction sites. Once the proposed project is operational, the pipeline would not be associated with odors. Impacts would be less than significant.

Mitigation Measures: None required or recommended.

3.4 Biological Resources

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
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Would the Project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	[]	[X]	[]	[]
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b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	[]	[]	[]	[X]
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	[]	[]	[]	[X]
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?	[]	[]	[]	[X]
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	[]	[]	[]	[X]
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?	[]	[X]	[]	[]

Discussion

A Biological Resources Technical Study (BRTS) was conducted in August 2022 for the proposed project. The BRTS included a desktop analysis and field survey to assess the biological resources of the proposed project area. The analysis included the project site plus a 100-foot buffer, referred to as the "study area," totaling 16.54 acres (11.34-acre proposed pipeline construction area, plus 5.2-acre staging area) as shown in **Figure 2-2**. The complete report is provided in **Appendix B** and is relied upon for the analysis in this Subsequent IS/MND.

Regulated or sensitive resources studied and analyzed included special status plant and wildlife species, nesting birds and raptors, wildlife movement corridors and habitat linkages, sensitive plant communities, jurisdictional waters and wetlands, and locally

protected resources (i.e., heritage trees). Potential impacts to biological resources were analyzed based on the following statutes:

- California Environmental Quality Act (CEQA)
- Federal Endangered Species Act (FESA)
- California Endangered Species Act (CESA)
- Federal Clean Water Act (CWA)
- California Fish and Game Code (CFGC)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act
- City of Moreno Valley Municipal Code
- Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The literature review consisted of publicly available spatial data from a variety of public agencies, geospatial warehouses, aerial imagery, and previously written reports related to the proposed project area and surrounding U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles (**Appendix B**). A field reconnaissance survey was performed in July 2022 to assess and document existing site conditions and the potential presence of sensitive biological resources such as plants, wildlife, nesting birds, and jurisdictional waters and wetlands. A formal jurisdictional delineation of waters and wetlands was not performed because no potentially jurisdictional features were present within the project area.

a) Less than Significant with Mitigation Incorporated

The proposed project would be located in an urban, built-out setting with the proposed alignment located within existing rights-of-way and surrounded by existing development. According to the BRTS (**Appendix B**), 45 sensitive plant species and 34 sensitive wildlife species are known to occur or have potential to occur within the five-mile radius of the study area. Similar to the original approved project, sensitive plant species are not expected to occur within the proposed project area due to the lack of suitable habitat as well as historical and existing disturbances.

Seven sensitive wildlife species were determined to have a low potential to occur within the study area: Cooper's hawk (*Accipiter cooperii*) and California horned lark (*Eremophila alpestris actia*), which are listed on the CDFW Watch List; and coastal whiptail lizard

(*Aspidoscelis tigris stejnegeri*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), western yellow bat (*Lasiurus xanthinus*), loggerhead shrike (*Lanius ludovicianus*), and burrowing owl (*Athene cunicularia*), which are listed as CDFW Species of Special Concern. These seven species were determined to have a low potential to occur in the study area due to the observation of small pockets of open habitat with sparse vegetation in the adjacent parcels and within the staging area.

Nonetheless, similar to the original approved project, construction of the proposed project adjacent to low quality habitat could potentially interfere with or deter these species from nesting, roosting, or foraging in the study area through increased noise and human presence. In order to avoid and minimize the potential for impacts to these sensitive species, **Mitigation Measures BIO-1, BIO-2, and BIO-3** would be implemented. **Mitigation Measure BIO-1** would avoid direct impacts to burrowing owls and was also a condition of the original approved project in the 2020 IS/MND and Addendum. To avoid direct or indirect impacts to nesting birds, implementation of **Mitigation Measure BIO-2** would require pre-construction surveys to minimize all impacts to nesting birds to less than significant. The original approved project also required pre-construction nesting bird surveys; however, the measure in this Subsequent IS/MND has been revised from the measure in the 2020 IS/MND and Addendum to reflect recent CDFW guidance. **Mitigation Measure BIO-3** would require a pre-construction clearance survey and implementation of a Worker Environmental Awareness Program (WEAP) prior to construction to address potential impacts to coastal whiptail, western yellow bat, and Los Angeles pocket mouse. Such a measure was not applicable to the original approved project because the original approved project's biological resources assessment did not identify any suitable habitat for the coastal whiptail, western yellow bat, or Los Angeles pocket mouse in or adjacent to the original approved project area. The WEAP required by **Mitigation Measure BIO-3** would mitigate potential impacts to the sensitive reptile and mammal species that have low potential to occur at the project site, while the nesting bird surveys required by **Mitigation Measure BIO-2** would mitigate potential impacts to the sensitive bird species that have low potential to occur at the project site. These species have a low potential to occur on small pockets of open habitat with sparse vegetation in the parcels adjacent to the proposed pipeline alignment and within the staging areas.

Construction activities would primarily occur within highly disturbed roadways that are surrounded by development. No sensitive plant species are anticipated within the proposed project alignment or staging area, and the existing high levels of disturbance and lack of habitat would likely deter wildlife from using the proposed project alignment long-term. Nonetheless, **Mitigation Measure BIO-1** would be implemented to ensure avoidance of direct impacts to burrowing owls, **Mitigation Measure BIO-2** would be

implemented to avoid impacts to nesting birds, and **Mitigation Measure BIO-3** would be implemented to minimize impacts to special status reptiles and mammals that have a low potential to be present in small pockets of open habitat with sparse vegetation in the parcels adjacent to the proposed pipeline alignment and within the staging areas. With implementation of **Mitigation Measures BIO-1, BIO-2, and BIO-3**, impacts would be less than significant.

b) No Impact

Based upon the findings in the 2022 BRTS, no sensitive plant communities, riparian habitat, or sage scrub are present within the study area. The study area is highly disturbed. Therefore, the proposed project would have no impact on any riparian habitat or other sensitive natural community.

c) No Impact

Based upon the findings in the 2022 BRTS, no hydric soils, vernal pools, fairy shrimp habitat, or jurisdictional features under the jurisdiction of the US Army Corps of Engineers, Regional Water Quality Control Board, or California Department of Fish and Wildlife are within or adjacent to the proposed project study area, including the pipeline alignment and staging area. No riparian/riverine habitat occurs within the proposed project site or staging area. No impact would occur.

d) No Impact

Based upon the findings in the 2022 BRTS, there are no mapped essential habitat connectivity areas in the immediate vicinity of the proposed project alignment. The proposed project would be located within existing roadways and vacant, disturbed land, with surrounding sites consisting of parks, disturbed lots, developed areas, and sites undergoing residential and industrial development. The study area is not located within an MSHCP Criteria Area, Public-Quasi Public Reserve Lands or within a Core or Linkage, which provide habitat connectivity. Therefore, the proposed project would have no impacts on wildlife movement.

e) No Impact

Similar to the original approved project, the proposed project would be located in the County of Riverside Stephen's Kangaroo Rat Plan and Fee Area (County of Riverside Ordinance No. 663). The County Ordinance requires all proposed development projects that are located within the fee area to be reviewed to assess the appropriate course of action to protect the survival of the species. Preparation of the BRTS (**Appendix B**) fulfills the requirements of the ordinance that the proposed project be reviewed. The

BRTS determined the proposed project study area, including the proposed pipeline alignment and staging areas, does not have the suitable grassland, coastal scrub and sagebrush habitat needed to support the Stephen's Kangaroo Rat. Therefore, the proposed project would not impact, or result in the loss of suitable habitat for the Stephen's Kangaroo Rat and no mitigation would be required.

The City of Moreno Valley Municipal Code protects heritage trees, defined as those with a 15" diameter (measured at 24 inches above ground level). According to the 2022 BRTS, the City of Moreno Valley Tree Management Policy (Ord. 923 § 1, 2017) within the City's Municipal Code, Chapter 14.40 Tree Care covers the project area. EMWD is not subject to the Tree Management Policy, although it may voluntarily comply. No city tree or heritage tree removal is proposed and therefore no City-protected trees would be impacted by the project.

f) Less than Significant with Mitigation Incorporated

Similar to the original approved project, the proposed project would be located in the Western Riverside MSHCP. None of the project area, including the proposed pipeline alignment and staging areas, is located within existing or proposed reserve or criteria areas of the MSHCP, or within Public/Quasi Public conserved lands. Throughout the proposed staging area, the potential for burrowing owl, a listed species protected under the MSHCP, to occur is low, given that the site is located within highly disturbed areas surrounded by urban development which would normally deter individuals from long-term use of the site. Indirect impacts are not expected with the implementation of **Mitigation Measure BIO-1**. Therefore, the proposed project would have a less than significant impact with the implementation of **Mitigation Measure BIO-1**.

Mitigation Measures:

The following mitigation measures shall be implemented to avoid direct impacts to burrowing owls, protected migratory nesting birds, and to address potential impacts to coastal whiptail, western yellow bat, and Los Angeles pocket mouse. With these mitigation measures incorporated, the proposed project impacts are considered less than significant.

BIO-1: Burrowing Owl Preconstruction Clearance Survey. A qualified wildlife biologist shall conduct a pre-construction survey of the impact areas to confirm presence/absence of burrowing owl individuals no more than 14 days prior to construction. The survey methodology will be consistent with the methods outlined in the CDFW Staff Report on Burrowing Owl Mitigation (2012). If no active breeding or wintering owls are identified, no further action is required.

If burrowing owls are detected onsite, the following actions shall be implemented in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (2012):

- A qualified wildlife biologist shall be onsite during initial ground-disturbing activities in potential burrowing owl habitat identified in the biological resources assessment.
- No ground-disturbing activities shall be permitted within a buffer no less than 200 meters (656 feet) from an active burrow, depending on the level of disturbance, as defined by the Canadian Wildlife Service Environment (CWSE) (2009), unless the qualified biologist determines a reduced buffer would not adversely affect the burrowing owl(s).
- Active burrows will not be disturbed during the nesting season (February 1 to August 31).
- During the nonbreeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow, depending on whether the level of disturbance is low, such as surveying, drive by, lowline 2" or less, plowed in (CWSE 2009), and if the active burrow is not directly affected by the project activity. A smaller/larger buffer may be established by the qualified biologist following monitoring and assessments of the project's effects on the burrowing owls. If active winter burrows are found that would be directly affected by ground-disturbing activities, owls can be excluded from winter burrows according to recommendations made in the Staff Report on Burrowing Owl Mitigation (2012). Additionally, if burrowing owls are found on-site, a qualified biologist shall prepare and submit a passive relocation program in accordance with Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the Staff Report on Burrowing Owl Mitigation (2012) for CDFW review and approval prior to the commencement of disturbance activities on-site.
- Burrowing owls shall not be excluded from burrows until a Burrowing Owl Exclusion Plan is developed based on the recommendations made in Appendix E, Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans, of the Staff Report on Burrowing Owl Mitigation (2012). The Burrowing Owl Exclusion Plan shall be submitted to CDFW for review and approval prior to the commencement of disturbance activities on-site.

- Prior to passive relocation, the EMWD shall be responsible for acquiring compensatory mitigation at a ratio of 1:1 for lost breeding and/or wintering habitat to be implemented on- or off-site, including permanent conservation and management of burrowing owl habitat through the recordation of a conservation easement, funding of a non-wasting endowment, and implementation of a Mitigation Land Management Plan based on the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012) and CDFW guidance. Mitigation lands would be identified through coordination with CDFW and on adjacent, or proximate to the impact site where feasible and where habitat is suitable to support burrowing owl. If required by CDFW, compensatory mitigation shall be completed prior to passive relocation of owls and completion of construction.
- When a qualified biologist determines that burrowing owls are no longer occupying the project site and passive relocation is complete, construction activities may begin. A final letter shall be prepared by the qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW.

BIO-2 Preconstruction Nesting Bird Survey

To avoid impacts to nesting birds, activities associated with vegetation removal, construction, and/ or grading shall be conducted September 16 and January 14, which is outside the peak nesting/ breeding bird season. If vegetation removal, construction, and/or grading must occur during the peak nesting/breeding season (January 15 through September 15), EMWD shall ensure that impacts to nesting/breeding birds are avoided through the implementation of preconstruction surveys, establishment of an exclusionary buffer zone, and ongoing monitoring, if necessary. EMWD shall designate a qualified biologist experienced in identifying local and migratory bird species; conducting bird surveys using appropriate survey methodology (such as CDFW-accepted species-specific survey protocols, available here: <https://www.wildlife.ca.gov/conservation/survey-protocols>); nesting surveying techniques; recognizing breeding and nesting behaviors; locating nests and breeding territories; identifying nesting stages and nest success; determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures.

- Prior to activities associated with vegetation removal, construction, and/ or grading during the peak bird nesting/breeding season (January 15 through September 15), the biologist shall conduct surveys for active nests.

Preconstruction nesting bird surveys should be conducted no more than three days prior to the start of clearance/construction work. If ground-disturbing activities are delayed, additional preconstruction surveys should be conducted so that no more than three days have elapsed between the survey and ground-disturbing activities.

- Surveys shall encompass all suitable areas within 100 feet of the construction zone, including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of the site; density, and complexity of the land cover type; number of survey participants; survey techniques employed; and shall be sufficient to ensure the data collected are complete and accurate. Preconstruction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior (e.g., copulation, carrying of food or nest materials, nest building, removal of fecal sacks, flushing suddenly from atypically close range, agitation, aggressive interactions, feigning injury or distraction displays, or other behaviors).
- Active nests found within 100 feet of the construction zone shall be delineated with highly visible construction fencing or other exclusionary material that would inhibit entry by personnel or equipment into the buffer zone. Installation of the exclusionary material shall be completed by the qualified biologist prior to initiation of construction activities. The biologist shall identify an appropriate protective buffer zone around the nest depending on the sensitivity of the species, the nature of the construction activity, and the amount of existing disturbance in the vicinity. In general, the qualified biologist should designate a buffer of 50 to 200 feet for common nesting birds and 200 to 500 feet for special status nesting birds and nesting raptors. If excluding work activities from any established buffers is not feasible, the biologist may establish a modified buffer exclusion utilizing specific biological and/or ecological attributes of the project location and avian species. The buffer zone shall remain intact and maintained while the nest is active (i.e., occupied or being constructed by at least one adult bird) and until young birds have fledged and no continued use of the nest is observed, as determined by the biologist. No construction activities shall be allowed within the buffer until nesting activity has ended to ensure protection of nesting birds. If the biologist determines nesting activities could fail as a result of work activities, all work shall cease within the buffer exclusion, and no entry into the buffer will occur. Construction activities within the no-work buffer may proceed after the biologist determines the nest is no longer active due to natural causes (e.g., young have fledged, predation, or

other non-human causes of nest failure). The barrier shall be removed by construction personnel at the direction of the biologist.

BIO-3 Coastal Whiptail, Yellow Bat, and Los Angeles Pocket Mouse WEAP Training and Pre-construction Survey

Because there is marginal habitat present within small pockets of open habitat with sparse vegetation in the adjacent parcels to the study area and within the staging area to support the presence of coastal whiptail, western yellow bat, and Los Angeles pocket mouse, a pre-construction survey prior to ground disturbance activity shall be carried out by a qualified biologist. Worker Environmental Awareness Program (WEAP) training shall also be conducted prior to any ground disturbance activities, to address the potential for these species to occur within the project area. The training will address best management practices (BMPs) prior to, during, and after construction, including appropriate protocol to follow if any special-status species are identified. All participants in construction activities will be required to attend this training prior to ground disturbance, and a signature from each participant will be required at the conclusion of the training.

3.5 Cultural Resources

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	[]	[X]	[]	[]
b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	[]	[X]	[]	[]
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	[]	[X]	[]	[]

Discussion

A Historic Properties Identification Report (HPIR) was prepared in September 2022 for the Raw Water Conveyance Pipeline Phase III project. The HPIR includes the results of a Sacred Lands File (SLF) search, outreach to Native American tribes and local historical groups, and a pedestrian field survey conducted on July 22, 2022. The HPIR relied on a cultural resources records search of the California Historical Resources Information System (CHRIS) conducted in July 2021 for the EMWD Perris North Groundwater Monitoring Project which provides analytical coverage for the proposed project area. The complete HPIR is provided in **Appendix C**.

In July 2021, a search of the CHRIS was conducted by Eastern Information Center (EIC) staff at the University of California, Riverside. The CHRIS records search identified nine previously recorded cultural resources within 0.5-mile of the proposed project Area of Potential Effects (APE). The recorded boundary of one resource (P-33-028824) is located 75 feet north of the APE across an adjacent roadway. P-33-028824 consists of an historic-period 15-foot by 6-foot foundation slab, a utility pole with 1930 and 1947 inspection nails, and a single clear glass bottle fragment. The July 2022 pedestrian field survey of the proposed project APE did not identify any new archaeological or built environment resources. The project archaeologist attempted to relocate the previously recorded resource documented 75 feet north of the project APE (P-33-028824); however, the resource is located on a private plot of land with fencing blocking access. As this site is outside of the APE and will not be impacted by the project, it requires no further management consideration.

The SLF search was returned with negative results and no cultural resources were identified within the proposed project APE as a result of the records search. No specific Native American archaeological resources were identified within the APE as a result of the outreach conducted. Given the level of previous ground disturbance within the project area (i.e., grading and construction activities) the proposed project APE is considered to have low archaeological sensitivity.

a) Less than Significant with Mitigation Incorporated

Similar to the original approved project, although no known historical resources would be affected by the proposed project, construction of the proposed project would involve ground disturbing activities which have the potential to encounter previously unknown historical resources. If previously unknown historical resources are encountered during construction, implementation of **Mitigation Measures CUL-1** through **CUL-6**, would reduce impacts to less than significant, similar to the original approved project.

b) Less than Significant with Mitigation Incorporated

Similar to the original approved project, archaeological resources are not anticipated to be encountered during construction of the proposed project because no archaeological resources have been previously recorded within or immediately adjacent to the project alignment and because the alignment is within an existing disturbed right-of-way. However, if ground-disturbing activities expose previously unrecorded resources, **Mitigation Measures CUL-1** through **CUL-6** would help prevent impacts to the cultural or archaeological resources. With implementation of Mitigation Measures **CUL-1** through **CUL-6**, potential impacts resulting in an adverse change to archeological resources would be less than significant.

c) Less than Significant with Mitigation Incorporated

Similar to the original approved project, construction of the proposed project has the potential to result in discovery of unanticipated human remains during ground disturbing activities. **Mitigation Measure CUL-7** would be implemented to ensure proper procedures are in place if human remains are discovered during construction. With implementation of **Mitigation Measure CUL-7**, the impacts would be less than significant.

Mitigation Measures:

The following mitigation measures shall be implemented to avoid direct impacts to previously unknown historical and archaeological resources. With these mitigation measures incorporated, the proposed project impacts are considered less than significant.

CUL-1: Cultural Resources Treatment and Monitoring Agreement. At least 30 days prior to the start of any ground-disturbing activities, EMWD shall contact the Consulting Tribe(s) to develop Cultural Resource Treatment Monitoring Agreement(s) ("Agreement"). The Agreement(s) shall address the treatment of archaeological resources inadvertently discovered on the project site; project grading; ground disturbance and development scheduling; the designation, responsibilities, and participation of tribal monitor(s) during grading, excavation, and ground disturbing activities; and compensation for the tribal monitors, including overtime, weekend rates, and mileage reimbursements.

CUL-2: Develop a Cultural Resources Monitoring Plan. Prior to any grading activities, a Cultural Resources Monitoring Plan shall be prepared by a qualified archaeologist in consultation with the Consulting Tribe(s). The plan shall identify the location and timing of cultural resources monitoring. The plan shall also contain an

allowance that the qualified archaeologist, based on observations of subsurface soil stratigraphy or other factors during initial grading, and in consultation with the Native American monitor and EMWD, may reduce or discontinue monitoring as warranted if the archaeologist determines that the possibility of encountering archaeological deposits is low. The plan shall outline the appropriate measures to be followed in the event of unanticipated discovery of cultural resources during project implementation (including during the survey to occur following vegetation removal and monitoring during ground-disturbing activities). The plan shall identify avoidance as the preferred manner of mitigating impacts to cultural resources. The plan shall establish the criteria utilized to evaluate the historic significance (per CEQA) of the discoveries, methods of avoidance consistent with CEQA Guidelines Section 15126.4(b)(3), as well as identify the appropriate data recovery methods and procedures to mitigate the effect of the project if avoidance of significant historical or unique archaeological resources is determined to be infeasible. The plan shall also include reporting of monitoring results within a timely manner, disposition of artifacts, curation of data, and dissemination of reports to local and state repositories, libraries, and interested professionals. A qualified archaeologist and Consulting Tribe(s) tribal monitor shall attend a pre-grade meeting with EMWD staff, the contractor, and appropriate subcontractors to discuss the monitoring program, including protocols to be followed in the event that cultural material is encountered.

CUL-3: Tribal Monitoring Agreements. A qualified archaeological monitor and a Consulting Tribe(s) monitor shall be present for ground-disturbing activities associated with the project, and both the project archaeologist and Tribal Monitor(s) will make a determination as to the areas with a potential for encountering cultural material. At least seven business days prior to project grading, EMWD shall contact the tribal monitors to notify the Tribe of grading/excavation and the monitoring program/schedule, and to coordinate with the Tribe on the monitoring work schedule. Both the archaeologist and the tribal monitor shall have the authority to stop and redirect grading activities in order to evaluate the nature and significance of any archaeological resources discovered within the project limits. Such evaluation shall include culturally appropriate temporary and permanent treatment pursuant to the Cultural Resources Treatment and Monitoring Agreement, which may include avoidance of cultural resources, in-place preservation, data recovery, and/or reburial so the resources are not subject to further disturbance in perpetuity. Any reburial shall occur at a location predetermined between EMWD and the Consulting Tribe(s), details of which shall be addressed in the Cultural Resources Treatment and Monitoring Agreement in **Mitigation Measure CUL-1**. Treatment may also include curation of the cultural resources at a tribal curation facility, as determined in discussion among

EMWD, the project archaeologist, and the tribal representatives and addressed in the Cultural Resources Treatment and Monitoring Agreement referenced in Mitigation Measure CUL-1.

CUL-4: Evaluation of Discovered Artifacts. All artifacts discovered at the development site shall be inventoried and analyzed by the project archaeologist and tribal monitor(s). A monitoring report will be prepared, detailing the methods and results of the monitoring program, as well as the disposition of any cultural material encountered. If no cultural material is encountered, a brief letter report will be sufficient to document monitoring activities.

CUL-5: Disposition of Inadvertent Discoveries. In the event that Native American cultural resources are recovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries with the tribe. EMWD shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources, and adhere to the following:

1. Preservation-in-place is the preferred option; preservation-in-place means avoiding the resources and leaving them in the place where they were found with no development affecting the integrity of the resource.
2. If preservation-in-place is not feasible, on-site reburial of the discovered items as detailed in the Monitoring Plan required pursuant to **Mitigation Measure CUL-2** is the next preferable treatment measure. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments.
3. In the event that on-site reburial is not feasible, EMWD will enter into a curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 Code of Federal Regulations 800 Part 79 and therefore would be curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation.

CUL-6: Non-Disclosure of Reburial Locations. It is understood by all parties that unless otherwise required by law, the site of any reburial of culturally sensitive resources shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code 6254(r), parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial.

CUL-7: Human Remains. If Native American human remains are encountered, Public Resources Code Section 5097.98 and California Health and Safety Code Section 7050.5 will be followed. If human remains are encountered, no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. Subsequently, the NAHC shall identify the person or persons it believes to be the "most likely descendant." The most likely descendant (MLD) shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

3.6 Energy

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	[]	[]	[X]	[]
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	[]	[]	[X]	[]

Discussion

The 2020 IS/MND and Addendum describes the applicable energy background, environmental setting, and regulatory setting. Since the 2020 IS/MND and Addendum were adopted, the City of Moreno Valley developed and adopted the *Moreno Valley Climate Action Plan (CAP)* (City of Moreno Valley 2021b), concurrently with the *Moreno Valley General Plan 2040*. The CAP included an inventory of energy use in the city by sector, including for the water and wastewater sectors. The CAP reported that EMWD and Box Springs Mutual Water Company consumed 4,651,580 kWh of electricity to supply potable and non-potable water within Moreno Valley in 2019. Box Springs Mutual Water Company supplied less than one percent of the total amount of the City's water, so most of that electricity use can be attributed to EMWD. EMWD consumed 199,577 therms of natural gas in supplying potable and non-potable water in Moreno Valley in 2019. EMWD consumed 9,441,777 kWh of electricity and 419,096 therms of natural gas to treat and manage wastewater in Moreno Valley in 2019 (City of Moreno Valley 2021b). No other background or setting information has changed since the 2020 IS/MND and Addendum were adopted.

Electrical service and natural gas service in the proposed project area is provided by Southern California Edison (SCE) and the Southern California Gas Company, respectively. SCE's power content mix utilizes approximately 30.9 percent renewables, 3.3 percent large hydroelectric, 15.2 percent natural gas, 8.4 percent nuclear, and 42.3 percent from other and unspecified power sources through transactions (SCE 2020).

a) Less Than Significant Impact

Similar to the original approved project, construction of the proposed project would require fossil fuel consumption for operation of diesel-powered construction equipment and vehicle trips from construction crew, equipment, and materials hauling and delivery trips. A description of the anticipation pipeline construction fleet and material excavation can be found in *Section 2.5.1*. Estimates of the number of worker, hauling, and vendor trips, as well as the construction vehicle fleet for all phases of construction were based on information in *Section 2.5.1* and CalEEMod model assumptions, which are based on surveys of similar construction activities. Further detail can be found in **Appendix A**.

Similar to the original approved project, the proposed project would implement typical construction practices such as trenching and repaving. The project would not require unusual or excessive construction equipment or practices that would result in wasteful, inefficient, or unnecessary consumption of energy compared to projects of similar type and size (see *Section 2.5.1*). In addition, the construction fleet contracted for the proposed

project would be required to comply with the CARB In-Use Off-Road Diesel-Fueled Fleets Regulations (CARB 2011), which would limit vehicle idling time to five minutes, restrict adding vehicles to construction fleets with older-tier engines, and establish a schedule for retiring older, less fuel-efficient engines from the construction fleet. Once construction is complete, operational energy consumption would be incorporated into EMWD's existing non-potable water distribution system. The additional energy required to operate the proposed project would be negligible compared to EMWD's overall operations. Routine inspection would also be incorporated into EMWD's existing O&M activities. As such, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy during construction, and impacts would be less than significant.

b) Less Than Significant Impact

The City of Moreno Valley CAP, prepared concurrently with the 2040 General Plan, promotes energy efficiency throughout the city and includes measures that address energy efficiency in the residential, commercial, industrial, off-road equipment, city public services and public lighting, and natural resources sectors. Energy-reduction measures applicable to proposed project construction include reducing emissions from heavy-duty construction equipment by limiting idling based on SCAQMD requirements; utilizing cleaner fuels, equipment, and vehicles; and requiring clear signage reminding construction workers to limit idling.

The City of Moreno Valley 2040 General Plan includes goals, objectives, policies, and programs that guide decision making. The Water and Energy Conservation section includes Goal OSRC-3, which requires the City to use energy and water wisely and promote reduced consumption, and identifies policies and action times to achieve this goal. EMWD also implements its own energy efficiency programs, which focus on pursuing alternative sources of electrical power supply such as solar, digester gas, fuel cell technology and microturbines (EMWD nd).

The project would not conflict with the City's CAP measures, General Plan policies and action items, or EMWD energy efficiency programs because, similar to the original approved project, the proposed project would result in a negligible net increase in EMWD's existing overall operations energy use. Construction of the proposed project would comply with the CARB In-Use Off-Road Diesel-Fueled Fleets Regulations (CARB 2011), including limiting idling. Furthermore, the project would not result in wasteful or inefficient energy consumption as explained under question "a" above. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

Mitigation Measures: None required or recommended.

3.7 Geology and Soils

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	[]	[]	[X]	[]
ii) Strong seismic ground shaking?	[]	[]	[X]	[]
iii) Seismic-related ground failure, including liquefaction?	[]	[]	[X]	[]
iv) Landslides?	[]	[]	[X]	[]
b) Result in substantial soil erosion or the loss of top soil?	[]	[]	[X]	[]
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	[]	[]	[X]	[]
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	[]	[]	[X]	[]

- | | | | | |
|--|-----|-------|-----|-------|
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | [] | [] | [] | [X] |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | [] | [X] | [] | [] |

Discussion

The 2020 IS/MND and Addendum describe the applicable geology and soils background, environmental setting, and regulatory setting. Since the 2020 IS/MND and Addendum were adopted, the City of Moreno Valley *General Plan 2006* was updated and replaced with the *General Plan 2040* (City of Moreno Valley 2021a). A Geotechnical Investigation Report was prepared for the proposed project by Converse Consultants (Converse Consultants 2022). The purposes of this investigation were to determine the nature and engineering properties of the subsurface soils and to provide design and construction recommendations. No other new information or changed circumstances have arisen since the 2020 IS/MND and Addendum were adopted.

a.i) Less than Significant Impact

No portion of the proposed pipeline alignment is located within a currently designated State of California or Riverside County Earthquake Fault Zone. As a result, the potential for surface rupture resulting from the movement of nearby or distant faults is considered very low (Converse Consultants 2022). The nearest potentially active fault mapped in accordance with the Alquist-Priolo Earthquake Fault Zoning Act is the San Jacinto Fault Zone. The shortest distance between the San Jacinto Fault Zone and the proposed pipeline is 3.5 miles. Due to the distance between the Fault Zone and project alignment, there is a very low potential for surface fault rupture. Similar to the original approved project, the proposed project would not be associated with significant levels of risk of loss, injury, or death from rupture of a known earthquake fault. Impacts would be less than significant.

a.ii) Less than Significant Impact

The San Jacinto Fault Zone, located approximately 3.5 miles from the proposed project alignment, is one of the most active faults in Southern California. Additionally, the San Andres and Elsinore Fault Zones are located approximately 14 miles east and 19 miles west of the project alignment, respectively. Based on the California Department of

Conservation Ground Motion Interpolator, the project area has a 0.915 gravity for potential ground shaking¹ and would likely be subject to seismic ground shaking during a measurable seismologic event (CDOC 2008).

Similar to the original approved project, the potential for ground shaking in the project area is relatively high due to the close proximity to the San Jacinto, San Andreas, and Elsinore Fault Zones. However, the project facilities would be designed per EMWD's Engineering Standards and Specifications and the geotechnical report prepared for the project (Converse Consultants 2022) which would ensure structural resiliency. The project would also be designed and constructed pursuant to applicable American Water Works Association standards and would incorporate measures to accommodate seismic loading pursuant to guidelines such as the "Greenbook" Standard Specifications for Public Works Construction (Greenbook Committee of Public Works Standards, Inc. 2018), the International Building Code (International Code Council 2018), and the California Building Code (California Code of Regulations, Title 24, Part 2). Because building and construction codes related to seismic shaking would be followed, there would be less potential for structural damage or loss due to seismic ground shaking. Even if structural damage does occur during a seismic event, the proposed project would be located entirely below ground and would not exacerbate a risk of seismic-related damage to other existing resources in the vicinity. Impacts would be less than significant.

a.iii) Less than Significant Impact

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions exist: shallow groundwater; low-density non-cohesive (granular) soils; and high-intensity ground motion (City of Moreno Valley 2021a). Based on review of hazard maps, the proposed pipeline alignment is located within a State of California or Riverside County designated zone of liquefaction susceptibility of low to moderate risk. In addition, historical high groundwater levels along the pipeline alignment are not known with certainty and could vary depending upon the seasonal precipitation and possible groundwater pumping activity in the alignment vicinity. Therefore, the proposed project may be susceptible to liquefaction.

¹ Ground shaking potential is calculated as the potential for ground shaking that has a two percent chance of being exceeded in 50 years and is measured on a ratio scale to signify the severity of the earthquake.

Similar to the original approved project, the proposed project would be designed and constructed in accordance with state and EMWD seismic engineering standards described under “a.ii” above, and the geotechnical report prepared for the project (Converse Consultants 2022) which would reduce any potential impacts associated with liquefaction. The proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure including liquefaction. Impacts would be less than significant.

a.iv) Less than Significant Impact

Landslide risk is typically associated with high slopes and unstable soils. Due to the flat nature of the proposed pipeline alignment, the potential for seismically induced landslides affecting the pipeline alignment is considered to be very low (Converse Consultants 2022). Similar to the original approved project, the proposed project would be designed and constructed in accordance with state and EMWD seismic engineering standards described under “a.ii” above, and the geotechnical report prepared for the project (Converse Consultants 2022) which would reduce any potential impacts associated with landslides. The proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related landslides. Impacts would be less than significant.

b) Less than Significant Impact

Similar to the original approved project, construction of the proposed project would require soil-disturbing activities, such as excavation, which would expose soil to erosion if exposed to strong winds, heavy rains, or other storm events. In compliance with the California NPDES Construction General Permit for Storm Water Discharges, a Storm Water Pollution Prevention Plan (SWPPP) would be prepared and Best Management Practices (BMPs) would be implemented to control and reduce pollutants in storm water discharges associated with construction, including erosion of soil. Once construction is complete, all pipeline disturbance areas would be returned to pre-project conditions and would not result in further soil erosion. Therefore, impacts would be less than significant.

c) Less than Significant Impact

Seismically induced lateral spreading involves primarily lateral movement of earth materials over underlying materials which are liquefied due to ground shaking. It differs from the slope failure in that complete ground failure involving large movement does not occur due to the relatively smaller gradient of the initial ground surface. Lateral spreading is demonstrated by near-vertical cracks with predominantly horizontal movement of the soil mass involved. Due to the low to moderate risk for liquefaction and flat nature of

proposed pipeline alignment, the risk of lateral spreading in the project area is considered low to moderate (Converse Consultants 2022). Landslide impacts were addressed in response “a.iv” above.

Similar to the original approved project, liquefaction and lateral spreading are a risk associated with the project area due to potentially shallow groundwater levels. However, operation of the project, a functionally independent component of the Perris North Basin Contamination Prevention and Remediation Program, would result in groundwater pumping which would help regulate groundwater levels and minimize the potential risk of liquefaction. Adherence to state and EMWD seismic engineering standards described under “a.ii” above and the geotechnical report prepared for the project (Converse Consultants 2022) would ensure structural resiliency to earthquake events and associated lateral spreading and liquefaction. Therefore, implementation of the project is not expected to result in significant risk of landslide, lateral spreading, or liquefaction.

Although none of the proposed project alignment would be located in an area of known subsidence, the operation of the proposed project, a functionally independent component of the Perris North Basin Contamination Prevention and Remediation Program, would extract groundwater, which, when conducted in an unregulated manner, has been known to cause land subsidence and collapse. As explained in further detail under question “b” in *Section 3.10 Hydrology and Water Quality*, the proposed project, together with the original approved project, would produce approximately 3,700 AFY of groundwater in a sustainable manner consistent with the San Jacinto Groundwater Basin GSP. Therefore, the proposed project is not expected to be susceptible to risks associated with land subsidence or collapse. Impacts would be less than significant.

d) Less than Significant Impact

Expansive soils have the ability to significantly change their volume, shrink and swell, due to their soil moisture content. Expansive soils can crack rigid structures and potentially create pipeline rupture. Typically, expansive soils are very fine grained with a high to very high percentage (60 percent or more) of clay. The project area overlies a soil area that is well drained and consists of sandy loam soils (UC Davis 2022). Based on the low clay particle content of the soil, the project alignment would not be located on expansive soils. Similar to the original approved project, the proposed project would be designed and constructed in accordance with state and EMWD seismic engineering standards described under “a.ii” above, and the geotechnical report prepared for the project (Converse Consultants 2022) which would ensure structural resiliency and minimize the potential effects of expansive soils. Therefore, impacts would be less than significant.

e) No Impact

The project does not propose the construction or use of septic tanks or alternative wastewater disposal systems. Therefore, there would be no impact.

f) Less than Significant Impact with Mitigation Incorporated

A Paleontological Resources Assessment was prepared in November 2021 for the EMWD Perris North Groundwater Monitoring Project which provides analytical coverage for the proposed project area. Given the proximity of the two projects, the paleontological sensitivity of the geological units underneath the proposed project area is similar to that of the Perris North Groundwater Monitoring Project and therefore, the 2021 Paleontological Resources Assessment is relied upon for the analysis in this Subsequent IS/MND. The complete report is provided in **Appendix D**.

As found in the Paleontological Resource Assessment (**Appendix D**), the majority of the proposed project area is directly underlain by Pleistocene alluvial-fan deposits which have a well-documented record of abundant and diverse vertebrate fauna recorded throughout California. A request was submitted to the Natural History Museum of Los Angeles County (NHMLAC) for a list of known fossil localities in the proposed project area. There are no previously recorded fossil localities in the project area based on the paleontological locality records search performed at NHMLAC. However, records maintained by the Western Science Center indicate several fossils were recovered less than 10 miles northeast of the project area between 11 to 13 feet below ground surface within Pleistocene alluvial fan deposits (**Appendix D**).

Similar to the original approved project, ground-disturbing activities associated with construction of the proposed project (e.g., trenching, bore and jack drilling) in previously undisturbed portions of the project site underlain by geologic units with a high paleontological sensitivity (i.e., Pleistocene alluvial deposits) may result in significant impacts to paleontological resources under Appendix G of State CEQA Guidelines. Impacts would be significant if construction activities result in the destruction, damage, or loss of scientifically important paleontological resources and associated stratigraphic and paleontological data.

Construction of the proposed project would require temporary ground disturbance that would reach a maximum depth of 10 feet during open cut trenching and up to 40 feet during "bore and jack" drilling. "Bore and jack" drilling would have negligible impacts on paleontological resources or unique geological features because this type of ground disturbance does not typically remove observable geologic sediments. The project alignment is underlain by Pleistocene alluvial deposits which have the potential for

fossiliferous deposits to occur at depths between 11-13 feet. Although there is low potential for encountering fossils, and impacts on paleontological resources are not anticipated, **Mitigation Measure GEO-1** would be implemented during all construction phases of the project to ensure proper procedures are in place in the event of an unanticipated fossil discovery, similar to the original approved project. **Mitigation Measure GEO-1** would ensure any unanticipated fossil discovered onsite would be preserved, and potential impacts on paleontological resources would be less than significant.

Mitigation Measures:

The following mitigation measures shall be implemented to avoid direct impacts to previously unknown paleontological resources. With these mitigation measures incorporated, the proposed project impacts are considered less than significant.

GEO-1: Unanticipated Fossil Discovery. In the event of an unanticipated fossil discovery made during the construction of the project, in accordance with Society of Vertebrate Paleontology (2010) guidelines, it is the responsibility of any worker who observes the fossil within the project site to stop work within the fossil’s immediate vicinity and notify a qualified professional paleontologist. The paleontologist shall evaluate the discovery, determine the fossil’s significance, and decide if additional mitigation or treatment is needed. Work within the area of the fossil discovery will resume once the find is documented and authorization to resume construction work is given. Any significant paleontological resources discovered during construction monitoring will be prepared, identified, analyzed, and permanently curated in an approved regional museum repository.

3.8 Greenhouse Gas Emissions

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
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Would the Project:

- | | | | | |
|---|-----|-----|-------|-----|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | [] | [] | [X] | [] |
|---|-----|-----|-------|-----|

- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? [] [] [X] []

Discussion

The 2020 IS/MND and Addendum describe the applicable greenhouse gas (GHG) background, environmental setting, and regulatory setting. Since the 2020 IS/MND and Addendum were adopted, the City of Moreno Valley adopted the *Moreno Valley Climate Action Plan CAP* (City of Moreno Valley 2021b), concurrently with the *Moreno Valley General Plan 2040*. No other background or setting information has changed since the 2020 IS/MND and Addendum were adopted.

a) Less Than Significant Impact

The proposed project would create GHG emissions during construction only. Construction is expected to last approximately 18 months, and the proposed project’s life expectancy is conservatively assumed to be 30 years for the purposes of this GHG analysis. Construction impacts would include emissions associated with pipeline trenching and installation, as well as on-road vehicle trips for mobilization and demobilization activities (e.g., potholing, pipe and valve testing, and other activities). The proposed project would not be associated with a net increase in operation emissions because the pipeline would not require energy use to operate, and inspection of the pipeline and above ground appurtenances, and exercise of the valves would be incorporated into EMWD’s existing O&M trips. Further details can be found in *Section 2 Project Description*.

Modeling of air emissions from construction was completed in CalEEMod version 2020.4.0. Details on construction, including timing and equipment, can be found in *Section 2.5 Proposed Project Description*. The proposed project would not emit GHGs associated with electricity consumption; all GHG emissions would result from vehicle use, including construction equipment, haul trips, and worker trips. No energy requirements are expected for the operation of the pipeline. Other project details necessary for GHG emissions modeling were obtained from CalEEMod and design engineer estimates (e.g., equipment horsepower, load factors, fleet mix, and vehicle emissions factors).

The results of the inventory for GHG emissions, as shown in the CalEEMod output tables in **Appendix A**, are presented in **Table 3-3** along with the significance threshold that was used in the 2020 IS/MND and Addendum. Consistent with the methodologies used in the 2020 IS/MND and Addendum, total GHG emissions from construction have been amortized over the 30-year lifetime of the proposed project.

Table 3-3: Project GHG Emissions per Year (MTCO_{2e}/year)

Source	MTCO _{2e}
Operation	negligible
Construction (amortized over 30 years)	33.7
Total	34
Threshold	3,000
<i>Exceed Threshold?</i>	<i>No</i>

**MTCO_{2e} = metric tons of carbon dioxide equivalents*

During construction, the proposed project would emit a total of 1,012 MTCO_{2e} over 2023 and 2024, with the maximum annual emissions of 603 MTCO_{2e} occurring in 2023. Amortized over a 30 year period, the project would generate approximately 34 MTCO_{2e} per year. In addition, the proposed project would adhere to existing energy efficiency requirements during construction, including CARB's In-Use Off-Road Diesel-Fueled Fleets Regulations that limit vehicle idling time to five minutes, restrict adding vehicles to construction fleets that have lower than Tier 3 engines, and establish a schedule for retiring older and less fuel-efficient engines (CARB 2011). Construction related GHG impacts would be less than significant. The State of California has set targets for renewable energy from the energy sector through the Renewable Portfolio Standard. The Renewable Portfolio Standard directs energy utilities to source half of their electricity sales from renewable sources by 2030 (CEC 2017). The proposed project would not consume electricity; therefore, the proposed project would not conflict with or obstruct this target. Impacts would be less than significant.

b) Less than Significant Impact

California's 2017 Climate Change Scoping Plan focuses on reducing energy demand and GHG emissions that result from mobile sources and land use development. Similar to the original approved project, the proposed project would not involve a considerable increase in new vehicle trips or land use changes, such as urban sprawl, that would result in an increase in vehicle trips. The Scoping Plan also recognizes that about two percent of the total energy used in the state is related to water conveyance; it calls for "increased water conservation and efficiency, improved coordination and management of various water supplies, greater understanding of the water-energy nexus, deployment of new technologies in drinking water treatment, groundwater remediation and recharge, and potentially brackish and seawater desalination." The proposed project is associated with the development, conveyance and use of local water supplies, thus requiring less energy than use of alternative water supplies such as imported water.

The City of Moreno Valley CAP Appendix C contains a non-exclusive list of potential additional measures that can be applied at the project level to reduce GHG emissions. Identified reduction measures include renewable energy, green building, energy efficiency, transportation, water conservation, landscaping, and solid waste measures. The proposed project would not conflict with the City of Moreno Valley CAP project level GHG reduction measures.

The proposed project would not interfere with existing city, county, or regional programs intended to reduce energy and improve water use efficiency. It would not result in GHG emissions higher than the Riverside County CAP significance screening thresholds. The proposed project would not, therefore, conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant, and no mitigation would be required.

Mitigation Measures: None required or recommended.

3.9 Hazards and Hazardous Materials

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	[]	[]	[X]	[]
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?	[]	[X]	[]	[]
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	[]	[X]	[]	[]

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|---|-----|-------|-------|-------|
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | [] | [] | [X] | [] |
| e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area? | [] | [] | [] | [X] |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | [] | [X] | [] | [] |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | [] | [] | [X] | [] |

Discussion

The 2020 IS/MND and Addendum describe the applicable hazards and hazardous materials background, environmental setting, and regulatory setting. No background and setting information has changed since the 2020 IS/MND and Addendum were adopted.

A regulatory records search was performed for the proposed project area using the SWRCB GeoTracker database (SWRCB 2022) and the California DTSC Envirostor database (DTSC 2022). There are no active hazardous materials cleanup sites listed on the SWRCB GeoTracker or DTSC Envirostor database within one mile of the proposed project alignment. The closest active cleanup site listed on the GeoTracker database is Towngate Cleaners (ID T10000005207) located approximately 1.5 miles southwest of the project pipeline. The closest active cleanup site listed on the EnviroStor database is Best Cleaners/Moreno Valley (ID 60002207) located approximately 1.25 miles west of the project pipeline. As discussed in *Section 3.20*, the project area is designated as a non-Very High Fire Hazard Severity Zone (VHFHSZ) within the Moreno Valley Local Responsibility Area (LRA) (FRAP 2009). The March Air Reserve Base, which has its own airport, is located approximately 3.5 miles southwest from the project alignment. The nearest municipal

airport is the San Bernardino International Airport which is located over 10 miles north of the project area.

a) Less than Significant Impact

Similar to the original approved project, construction of the proposed project would temporarily increase the routine transport and use of hazardous materials such as for operation of equipment (i.e., gasoline, diesel) or installation of pipeline or appurtenances (i.e., adhesives, solvents). However, the construction contractor would be required to comply with applicable safety standards and regulations as described in the 2020 IS/MND and Addendum. Operation of the pipeline and above ground appurtenances would be incorporated into EMWD's existing O&M activities and would not require the routine transportation or use of hazardous materials. Therefore, the proposed project would not represent a significant hazard to the public or environment due to compliance with existing standards. Impacts would be less than significant.

b) Less than Significant with Mitigation Incorporated

Similar to the original approved project, construction of the proposed project could create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials used in construction, which include diesel fuel and minor amounts of paints, fuels, solvents and glues. As stated in Section 2.4 *Environmental Setting*, sensitive receptors adjacent to the proposed pipeline alignment include single family residences, multi-family residences, churches, day care centers, and a public park. Implementation of **Mitigation Measure HAZ-1** from the 2020 IS/MND and Addendum would require the construction contractor to develop and implement a Hazardous Materials Management Spill Prevention and Control Plan that includes project-specific contingencies in the event of a spill or release of a hazardous material. Operation of the project pipeline and appurtenances would not require the routine transportation or use of hazardous materials which could create a significant hazard to the public or the environment. Therefore, with implementation of **Mitigation Measure HAZ-1**, impacts resulting from potential hazardous materials-related accidents would be reduced to less than significant.

c) Less than Significant with Mitigation Incorporated

Similar to the original approved project, there are existing schools within one-quarter mile of the proposed project alignment that would be exposed to hazardous emissions during construction (see Section 2.5 *Environmental Setting*). As explained in Section 3.3 *Air Quality*, emissions would be below SCAQMD LST thresholds and less than significant. As explained in response to "b" above, there is a risk of accidental release of hazardous

materials during project construction, including within one-quarter mile of schools. Implementation of **Mitigation Measure HAZ-1** would reduce impacts to less than significant.

Upon completion of construction, no chemicals would be stored or routinely transported and used for O&M of the project. No hazardous materials would be handled or emitted on a regular basis and there would be less than significant impacts related to hazardous material release associated with long-term O&M activities. Impacts would be less than significant.

d) Less Than Significant Impact

Regulatory records were searched through the SWRCB GeoTracker database and the DTSC EnviroStor database. These databases provide information on potential, confirmed, and closed hazardous waste and substances sites in California. None of the proposed project alignment, appurtenances, or staging areas are proposed on a site that is included on a list of hazardous materials sites per Government Code Section 65962.5, according to the SWRCB GeoTracker and DTSC EnviroStor databases (DTSC 2022 and SWRCB 2022). Additionally, there are no active hazardous waste clean-up sites adjacent to the proposed pipeline alignment. However, five closed clean-up sites are located adjacent to the project pipeline, all of which were leaking underground storage tank (LUST) sites.

Because none of the project alignment, appurtenances, or staging areas would be located on a clean-up site undergoing or awaiting remediation, no hazards to the public or the environment would be expected. Impacts would be less than significant.

e) No Impact

Similar to the original approved project, the proposed project is located near the MARB, which has its own airport. However, the proposed project area is outside of the MARB compatibility zones or airport influence area. While the project area is located within the FAR Part 77 Military Outer Horizontal Surface Limits, there are no restrictions on development for this outer area. Even so, the project would not include tall structures that could interfere with airport safety measures. There would be no impact.

f) Less than Significant with Mitigation Incorporated

Construction of the proposed project pipeline would involve installation of approximately 12,500 linear feet of raw water transmission pipeline with air release valves within Ironwood Avenue and Perris Boulevard. Similar to the original approved project, the proposed project would temporarily block traffic lanes during construction that could be

used by emergency response vehicles or in emergency evacuations such that construction activities may conflict with the adopted emergency response plan and emergency evacuation plan (City of Moreno Valley Emergency Operations Plan (EOP) [City of Moreno Valley 2019c and City of Moreno Valley Local Hazard Mitigation Plan (LHMP) [City of Moreno Valley 2017]). As discussed in *Section 3.17 Transportation*, **Mitigation Measure TRA-1** would be implemented during project construction to ensure that construction would not interfere with emergency response times, similar to the original approved project. Long term, the project would not physically impair or otherwise interfere with emergency response or evacuation in the project vicinity because the pipeline would be installed underground, and ground surfaces would be returned to pre-construction conditions. Pipeline appurtenances would be installed at a practicable distance from traffic lanes to ensure no permanent impact to vehicles. Operation and maintenance of the project would be incorporated into EMWD's existing O&M activities and would not interfere with an adopted emergency response plan or emergency evacuation plan. With the incorporation of traffic control measures identified in **Mitigation Measure TRA-1**, impacts would be less than significant.

g) Less than Significant

Similar to the original approved project, the proposed project would not involve the installation or maintenance of infrastructure that is typically associated with fire risk (see *Section 3.20 Wildfire*). Additionally, the proposed project alignment is located within area designated as non-VHFHSZ within the Moreno Valley LRA (FRAP 2009). Therefore, the project would have a less than significant impact on exposing people or structures to a significant risk of loss, injury or death involving wildland fires.

Mitigation Measures:

Implementation of the following mitigation measures will mitigate potential impacts related to emergency evacuation routes and accidental release of hazardous materials. With mitigation, impacts will be less than significant.

TRA-1: Traffic Control and Detour Plan (see *Section 3.17*)

Mitigation Measure HAZ-1: Hazardous Materials Management and Spill Prevention and Control Plan. Before construction begins, EMWD shall prepare a Hazardous Materials Management Spill Prevention and Control Plan that includes a project-specific contingency plan for hazardous materials and water operations. The Plan will be applicable to construction activities and will establish policies and procedures according to applicable codes and regulations, including but not limited

to the California Building and Fire Codes, and federal and OSHA regulations. The Plan will include, but is not limited to the following:

- A discussion of hazardous materials management, including delineation of hazardous material storage areas, access and egress routes, waterways, emergency assembly areas, and temporary hazardous waste storage areas;
- Notification and documentation of procedures; and
- Spill control and countermeasures, including employee spill prevention/response training.

3.10 Hydrology and Water Quality

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	[]	[]	[X]	[]
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may?	[]	[]	[X]	[]
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	[]	[]	[X]	[]
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	[]	[]	[X]	[]

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	[]	[]	[X]	[]
iv) impede or redirect flood flows?	[]	[]	[X]	[]
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	[]	[]	[X]	[]
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	[]	[]	[X]	[]

Discussion

The 2020 IS/MND and Addendum describe the applicable hydrology and water quality background, environmental setting, and regulatory setting. The West San Jacinto Groundwater Basin GSP has been approved since the certification of the 2020 IS/MND and Addendum. No other new information or changed circumstances have arisen since the 2020 IS/MND and Addendum were adopted.

The San Jacinto Groundwater Basin was deemed a high priority, but not critically overdrafted, basin by the California Department of Water Resources and was required to develop a GSP by 2022 for the non-adjudicated portions of the San Jacinto Groundwater Basin, according to the 2014 Sustainable Groundwater Management Act (SGMA). The eastern portion of the Subbasin is adjudicated, but the western portion (which includes the Perris North Groundwater Management Zone) is subject to the provisions of SGMA. EMWD acts as the Groundwater Sustainability Agency (GSA) for the western portion of the Subbasin and developed the West San Jacinto Groundwater Basin GSP, which was adopted by the EMWD Board of Directors, acting as the West San Jacinto GSA Board of Directors, on September 15, 2021. The GSP documents basin conditions and basin management based on measurable objectives and minimum thresholds defined to prevent significant and unreasonable impacts to sustainability indicators (including surface and groundwater levels and quality) defined in the GSP.

a) Less than Significant Impact

Similar to the original approved project, construction of the proposed project could result in short-term erosion/sedimentation during construction that has the potential to impact surface water quality. As discussed in *Section 2.6 Environmental Commitments*, the project contractor would be required to prepare a SWPPP and implement BMPs to control water quality of stormwater discharges offsite, such as erosion control, sediment control, tracking control and wind erosion control. Trenchless “bore and jack” construction may be required for pipeline installation where the project alignment crosses under RCFCWCD storm drains at Fir Avenue, Eucalyptus Avenue, and Cottonwood Avenue, and where the proposed project alignment crosses the Sunnymead stormwater channel north of the Highway 60/Moreno Valley Freeway. For this construction method, pits would be dug on either side of the surface feature to be avoided (e. g. storm channel). With implementation of the SWPPP BMPs and avoidance of the stormwater channels through trenchless (jack and bore) installation method, construction of the proposed project would not be expected to impact water quality and thus, would not violate water quality standards or waste discharge requirements or otherwise degrade water quality. Impacts would be less than significant.

Operation of the proposed project, together with the other facilities of the Cactus Corridor Groundwater Wells Project evaluated in the 2020 IS/MND and Addendum, would help improve and protect groundwater quality of the Perris North Basin over time and is considered a beneficial effect. No adverse impacts on groundwater quality would be expected.

b) Less than Significant Impact

The proposed project is a below-ground pipeline that would not generate a need for increased groundwater supplies or result in a change in impervious surface area. Therefore, the project would not decrease groundwater supplies or interfere with groundwater recharge.

Similar to the original approved project, the applicable groundwater sustainability plan for the proposed project is the West San Jacinto Groundwater Basin GSP, which was adopted by the EMWD Board of Directors, acting as the West San Jacinto GSA Board of Directors, in September 2021. The West San Jacinto Basin GSP sustainability goal is to manage groundwater resources in a way that facilitates long-term sustainable use of groundwater in the non-adjudicated portion of the San Jacinto Groundwater Basin (West San Jacinto GSA 2021). Long-term sustainable management includes:

- Maintaining sufficient groundwater in storage to allow for ongoing groundwater production that meets the operational demands of groundwater users in the West San Jacinto Groundwater Basin
- Protecting beneficial uses such as municipal and domestic supplies of fresh groundwater resources in the Lakeview and Perris North Groundwater Management Zones to the extent feasible, by minimizing the northward and eastward migration of brackish groundwater from the Perris South Groundwater Management Zone.
- Avoiding subsidence related to groundwater production that substantially interferes with surface land uses.
- Ensuring that groundwater production does not result in significant and unreasonable loss of groundwater dependent ecosystems.

The proposed project, together with the Cactus Avenue Corridor Groundwater Wells Project components evaluated in the 2020 IS/MND and Addendum, would extract, convey, and treat approximately 3,700 AFY of contaminated groundwater from the Perris North Groundwater Management Zone for beneficial use as part of the larger Perris North Basin Groundwater Contamination Prevention and Remediation Program. As stated in the GSP, chronic lowering of groundwater levels in the Moreno Valley Production Area may impact operations of the Perris North Basin Groundwater Contamination Prevention and Remediation Program (West San Jacinto GSA 2021). However, over the 50-year planning and implementation horizon, the groundwater elevation minimum thresholds in the GSP allow for groundwater extractions that exceed historical levels while protecting against long-term aquifer supply depletion. This planned extraction accounts for groundwater production and use of the Perris North Basin Groundwater Contamination Prevention and Remediation Program. Therefore, the proposed project, as an independent component of the Perris North Basin Groundwater Contamination Prevention and Remediation Program, would not impact groundwater sustainability, and the production of groundwater associated with the Perris North Groundwater Contamination Prevention and Remediation Program would be conducted in a sustainable manner consistent with the San Jacinto Groundwater Basin GSP. Therefore, the proposed project would not substantially decrease groundwater supplies or interfere with groundwater recharge such that it would impede sustainable groundwater management of the basin, and impacts would be less than significant.

c) Less than Significant Impact

Construction of the proposed project would occur within existing roadway rights-of-way, and staging areas would be located on vacant, disturbed parcels. The pipeline would be installed below-ground and disturbed areas would be restored to their pre-construction condition. Above ground appurtenances would be installed within existing impervious areas and thus would not result in a permanent increase in total impervious surfaces in the project area. As discussed under topic “a”, construction of the proposed project may result in disturbance or exposure of soil that could be subjected to erosion or sedimentation during a rain event.

Implementation of BMPs as required by the NPDES Construction General Permit and EMWD’s existing environmental commitments would control erosion and sedimentation and prevent construction-related pollutants in stormwater discharges from the construction site. The project pipeline alignment may be required to cross existing concrete-lined drainage channels. However, at these locations, pipelines may be required to be constructed using trenchless methods (e.g., jack and bore). Using this technique, ground surface disturbance would not occur, except at the pits used to site the jack and bore equipment (which would be located away from the channels). As a result, similar to the original approved project, the construction and operation of the proposed project would not impede or redirect flood flows, alter drainage patterns of the project area, cause substantial erosion, substantially increase surface runoff, generate runoff in excess of the existing storm drainage systems, or be a source of polluted runoff. Impacts would be less than significant.

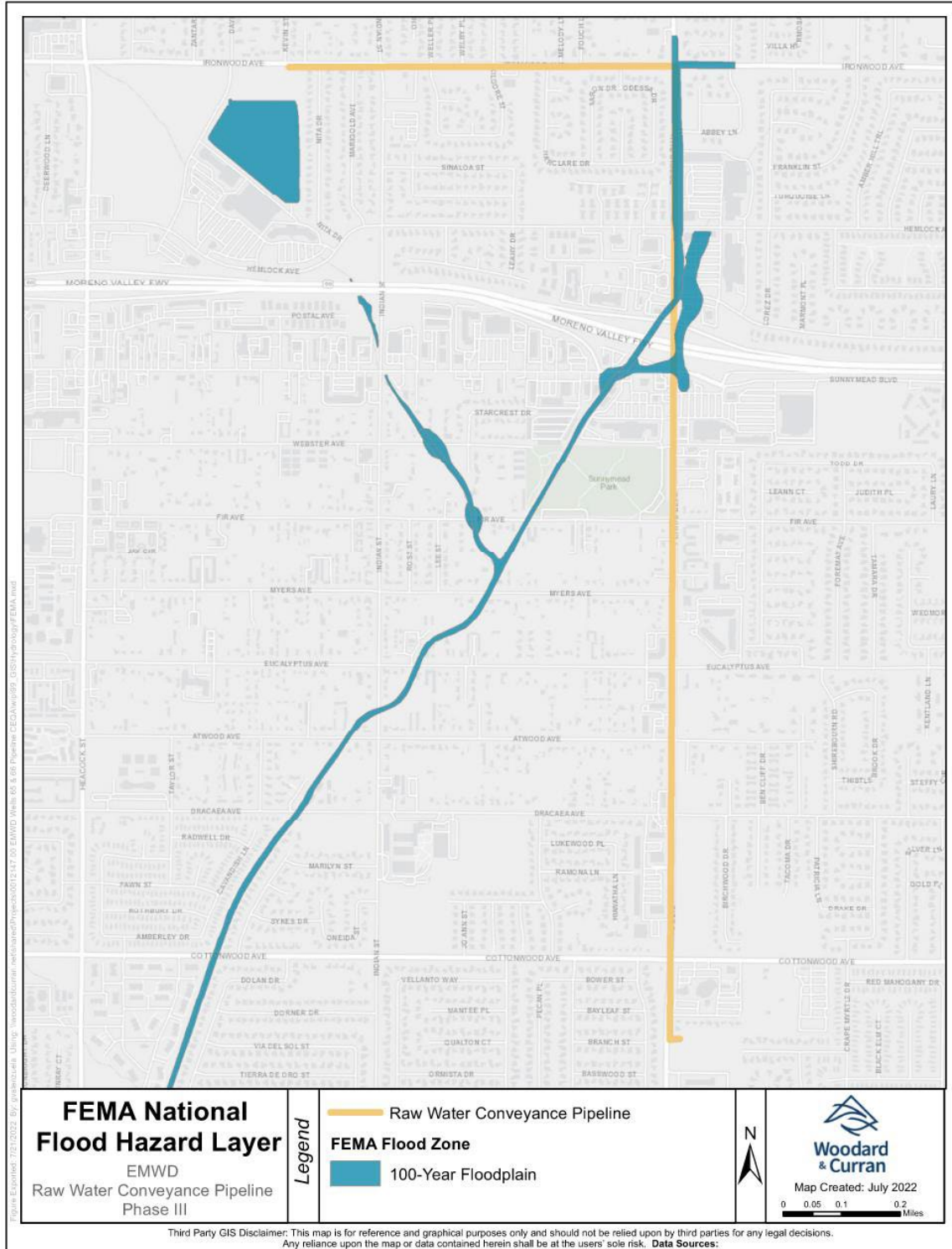
d) Less than Significant Impact

The proposed project is located approximately 40 miles from the Pacific Ocean; at this distance, a tsunami would not impact the project vicinity. Located approximately 5 miles southeast of the project alignment, Lake Perris is one of only two waterbodies in Riverside County that have the potential for seismically induced seiche based on morphology and hydrology (Riverside County 2015). However, due to the distance between Lake Perris and the project alignment, the potential for inundation by seiche is low.

As shown in **Figure 3-2**, portions of the project alignment along Perris Boulevard are located in a 100-year floodplain as designated by the United States Department of Homeland Security Federal Emergency Management Agency (FEMA) National Flood Insurance Program. However, the pipeline would be installed below ground, disturbed areas would be restored to their pre-construction condition, and above ground appurtenances would be set back from flood channels. In addition, O&M of the project

would not require storage of pollutants onsite that could be released in the event of potential inundation. Therefore, similar to the original approved project, the potential for the release of pollutants due to project inundation is low. Impacts would be less than significant.

Figure 3-2: FEMA 100 Year Floodplain



e) Less than Significant Impact

Similar to the original approved project, the applicable water quality and groundwater sustainability plans for the proposed project are the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) (Santa Ana RWQCB 2016) and the West San Jacinto Groundwater Basin GSP.

Water quality thresholds identified in the Basin Plan are intended to reduce pollutant discharge and ensure that water bodies are of sufficient quality to meet their designated beneficial uses (Santa Ana RWQCB 2016). The proposed project would not conflict with the water quality standards outlined in the Basin Plan or worsen water quality conditions in any 303(d)-listed water body. As discussed above, pollutant discharge during construction would be avoided via compliance with the NPDES Construction General Permit and existing EMWD environmental commitments (See *Section 2.6 Environmental Commitments*). Once operational, the project would not discharge extracted or treated water that could become a potential source of pollutants for downstream water bodies (e.g., San Jacinto River, Canyon Lake, Lake Elsinore). Therefore, the proposed project would not conflict with the Basin Plan. Impacts would be less than significant.

As discussed earlier in this section, the West San Jacinto GSP was adopted by the GSA in September 2021 in accordance with SGMA regulations. The sustainability goal of the GSP is to manage groundwater resources in a way that facilitates long-term sustainable use of groundwater in the non-adjudicated portion of the San Jacinto Groundwater Basin (West San Jacinto GSA 2021). The proposed project, together with the original approved project, would extract, convey, and treat approximately 3,700 AFY of contaminated groundwater in the Perris North Groundwater Management Zone as part of the larger Perris North Basin Groundwater Contamination Prevention and Remediation Program. As stated under topic "b" above, groundwater extractions as a result of the Perris North Basin Groundwater Contamination Prevention and Remediation Program have been accounted for over the West San Jacinto GSP 50-year planning and implementation horizon. Therefore, the proposed project, as an independent component of the Perris North Basin Groundwater Contamination Prevention and Remediation Program, would not impact groundwater sustainability, and the production of groundwater, associated with the Perris North Groundwater Contamination Prevention and Remediation Program, would be conducted in a sustainable manner consistent with the San Jacinto Groundwater Basin GSP. Thus, the proposed project would not conflict with the West San Jacinto GSP. Impacts would be less than significant.

Mitigation Measures: None required or recommended.

3.11 Land Use and Planning

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Physically divide an established community?	[]	[]	[X]	[]
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	[]	[]	[]	[X]

Discussion

The 2020 IS/MND and Addendum describe the applicable land use and planning background, environmental setting, and regulatory setting. Background and setting information that has changed since the 2020 IS/MND and Addendum was adopted includes an update to the City of Moreno Valley General Plan (City of Moreno Valley 2021). No other new information or changed circumstances have arisen since the 2020 IS/MND and Addendum were adopted.

According to the City of Moreno Valley General Plan Land Use Map, the land use designation of the proposed project alignment includes roadway rights-of-way, and the potential temporary construction staging area is designated corridor mixed use. Land use designations adjacent to the pipeline alignment include commercial, light industrial, churches, single and multi-family residential, corridor mixed use, and public facilities including parks and schools (City of Moreno Valley 2022).

a) Less Than Significant Impact

Similar to the original approved project, the proposed project would be constructed within existing roadway rights-of-way and would temporarily affect adjacent established communities through increased dust, noise, and traffic during construction. However, once constructed, the pipelines would be underground, and roadways would be restored to pre-construction condition. The above ground appurtenances would be located a practicable distance from traffic lanes. Therefore, the proposed project would not permanently interfere with the pedestrian, bicycle or vehicle circulation of the

neighborhoods or community. The proposed project would have a less than significant impact related to physically dividing an established community.

b) No Impact

Construction of the proposed project would occur entirely within existing roadway rights-of-way and would comply with all applicable permits and approvals identified in *Section 2.7 Required Permits and Approvals*. Upon completion of construction, all disturbed surfaces would be restored to pre-construction conditions and operation of the project would not result in any land use changes. Therefore, the project would not conflict with applicable land use plans, policies and regulations intended to avoid or mitigate an environmental effect including City of Moreno Valley zoning policies and the 2040 General Plan. No impact would occur.

Mitigation Measures: None required or recommended.

3.12 Mineral Resources

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	[]	[]	[]	[X]
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?	[]	[]	[]	[X]

Discussion

The 2020 IS/MND and Addendum describe the applicable mineral resources background, environmental setting, and regulatory setting. Background and setting information that has changed since the 2020 IS/MND and Addendum were adopted includes an update to the City of Moreno Valley General Plan (City of Moreno Valley 2021). No other new

information or changed circumstances have arisen since the 2020 IS/MND and Addendum were adopted.

a, b) No Impact

The proposed project is located within land designated by the California Department of Conservation as Mineral Resource Zone (MRZ)-3, land for which the significance of mineral resources cannot be determined. However, this MRZ category is not considered a significant potential mineral resource and there are no active mineral resource extraction facilities within the project area (City of Moreno Valley 2021a). The City of Moreno Valley 2040 General Plan land use map does not delineate any mineral resource recovery sites or designate any land for mineral resource production (City of Moreno Valley 2022). Therefore, no impact on the availability of a known mineral resource or the availability of a locally-important mineral resource recovery site would occur as a result of construction or operation of the proposed project.

Mitigation Measures: None required or recommended.

3.13 Noise

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	[]	[X]	[]	[]
b) Generation of excessive groundborne vibration or groundborne noise levels?	[]	[X]	[]	[]

- | | | | | |
|---|-----|-----|-----|-------|
| c) For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels? | [] | [] | [] | [X] |
|---|-----|-----|-----|-------|

Discussion

The 2020 IS/MND and Addendum describe the applicable noise background, environmental setting, and regulatory setting. Since the 2020 IS/MND and Addendum were adopted, the City of Moreno Valley *General Plan 2006* was updated and replaced with the *General Plan 2040* (City of Moreno Valley 2021a). Information from the *2040 General Plan* relevant to the proposed project is summarized in the next paragraph. No other new information or changed circumstances have arisen since the 2020 IS/MND and Addendum were adopted. Refer to the 2020 IS/MND and Addendum for definitions and standards relevant to the proposed project.

The City of Moreno Valley *General Plan 2040* contains goals, policies, and actions related to minimizing noise impacts.

- Goal N-1: Design for a pleasant, healthy sound environment conducive to living and working
 - N.1-4: Require a noise study and/or mitigation measures if applicable for all projects that would expose people to noise levels greater than the “normally acceptable” standard and for any other projects that are likely to generate noise in excess of these standards.
 - N.1-5: Noise impacts should be controlled at the noise source where feasible, as opposed to at receptor end with measures to buffer, dampen, or actively cancel noise sources. Site design, building orientation, building design, hours of operation, and other techniques, for new developments deemed to be noise generators shall be used to control noise sources.
 - N.1-6: Require noise buffering, dampening, or active cancellation, on rooftop or other outdoor mechanical equipment located near residences, parks, and other noise sensitive land uses.

- N.1-C: Study the feasibility of using alternative pavement materials such as rubberized asphalt pavements on roadways to reduce noise generation. Update City standards as appropriate.
- Goal N-2: Ensure that noise does not have a substantial, adverse effect on the quality of life in the community.
 - N.2-3: Limit the potential noise impacts of construction activities on surrounding land uses through noise regulations in the Municipal Code that address allowed days and hours of construction, types of work, construction equipment, and sound attenuation devices.
 - N.2-A: Continue to maintain performance standards in the Municipal Code to ensure that noise generated by proposed projects is compatible with surrounding land uses.

In addition, the *General Plan 2040* Noise Element specifies sound levels for land use compatibility for the purposes of siting new land uses. These standards are summarized in **Table 3-4**.

Table 3-4: City of Moreno Valley General Plan 2040 Community Noise Compatibility Matrix

Land Use Type	Normally Acceptable (L _{dn} or CNEL dBA)	Conditionally Acceptable (L _{dn} or CNEL dBA)
Residential – Low Density Single Family, Duplex, Mobile Homes Residential – Multiple Family Transient Lodging: Hotels and Motels	50-65	65-70
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-70	Not defined
Auditoriums, Concert Halls, Amphitheaters Sports Arena, Outdoor Spectator Sports	Not defined	50-70
Playground, Neighborhood Parks	50-70	70-75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-75	Not defined
Office Buildings, Businesses, Commercial and Professional	50-70	70-80
Industrial, Manufacturing, Utilities, Agricultural	50-75	75-80

Note: "Conditionally Acceptable" means new construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features included in the design.

Existing Conditions

The project area setting is generally built-out. Surrounding land uses include commercial, light industrial, churches, single and multi-family residential, and public facilities including parks and schools. Noise-sensitive receptors adjacent to or in the vicinity of the pipeline alignment are described in *Section 2.4.1 Sensitive Receptors*. The pipeline alignment would be located in the existing roadway right-of-way, typically at least 25 feet from the nearest receptor.

Transportation is the major source of noise in the City of Moreno Valley. As part of the *General Plan 2040* development, ambient noise monitoring was conducted to assess current noise levels in Moreno Valley at a variety of land uses proximate to major noise sources. Short-term daytime noise measurements were taken adjacent to major noise sources in the city. The project alignment along Ironwood Avenue and Perris Boulevard has an existing community noise equivalent level¹ (CNEL) of 65-70 and 70-75 decibels (dB), respectively (City of Moreno Valley 2021a).

a) Less than Significant with Mitigation Incorporated

Construction

Construction of the proposed project is expected to last 18 months and would involve noise-generating activities such as trenching and installation of valves which would require the use of heavy equipment. The construction equipment that would be used can be found in *Section 2.5 Proposed Project Description*. The typical noise level of each piece of construction equipment that would be used for the Project is shown in **Table 3-5**.

¹ A 24-hour time-averaged sound exposure level adjusted for average-day sound source operations. The adjustment includes a 5-dB penalty for noise occurring between 7:00 p.m. and 10:00 p.m., and a 10-decibel (dB) penalty for those occurring between 10:00 p.m. and 7:00 a.m., to adjust for the increased impact of nighttime noise on human activities.

Table 3-5: Typical Construction Equipment Noise Levels

Equipment	Typical Noise Levels (dBA, at 50 feet)
Backhoe/Loader	78
Hydraulic Excavator	81
Crane	81
Drill Rig	85
Utility Truck	74 ¹
Water Truck	84 ¹
Welder	74
Compressor	78
Pump	81
Pick-up Trucks	75
Dump Truck	76
Concrete Saw	90
Pavement Breaker	89 ¹
Sweeper	82
Paver	77
Generator	81

Source: FHWA 2006a

1. Utility truck noise was assumed to be comparable to a flat-bed truck. Water truck noise was assumed to be comparable to a tractor.. Pavement breaker noise level was assumed to be comparable to a jackhammer.

Construction of the proposed pipeline would occur in the Ironwood Avenue and Perris Boulevard right-of-way during daytime hours, except along Perris Boulevard between Elder Avenue and Sunnymead Boulevard where nighttime construction could be scheduled to avoid traffic impacts. The potential pipeline alignment and staging area are shown in **Figure 2-2**. Pipeline construction would include noise-generating activities such as saw cutting of the pavement, trench excavation, trench backfill and compaction, and site restoration/pavement replacement. The pipelines would be constructed at an average rate of 50 to 100 linear feet per day, depending on the conditions, extent of existing utilities and traffic control, and permitted work hours. The pipeline would be constructed using an open cut trenching method; however, trenchless techniques may be required where the pipeline crosses under RCFCWCD storm drains. In the limited locations where jack-and-bore methods may be used, construction would occur in one location for a longer period of time and could expose people to increased noise levels.

During project construction, truck trips would generate noise along haul routes. Project construction would require approximately 28 round-trip worker trips per day, one round-trip vendor trip per day, and an average of approximately six to seven round-trip

hauling trips per day during the busiest phase of construction - pipeline trenching, installation, and paving. Noise-sensitive land uses along haul routes, including residences and schools, would be exposed to truck noise during construction. The amount of noise generated is affected by the vehicle speed, load, road condition, and other factors. As noted in the City of Moreno Valley General Plan, road noise is a major noise source in the city. Construction truck noise that occurs in noisy locations is generally less disruptive than the same noise would be in a quieter location.

Existing features in the area can also attenuate noise to residential receptors. The approximate range of noise attenuation from existing features according to the Federal Highway Administration Roadway Construction Noise Model User Manual, which provides the guidance on shielding, is summarized in **Table 3-6** (FHWA 2006).

Table 3-6: Noise Shielding Guidance References

dBA of Shielding	Equivalent to the following between noise source and receptor
0	No barriers or breaks in the line of sight between the noise source and the receptor.
3	A noise barrier or other obstruction (like a dirt mound) just barely breaks the line-of-sight between the noise source and the receptor.
5	Noise source is enclosed or shielded with a solid barrier close to the source, but the barrier has some gaps in it.
8	Noise source is enclosed or shielded with a solid barrier close to the source
10	Noise source is completely enclosed and shielded with a solid barrier close to the source.
15	A building stands between the noise source and receptor and completely shields the noise source.

Source: FHWA 2006

Attenuating features between the proposed alignment and nearby residential structures range from no features, to wooden fences, to 5- or 6-foot concrete masonry walls. An estimate of the proposed project's related construction noise was modeled using the Federal Highway Administration Roadway Construction Noise Model (RCNM). Model results are included in **Appendix E**. The model included a conservative assumption about the total pieces of equipment that could be in use at any one time. The noise estimate relied on the default equipment list and noise specifications available in the RCNM. Assuming simultaneous use of the construction vehicle fleet shown in **Table 3-7**, the noise level at a distance of 50 feet would be approximately 87.9 dBA Leq. Where there are masonry walls providing shielding between the residences and the area actively under construction, the noise levels would be reduced to approximately 82.9 dBA Leq. See **Table 3-7**.

Table 3-7: Modeled Construction Noise

Equipment	Modeled Usage (%)	Noise Level at 50 feet	Noise Level at 50 feet with 5 dBA shielding
Concrete Saws (2)	20	82.6	77.6
Crane	16	72.6	67.6
Dump Trucks (2)	40	72.5	67.5
Excavator	40	76.7	71.7
Pickup Trucks (3)	40	71	66
Pumps	50	77.9	72.9
Backhoes (2)	40	73.6	68.6
Welder / Torch	40	70	65
Total		87.9	82.9
Source: Federal Highway Administration's Roadway Construction Noise Model Software, Version 1.1, 12/08/2008			

Project construction noise generated by EMWD project construction is not subject to the City of Moreno Valley ordinances and is unlikely to exceed the levels prohibited in the City Municipal Code that could cause permanent hearing loss and would occur during daytime hours in accordance with the City Municipal Code. Nonetheless, due to the proximity of construction activities to residences and other noise-sensitive receptors, impacts from construction noise would be potentially disruptive to daily activities. As with the original approved project, implementation of **Mitigation Measure NOI-1**, which requires the construction contractor to implement BMPs for noise control, daytime construction noise impacts would be reduced to less than significant. When project construction requires nighttime activities, **Mitigation Measure NOI-2**, would be implemented which requires that sound barriers providing at least 25 dBA of noise attenuation be used during nighttime construction activities, similar to the original approved project.

Once operational, the below-ground conveyance pipelines would not generate noise. Noise may be associated with occasional vehicle maintenance trips but these trips would be negligible. The project would have less-than-significant long-term operational noise impacts.

b) Less Than Significant With Mitigation Incorporated

Similar to the original approved project, construction activities associated with the proposed project would have the potential to generate low levels of groundborne vibration. Groundborne vibrations propagate through the ground and decrease in intensity quickly as they move away from the source. Vibrations with a PPV of 0.2

inches/second or greater have the potential to cause damage to non-engineered timber and masonry buildings (FTA 2018). The Transit Noise and Vibration Impact Assessment Manual provides average source levels for typical construction equipment that may generate groundborne vibrations (**Table 3-8**). Most equipment that would be used in construction of the proposed project is not expected to generate substantial groundborne vibration. For example, a loaded truck produces 0.076 PPV at a distance of 25 feet, and a pavement breaker produces 0.035 PPV at a distance of 25 feet. None of the construction equipment to be used would exceed the PPV threshold of 0.2 inches/second at a distance of 25 feet, which is the closest that the project construction would be to adjacent, existing land uses.

Table 3-8: Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 feet (inches/second)	Approximate VdB at 25 feet
Backhoe/Loader	N/A	N/A
Auger Drill Rig	0.089 ¹	87 ¹
Compressor	N/A	N/A
Concrete Pumper	N/A	N/A
Concrete Saw	N/A	N/A
Crane	N/A	N/A
Drilling Rig	0.089 ¹	87 ¹
Generator	N/A	N/A
Hydraulic Excavator	N/A	N/A
Pavement Breaker	0.035	79
Paver	N/A	N/A
Pick-up Trucks	0.076 ¹	86 ¹
Pump	N/A	N/A
Sweeper	N/A	N/A
Utility Truck	0.076 ¹	86 ¹
Water Truck	0.076 ¹	86 ¹
Welder	N/A	N/A

Source: FTA 2018

Most construction equipment is not expected to generate vibration; these are denoted with "N/A."

1. Drill rig PPV was assumed to be comparable to caisson drilling. Pavement breaker was assumed to be comparable to a jackhammer. Pickup trucks, utility trucks, and water trucks were assumed to be comparable to "loaded trucks" as listed in the *Transit Noise and Vibration Impact Assessment Manual*.

According to the FTA's Transit Noise and Vibration Impact Assessment Manual, 80 VdB is the threshold for human annoyance from groundborne vibration noise when events are

infrequent. Typical vibration dB levels for a loaded truck are 86 VdB at a distance of 25 feet, and a pavement breaker typically produces 79 VdB at a distance of 25 feet. The pipeline would be constructed at least 25 feet from the nearest sensitive receptors. Vibrations associated with pipeline construction would occur infrequently and would be short in duration. Additionally, pipeline construction would move along the alignment at a rate of 50-100 linear feet per day and would not remain in the same location for an extended period of time; therefore, sensitive receptors near the pipeline alignment would not experience vibrations for the entire duration of Project construction. Exposure would be temporary, sporadic, and limited in duration. Once operational, the pipeline would not produce groundborne vibration or groundborne noise.

Pipeline construction would occur near sensitive receptors, including residences. Groundborne vibration and noise tends to be more perceptible and disruptive during nighttime hours when people are generally indoors and asleep. Although the majority of project construction would occur between the hours of 7:00 a.m. and 7:00 p.m., pipeline construction may require nighttime construction for portion of the alignment to reduce traffic impacts. Implementation of **Mitigation Measure NOI-2** would require that sound barriers providing at least 25 dBA of noise attenuation be used during nighttime construction activities. With the implementation of **Mitigation Measure NOI-2**, impacts would be less than significant.

c) No impact

Similar to the original approved project, the proposed project is not located within the vicinity of an airport. The closest airport is the MARB/March Inland Port. The runways at the base are located along the western edge of the base, approximately 3.5 miles from the project alignment. The Project alignment would be outside the 60-CNEL noise contour for the airport (Riverside County Airport Land Use Commission, 2014). The Project would not expose residences or workers to excessive aircraft noise and there would be no impact.

Mitigation Measures:

To mitigate possible noise impacts of the proposed project, EMWD shall implement **Mitigation Measure NOI-1** that requires implementation of BMPs to control construction noise, and **Mitigation Measure NOI-2** to require sound barriers to attenuate night-time construction noise. With these mitigation measures incorporated, the Project impacts are considered less than significant.

Mitigation Measure NOI-1: Construction Noise Reduction Measures

EMWD shall require its contractor to implement the following actions relative to construction noise:

- EMWD shall conduct construction activities between 7:00 a.m. and 7:00 p.m. on weekdays and 8:00 a.m. and 4:00 p.m. on Saturdays, in accordance with the City of Moreno Valley Municipal Code, Sections 8.14.040 and 11.80.030, with the exception of specific well drilling and testing activities, which require 24-hour continuous work.
- Prior to construction, EMWD in coordination with the construction contractor, shall provide written notification, to all properties within 50 feet of the proposed project facilities informing occupants of the type and duration of construction activities. Notification materials shall identify a method to contact EMWD's program manager with noise concerns. Prior to construction commencement, the EMWD program manager shall establish a noise complaint process to allow for resolution of noise problems. This process shall be clearly described in the notifications.
- Stationary noise-generating equipment shall be located as far from sensitive receptors as possible. Such equipment shall also be oriented to minimize noise that would be directed toward sensitive receptors. Whenever possible, other non-noise generating equipment (e.g., water tanks, roll-off dumpsters) shall be positioned between the noise source and sensitive receptors.
- Equipment and staging areas shall be located as far from sensitive receptors as possible. At the staging location, equipment and materials shall be kept as far from adjacent sensitive receptors as possible.
- Construction vehicles and equipment shall be maintained in the best possible working order; operated by an experienced, trained operator; and shall utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).
- Unnecessary idling of internal combustion engines shall be prohibited. In practice, this would require turning off equipment if it would idle for five or more minutes.
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion powered equipment, where feasible.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.

Mitigation Measure NOI-2: Noise Barriers

EMWD shall require its contractor to install temporary construction noise barriers prior to the start of construction activities that would occur outside the hours specified by the City of Moreno Valley Municipal Code Sections 8.14.040 and 11.80.030. These barriers shall block the line of sight between the equipment and the noise-sensitive receptor(s) and shall provide a minimum of 25 dBA of noise attenuation. The construction noise barrier shall be constructed of a material with a minimum weight of one pound per square foot with no gaps or perforations. It shall remain in place until conclusion of the nighttime construction activities. The project plans and specifications shall include documentation from a noise consultant verifying the inclusion of an appropriate noise barrier.

3.14 Population and Housing

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

Discussion

The 2020 IS/MND and Addendum describe the applicable population and housing background, environmental setting, and regulatory setting. Background and setting information that has changed since the 2020 IS/MND and Addendum were adopted includes an update to the EMWD Urban Water Management Plan (UWMP) (EMWD 2021), and update to the City of Moreno Valley General Plan (City of Moreno Valley 2021). No

other new information or changed circumstances have arisen since the 2020 IS/MND and Addendum were adopted.

According to the 2020 UWMP, in 2020, EMWD served an estimated retail population of 603,950 through approximately 155,561 municipal connections which include single family, multi-family, commercial, industrial, institutional, landscape, and irrigation accounts. EMWD's service area is currently 40 percent built out, making it one of the few regions in Southern California that will see significant population growth in the coming decades. As planned for in the EMWD 2020 UWMP, EMWD's retail service area population will increase to an estimated 807,200 in 2045 (EMWD 2021).

A) No Impact

The proposed project would not directly induce unplanned population growth because the project is a raw water conveyance pipeline, and no new housing or permanent employment are proposed. Similar to the original approved project, the proposed project involves expansion of EMWD's water service infrastructure within its existing service area to augment water supply reliability and offset imported water. This supply would accommodate existing water demand and is consistent with planned growth anticipated in EMWD's 2020 UWMP. Therefore, the proposed project would not directly or indirectly induce unplanned population growth. No impact would occur.

b) No Impact

Construction and operation of the proposed pipeline would occur within existing roadways, and staging areas would be located on vacant lots. Similar to the original approved project, the proposed project would not displace existing people or houses or require the construction of replacement housing. No impact would occur.

Mitigation Measures: None required or recommended.

3.15 Public Services

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:	[]	[]	[X]	[]
i) Fire protection?	[]	[]	[]	[X]
ii) Police protection?	[]	[]	[]	[X]
iii) Schools?	[]	[]	[]	[X]
iv) Parks?	[]	[]	[]	[X]
v) Other public facilities?	[]	[]	[]	[X]

Discussion

The 2020 IS/MND and Addendum describe the applicable public services background, environmental setting, and regulatory setting. No background or setting information has changed since the 2020 IS/MND and Addendum were adopted.

Riverside County Fire Station 2, located at 24935 Hemlock Avenue, is approximately 500 feet west of the proposed pipeline. The Moreno Valley Police Department, located at 22850 Calle San Juan de Los Lagos, is approximately 2.5 miles southwest of the proposed pipeline. Both the Riverside County Regional Medical Center, located at 26520 Cactus Avenue, and Kaiser Permanente Moreno Valley Medical Center, located at 27300 Iris Avenue, are farther than one mile from the proposed project alignment.

Ramona Elementary School, Sunnymead Montessori School, and the Riverside Academy are located within one-quarter mile of the project. Ramona Elementary and Sunnymead

Montessori are located on Bay Avenue, 0.12 mile west of the intersection with Perris Boulevard. Riverside Academy is located south of the southernmost extent of the proposed pipeline. St Christopher Parish, which houses the St. Christopher preschool, is located on the southeast corner of Perris Boulevard and Cottonwood Avenue. Sunnymead Park is located on the west side of Perris Boulevard, north of Fir Avenue.

No other new information or changed circumstances have arisen since the 2020 IS/MND and Addendum were adopted.

a) No Impact

The proposed project would not change existing demand for public services (e.g., fire and police protection, schools, parks, libraries, or health clinics) because construction of the project pipeline would serve existing communities and would not result in unplanned population growth (see *Section 3.14 Population and Housing*). Therefore, construction and operation of the proposed project would not necessitate expansion of existing or construction of new public facilities. No impact would occur.

Mitigation Measures: None required or recommended.

3.16 Recreation

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
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?	[]	[]	[]	[X]
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?	[]	[]	[]	[X]

Discussion

The 2020 IS/MND and Addendum describe the applicable recreation background, environmental setting, and regulatory setting. Background and setting information that has changed since the 2020 IS/MND and Addendum were adopted includes an update to the City of Moreno Valley General Plan (City of Moreno Valley 2021). No other new information or changed circumstances have arisen since the 2020 IS/MND and Addendum were adopted.

According to the City of Moreno Valley General Plan Land Use Map, land uses adjacent to the project alignment include commercial, light industrial, corridor mixed use, churches, single and multi-family residential, and public facilities including parks and schools (City of Moreno Valley 2022).

a, b) No Impact

The proposed project would not increase the use of existing parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The project would be constructed within existing roadway rights-of-way and all disturbed surfaces would be restored to pre-construction conditions. The proposed project would not change existing demand for parks or other recreational facilities because construction of the project pipeline would serve existing and planned communities and would not result in unplanned population growth (see *Section 3.14 Population and Housing*). The project would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. Thus, no impacts would occur.

Mitigation Measures: None required or recommended.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the Project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	[]	[X]	[]	[]
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	[]	[]	[X]	[]
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	[]	[X]	[]	[]
d) Result in inadequate emergency access?	[]	[X]	[]	[]

Discussion

The 2020 IS/MND and Addendum describe the applicable transportation background, environmental setting, and regulatory setting. Three background and setting planning documents have been updated since the 2020 IS/MND and Addendum were adopted: 1) the RCTC *2011 Congestion Management Plan* was incorporated into the *2019 Long Range Transportation Study* (RCTC 2019); 2) the SCAG *2016 Regional Transportation Plan/Sustainable Communities Strategy* was updated in the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (SCAG 2020); and 3) the City of Moreno Valley *General Plan 2006* was updated in the *General Plan 2040* (City of Moreno Valley 2021).

The RCTC *2019 Long Range Transportation Study* took a comprehensive review of projects on the state highway, regional arterials, rail and bus, freight, and active transportation networks to identify transportation improvements. According to the *Long Range Transportation Study*, RCTC's *Congestion Management Plan (CMP)* minimum level of service threshold has been met for much of the CMP system, and in cases where the CMP

minimum threshold has been exceeded, there have been overriding considerations (e.g., construction, traffic diversions, etc.) or project improvements were already planned. No roadway segments in the proposed project area were identified with deficiencies using highway capacity model-based level of service results from the SCAG 2016 PM peak period level of service traffic model. Roadway segments within the proposed project area were identified with a level of service (LOS) D or better (RCTC 2019).

The *SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* identifies strategies to meet mobility, legislative, financial and air quality requirements in the six counties of Southern California. The most noteworthy project identified in the City of Moreno Valley is the RapidLink Service with the goal of connecting the cities of Riverside, Moreno Valley, and Perris through public transportation (SCAG 2021).

The City of Moreno Valley *General Plan 2040 Circulation Element* establishes goals, objectives, and policies for transportation, including identifying acceptable roadway LOS standards. LOS represents a qualitative description of the traffic operations experienced by the driver at an intersection or along a roadway segment, where LOS A represents no congestion and LOS F represents gridlock. General Plan policy C.3-1 requires the City to strive to maintain LOS “C” on roadway links, wherever possible, and LOS “D” in the vicinity of State Route 60/Moreno Valley Freeway and high employment centers, including intersections during peak hours.

The proposed project area is roughly 3.5 miles east of Interstate (I)-215 and intersects Highway 60/Moreno Valley Freeway along Perris Boulevard. The proposed alignment is located along Ironwood Avenue and Perris Boulevard, which are classified as a minor arterial and mixed-use boulevard, respectively. The proposed alignment is also entirely within the City of Moreno Valley’s designated truck routes, which run east-west along Ironwood Avenue and north-south along Perris Boulevard (City of Moreno Valley 2019a). In addition, Ironwood Avenue is also classified as a Class II bike lane (City of Moreno Valley, 2021a). Active bus routes along the project alignment are operated by Riverside Transit Agency (RTA) and include Route 11 Moreno Valley Mapp – March ARB Loop Route and Route 19 Moreno Valley Mall to Perris Station Transit Center (RTA 2021).

a) Less Than Significant with Mitigation Incorporated

As described in *Section 2.5.3 Construction Schedule*, construction is anticipated to last approximately 19 months and most of the work would occur on weekdays between the hours of 7:00 a.m. to 7:00 p.m. However, to avoid conflicts with transportation in the area around California State Route 60/Moreno Valley Freeway, construction activities are expected to be scheduled during nighttime hours (7:00 p.m. to 5:00 a.m.) on Perris

Boulevard between Elder Avenue and Sunnymead Boulevard, with the possibility of extending 200 yards to the north and south beyond Elder Avenue and Sunnymead Boulevard on Perris Boulevard, depending on Caltrans circulation needs. During construction, the project would generate up to 28 round-trip worker trips, one vendor trip, and an average of six to seven hauling trips per day, assuming a conservatively slow construction rate of 50 LF per day. All construction activities would occur within City of Moreno Valley roadway rights of way, areas adjacent to the roadways, and on vacant parcels selected for staging areas.

Similar to the original approved project, although construction impacts would not be substantial, construction of the proposed project may necessitate individual traffic lane closures. However, construction would be temporary and potential traffic-related impacts would not occur in the same location over the 18-month construction period, but would move along the pipeline alignment. All disturbed areas would be restored to original grade and the project would have no permanent impact on existing vehicular traffic lanes, LOS, bike lanes, bus stops, or public transportation routes.

Although construction impacts would be temporary and have limited footprints, construction of the proposed project may require temporary closures of roadways, bicycle lanes, and sidewalks. To ensure the appropriate traffic controls are applied and potential traffic impacts related to lane closures are less than significant, **Mitigation Measure TRA-1** would be implemented which requires a Traffic Control and Detour Plan to be developed and approved by EMWD and the City of Moreno Valley prior to the start of construction. With implementation of **Mitigation Measure TRA-1**, the project would have a less than significant impact related to the City of Moreno Valley *2040 General Plan*, *RCTC Long Range Transportation Plan*, *CVAG Transportation Prioritization Study*, and *SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*, which focuses on long-term, regional circulation projects.

Operation of the proposed project would not conflict with regional transportation plans or the City of Moreno Valley General Plan because it would install below-ground pipelines that would not have a permanent impact on circulation. The above ground appurtenances would be located a practicable distance from traffic lanes and would also have no permanent impact on circulation. The proposed project's long-term impacts on the circulation system would therefore be less than significant.

b) Less Than Significant Impact

CEQA Guidelines Section 15064.3, subdivision (b) stipulates criteria for analyzing transportation impacts in terms of vehicle miles traveled (VMT) for land use projects and

transportation projects. VMT refers to the amount and distance of automobile travel attributable to a project. According to the Office of Planning and Research Technical Advisory on Evaluating Transportation impacts in CEQA (OPR 2018), the term “automobile” refers to on-road passenger vehicles, specifically cars and light-duty trucks. In the case of the proposed project, worker trips would be conducted in cars and light-duty trucks. Vendor and hauling trips would be conducted in medium- or heavy-duty trucks and are therefore excluded from the estimation of VMT. Environmental impacts associated with the use of medium- and heavy-duty truck trips are addressed in the Air Quality, Energy, and Greenhouse Gas sections of this document.

Similar to the original approved project, construction of the proposed project would involve approximately 28 round trip vehicle trips per day associated with workers travelling to and from the site. Worker trip details were based on CalEEMod default assumptions. CalEEMod estimates the number of construction workers by multiplying the number of pieces of construction equipment by 1.25. These trips would be temporary, occurring during the 18-month construction period. The screening threshold established by the Governor’s Office of Planning and Research (OPR) for small projects states that “projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact” (OPR 2018). The City of Moreno Valley considers projects that generate fewer than 400 trips per day to have less-than-significant VMT impacts (City of Moreno Valley Transportation Engineering Division 2020). Light-duty and passenger vehicle trips generated for this project would be less than the thresholds set by OPR and the City. Upon completion of the project, EMWD would continue to operate its water system with no operational modifications or net increase in VMT from cars and light-duty trucks. Therefore, the project would be consistent with CEQA Guidelines Section 15064.3, subdivision (b) and impacts would be less than significant.

c) Less Than Significant with Mitigation Incorporated

Similar to the original approved project, the proposed project would install below-ground pipelines and above ground appurtenances which would not have a permanent impact on geometric roadway design. The project would not construct new roadways, and existing roadways would be restored to their prior condition once construction is complete. EMWD would continue to operate its water system with minimal changes to O&M and the continued use of standard vehicles, which would not introduce incompatible uses to roadways. Therefore, the project would not create roadway hazards as a result of operation. Although project construction may require some incompatible uses on roadways in the project area (e.g., transportation of heavy construction equipment) that could temporarily increase hazards within primary City arterial streets,

the Traffic Control and Detour Plan required under **Mitigation Measure TRA-1** would include measures to ensure that vehicle ingress and egress from construction sites and staging areas occurs safely. The Traffic Control and Detour Plan under **Mitigation Measure TRA-1** would be required prior to the issuance of an encroachment permit from the City of Moreno Valley. With the implementation of **Mitigation Measure TRA-1**, project impacts associated with incompatible uses on the local roadways would be less than significant.

d) Less Than Significant with Mitigation Incorporated

Similar to the original approved project, construction of the proposed project would generate trips associated with construction (worker travel and delivery of materials and equipment) and may necessitate individual traffic lane closures. Although temporary, lane closures have the potential to hinder access for emergency vehicles.

To ensure that construction would not interfere with emergency response times, the project would implement **Mitigation Measure TRA-1** during construction, similar to the original approved project. Traffic control measures would require that emergency crews be able to access adjacent and surrounding areas and that the contractor coordinates the location of the work daily to ensure that emergency responders are informed of construction locations. Traffic control measures would also require the contractor make a reasonable effort to preserve access to business and properties during construction. With the incorporation of traffic control measures identified in **Mitigation Measure TRA-1**, impacts would be less than significant.

Mitigation Measures:

To mitigate possible impacts to circulation and emergency access during construction, EMWD shall implement **Mitigation Measure TRA-1**. The project impacts are considered less than significant with mitigation incorporated.

Mitigation Measure TRA-1: Traffic Control Plan and Detour Plan

Prior to project construction, EMWD shall require its construction contractor to implement a Traffic Control and Detour Plan, to be approved by the EMWD construction inspector. The Traffic Control Plan shall, at a minimum:

- Identify staging locations to be used during construction
- Identify safe ingress and egress points from staging areas
- Identify potential road closures
- Establish haul routes for construction-related vehicle traffic

- Include a Detour Plan that identifies alternative safe routes to maintain pedestrian and bicyclist safety during construction
- Include provisions for traffic control measures such as barricades, warning signs, cones, lights, and flag persons, to allow safe circulation of vehicle, bicycle, pedestrian, and emergency response traffic

The Traffic Control and Detour Plan shall be reviewed and approved by EMWD’s project manager and the construction inspector prior to project construction. EMWD’s construction inspector shall also provide the construction schedule and Traffic Control and Detour Plan to the City of Moreno Valley for review to ensure that construction of the proposed project does not conflict with other construction projects that may be occurring simultaneously in the project vicinity.

3.18 Tribal Cultural Resources

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
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Would the Project:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|--|-----|-------|-----|-----|
| i) 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 | [] | [X] | [] | [] |
|--|-----|-------|-----|-----|

- | | | | | |
|---|-----|-------|-----|-----|
| ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | [] | [X] | [] | [] |
|---|-----|-------|-----|-----|

Discussion

A HPIR was prepared in September 2022 for the proposed project. The complete report is provided in **Appendix C**.

The HPIR relied on a cultural resources records search of the CHRIS conducted by the Eastern Information Center staff at the University of California, Riverside in July 2021 for the EMWD Perris North Groundwater Monitoring Project which provides analytical coverage for the proposed project area. The CHRIS records search identified nine previously recorded cultural resources within 0.5-mile of the proposed project Area of Potential Effects (APE). None are located within the proposed project APE. Of these, eight are historic-period built environment resources comprised of historic-period single-family properties, and one is a historic period archaeological foundation. The recorded boundary of one resource (P-33-028824) is adjacent to the proposed project APE. P-33-028824 consists of an historic-period 15-foot by 6-foot foundation slab, a utility pole with 1930 and 1947 inspection nails, and a single clear glass bottle fragment.

On July 22, 2022, an archaeological field survey was conducted of the project area. The field survey did not identify any new archaeological or built environment cultural resources within the proposed project APE. The archaeologist attempted to relocate the previously recorded site P-33-028824 located adjacent to the project APE; however, the resource is located in a private plot of land with fencing blocking access. As this site is outside of the APE and would not be impacted by the project it requires no further management consideration.

A Sacred Lands File (SLF) search and contact list of Native Americans culturally affiliated with the project area was conducted in July 2021 for the Perris North Groundwater Monitoring Project, which encompassed the entirety of the proposed project APE. The SLF search was returned with negative results and no cultural resources were identified within

the proposed project APE as a result of the records search. For the HPIR, outreach to Native American tribes and local historical groups was conducted. Four responses from Native American groups were received as a result of the initial outreach letters mailed or emailed on July 29, 2022, to each of the NAHC contacts included on the contact list received on July 25, 2021.

- Omar Aceves, Tribal Operations Clerk for the Augustine Band of Cahuilla Mission Indians, responded on July 29, 2022, stating they are unaware of specific cultural resources that may be affected by the proposed project but asked that – should cultural resources be discovered during the development of the project – the tribe be contacted immediately for further evaluation.
- A response letter was received from the Pechanga Band of Luiseño Indians on July 29, 2022. The letter stated they are interested in participating in this project as it is in their Ancestral Territory. They would like notification once the project begins the entitlement process and would also like copies of all archaeological reports, site records, proposed grading plans, and environmental documents. The tribe requests government-to-government consultation with the lead agency and suggests monitoring by a Riverside County qualified archaeologist and professional Pechanga Tribal Monitor be required during earthmoving activities. They are also interested in participating in surveys within Luiseño Ancestral territory and consulting with the project proponent/ lead agency regarding the treatment and disposition of all artifacts.
- The office of the Fort Yuma Quechan Historic Preservation Officer responded on August 1, 2022, stating they have no comments on the project and will defer to more local Tribes and support their decisions on the project.
- Arysa Gonzalez Romero, Cultural Resources Analyst for the Agua Caliente Band of Cahuilla Indians, responded on August 10, 2022, requesting the shapefiles for the project. The project archaeologist responded on August 12, 2022, providing the requested shapefiles.

On August 12, 2022, follow-up phone calls were made by the project archaeologist to each of the NAHC contacts listed that had not yet responded to initial outreach efforts, as summarized below.

- On August 12, 2022, project archaeologist Laura Maldonado attempted to contact Chairperson Daniel Salgado of the Cahuilla Band of Indians, but the call was forwarded to Bobby Ray Esparza instead. Mr. Esparza asked to have the original letter forwarded to him, which was done immediately after the call. On August 18, 2022, Ms. Maldonado received a response from Mr. Esparza stating the Cahuilla

Band has an interest in this project and would like to request that a cultural monitor from Cahuilla be present for all ground disturbing activities, expressing concern cultural resources may be unearthed during construction.

- On August 12, 2022, Ms. Maldonado called and spoke to Joseph Ontiveros from the Soboba Band of Luiseño Indians Cultural Resources Department. Mr. Ontiveros stated the project location is within their tribal cultural landscape and would like to enter government to government consultation with the lead agency.
- On August 12, 2022, Ms. Maldonado attempted to contact Bo Mazzetti, the Rincon Band of Luiseño Indians Chairperson, but Chairperson Mazzetti was unavailable. Ms. Maldonado left a voicemail and sent a follow-up email. Chairperson Mazzetti responded on August 12, 2022, stating he would check in on the status of the Tribe's response. On August 19, 2022, Rincon received an email response from Cheryl Madrigal, the Tribal Historic Preservation Officer (THPO) for the Rincon Band of Luiseño Indians, stating the Tribe would like to consult with the lead agency on the proposed project. Ms. Madrigal also requested additional information regarding the project such as existing GIS shapefiles/KMZ, any cultural resources assessments, record search results, overlay maps of the project and potential APE and previously recorded cultural sites. Ms. Maldonado responded on August 26, 2022, providing the requested shapefiles, record search results, and project map.
- On August 22, 2022, archaeologist Leanna Flaherty attempted to contact Chairperson Jeff Grubbe of the Agua Caliente Band of Cahuilla Indians but was directed to an assistant instead. The assistant stated there was a new Chairperson, Reid Milanovich, and Ms. Flaherty was subsequently able to leave a voicemail for Mr. Milanovich. No further response has been received as of the date of the HPIR.
- On August 22, 2022, Ms. Flaherty called and spoke with Patricia Garcia, the THPO for the Agua Caliente Band of Cahuilla Indians (ACBCI). Ms. Garcia expressed concerns about the project and stated the Tribe is interested in consulting with the lead agency on impacts to resources, developing a mitigation plan, and participating in Native American monitoring. Ms. Garcia also stated the Tribe is backed up right now but will send a formal response letter soon. The project archaeologist received a formal letter from Lacy Padilla, THPO Operations Manager on August 30, 2022. The letter stated the project area is not located within the boundaries of the ACBCI Reservation; however, it is within the Tribe's Traditional Use Area. The Tribe requests a cultural resources inventory of the project area by a qualified archaeologist prior to any development activities in this area, a copy of the records search with associated survey reports and site records from the information center, and copies of any cultural resource documentation generated

in connection with this project. The documentation requested will be provided to the Tribe once it is finalized.

- On August 22, 2022, Ms. Flaherty attempted to contact Chairperson Joseph Hamilton of the Ramona Band of Cahuilla Indians, but the administrative staff person informed Ms. Flaherty that Mr. Hamilton is no longer the Chairman, and the new Chairperson is Danae Hamilton Vega. The administrative staff person also said she would follow-up with John Gomez, the Environmental Coordinator of the Tribe. (Note that two voicemails were also left for Mr. Gomez on August 12 and 22, 2022 and a follow-up email had been sent on August 12, 2022.) No further response has been received as of the date of the HPIR.
- On August 22, 2022, Ms. Flaherty attempted to contact Lovina Redner, the Tribal Chair of the Santa Rosa Band of Cahuilla Indians, but the call was answered by an administrative person instead. The administrative person gave Ms. Flaherty an updated email for the Tribal Chair and stated that Ms. Redner likely did not have any concerns if she hadn't already responded. On August 25, 2022, Ms. Flaherty confirmed the original letter was sent to the correct email address. No further response has been received as of the date of the HPIR.
- On August 23, 2022, Ms. Flaherty found evidence of a new email for Chairperson Shane Chapparosa of the Los Coyotes Band of Cahuilla and Cupeño Indians. Ms. Maldonado sent a copy of the original letter to Chairperson Chapparosa's new email on September 6th, 2022. No further response has been received as of the date of the HPIR.
- On August 25, 2022, Ryan Nordess, Cultural Resource Analyst for the Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians), emailed the project archaeologist stating the proposed project is not located near any known cultural resources.

Appendix C provides further information on contact efforts and provides copies of all nonconfidential Native American outreach correspondence.

Assembly Bill (AB) 52 Consultation

AB 52 establishes a formal consultation process between the lead agency, EMWD, and all California Native American Tribes within the area regarding tribal cultural resource evaluation. AB 52 mandates that the lead agency must provide formal written notification to the designated contact of traditionally and culturally affiliated California Native American tribes that have previously requested notice. Native American tribes are notified early in the project review phase by written notification that includes a brief description of the proposed project, location, and the lead agency's contact information. The Tribal contact then has 30 days to request project-specific consultation pursuant to this section (Public Resources Code Section 21080.1).

As a part of the consultation pursuant to Public Resources Code (PRC) Section 21080.3.1(b), both parties may suggest mitigation measures (PRC Section 21082.3) that can avoid or substantially lessen potential significant impacts to tribal cultural resources or provide alternatives that would avoid significant impacts to a tribal cultural resource. The California Native American tribe may request consultation on mitigation measures, alternatives to the project, or significant effects. The consultation may also include discussion on the environmental review, the significance of tribal cultural resources, the significance of the project's impact on the tribal cultural resources, project alternatives, or the measures planned to preserve or mitigate. Consultation shall end when either: 1) both parties agree on the mitigation measures to avoid or mitigate significant effects on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

EMWD has previously consulted with Native American tribal representatives, based on a contact list of tribes who indicated to EMWD that they are interested in receiving notification. Tribes previously consulted included Pechanga Band of Luiseno Indians, Soboba Band of Luiseno Indians, Rincon Band of Luiseno Indians and Agua Caliente Band of Cahuilla Indians. EMWD sent out re-initiation letters on 8/19/22 to tribes that previously consulted on the Cactus Avenue Corridor Groundwater Wells Project. EMWD has not received a response to the re-initiation letters.

a) Less than Significant with Mitigation Incorporated

No tribal cultural resources eligible for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR) have been recorded or identified within the project area. These results suggest that the project area is not highly sensitive for buried archaeological remains and therefore the possibility of encountering intact surface tribal cultural resources is considered low. However, the lack of surface

archaeology sites does not preclude their subsurface existence. Similar to the original approved project, construction of the proposed project requires ground-disturbing activities such as excavation which have the potential to expose previously unrecorded tribal cultural resources. **Mitigation Measure CUL-1** would require a Cultural Resource Treatment Monitoring Agreement be developed, in consultation with the Consulting Tribe(s) to address the treatment of inadvertently discovered archaeological resources and the participation of tribal monitor(s) during construction. **Mitigation Measure CUL-2** would require preparation of a Cultural Resources Monitoring Plan, in consultation with the Consulting Tribe(s) that identifies the location and timing of monitoring, and outlines the appropriate measures to be followed in the event of unanticipated discovery of cultural resources during project implementation. **Mitigation Measure CUL-2** also requires the Consulting Tribe(s) tribal monitor attend a pre-construction meeting with EMWD staff, the contractor, and appropriate subcontractors to discuss the monitoring program, including protocols to be followed in the event that cultural material is encountered. **Mitigation Measure CUL-3** requires a Consulting Tribe(s) monitor be present for ground-disturbing activities, make a determination as to the areas with a potential for encountering cultural material, and have the authority to stop and redirect grading activities in order to evaluate the nature and significance of any cultural resources discovered within the project limits. **Mitigation Measure CUL-4** requires artifacts discovered be inventoried and analyzed by the Consulting Tribe(s) tor. **Mitigation Measure CUL-5** specifies procedures to be carried out for final disposition of discoveries, in the event that Native American cultural resources are recovered. **Mitigation Measure CUL-6** requires the site of any reburial of culturally sensitive resources to not be disclosed. **Mitigation Measure CUL-7** requires Public Resources Code Section 5097.98 and California Health and Safety Code Section 7050.5 will be followed if Native American human remains are encountered, and the NAHC and "most likely descendant" be contacted, as appropriate. The implementation of these measures would reduce impacts to less-than-significant levels. Similar to the original approved project, with implementation of **Mitigation Measures CUL-1** through **CUL-7**, potential impacts resulting in a substantial adverse change to the significance of tribal cultural resources would be reduced to less than significant.

Mitigation Measures: Refer to **Mitigation Measures CUL-1** through **CUL-7** in *Section 3.5 Cultural Resources*.

3.19 Utilities and Service Systems

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Would the Project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	[]	[]	[X]	[]
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	[]	[]	[]	[X]
c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	[]	[]	[X]	[]
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	[]	[]	[X]	[]
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	[]	[]	[X]	[]

Discussion

The 2020 IS/MND and Addendum describe the applicable utilities background, environmental setting, and regulatory setting. Background and setting information that has changed since the 2020 IS/MND and Addendum were adopted includes an update to the EMWD UWMP (EMWD 2021).

No other new information or changed circumstances have arisen since the 2020 IS/MND and Addendum were adopted.

According to the 2020 UWMP, in 2020, EMWD provided 84,673 AF of water to 603,950 retail customers (EMWD 2021).

a) Less than Significant Impact

The proposed project would construct a raw water transmission pipeline and appurtenances and would not require or result in the additional expansion of EMWD's potable water delivery system beyond construction of the project pipeline.

As discussed in *Section 3.14 Population and Housing*, the proposed project would serve existing and planned communities and would not induce unplanned population or employment growth that would require or result in the construction of new or expanded water, wastewater treatment, natural gas, or telecommunications facilities. The proposed project, together with the other facilities of the Cactus Avenue Corridor Groundwater Wells Project analyzed in the 2020 IS/MND and Addendum, would augment the City of Moreno Valley's water supply to serve existing demand, consistent with planned growth anticipated in EMWD's 2020 UWMP.

Disturbed areas would be restored to their pre-construction condition and any vegetated areas would be replanted with appropriate native species, such that no permanent change in stormwater drainage would occur and no new drainage facilities would be constructed. As explained in *Section 3.6 Energy*, operation of the proposed project would be incorporated into EMWD's existing O&M and would require negligible additional consumption of electricity within EMWD's overall potable water distribution system. Therefore, the project would not result in the construction of new or expanded stormwater drainage or electrical power facilities that could create significant environmental effects.

The environmental impacts of the proposed project's raw water transmission pipeline and associated above ground appurtenances and valves are evaluated throughout this IS/MND and are anticipated to all be mitigated to a less than significant level.

b) No Impact

Similar to the original approved project, the proposed project involves expansion of EMWD's water service infrastructure within its existing service area to augment water supply reliability and offset imported water. Construction of the proposed project would require a minimal water supply for construction purposes such as dust control and

concrete mixing. Existing sources would be sufficient, and no new or expanded water source would be required for construction.

As discussed in *Section 3.14 Population and Housing*, operation of the proposed project would not induce unplanned population growth that would require or result in the construction of new water treatment facilities or the expansion of existing facilities. The additional water supply provided by the proposed project and other facilities of the Cactus Avenue Corridor Groundwater Wells project would accommodate existing water demand and is consistent with planned growth anticipated in the EMWD 2020 UWMP. No adverse impact related to sufficient water supplies would occur.

c) Less than Significant Impact

As discussed in *Section 3.14 Population and Housing*, construction and operation of the proposed project would not directly or indirectly induce unplanned population or employment growth that would require or result in the construction of a new or expanded wastewater collection infrastructure or treatment services. Therefore, the proposed project would have a less than significant impact on wastewater treatment capacity.

d) Less than Significant Impact

Construction of the proposed project would generate soil, asphalt, and concrete waste during installation of underground pipelines and construction of above ground appurtenances. While excavated soil would be reused onsite as backfill to the extent feasible, it is estimated that approximately 16,200 cubic yards of material would be generated during construction that would need to be disposed at a permitted landfill in accordance with local and state solid waste disposal requirements.

The closest landfill to the proposed project is the Badlands Sanitary Landfill (33-AA-0006), located at 31125 Ironwood Avenue approximately 6 miles east of the project alignment. The landfill has an overall remaining disposal capacity of approximately 7,800,000 tons of solid waste and has an expected cease operation date of January 2026 (CalRecycle nd). Construction of the proposed project would be complete by October 2024. Therefore, excess debris generated during project construction is reasonably anticipated to be within the permitted capacity of the Badlands Sanitary Landfill after onsite backfill of excavated soil combined with adherence to mandatory construction waste diversion requirements.

Solid waste generation would be limited to temporary construction activities, and operation of the proposed project is not anticipated to generate long-term solid waste. Similar to the original approved project, the proposed project would not adversely affect

available solid waste disposal capacity in the region and impacts to local infrastructure capacity and solid waste reduction goals would be less than significant.

e) Less than Significant Impact

Construction and operation of the proposed project would comply with local, state, and federal regulations related to solid waste. While operation of the proposed project is not anticipated to generate a significant amount of long-term solid waste, construction activities would create debris such as excavated soil and asphalt. Excavated soil would be backfilled to the extent possible, but construction contractor(s) would be required to dispose of excess construction debris in accordance with existing reduction statutes and regulations including Assembly Bill (AB) 939 and AB 341. These regulations would determine the landfill to be used for disposal of construction debris, mandatory 50 percent diversion of solid waste (AB 939), and mandatory recycling programs to reduce GHG emissions (AB 341). Therefore, similar to the original approved project, impacts from the proposed project related to compliance with local, state, and federal reduction statutes and regulations related to solid waste would be less than significant.

Mitigation Measures: No additional mitigation measures required or recommended.

3.20 Wildfire

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	[]	[X]	[]	[]
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	[]	[]	[]	[X]

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- | | | | | |
|--|-----|-----|-----|-------|
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | [] | [] | [] | [X] |
| d) Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | [] | [] | [] | [X] |

Discussion

The 2020 IS/MND and Addendum describe the applicable wildfire background, environmental setting, and regulatory setting. No background or setting information has changed since the 2020 IS/MND and Addendum were adopted.

The proposed project area is designated as a non-VHFHSZ within the California Department of Forestry and Fire Protection (CalFire) Moreno Valley LRA (CalFire 2009). No other new information or changed circumstances have arisen since the 2020 IS/MND and Addendum were adopted.

a) Less than Significant with Mitigation Incorporated

Construction activities would be located within roadway rights-of-way, and potential staging areas include vacant land. As a result, construction may require sidewalk and lane closures that would temporarily restrict access for use by emergency response vehicles or emergency evacuations, and could impair implementation of or physically interfere with the City's adopted EOP or Local Hazard Mitigation Plan. Implementation of **Mitigation Measure TRA-1** would require EMWD to develop a Traffic Control and Detour Plan, which would reduce conflict between project construction activities and the EOP and LHMP by requiring coordination with emergency services (police, fire, and others); requiring identification of roadways and access points for emergency services; and requiring that disruptions to or closures of these locations be minimized. Similar to the original approved project, operation of the proposed project would not physically impair or otherwise interfere with long-term emergency response or evacuation in the project vicinity as the pipeline would be located underground, and ground surfaces would be restored to pre-construction conditions. O&M activities would be incorporated into EMWD's routine maintenance and would not involve additional vehicles being added to roadways. Therefore, impacts of the project on adopted emergency plans would be less

than significant with implementation of **Mitigation Measure TRA-1**. Further consideration of the proposed construction activities and potential for roadway access and hazardous conditions can be found under *Section 3.17 Transportation*.

b) No Impact

Similar to the original approved project, the proposed project area is designated as non-VHFHSZ within the Moreno Valley LRA. Upon completion, the project pipeline would be located below grade within public rights of way and appurtenances would be located within adjacent sidewalks. The proposed project would not change any existing land surface or use types that would exacerbate wildfire risks. In addition, the project is an underground pipeline and not a land use development that would accommodate occupants on-site. Therefore, the proposed project would not exacerbate wildfire risks or expose any project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No impacts would occur.

c) No Impact

The proposed project would not involve the installation or maintenance of infrastructure that is typically associated with fire risk, such as roads, fuel breaks, emergency water sources, or power lines. The proposed project would rely on existing roads and utilities. Installation of pipelines and appurtenances would occur within existing roadway rights-of-way. The proposed project area is designated as non-VHFHSZ within the Moreno Valley LRA. The project would not exacerbate wildfire risks. No impact would occur.

d) No Impact

The proposed would be located within existing public rights-of-way and potential staging areas would be located within vacant parcels. Pipelines would be installed below-grade and overlying ground surface would be restored to pre-construction conditions, resulting in no permanent impact to site drainage. Therefore, the proposed project would not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. No impact would occur. Further consideration of the proposed project's impact related to stormwater runoff and drainage can be found under *Section 3.10 Hydrology and Water Quality*.

Mitigation Measures: Refer to **Mitigation Measure TRA-1** in *Section 3.17 Transportation*.

3.21 Mandatory Findings of Significance

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>
Does the Project:				
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	[]	[X]	[]	[]
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	[]	[]	[X]	[]
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	[]	[X]	[]	[]

Discussion

a) Less Than Significant with Mitigation Incorporated

With the implementation of mitigation measures, the proposed project would have a less than significant impact on the environment. Due to high levels of existing disturbance and low habitat quality, there is low probability of sensitive wildlife species being present in the project area. However, small pockets of open space and vegetation exist that could support nesting and foraging. In order to avoid and minimize the potential for impacts to these sensitive species, **Mitigation Measures BIO-1, BIO-2, and BIO-3** would be

implemented. **Mitigation Measure BIO-1** would avoid direct impacts to burrowing owls. To avoid direct or indirect impacts to nesting birds, implementation of **Mitigation Measure BIO-2** would require pre-construction surveys to minimize all impacts to nesting birds to less than significant. **Mitigation Measure BIO-3** would require a pre-construction clearance survey and implementation of a Worker Environmental Awareness Program (WEAP) prior to construction to address potential impacts to coastal whiptail, western yellow bat, and LA pocket mouse. No historical or prehistorical resources were identified within the area that would be directly impacted by the project activities; however, there is a potential for previously unknown cultural material to exist. If ground-disturbing activities expose previously unrecorded resources, **Mitigation Measures CUL-1** through **CUL-6** would help prevent damage to the cultural resources. The project area is underlain by Holocene deposits, which have low paleontological sensitivity; however, below the Holocene deposits are Pleistocene sediments at a depth of approximately 11 feet, which have high paleontological sensitivity. Impacts on paleontological resources are not anticipated because fossiliferous deposits have the potential to occur at greater depths than most of the proposed project ground disturbance. To ensure proper procedures are in place in the event of an unanticipated fossil discovery, **Mitigation Measure GEO-1** would be implemented during all construction phases of the project. **Mitigation Measure GEO-1** would require that any unanticipated fossil discovered onsite be preserved.

b) Less Than Significant

CEQA Guidelines Section 15130(b) provides two approaches to discussing cumulative project impacts: either the *List-of-Projects* Method: a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or the *Summary-of-Projections* Method: a summary of projections contained in an adopted general plan or related planning document or in a prior environmental document that has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative

impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency. EMWD is relying on the *List-of-Projects* method for purposes of this analysis.

The proposed project is part of the Cactus Avenue Corridor Groundwater Wells Project, which is one project of several within the Perris North Groundwater Contamination Prevention and Remediation Program. The other projects include projects that would result in the construction and operation of groundwater monitoring wells, extraction wells, treatment and distribution facilities also within the Perris North Basin. The other projects

include the following:

- Perris North Raw Water Conveyance Pipeline Phase II project which includes a transmission pipeline to convey groundwater extracted at Wells 208 and 209. Facilities include approximately 18,300 linear feet of pipelines in the City of Moreno Valley to convey raw groundwater from the extraction wells to the proposed centralized treatment and blending facility. These pipelines would be located primarily within roadway rights of way along Bay Avenue, Kitching Street, Gentian Street, Patricia Avenue, Santiago Drive, Iris Avenue, and Los Cabos Drive.
- Perris North Cactus Corridor Well Equipping and Treatment consisting of:
 - Equipping Wells 65-66
 - Equipping Wells 208-209
 - Equipping of Wells 206-207
 - A centralized treatment facility consisting of granular activated carbon (GAC) for Tetrachloroethylene - also known as perchloroethylene (PCE) - removal and a subsequent blending facility using MWD water from the Cactus II Feeder for compliance for nitrate and fluoride above MCLs/SMCLs and manganese which includes a finished water pumping station, a clearwell, and approximately related raw and potable pipelines.

Construction of these projects would occur at different times and sites far enough removed from each other that construction related cumulative effects such as fugitive dust and construction noise would be less than significant. Development would adhere to applicable rules and regulations related to dust suppression, traffic control, storm water control, handling/storage of hazardous materials, and regulations related to protections for plants/animals/waters of the State and U.S. Cumulative impacts in these areas are also considered less than significant. The only operational vehicle trips associated with the various projects listed above would be the infrequent monitoring/maintenance trips and brine disposal trips, which would result in an insignificant cumulative increase on area roadways separated in time and distance. Cumulative noise and air quality effects from these projects would also be less-than-significant due to their minimal contribution. Therefore, these projects are not expected to create impacts that are individually limited, but cumulatively considerable.

The proposed project would not have impacts that are individually limited, but cumulatively considerable. The impacts of the proposed project have been analyzed in

accordance with the CEQA Guidelines; each topic has been found to have either no impact, a less than significant impact, or a less than significant impact with mitigation incorporated. The project is of a limited scale, and, taken in sum with other projects in the area, would not produce cumulatively considerable impacts to the environment or human beings. Therefore, cumulative impacts of the proposed project would be less than significant.

c) Less Than Significant with Mitigation Incorporated

With the implementation of mitigation measures, the proposed project would have a less than significant environmental impact on human beings. Although the proposed project would follow all existing applicable regulations, during construction, there is generally the potential for hazardous materials associated with typical construction activities to be released. **Mitigation Measure HAZ-1** would minimize the risk of hazardous material exposure through material use and accidents by requiring EMWD and its construction contractor to develop a Hazardous Materials Management and Spill Prevention and Control Plan to ensure project-specific contingencies are in place.

The proposed project may expose the community, including sensitive receptors, to noise from project construction. **Mitigation Measure NOI-1** would ensure that construction noise is reduced using BMPs, and **Mitigation Measure NOI-2** would require the use of noise barriers to reduce the nighttime noise level at sensitive receptors to the maximum extent possible. With these mitigation measures in place, the proposed project would have a less than significant impact on human beings as a result of noise.

Construction impacts would be temporary and have a limited footprint, but construction may require temporary closures of roadways, bicycle lanes, and sidewalks. Potential impacts related to these closures would be minimized through the implementation of a Traffic Control Plan and Detour Plan, as described in **Mitigation Measure TRA-1**, which would ensure that appropriate traffic controls are implemented.

The impacts of the proposed project have been analyzed in accordance with the CEQA Guidelines; each topic has been found to have either no impact, a less than significant impact, or a less than significant impact with mitigation incorporated. Therefore, with the implementation of the mitigation measures noted above, the proposed project would not result in any environmental effects that would cause substantial adverse effects on human beings either directly or indirectly.

Mitigation Measures: See Mitigation Measures **BIO 1, BIO-2, BIO-3, CUL-1, CUL-2, CUL-3, CUL-4, CUL-5, CUL-6, CUL-7, GEO-1, HAZ-1, NOI-1, NOI-2, and TRA-1.**

4. FEDERAL CROSS-CUTTING ENVIRONMENTAL REGULATIONS EVALUATION

The proposed project may receive funding from a federal program (U.S. Department of the Interior, Bureau of Reclamation) or a partially funded federal program (SWRCB's Clean Water State Revolving Fund [CWSRF] and DWSRF). This section describes the proposed project's status of compliance with the federal crosscutting regulations. The 2020 IS/MND and Addendum describe the applicable regulatory background of each federal cross-cutting regulation. There are no changed circumstances or new information that have arisen since the 2020 IS/MND and Addendum were adopted.

4.1 Federal Endangered Species Act

As explained in the Biological Resources Technical Study (**Appendix B**), the proposed project area does not provide suitable habitat for most special-status plant and wildlife species. The literature review identified 45 sensitive plant species and 34 sensitive wildlife species within the California Native Plant Society nine-quad and California Natural Diversity Database five-mile search of the study area, respectively. However, this was presumably because the study area is located between Box Spring Mountain Reserve Park and the Lake Perris Reservoir. Due to the lack of specific habitat types or suitable substrates as well as the high levels of historic and existing disturbance, special status plant species are not expected to occur in the study area. Twenty-seven of the 34 wildlife species within five miles of the project area have no potential or are not expected to occur within the study area due to lack of suitable habitat.

Seven sensitive wildlife species were determined to have a low potential to occur within the study area due to the observation of small pockets of open habitat with sparse vegetation in the adjacent parcels and within the staging area: CDFW Watch List Cooper's hawk and California horned lark; and CDFW Species of Special Concern coastal whiptail lizard, Los Angeles pocket mouse, western yellow bat, loggerhead shrike, and burrowing owl. The burrowing owl and its habitat is also protected under the Western Riverside MSHCP, which encompasses the project area.

Potential indirect impacts would be minimized through implementation **Mitigation Measures BIO-1, BIO-2, and BIO-3**. Therefore, similar to the original approved project, the proposed project would not result in direct or indirect impacts to special-status plant or wildlife species, would not jeopardize any listed species, and a no effect determination is anticipated. The lead agency would be in compliance with the FESA.

4.2 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act applies to projects in which the maximum surface area of impoundment of water is greater than ten acres. It is not applicable to activities primarily connected to land management and use carried out by federal agencies with respect to federal lands under their jurisdiction. The proposed project would not involve any direct or indirect impacts from construction or operational activities to a body of water. Therefore, the Fish and Wildlife Coordination Act would not apply.

4.3 Federal Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act

As explained in the Biological Resources Technical Study (**Appendix B**), the proposed project area contains potential nesting bird habitat. Construction of the pipeline has the potential to impact species protected by the MBTA and the Bald and Golden Eagle Protection Act indirectly through construction noise, dust, and vibration from equipment. Impacts would be minimized through actions to avoid special status bird species during construction (**Mitigation Measure BIO-2**). Therefore, similar to the original approved project, the proposed project would not result in impacts to protected birds, and the lead agency would be in compliance with the MBTA and the Bald and Golden Eagle Protection Act.

4.4 Magnuson-Stevens Fishery Conservation and Management Act

The proposed project area is not located in any U.S. federal waters regulated under the Magnuson-Stevens Act. As explained in the Biological Resources Technical Study (**Appendix B**), the area is not within any Essential Fish Habitat. Similar to the original approved project, the proposed project is not expected to have an adverse effect on resident or migratory fish, wildlife species, or fish habitat in the proposed project area.

4.5 Invasive Species - Executive Order 13112

Executive Order 13112 (Invasive Species) calls upon executive departments and agencies to take steps to prevent the introduction and spread of invasive species, and to support efforts to eradicate and control invasive species that are established. Construction of the proposed project has the potential to affect the spread of invasive species. The spread of invasive species pollen and seeds would be minimized through implementation of construction best management practices that suppress dust and contain sedimentation and runoff from the site (see *Section 2.6 Environmental Commitments*). As such, the lead agency would be in compliance with Executive Order 13112 on Invasive Species.

4.6 Rivers and Harbors Act, Section 10

If a project involves the construction of structures or any other regulated activities in, under, or over navigable waters of the United States, a Section 10 Permit from the USACE is required. Regulated activities include the placement/removal of structures, work involving dredging, disposal of dredged material, filling, excavation, or any other disturbance of soils/ sediments or modification of a navigable waterway. There are no navigable waters of the United States under Section 10 Rivers and Harbors Act (USACE Los Angeles 1961) in the project area. Therefore, the Rivers and Harbors Act does not apply to the proposed project.

4.7 Protection of Wetlands - Executive Order 11990

As explained in the Biological Resources Technical Study (**Appendix B**), the proposed project area does not contain wetlands or wetland features. Therefore, there would be no impact to wetlands and the lead agency would be in compliance with EO 11990.

4.8 Coastal Barriers Resources Act, Coastal Zone Management Act, Marine Mammal Protection Act

The proposed project area is not within or adjacent to the Coastal Zone or the Coastal Barrier Resources System. It is located 40 miles from the ocean and construction activities would not involve direct, indirect, and/or cumulative impacts to marine mammals. Similar to the original approved project, the Coastal Barriers Resources Act, Coastal Zone Management Act, and Marine Mammal Protection Act do not apply to the proposed project.

4.9 Floodplain Management - Executive Orders 11988, 12148, and 13690

As described in *Section 3.10 Hydrology and Water Quality*, the project area is in FEMA SFHA Zone AE (100-year flood zone). Although the proposed project would be located within 100-year SFHA, it would include installation of underground water distribution pipelines that would not interfere with floodplain management or floodplain function or expose people or structures to a significant loss, injury or death involving flooding. As such, the lead agency would be in compliance with these executive orders.

4.10 Wild and Scenic Rivers Act, Wilderness Act

The proposed project is not within any federal designated Wild and Scenic Rivers. It also is not within a designated wilderness area. Similar to the original approved project, the Wild and Scenic Rivers Act and Wilderness Act do not apply to the project.

4.11 Safe Drinking Water Act/ Sole Source Aquifer Protection

Similar to the original approved project, proposed project is not located in an area with a sole source aquifer. 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.

4.12 National Historic Preservation Act, Section 106/ Historic Sites Act

As discussed in *Section 3.5 Cultural Resources*, a Historical Properties Identification Report for the proposed project was conducted and provided in **Appendix C**. 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.

The HPIR identified nine previously recorded cultural resources within 0.5-mile of the proposed project Area of Potential Effects (APE). None are located within the proposed project APE. Eight are historic-period built environment resources comprised of historic-period single-family properties, and one is a historic period archaeological foundation. The recorded boundary of one resource (P-33-028824) is adjacent to the proposed project APE. P-33-028824 consists of an historic-period 15-foot by 6-foot foundation slab, a utility pole with 1930 and 1947 inspection nails, and a single clear glass bottle fragment. On July 22, 2022, the field survey did not identify any new archaeological or built environment cultural resources within the proposed project APE. The archaeologist attempted to relocate the previously recorded site P-33-028824 located adjacent to the project APE; however, the resource is located in a private plot of land with fencing blocking access. This site is outside of the APE and will not be impacted by the project. All historic period built environment resources were found to be unevaluated or ineligible for listing in the NRHP or CRHR, and therefore do not qualify as historical resources under Section 106.

Similar to the 2020 IS/MND and Addendum, although archeological sensitivity of the project area is considered low based on the records search and field survey, there is potential for ground-disturbing activities to expose previously unrecorded cultural resources. **Mitigation Measures CUL-1** through **CUL-6** would require the initial ground-disturbing activities be observed by an archaeological and Native American monitor, construction be suspended if historical resources are discovered during construction, and the resource be appropriately evaluated and treated. **Mitigation Measure CUL-7** would be implemented to ensure proper procedures would be in place if human remains were unearthed during construction activities. Similar to the original approved project, there would be no effect to historic properties under Section 106 of the NHPA.

4.13 Archaeological and Historic Preservation Act (AHPA)

As described in *Section 3.5 Cultural Resources* and *Federal Cross-Cutting Environmental Regulation 4.12 National Historic Preservation Act, Section 106 Historic Sites Act*, a Historical Properties Identification Report for the proposed project was conducted and is provided in **Appendix C**. This assessment evaluated the potential for the proposed project to impact prehistoric, historic, and archaeological resources and found there would be no effect to archaeological and historic resources. Similar to the original approved project, the proposed project would include ground-disturbing activities which could impact buried materials. In order to mitigate this impact, and ensure preservation of any materials or data discovered, several mitigation measures would be implemented. With implementation of **Mitigation Measures CUL-1** through **CUL-7**, scientific, prehistoric, historic and archaeological materials and data would be preserved. The proposed project is expected to have no effects to scientific, prehistoric, historic and archaeological materials and data under the AHPA.

4.14 Executive Order 13007 – Indian Sacred Sites

As discussed in *Section 3.18 Tribal Cultural Resources*, results of the Sacred Lands File Search by the NAHC did not indicate the presence of Native American sacred lands within the vicinity of the project area. Similar to the original approved project, implementation of **Mitigation Measure CUL-1, CUL-2, and CUL-3** would require agreements and monitoring plans be established prior to any ground-disturbing activities. **Mitigation Measures CUL-4, CUL-5, and CUL-6** would require appropriate treatment of any inadvertently discovered artifacts. **Mitigation Measure CUL-7** Human Remains would ensure proper procedures are in place if human remains are discovered during construction and for the remains to analyzed to determine origin and disposition pursuant to PRC Section 5097.98. With the implementation of **Mitigation Measure CUL-1** through **CUL-7** the project would have a less than significant impact to tribal cultural resources and EMWD would be in compliance with EO 13007.

4.15 Farmland Protection Policy Act

As discussed in *Section 3.2 Agriculture and Forestry Resources*, none of the pipeline alignments are classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, or located on lands protected by a Williamson Act contract. Similar to the original approved project, the project would not result in land use changes and would, convert important farmland to a nonagricultural use, conflict with zoning regulations, or result in other changes that would indirectly result in conversion of nearby farmland to non-agricultural use. Therefore, the lead agency would be in compliance with the FPPA.

4.16 Clean Air Act

As described in *Section 3.3 Air Quality*, the proposed is within the South Coast Air Basin, which is designated extreme nonattainment for ozone and serious nonattainment particulate matter PM_{2.5}. **Table 4-1** summarizes the project's total annual construction emissions, adds the total annual construction emissions from the original approved project, and compares those to the applicable de minimis threshold for the SCAB region. As shown in **Table 4-1**, the proposed and original approved project combined criteria air pollutant emissions would not exceed the applicable de minimis thresholds. Therefore, the general conformity requirements do not apply to these emissions and the project is exempt from a conformity determination.

Table 4-1: Annual Project Emissions Compared to De Minimum Thresholds (tons/year)

Emissions Source	Ozone (NO _x)	Ozone (VOC)	PM _{2.5}
Raw Water Conveyance Pipeline Phase III annual construction emissions	2.4	0.3	0.1
Original Approved Project annual construction emissions	11	1.5	0.8
Combined annual construction emissions	13.4	1.8	0.9
<i>De Minimis Threshold</i>	<i>10</i>	<i>10</i>	<i>70</i>
Threshold exceeded?	No	No	No
Notes: The SCAB is non-attainment for O ₃ , however thresholds are set for NO _x (oxides of nitrogen) and ROG (reactive organic gases)/VOC (volatile organic compounds) because these pollutants are ozone precursors, which chemically react in the presence of sunlight to form ground-level ozone. For the purposes of this analysis, the terms ROG and VOC are used interchangeably. Sources: USEPA 2017; SCAQMD 2022.			

The results of the air quality modeling show that pollutant emissions would not exceed federal General Conformity de minimis thresholds. Accordingly, the lead agency would be in compliance with the CAA.

4.17 Executive Order 13195 on Trails for America in the 21st Century

There are no trails within the project area that would be permanently or temporarily impacted. To ensure appropriate traffic controls are implemented, including identification of temporary alternative safe routes to maintain pedestrian safety, the project would develop a Traffic Control and Detour Plan (**Mitigation Measure TRA-1**). As a result, no adverse effects on trails would occur and the lead agency is in compliance with this EO.

4.18 Environmental Justice

As shown in *Section 4.16 Environmental Justice* of the 2020 IS/MND, communities composed of minority populations and disadvantaged communities are located within the project area. Similar to the original approved project, the proposed project would help increase water supply reliability in the EMWD service area. Although construction of the proposed project has the potential for short-term environmental impacts related to noise, hazards and hazardous materials, and transportation as described in this document, operation of the project would have the long-term benefit of providing a more reliable local potable water source for these communities which are served by EWMD. As assessed elsewhere in this document, temporary impacts would be reduced to less than significant. Therefore, with the consideration of the benefits provided to these communities through implementation of the project, it would not result in any disproportionately high adverse impact on minority or low-income communities. Thus, no adverse environmental justice impacts would occur.

4.19 Environmental Alternative Analysis

SWRCB SRF Programs' federal regulations and the State Environmental Review Process require an environmental alternative analysis for projects covered under a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report. The analysis should briefly explain the direct and indirect environmental impacts associated with each project alternative considered and the environmental reasoning behind why the project alternative was selected. The project alternatives include the No Project Alternative and the proposed Cactus Avenue Groundwater Wells Project.

The No Project/No Action Alternative would not achieve the project objectives to increase EMWD potable supplies by 3,700 AFY, while also cleaning up contamination areas of concern in the Perris North Groundwater Basin. The No Project/No Action Alternative is also not consistent with regional and state plans to address groundwater contamination. The No Project/No Action Alternative would result in continued environmental impacts related to hazardous substances and contaminated groundwater.

The addition of the proposed project to the proposed Cactus Avenue Groundwater Wells project would not add new potential environmental effects. The proposed project, including the proposed project, is the recommended alternative because it is cost-effective, serves the greatest demand, and achieves other project objectives for drinking water compliance reliability.

5. REPORT PREPARATION

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APPENDIX A: CALEEMOD AIR QUALITY DATA SHEETS

APPENDIX B: BIOLOGICAL RESOURCES TECHNICAL REPORT

APPENDIX C: HISTORICAL PROPERTIES IDENTIFICATION REPORT

**APPENDIX D: PALEONTOLOGICAL RESOURCE ASSESSMENT FOR THE
PERRIS NORTH BASIN GROUNDWATER
CONTAMINATION MONITORING PROJECTS**

APPENDIX E: NOISE MODEL OUTPUT SHEETS

