

Draft Initial Study/Mitigated Negative Declaration Los Alamos Hills Water System Project Murrieta, California

Prepared for Eastern Municipal Water District 2270 Trumble Road Perris, CA 92572-8300

Prepared by RECON Environmental, Inc. 3111 Camino del Rio North, Suite 600 San Diego, CA 92108 P 619.308.9333

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1.0 Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared in accordance with relevant provisions of the California Environmental Quality Act (CEQA) of 1970, as amended, and the CEQA Guidelines, as revised. This IS/MND evaluates the environmental effects of the proposed Los Alamos Hills Water System Project (proposed project).

The IS/MND includes the following components:

- A Draft MND and the formal findings made by the Eastern Municipal Water District (District or EMWD) that the proposed project would not result in any significant effects on the environment, as identified in the CEQA IS Checklist.
- A detailed project description.
- The CEQA IS Checklist, which provides standards to evaluate the potential for significant environmental impacts from the proposed project and is adapted from Appendix G of the CEQA Guidelines. The proposed project is evaluated in 21 environmental issue categories to determine whether the proposed project's environmental impacts may be significant in any category. Brief discussions are provided that further substantiate the proposed project's anticipated environmental impacts in each category.

Because the proposed project fits into the definition of a "project" under Public Resources Code Section 21065 requiring discretionary approvals by the District, and because it could result in a significant effect on the environment, the proposed project is subject to CEQA review. The IS Checklist was prepared to determine the appropriate environmental document to satisfy CEQA requirements: an Environmental Impact Report (EIR), a Mitigated Negative Declaration (MND), or a Negative Declaration (ND). The analysis in this IS Checklist supports the conclusion that the proposed project may result in significant environmental impacts, but (1) revisions in the project plans or proposals made by or agreed to by the applicant before a proposed MND and IS are released for public review would avoid the effects or mitigate the effects to appoint where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the District, that the proposed project as revised may have a significant effect on the environment; therefore, an MND has been prepared.

This IS/MND will be circulated for 30 days for public and agency review, during which time individuals and agencies may submit comments on the adequacy of the environmental review. Following the public review period, the District's Board will consider any comments received on the IS/MND when deciding whether to adopt the MND.

2.0 Project Description

1. Project Name:

Los Alamos Hills Water System Project ("proposed project")

2. Lead Agency:

Eastern Municipal Water District 2270 Trumble Road Perris, CA 92570

3. Contact Person and Phone Number:

Joseph Broadhead
Principal Water Resource Specialist – CEQA/NEPA
Eastern Municipal Water District
2270 Trumble Road
Perris, CA 92572-8300
(951) 928-3777
broadhej@emwd.org

4. Project Location:

The proposed project is located in the city of Murrieta, California. The project area encompasses approximately 171 acres and is located near Los Alamos Road (Figures 1, 2, and 3). There are 50 rural residential parcels within the project area and 45 of those lots are developed with a residential structure. Los Alamos Road, Mason Avenue, Mary Place, and Celia Road connect back into the existing pipeline along Ruth Ellen Way and Los Alamos Road.

5. Project Applicant/Sponsor:

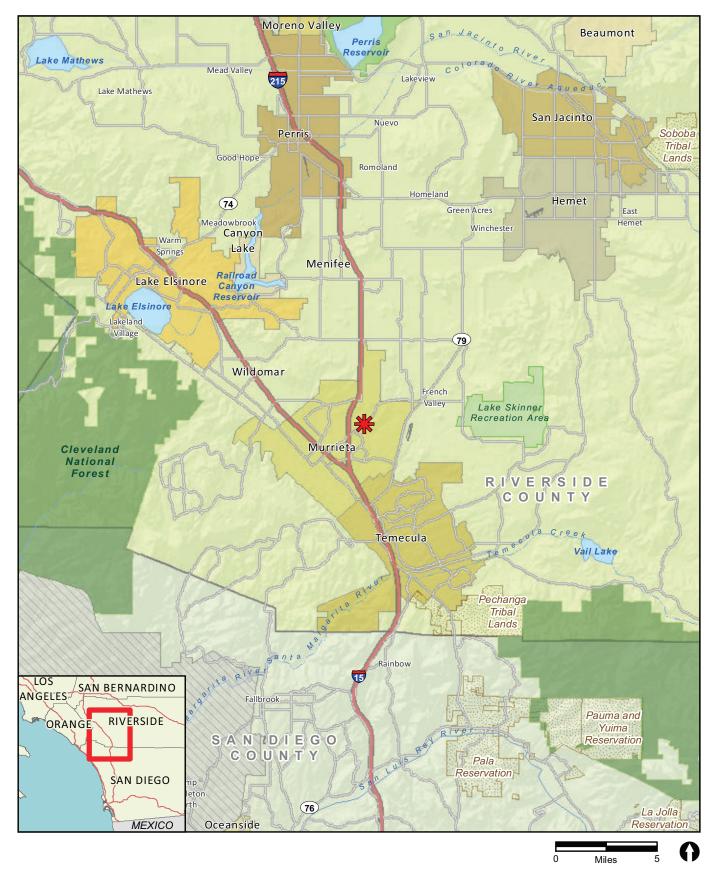
Eastern Municipal Water District 2270 Trumble Road Perris, CA 92572-8300

6. General Plan Designation:

The project area is designated as Large Lot Residential in the City of Murrieta (City) General Plan (General Plan). The area surrounding the proposed project is also designated as Large Lot Residential in the General Plan.

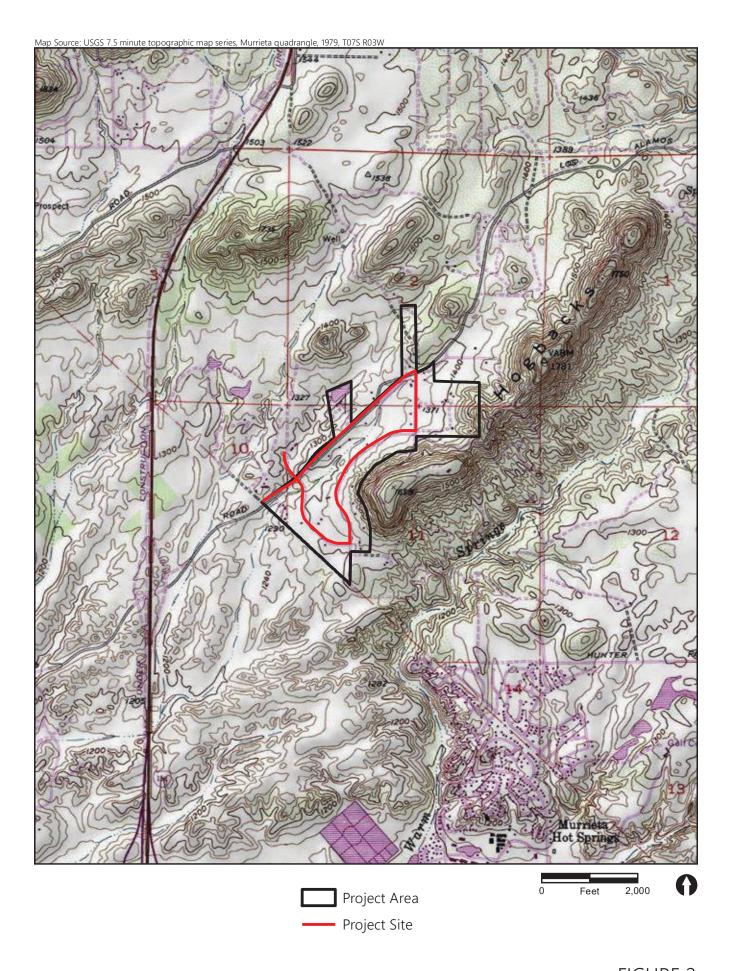
7. Zoning:

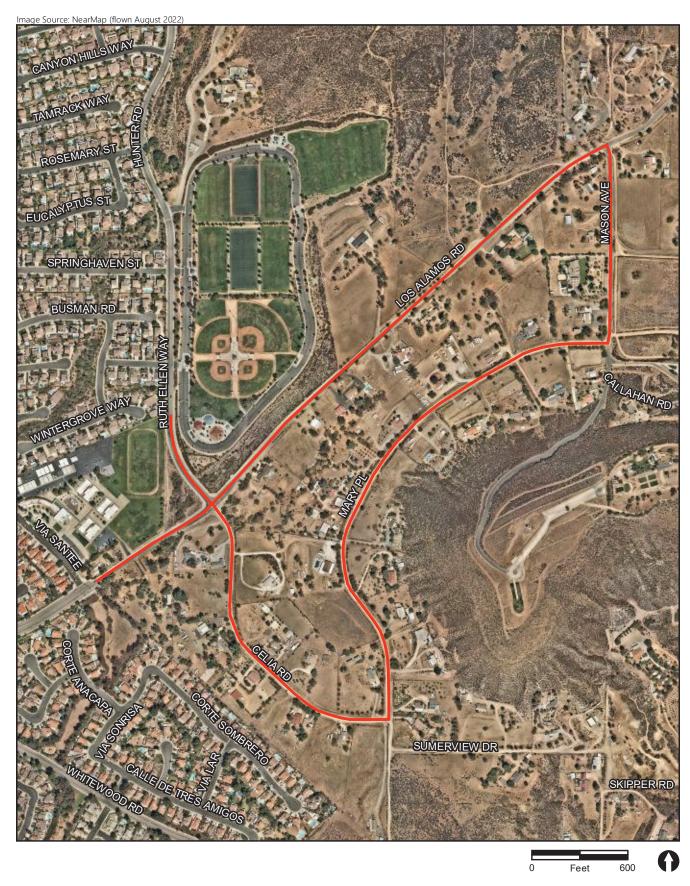
The project area and surroundings are zoned as Rural Residential (RR).











Pipeline Alignment

8. Project Background

The project area, as shown in Figure 4, is outside both the Eastern Municipal Water District (District) and the Metropolitan Water District of Southern California (MWD) service areas. Properties in this area currently rely on private wells for potable water. The project area is within the MWD's sphere of influence and is proposed to be annexed into both the District's service area and MWD's service area to receive potable water.

The project area is currently a subset of the "Keyhole Area", an approximately 1,000-acre area located outside District and MWD service areas (see Figure 4). The adjacent 96th Fringe Annexation properties have been annexed, water pipelines connected, and are now eligible for water service.

9. Proposed Project Description:

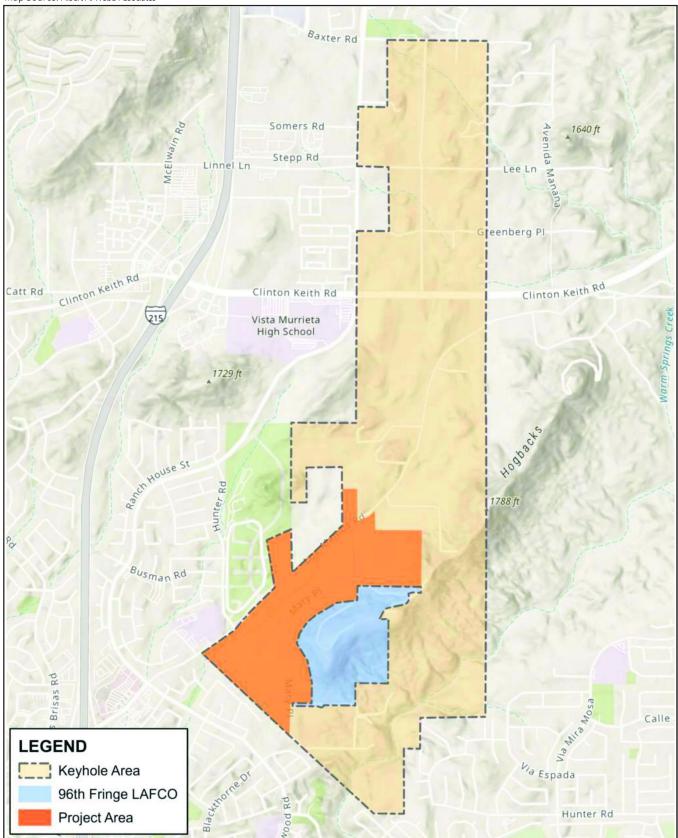
The proposed project consists of the annexation of properties within the community known as Los Alamos Hills within the city of Murrieta, and the construction of 10,685+/- linear feet of water pipeline to service the annexed properties. Los Alamos Hills includes approximately 50 properties (171.9 acres) fronting Los Alamos Road, Celia Road, Mary Place, and Mason Avenue. The area considered for annexation is referred to in this document as the "project area" (see Figure 4). Forty-five of the 50 parcels in the project area are currently developed with residential structures. Currently, owners of 36 of the 50 properties have opted to annex to the District (Figure 5).

A dual-annexation process is required to annex properties into MWD and EMWD service areas. The application to annex is done through MWD and the Riverside Local Agency Formation Commission (LAFCO). EMWD will serve as the applicant for the annexation processes into MWD and EMWD services areas, as well as the LAFCO process. It is anticipated that all fees and costs for LAFCO, the dual-annexation processes and connection fees would be advanced by EMWD with repayment of the annexation costs and connection fees to be made by residents of Los Alamos Hills that opt to proceed with annexation. District water service to the project area would be allowed once annexation is approved by the District, MWD, and LAFCO.

The "project site" is that portion of the project area where impacts could occur due to pipeline construction. The project site consists of those portions of Los Alamos Road, Celia Road, Mason Road, Mary Place, and Ruth Ellen Way within the project area. The project site is located entirely within city roadway rights-of-way, a portion of which is paved and a portion unpaved.

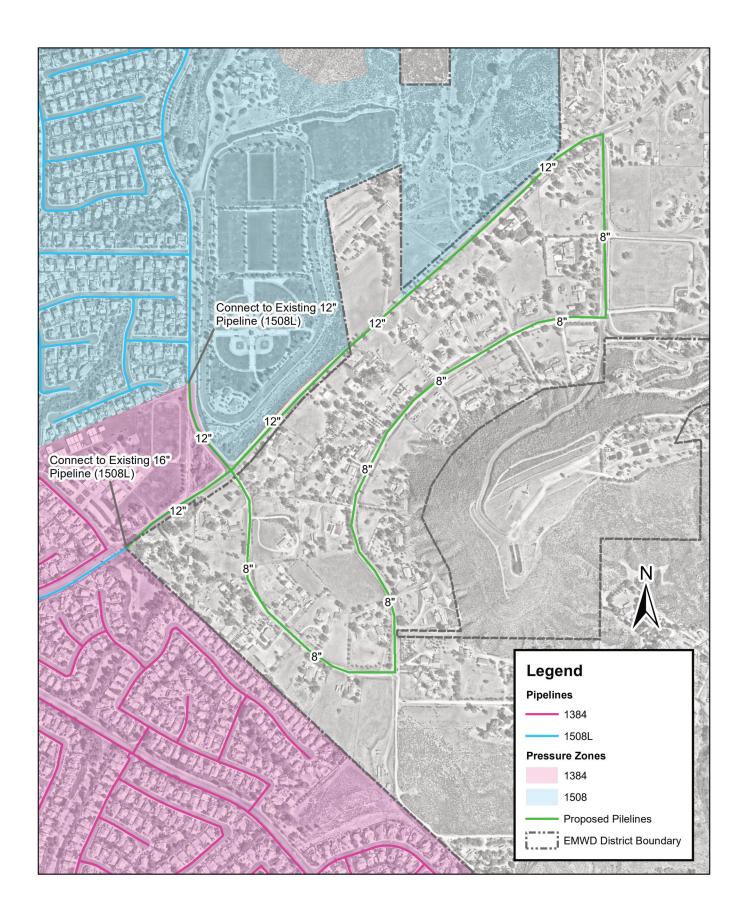
As shown in Figure 6, project site plan, the following are the proposed pipeline segments and sizing:

- Los Alamos Road: 12-inch pipeline, from Celia Road to Mason Avenue (approximately 3,350 linear feet)
- Celia Road: 8-inch pipeline, Mary Place to Mason Road (approximately 2,000 linear feet)
- Mason Road: 8-inch pipeline, Mary Place to Los Alamos Road (approximately 1,260 linear feet)
- Mary Place: 8-inch pipeline, Celia Road to Mason Avenue (approximately 3,400 linear feet)
- Ruth Ellen Way: 12-inch pipeline, Los Alamos Road to the northern property line of Rail Ranch Elementary School (approximately 675 linear feet)









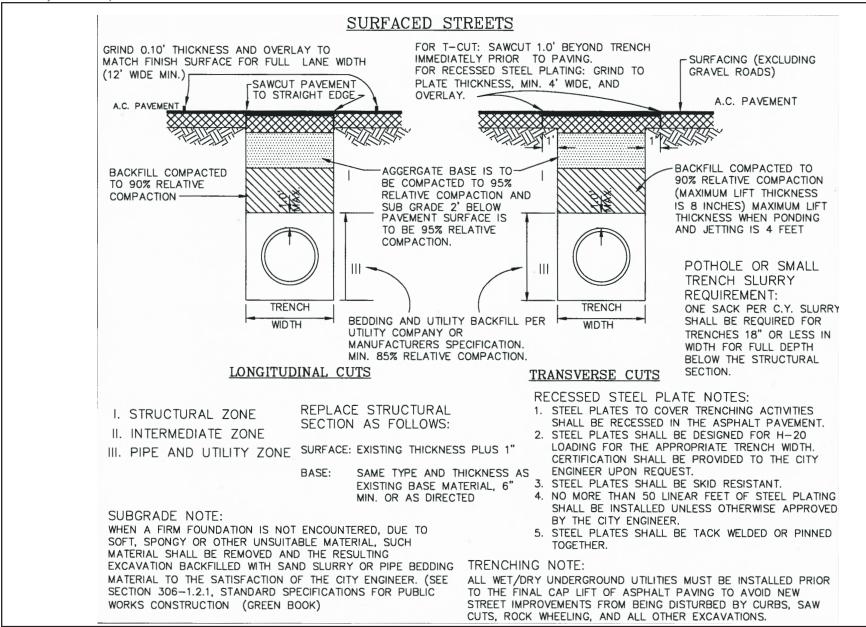
The proposed pipeline alignment is designed to avoid conflict with existing utilities and existing culverts beneath the roadways. Construction of the proposed pipeline involves open trench excavation estimated at 4 feet wide and 6 feet deep. The trench cross-sections are presented in Figures 7 and 8. Up to 200 linear feet of pipeline could be constructed each day. Construction of trenches would be in the roadway above any drainage culverts. If there is not enough depth from pavement to install the pipelines above the drainage culverts, construction of the pipeline would require a tunnel beneath the culverts. Total estimated volume of material to be excavated is approximately 20,031 cubic yards, which may be reused onsite as trench backfill; however, this would not be determined until excavation begins. Therefore, it is conservatively assumed that all of the material would be hauled offsite for disposal. Total construction time is conservatively estimated to be approximately 5 months, with construction occurring between the hours of 7:00 a.m. to 8:00 p.m. No night construction would occur.

Construction of the pipeline is anticipated to require use of the construction equipment shown in Table 1.

Table 1 Estimated Construction Equipment						
Equipment	Number Required for Pipeline					
Air Compressor	2					
Concrete Industrial Saw	1					
Excavator	1					
Generator Set	2					
Off-Highway Truck	1					
Signal Boards	4					
Sweeper/Scrubber	1					
Tractors/Loaders/Backhoes	2					
Pavers	1					

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's requirements. Unpaved and paved roads would be replaced to original conditions.

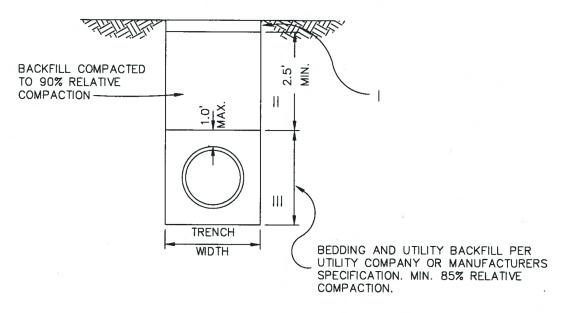
Water service laterals and meters would be installed to parcels opting into annexation following annexation and pipeline construction. Private service lateral easements would be required for lots in the project area not fronting on the project site roadways.





Source: City of Murrieta Dept. of Public Works

UNSURFACED MEDIANS ROADSIDE STRIPS AND EASEMENTS



- I. STRUCTURAL ZONE
- II. INTERMEDIATE ZONE
- III. PIPE AND UTILITY ZONE

REPLACE STRUCTURAL SECTION AS FOLLOWS:

SURFACE: 3" MINIMUM DG SURFACE IF WITHIN 12' OF PAVED SURFACE OR WITHIN ROADWAY SHOULDER

BASE:

SAME TYPE AND THICKNESS AS EXISTING BASE MATERIAL, 6" MIN. OR AS DIRECTED

SUBGRADE NOTE:

WHEN A FIRM FOUNDATION IS NOT ENCOUNTERED, DUE TO SOFT, SPONGY OR OTHER UNSUITABLE MATERIAL, SUCH MATERIAL SHALL BE REMOVED AND THE RESULTING EXCAVATION BACKFILLED WITH SAND SLURRY OR PIPE BEDDING MATERIAL TO THE SATISFACTION OF THE CITY ENGINEER. (SEE SECTION 306-1.2.1, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK)



10. Surrounding Land Use(s) and Project Setting:

The project site is located within city roadway rights-of-way and consists of those portions of Los Alamos Road, Celia Road, Mason Road, Mary Place, and Ruth Ellen Way within the project area. The northern portion of the project site along Ruth Ellen Way proposes to connect to an existing 12-inch water pipeline and the point of connection is located next to the Los Alamos Hills Sports Park to the east, the Rail Ranch School, as well as an existing tract residential development to the west. There are three parcels that are included in the project site that are located north of Los Alamos Road (see Figure 3). The majority of the area to the east and south of the project site consists of single-family residential rural development with scattered undeveloped lots (Photographs 1 through 4).

The project site is located approximately 1.2 miles east of I-215. The project site is in the U.S. Geological Survey (USGS) Murrieta quadrangle, Township 7 South, Range 3 West (USGS 1979; see Figure 2).

The proposed project is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) plan area (County of Riverside 2003). No components of the proposed project are within or adjacent to any existing or proposed criteria areas or reserves defined in the MSHCP.

11. Required Approvals:

District adoption of this MND, and approval of the annexation/pipeline project.

12. Other Required Agency Approvals or Permits Required:

- LAFCO approval of District annexation
- MWD approval of District annexation
- Encroachment Permit from the City of Murrieta
- Notice of Intent/Storm Water Pollution Prevention Plan (NOI/SWPPP) from Regional Water Quality Control Board for construction of a linear pipeline
- 13. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? 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.?

On October 7, 2022, the District sent consultation notification letters to Native American tribes on the District's Master List pursuant to the requirements of Assembly Bill 52 (AB 52) pertaining to government-to-government consultation regarding the project. Six Native American tribes were contacted but to date none have responded to consultation requests.



PHOTOGRAPH 1
Overview of Ruth Ellen Way, Looking North from
Los Alamos Road Intersection



PHOTOGRAPH 2 Overview of Los Alamos Road, Looking Northeast from Eastern Boundary of Los Alamos Hills Sports Park Equestrian Trail





PHOTOGRAPH 3
End of Pavement at the Intersection of Mason Avenue and Mary Place,
Looking West from East Side of Mason Avenue where it Transitions to
Los Alamos Heights Road



PHOTOGRAPH 4
Overview of Celia Road with Drainage Ditch, Looking South from Celia Road,
Approximately 500 feet South of Intersection with Los Alamos Road



14. Summary of Environmental Factors Potentially Affected:

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

3.0 Draft Mitigated Negative Declaration

DETERMINATION: (To be completed by the Lead Agency)	
On the basis of this initial evaluation:	
I find that the proposed project COULD NOT have a signific a NEGATIVE DECLARATION shall be prepared.	ant effect on the environment, and
I find that, although the proposed project might have a sig there would not be a significant effect in this case because made, or agreed to, by the project proponent. A MITIGATED prepared.	revisions in the project have been
I find that the proposed project might have a significant deficiencies exist relative to the City's General Plan Quality of the deficiency exceeds the levels identified in the City's pursuant to Zoning Code Article 47, Section 33-924 (b), a REPORT shall be required.	of Life Standards, and the extent of Environmental Quality Regulations
I find that the proposed project might have a "potentially significant unless mitigated impact" on the environment, be adequately analyzed in an earlier document pursuant to appete been addressed by mitigation measures based on the earlier sheets. An ENVIRONMENTAL IMPACT REPORT shall be receiffects that remain to be addressed.	ut at least one effect: (a) has been plicable legal standards, and (b) has er analysis as described on attached
I find that, although the proposed project might have a significant further documentation is necessary because all potentially analyzed adequately in an earlier EIR or NEGATIVE DECESTAND standards, and (b) have been avoided or mitigated pursua DECLARATION, including revisions or mitigation measures the project.	significant effects: (a) have been LARATION pursuant to applicable nt to that earlier EIR or NEGATIVE
Joe Broadhead Signature	1/24/23 Date
Joe Broadhead Printed Name	Principal Water Resources Specialist

4.0 Initial Study Checklist

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved. A "No Impact answer should be explained where it is based on project specific factors as well as general standards.
- 2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or (mitigated) negative declaration. Section 15063(c)(3)(D).
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significant.

4.1 Aesthetics

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic vista?			\boxtimes	
b.	Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
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 a 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?				
d.	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?				

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

Construction of the water pipeline within the project site could temporarily alter the scenic composition of the project area with the addition of construction vehicles and equipment being used. The project site/pipeline alignment is comprised of both paved and unpaved ground, either bare or with existing disturbed vegetation. Recreational uses and vacant lands are located to the north of the project area, residential development surrounds the east, south, and west of the project

area. Given that Murrieta is surrounded by rolling hillsides and steep mountain slopes, distant vistas of surrounding significant visual features are afforded from within the City. Distant vistas to the north and east can be viewed from the project area. Construction activities along the pipeline alignment would include grubbing/land clear phase, soil hauling, excavation/trenching, staging areas, utility placement, back fill and paving, which could temporarily change the scenic composition of the project area; however, the distant scenic vistas would not be affected. Upon completion of construction, all proposed improvements would be located underground within existing paved and unpaved streets and would not be visible. Therefore, pipeline construction would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant.

b. No Impact

There are no designated State Scenic Highways within the City; therefore, the project area is not visible from a State Scenic Highway. The closest officially designated scenic highway to the project area is State Route 74. The official designation for State Route 74 begins at the west boundary of the San Bernardino National Forest and State Route 111 and ends at Palm Desert, which is approximately 26 miles east of the project area (California Department of Transportation [Caltrans] 2022). Therefore, the proposed project would not substantially damage any scenic resources within a state scenic highway. No impact would occur.

c. Less Than Significant Impact

The project area is characterized by rural residential development with recreational uses and undeveloped lands located to the north of the project area. Construction activities associated with the pipeline portion of the proposed project (e.g., presence of construction vehicles, excavated materials, laydown areas) would create short-term visual effects for the surrounding residential areas. All construction-related visual impacts would be removed following construction. Project implementation would not adversely affect the quality of public views of the project area and its surroundings and impacts would be less than significant.

d. Less Than Significant Impact

Construction of the water pipeline would be limited to daytime hours Monday through Friday and is not anticipated to require lighting. In the event that construction lighting is required, it would be properly shielded and pointed downwards to avoid spillover effects onto neighboring properties, consistent with Murrieta Municipal Code (MMC) Section 16.18.100(C). Once project construction is complete, any temporary lighting that was required would be removed. Furthermore, the water pipeline loop would be located underground and would not include any permanent aboveground components. Therefore, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and impacts would be less than significant.

4.2 Agriculture and Forestry Resources

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				
b.	Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				
C.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 1220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g])?				
d.	Result in the loss of forest land or conversion of forest land to non-forest use?				
e.	Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?				

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not directly result in development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. No Impact

The project site is not located on land classified as "Farmland of Local Importance" by the Farmland Mapping and Monitoring Program (California Department of Conservation 2018). Furthermore, the proposed loop water pipeline would be installed within existing roads that would have no potential for conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. No impact would occur.

b. No Impact

Physical changes resulting from the proposed project include the construction of a pipeline loop below ground within existing road ROWs. Neither the project site nor surrounding properties are zoned for agricultural uses, nor are they subject to a Williamson Act contract. No impact would occur.

c. No Impact

The project site does not contain any forest or timberland as defined by Public Resources Code Section 12220[g], Public Resources Code Section 4526, or Government Code Section 51104(g) and is not zoned as forest or timberland. No impact would occur.

d. No Impact

The project site does not contain any forest or timberland as defined by Public Resources Code Section 12220[g], Public Resources Code Section 4526, or Government Code Section 51104(g). No impact would occur.

e. No Impact

There are no agricultural uses or forestlands in the vicinity of the project site. Therefore, the proposed project would not result in conversion of farmland or forest land. No impact would occur.

4.3 Air Quality

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan?				
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?				
C.	Expose sensitive receptors to substantial pollutant concentrations?				
d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not directly result in development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

The proposed project is located within the South Coast Air Basin (Basin) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Air districts are tasked with regulating emissions to ensure that air quality in the Basin does not exceed National or California Ambient Air Quality Standards (NAAQS and CAAQS). NAAQS and CAAQS represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. NAAQS and CAAQS have been established for six common pollutants of concern known as criteria pollutants, which include ozone, carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), lead (Pb), and respirable particulate matter (PM₁₀ and PM_{2.5}).

The Basin is currently classified as a federal non-attainment area for ozone and PM_{2.5} and a state non-attainment area for ozone, PM₁₀, and PM_{2.5}. The regional air quality plan, the 2016 Air Quality Management Plan (AQMP), outlines measures to reduce emissions of ozone and PM_{2.5}. Whereas reducing PM concentrations is achieved by reducing emissions of PM_{2.5} to the atmosphere, reducing ozone concentrations is achieved by reducing the precursors of photochemical formation of ozone, volatile organic compounds (VOC), and oxides of nitrogen (NO_X).

Growth forecasting for the AQMP is based in part on the land uses established by local general plans. Thus, if a project is consistent with land use as designated in the local general plan, it can normally be considered consistent with the AQMP. Projects that propose a different land use than is identified in the local general plan may also be considered consistent with the AQMP if the proposed land use is less intensive than buildout under the current designation. For projects that propose a land use that is more intensive than the current designation, analysis that is more detailed is required to assess conformance with the AQMP.

The project area and surroundings are designated as Civic/Institutional, Specific Plan, and Rural Residential in the Murrieta General Plan 2035 and are zoned as Civic/Institutional (C/I) (Parks and Recreation (PR), Open Space (OS), and Rural Residential (RR). The proposed project would be consistent with land use designations, as it would supply water for existing residential uses. As described in Section 4.3b below, pipeline construction and operation (inspection and maintenance trips) would not result in significant air quality impacts. The proposed project does not include growth-generating components, but rather would provide water service to existing and planned development. As such, the proposed project would be consistent with growth projections contained in the Murrieta General Plan 2035 and AQMP forecasts. Based on these considerations and pursuant to SCAQMD guidelines, project-related emissions are accounted for in the AQMP. Therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan, and impacts would be less than significant.

b. Less Than Significant Impact

Regional Significance Thresholds

NAAQS and CAAQS have been established for six criteria pollutants (ozone, CO, SO₂, NO₂, lead, and PM). As described in Section 4.3a above, the SCAQMD is the air pollution control agency responsible for protecting the people and the environment of the Basin from the effects of air pollution. Accordingly, the District evaluates project air quality emissions based on the quantitative emission thresholds originally established in the SCAQMD's CEQA Air Quality Handbook (SCAQMD 1993). SCAQMD's daily significance thresholds for impacts to regional air quality are shown in Table 2.

Table 2 SCAQMD Air Quality Significance Thresholds – Mass Daily Thresholds						
Emissions (pounds)						
Pollutant	Construction	Operational				
Oxides of Nitrogen (NO _X)	100	55				
Volatile Organic Compounds (VOC)	75	55				
Coarse Particulate Matter (PM ₁₀)	150	150				
Fine Particulate Matter (PM _{2.5})	55	55				
Oxides of Sulfur (SO _x)	150	150				
Carbon Monoxide (CO)	550	550				
Lead (Pb)	3	3				
SOURCE: SCAQMD Air Quality Significance T	hresholds (SCAQME	2015).				

Emissions that would result from construction of the water pipeline component of the proposed project would be subject to the rules and regulations of SCAQMD. The SCAQMD rules applicable to the proposed project may include the following:

- Rule 401, Visible Emissions. This rule establishes the limit for visible emissions from stationary sources.
- Rule 402, Nuisance. This rule prohibits the discharge of air pollutants from a facility that cause injury, detriment, nuisance, or annoyance to the public or damage to business or property.
- Rule 403, Fugitive Dust. This rule requires fugitive dust sources to implement best available
 control measures for all sources and prohibits all forms of visible particulate matter from
 crossing any property line. SCAQMD Rule 403 is intended to reduce PM₁₀ emissions from any
 transportation, handling, construction, or storage activity that has the potential to generate
 fugitive dust.
- Rule 431.2, Sulfur Content of Liquid Fuels. The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of reducing the formation of oxides of sulfur (SO_X) and particulates during combustion and of enabling the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers, and retailers, as well as to users of diesel, low-sulfur diesel, and other liquid fuels for stationary-source applications in the SCAQMD. The rule also affects diesel fuel supplied for mobile sources.
- Rule 1110.2, Emissions from Gaseous- and Liquid-Fueled Engines. This rule applies to stationary and portable engines rated at greater than 50 horsepower. The purpose of Rule 1110.2 is to reduce NOx, VOC, and CO emissions from engines. Emergency engines, including those powering standby generators, are generally exempt from the emissions and monitoring requirements of this rule because they have permit conditions that limit operation to 200 hours or less per year as determined by an elapsed operating time meter.
- Rule 1113, Architectural Coatings. This rule requires manufacturers, distributors, and end users
 of architectural and industrial maintenance coatings to reduce VOC emissions from the use
 of these coatings, primarily by placing limits on the VOC content of various coating
 categories.

Pipeline construction would result in short-term emissions associated with construction. Operation of the pipeline would result in emissions related to minor vehicle/equipment use associated with routine inspection and maintenance; however, these operational emissions would be negligible. Therefore, this analysis focuses on emissions associated with construction activities. Construction emissions associated with pipeline construction were modeled using the Sacramento Metropolitan Air Quality Management District's (SMAQMD) Roadway Construction Emissions Model (RCEM) Version 9.0.1 (SMAQMD 2022). The RCEM is a spreadsheet-based model that is able to use basic project information (e.g., total construction months, project type, total project area) to estimate a construction schedule and quantify exhaust emissions from heavy-duty construction equipment, haul trucks, and worker commute trips associated with linear construction projects. Version 9.0.1 of the model incorporates the most currently approved 2017 Emission Factor (EMFAC2017)¹ model and Off-Road emissions factors model. Although RCEM was developed by SMAQMD, it is appropriate for use in the SCAQMD jurisdiction because it is applicable for all statewide construction projects that involve construction equipment that is subject to California Air Resources Board (CARB) construction equipment emissions standards and incorporates statewide emission factor models (EMFAC2017 and Off-Road). RCEM calculates fugitive dust, exhaust, and off-gas emissions from grubbing/land clearing, grading/excavation, drainage/utilities/sub-grade, and paving activities associated with construction projects that are linear in nature (e.g., road or levee construction, pipeline installation, transmission lines). Construction is expected to begin in the fall of 2023 and last approximately five months.

The pipeline alignment would consist of a total of approximately 10,685 linear feet. The total project site along the pipeline alignment was calculated assuming a conservative trench width of 5 feet and a depth of 10 feet. Excavated soil would likely be replaced in the trench once the new pipeline is replaced; however, to be conservative, hauling was included in the analysis. Hauling emissions associated with asphalt removal were calculated assuming a total of 244 cubic yards of asphalt export (5,275 feet of paved road, 5 feet wide, and 3 inches deep). Hauling emissions associated with soil removal were calculated assuming all the excavated soil would be hauled, for a total of 19,787 cubic yards of soil export (10,685 feet long, 5 feet wide, and 10 feet deep). Asphalt hauling was modeled over the duration of the 0.25-month grubbing/land clear phase, and soil hauling was modeled over the duration of the 2.25-month grading/excavation phase. Modeled construction equipment includes a backhoe, loader, excavator, sweeper, paver, two generators, air compressor, concrete saw,

 $methodologies\ incorporated\ into\ RCEM.$

of emissions would be construction equipment which are calculated using the Off-Road emissions factor model

The 2021 Emission Factor (EMFAC2021) model was released in January 2021; however, EMFAC2021 has not yet been approved for use by the U.S. Environmental Protection Agency (U.S EPA). EMFAC2017 is the most recent version of the model approved by the U.S. EPA, and was therefore used in this analysis. Use of EMFAC2021 would not result in emissions that are substantially different than those calculated in this analysis, particularly since the main source

water truck, and signal boards along with dump trucks used for hauling, utility trucks, and employee vehicles. Construction would require up to 10 workers per day.

The maximum daily construction emissions are summarized in Table 3. Appendix A contains the RCEM calculations for this pipeline project. Appendix A also contains detailed calculations showing how the project size and hauling quantities were calculated.

Table 3 Maximum Daily Construction Emissions (pounds per day)								
			Poll	utant				
	ROG	NOx	CO	SO _X	PM ₁₀	PM _{2.5}		
Grubbing/Land Clearing	2.93	23.83	31.00	0.06	3.35	1.54		
Grading/Excavation	2.96	27.35	31.45	0.08	3.47	1.60		
Drainage/Utilities/Sub-Grade	2.93	23.21	30.92	0.06	3.33	1.53		
Paving	0.48	3.40	5.01	0.01	0.19	0.15		
Maximum Daily Emissions 2.96 27.35 31.45 0.08 3.47 1.60								
SCAQMD Threshold	75	100	550	150	150	55		
Significant Impact?	No	No	No	No	No	No		

ROG = reactive organic gases; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter less than 10 microns; $PM_{2.5}$ = particulate matter less than 2.5 microns

Construction emissions were compared to the significance thresholds shown in Table 2 to assess the significance of the air quality emissions resulting from pipeline construction. These thresholds are designed to provide limits below which project emissions would not significantly change regional air quality.

As shown in Table 3, maximum daily construction emissions associated with the pipeline construction are projected to be less than the applicable thresholds for all criteria pollutants, including emissions for ozone precursors (reactive organic compounds [ROG] and NO_X), PM₁₀, and PM_{2.5}. Therefore, pipeline construction would not result in a cumulatively considerable net increase in emissions of ozone, PM₁₀, or PM_{2.5}, and impacts would be less than significant.

After installation of the underground pipeline, there would be occasional inspection and maintenance trips. These trips would be minimal and currently occur within the District's jurisdiction by existing staff. Inspection and maintenance trips would not result in operational emissions that exceed SCAQMD thresholds and there would be no other source of operational emissions. Impacts associated with pipeline operation would be less than significant.

Localized Construction Impacts

In addition to these regional significance thresholds, the SCAQMD utilizes Localized Significance Thresholds (LST) to evaluate localized air quality impact to sensitive receptors in the vicinity of the proposed project (SCAQMD 2008). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. Localized air quality impacts would occur if pollutant concentrations at sensitive receptors exceeded applicable NAAQS or CAAQS.

The project area is located within Source Receptor Area 26. LSTs apply to on-site air emissions of CO, NO₂, PM₁₀, and PM_{2.5}. The LST methodology states that only on-site emissions should be compared to LSTs. Therefore, off-site emissions associated with worker travel, materials deliveries, and other mobiles sources are not evaluated against LSTs. The LSTs for a 1-acre site with receptors at 25 meters were conservatively used. The results of the LST analysis are provided in Table 4.

Table 4 Localized Construction Emissions						
	Pollutant					
NO _X CO PM ₁₀ PM _{2.5}						
Maximum Daily Emission	27.35	31.45	3.47	1.60		
LST Threshold	162	750	4	3		
Threshold Exceeded?	No	No	No	No		

As shown in Table 4, maximum localized pipeline construction emissions would not exceed any of the SCAQMD recommended localized screening thresholds. Therefore, the pipeline construction of the proposed project would not exceed the LST thresholds for CO, NO_X, PM₁₀, or PM_{2.5}, and impacts would be less than significant.

c. Less Than Significant Impact

A sensitive receptor is a person in the population who is more susceptible to health effects due to exposure to an air contaminant than is the population at large. Examples of sensitive receptor locations in the community include residences, schools, playgrounds, childcare centers, churches, athletic facilities, retirement homes, and long-term health care facilities. Residential uses are located adjacent to the pipeline loop. Additionally, a park is located north of the pipeline loop. Pollutants that have the potential to affect sensitive receptors include criteria pollutants, diesel particulate matter (DPM), and CO hotspots. Ozone is formed through the combination of ROG and NO_x, with help from sunlight and heat. Exposure to either can impact respiratory health, causing respiratory inflammation and asthma exacerbations. Health effects of DPM are wide ranging, with strong links to all-cause mortality, cardiovascular mortality and hospitalizations, and respiratory and asthma hospitalizations. Adverse health effects associated with CO include chest pain in heart patients, headaches, and reduced mental alertness. Impacts to sensitive receptors from criteria pollutants are discussed above in Section 4.3b, Localized Construction Impacts. DPM and CO hotspots are discussed below.

Diesel Particulate Matter

Construction of the pipeline would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Construction of the pipeline would result in the generation of diesel exhaust DPM emissions from the use of off-road diesel equipment required for construction activities and on-road diesel equipment used to bring materials to and from the project site.

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction is anticipated to last for approximately five months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer

exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the proposed project (OEHHA 2015). Although the alignment is located adjacent to residential uses, construction equipment would only be located adjacent to a particular sensitive receptor for a matter of days or weeks since work would move along the alignment. Thus, because the duration of proposed construction activities near any specific sensitive receptor would be minimal and would be significantly less than the 30-year exposure period used in health risk assessments, the impacts would be less than significant.

Additionally, with ongoing implementation of U.S. EPA and CARB requirements for cleaner fuels; off-road diesel engine retrofits; and new, low-emission diesel engine types, the DPM emissions of individual equipment would be reduced over time. As discussed previously, all construction equipment is subject to the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation, which limits unnecessary idling to 5 minutes, requires all construction fleets to be labeled and reported to CARB, bans Tier 0 equipment and phases out Tier 1 and 2 equipment (thereby replacing fleets with cleaner equipment), and requires that fleets comply with Best Available Control Technology requirements. Therefore, due to the limited duration of construction activities, the limited amount of time equipment would be located adjacent to any specific sensitive receptor, and implementation of the In-Use Off-Road Diesel-Fueled Fleets Regulation, DPM generated by project construction is not expected to create conditions where the probability is greater than 10 in 1 million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than 1 for the Maximally Exposed Individual. Therefore, the pipeline construction component of the proposed project would not expose sensitive receptors to substantial pollutant concentration, and impacts would be less than significant.

Carbon Monoxide Hot Spots

A CO hot spot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hot spots have the potential to violate state and federal CO standards at intersections, even if the broader basin is in attainment for federal and state levels. CO hot spots occur nearly exclusively at signalized intersections operating at level of service (LOS) E or F. Due to increased requirements for cleaner vehicles, equipment, and fuels, CO levels in the state have dropped substantially. All air basins are attainment or maintenance areas for CO. Therefore, more recent screening procedures based on more current methodologies have been developed. The Sacramento Metropolitan Air Quality Management District developed a screening threshold in 2011, which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District developed a screening threshold in 2010 which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis.

The pipeline construction component of the proposed project would generate vehicle trips during construction in the form of haul trucks and worker commute vehicles. Based on the RCEM emission calculations prepared for project construction, up to 20 daily worker trips would occur during peak construction activities, and up to 10 daily hauling trips would be required. The proposed alignment

would not affect any signalized intersections. The addition of construction traffic to area roadways would not cause any intersections to operate at LOS E or F and would not significantly increase peak hourly volumes. Construction vehicle generation would also be temporary. Therefore, the pipeline construction component of the proposed project would not generate CO hot spots, and potential impacts would be less than significant.

d. Less Than Significant Impact

The potential for an odor impact is dependent on a number of variables, including the nature of the odor source, distance between the receptor and odor source, and local meteorological conditions. During construction, diesel equipment may generate some nuisance odors from equipment exhaust. Additionally, paving activities have the potential to generate odors while laying asphalt. Sensitive receptors near the project site/pipeline alignment include residential uses adjacent to the pipeline loop. However, exposure to odors associated with project construction would be short-term and temporary in nature. In addition, construction activities within the project site is required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance. Further, per CARB's Airborne Toxic Control Measures 13 (California Code of Regulations Chapter 10 Section 2485), the applicant shall not allow idling time to exceed 5 minutes unless more time is required per engine manufacturers' specifications or for safety reasons. Compliance with this regulation would reduce odors from equipment exhaust. Given the short-term nature of construction, compliance with SCAQMD Rule 402, and the distance to the nearest sensitive receptors, it is not anticipated that project construction would generate odors that would affect a substantial number of people.

The following list provides some common types of facilities that are known producers of objectionable odors (Bay Area Air Quality Management District 2017). This list of facilities is not meant to be all-inclusive.

- Wastewater Treatment Plant
- Wastewater Pumping Facilities
- Sanitary Landfill
- Transfer Station
- Composting Facility
- Petroleum Refinery
- Asphalt Batch Plant
- Chemical Manufacturing
- Fiberglass Manufacturing
- Painting/Coating Operations
- Rendering Plant
- Coffee Roaster
- Food Processing Facility
- Confined Animal Facility/Feed Lot/Dairy
- Green Waste and Recycling Operations
- Metal Smelting Plants

The proposed project does not include any of these uses that are typically associated with odor complaints. There would be no operational source of odors associated with the proposed project, as the water pipeline would be completely enclosed and underground. Therefore, the proposed project would not generate substantial amounts of odors adversely affecting a substantial number of people, and impacts would be less than significant.

4.4 Biological Resources

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?				
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 CDFW or USFWS?			\boxtimes	
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?				
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?				

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e.	Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?				
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Potentially Significant Unless Mitigation Incorporated

This section is based on the Biological Resources Survey prepared by RECON Environmental, Inc. (Appendix B). The survey area included the project site (the pipeline trench plus a 15-foot temporary work area), plus a surrounding 50-foot buffer. The totality of the survey area is 34.12 acres. The biological surveys were conducted on September 27, 2022; biological resources and potential impacts to biological resources are identified in Figure 9.

Vegetation Communities/Land Cover Types

The project site consists of paved and unpaved roadways, which contain one land cover type: urban/developed. The project site is further surrounded by the following six vegetation communities/land cover types: flat-topped buckwheat scrub, Riversidean sage scrub, southern riparian woodland, walnut woodland, non-vegetated channel, and urban/developed. The acreage of these vegetation communities/land cover types is presented in Table 5 and descriptions are provided below.

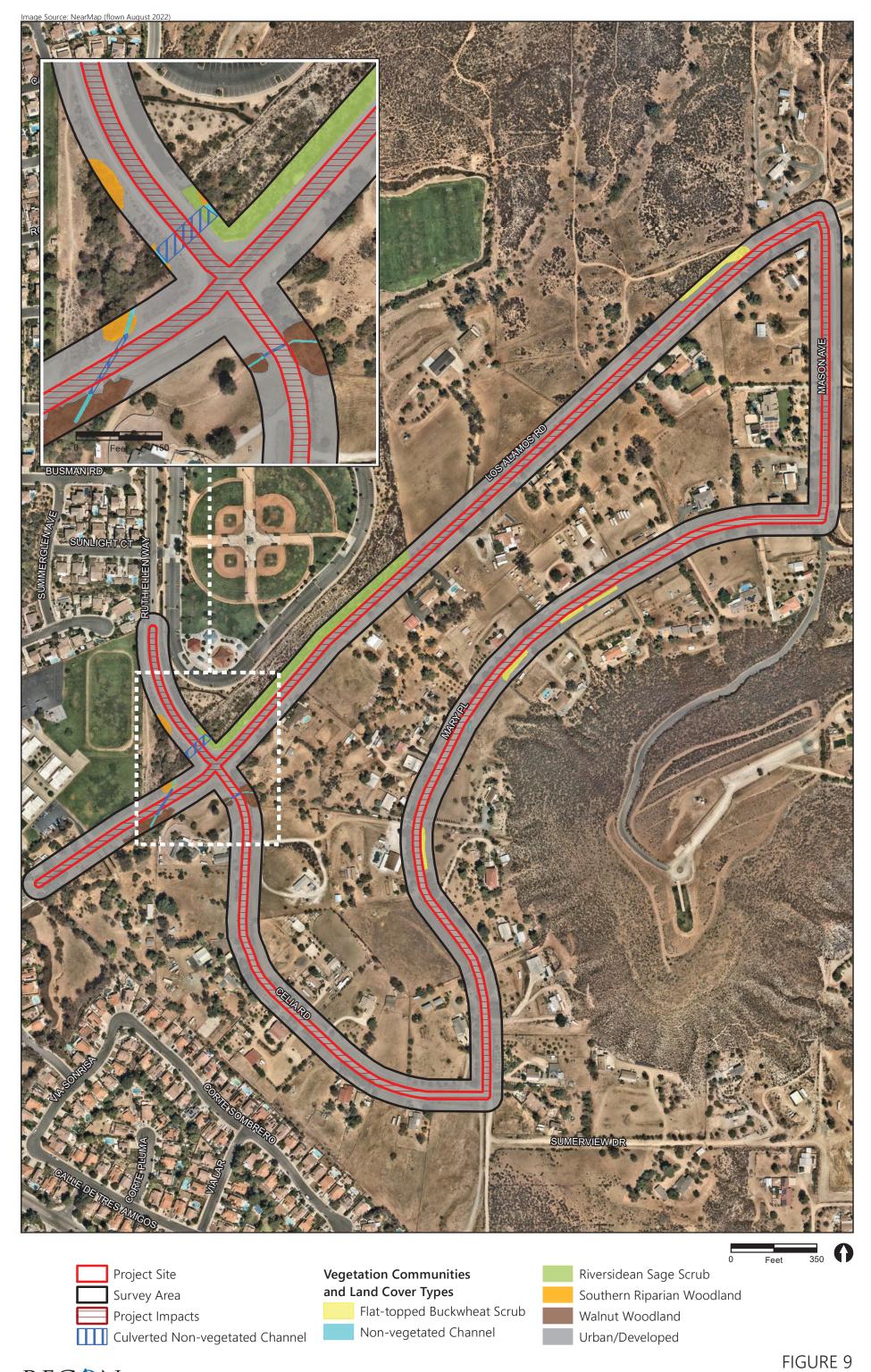


Table 5 Vegetation Communities within the Survey Area (acres)					
Project Site/					
Vegetation Communities	Pipeline Alignment	Survey Area			
Flat-topped Buckwheat Scrub	_	0.24			
Riversidean Sage Scrub	_	1.02			
Southern Riparian Woodland	_	0.10			
Walnut Woodland	_	0.39			
Non-vegetated Channel	_	0.03			
Urban/developed 7.91 32.34					
TOTAL	7.91	34.12			

Urban/Developed Land

Urban/developed land accounts for the entirety of the project site and the majority of the buffer surrounding the project site and occurs as various paved and unpaved roadways, private residences, and a manufactured ditch running adjacent to Los Alamos Road along the northeastern portion of the survey area. Vegetation within urban/developed land consists of ornamental landscaping and a variety of non-native species, including ripgut brome, Peruvian pepper tree, and gum tree.

Non-vegetated Channel

Non-vegetated channel occurs as culverted drainage channels traveling under Ruth Ellen Way, Los Alamos Road, and Celia Road adjacent to the intersection of Ruth Ellen Way, Los Alamos Road, and Celia Road in the western portion of the survey area. No water was flowing at the time of the survey and the channels appear to support either an ephemeral or intermittent flow regime.

Flat-topped Buckwheat Scrub

Flat-topped buckwheat scrub is present in small linear patches (0.24 acre) along Los Alamos Road adjacent to the northeastern portion of the project site and along Mary Place adjacent to the southern portion of the survey area, adjacent to the project site. This vegetation community is comprised entirely of California buckwheat occurring primarily along fence line and appears to be regularly mowed for fuel management along the roadway.

Riversidean Sage Scrub

Riversidean sage scrub is found with moderate vegetation cover along Los Alamos Road adjacent to the northwestern portion of the project site. The Riversidean sage scrub occurs as an isolated patch adjacent to Los Alamos Road that was planted on a graded slope based on historic aerials. The Riversidean sage scrub is dominated by native scrub species such as California buckwheat, coyote brush, brittlebush, and coastal goldenbush.

Southern Riparian Woodland

Southern riparian woodland is found in small, isolated segments on either side of Ruth Ellen Way along Los Alamos Road adjacent to the western portion of the project site. This vegetation community is dominated by western sycamore and contains an understory dominated by mule fat.

Walnut Woodland

Walnut woodland is found in small, isolated segments on either side of Ruth Ellen Way and along Los Alamos Road adjacent to the western portion of the project site. This vegetation community is dominated by southern California black walnut with an understory of mule fat.

The proposed project would result in a total of up to 7.91 acres of direct impacts to urban/developed land. Impacts to urban/developed land are not considered significant as this land cover type is not considered sensitive. Thus, no mitigation is required for impacts to vegetation communities as a result of the proposed project. Therefore, potential impacts would be less than significant and no mitigation would be required.

Plant Species

No sensitive plants were observed within or adjacent to the project site during the biological survey, and none are expected to occur due to the developed nature of the project site and surrounding area. Therefore, no impacts to sensitive plant species are anticipated to result from the proposed project and no mitigation would be required.

Wildlife

No sensitive wildlife was detected within or adjacent to the project site during the biological survey. However, there is a low to moderate potential for coastal California gnatcatcher, southern California rufous-crowned sparrow, Bell's sage sparrow, and migratory/nesting birds to occur adjacent to the project site. These species are discussed in further detail below.

Coastal California Gnatcatcher

Coastal California gnatcatcher is federally listed as threatened, a California Department of Fish and Wildlife (CDFW) species of special concern, and a MSHCP (County of Riverside 2003) covered species. This species is generally found in mature coastal sage scrub habitat consisting of low shrub and subshrub species. This species has a low to moderate potential to occur in suitable Riversidean sage scrub habitat adjacent to the project site, outside of the project impact area. Though the identified Riversidean sage scrub habitat adjacent to the project site consists of appropriate vegetation structure for nesting, the Riversidean sage scrub is limited to a small, isolated patch bounded by urban/developed land and lacks connectivity to open space areas. Should this species be present adjacent to the project site, direct impacts to coastal California gnatcatcher are not anticipated as the proposed project would be limited to the developed roadway and the proposed project would avoid removal of suitable Riversidean sage scrub habitat. However, due to the proximity of potentially suitable Riversidean sage scrub to work areas, indirect impacts as a result of construction noise during the breeding season (March 1 through August 15) could result if this species were to nest adjacent to the project site. Indirect impacts to coastal California gnatcatcher if present at the time of project construction would be significant (Impact BIO-1). Implementation of mitigation measure BIO-1 would reduce this impact to a level less than significant.

Southern California Rufous-crowned Sparrow

Southern California rufous-crowned sparrow is a CDFW watch list species and an MSHCP covered species. This species is primarily found in coastal sage scrub, chaparral, and grassland habitats. This

species has low to moderate potential to occur in suitable Riversidean sage scrub habitat adjacent to the project site, outside of the project impact area. Though the Riversidean sage scrub habitat adjacent to the project site consists of appropriate vegetation structure for nesting, the Riversidean sage scrub is limited to a small, isolated patch bounded by urban/developed land and lacks connectivity to open space areas. Should this species be present adjacent to the project site, direct impacts to southern California rufous-crowned sparrow are not anticipated as the proposed project would be limited to the developed roadway and the proposed project would avoid removal of suitable Riversidean sage scrub habitat. However, due to the proximity of potentially suitable Riversidean sage scrub to work areas, indirect impacts as a result of construction noise during the general bird breeding season (February 1 through September 15) could result if this species were to nest adjacent to the project site. Indirect impacts to southern California rufous-crowned sparrow if present at the time of project construction would be significant (Impact BIO-2). Implementation of mitigation measure BIO-2 would reduce this impact to a level less than significant.

Bell's Sage Sparrow

Bell's sage sparrow is a CDFW watch list species and an MSHCP covered species. This species is primarily found in sage scrub and low chaparral habitats. There is one record of this species within one mile of the project area. This species has low to moderate potential to occur in suitable Riversidean sage scrub habitat adjacent to the project site, outside of the project impact area. Though the Riversidean sage scrub habitat adjacent to the project site consists of appropriate vegetation structure for nesting, the Riversidean sage scrub is limited to a small, isolated patch bounded by urban/developed land and lacks connectivity to open space areas. Should this species be present adjacent to the project site, direct impacts to Bell's sage sparrow are not anticipated as the proposed project would be limited to the developed roadway and the proposed project would avoid removal of suitable Riversidean sage scrub habitat. However, due to the proximity of potentially suitable Riversidean sage scrub to work areas, indirect impacts as a result of construction noise during the general bird breeding season (February 1 through September 15) could result if this species were to nest adjacent to the project site. Indirect impacts to Bell's sage sparrow if present at the time of project construction would be significant (Impact BIO-2). Implementation of mitigation measure BIO-2 would reduce this impact to a level less than significant.

Migratory and Nesting Birds

No migratory or nesting birds are anticipated to nest within the project site due to project site's location within a developed roadway. However, the majority of the adjacent habitat including the scrub habitats, woodland habitats, and the non-native Peruvian pepper trees and gum trees found within the urban/developed land, have potential to support migratory and nesting bird species. Urban adapted species in particular have been known to nest within ornamental vegetation or the eves of houses or openings in structures. Direct impacts to migratory and nesting birds are not anticipated as no vegetation would be removed by the proposed project, and the proposed project occurs within a developed roadway with existing vehicular traffic. However, indirect noise impacts may occur to nesting and migratory birds, including southern California rufous-crowned sparrow and Bell's sage sparrow, if they are nesting in the adjacent habitat should construction occur during the general avian breeding season (February 1 to September 15). Impacts to nesting and migratory birds if present at the time of project construction would be considered significant (Impact BIO-2). Implementation of mitigation measure BIO-2 would reduce this impact to a level less than significant.

b. Less Than Significant Impact

Direct impacts associated with the proposed project would be limited to urban/developed land associated with the existing roadway. Project impacts to urban/developed land would be less than significant as this land cover type is not considered sensitive and, therefore, no mitigation would be required.

c. Potentially Significant Unless Mitigation Incorporated

The proposed project would avoid direct impacts to potentially jurisdictional non-wetland waters by avoiding the drainage culverts underlying the roadways. Specifically, construction of trenches would be in the roadway above culverts. If there is not enough depth from pavement to install the pipelines above the culverts, construction of the pipeline would require a tunnel beneath the culverts. Therefore, there would be no impact to culverts and associated drainages and non-wetland waters. However, the proposed project has potential to result in indirect impacts to potential jurisdictional resources occurring adjacent to the work areas (BIO-3). Implementation of mitigation measure BIO-3 would reduce this impact to a level less than significant.

d. Less Than Significant Impact

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife travel. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits between populations. Wildlife movement corridors are considered sensitive by resource and conservation agencies.

The project site is comprised of roadways within existing easements and rights-of-way along Los Alamos Road, Mason Avenue, Mary Place, Celia Road, and Ruth Ellen Way. The project is generally bounded by a school and undeveloped lots to the north, residential development and open space to the south, residential development to the west, and undeveloped lots to the east. Though habitats adjacent to the project site likely provides habitat for urban-adapted species and local wildlife movement, it is not anticipated that these habitats would constitute a significant regional corridor due to the project site's location in a developed area and lack of connectivity to off-site areas of open space. Also, the project site is unlikely to support wildlife nursery sites or large roosting or breeding colonies due to the developed nature of the project site. The project site is separated from any MSHCP Conservation Areas by residential development to the east and Summerview Drive, Somerville Road, Willie Lane, and Skipper Drive and existing residential development to the southeast. Therefore, impacts to wildlife movement corridors would be less than significant, and no mitigation required.

e. Less Than Significant Impact

The Murrieta General Plan 2035 (Conservation Element CSV-8: Biological) provides policies related to protecting biological resources and implementing the MSHCP. As discussed in further detail below, the proposed project is consistent with the MSHCP and, therefore, would not conflict within any Murrieta General Plan 2035 policies pertaining to the protection of biological resources. In addition, the City's Development Code (Article III, Chapter 16.42-Tree Preservation) has a Tree

Preservation Ordinance that provides regulations and guidelines for the protection of existing trees. No trees are located within the project site and no conflicts with the development code would occur. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources, and impacts would be less than significant.

f. Less Than Significant Impact

The project area is located within the boundaries of the Western Riverside County MSHCP plan area. A portion of the project area is specifically located within criteria cells in Subunit 5, French Valley/Lower Sedco Hills, identified by the MSHCP. However, the project site is restricted to existing developed roadways within the criteria cells and does not contain biological resources meeting the conservation criteria of the MSHCP. In addition, there are no riparian areas, vernal pools, narrow endemic or criteria area plant species, or burrowing owl habitat protected by the MSHCP within the project site, and the proposed project has been designed to avoid potential riverine areas associated with the culverted drainages underlying the roadway. Specifically, construction of trenches would be in the roadway above culverts. If there is not enough depth from pavement to install the pipelines above the culverts, construction of the pipeline would require a tunnel beneath the culverts. Following these construction measures, there would be no impact to culverts and associated drainages and non-wetland waters. Therefore, there are no MSHCP compliance requirements related to these resources applicable to the proposed project and the proposed project would have no impact. A more detailed analysis of project consistency with the MSHCP is contained in the Biological Resources Report (see Appendix B).

As further described in the biological report, the development of the proposed project, which consists of the installation of water pipelines in previously developed roadways, would not preclude the ability of MSHCP conservation goals to be reached nor is the project area located in an area that would cause indirect impacts to conservation areas in the urban/wildland interface area. Therefore, the proposed project is consistent with the reserve assembly goals of the MSHCP, as well as the guidelines pertaining to the urban/wildlife interface; therefore, impacts would be less than significant.

Mitigation Measures

BIO-1: Coastal California Gnatcatcher: Project construction should be conducted outside the coastal California gnatcatcher breeding season, which is March 1 to August 15. If construction must take place during the coastal California gnatcatcher breeding season, a qualified biologist (possessing a valid Endangered Species Act Section 10(a)(1)(A) Recovery Permit) shall survey Riversidean sage scrub adjacent to the project site for the presence of the coastal California gnatcatcher. Surveys for coastal California gnatcatcher shall be conducted pursuant to the protocol survey guidelines established by the U.S. Fish and Wildlife Service (USFWS) within the breeding season prior to the commencement of any construction. If the protocol survey concludes that no coastal California gnatcatchers are present or all work is constructed outside of the breeding season (August 16 to February 28), no additional mitigation measures would be necessary. If coastal California gnatcatchers are present, then the following additional mitigation conditions must be met:

- a. Between March 1 and August 15, no construction activities shall occur within any portion of the project site where construction activities would result in noise levels exceeding 60 A-weighted decibels [dB(A)] hourly average (or ambient, whichever is higher) at the edge of occupied coastal California gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by District at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or
- b. At least two weeks prior to the commencement of construction activities during the breeding season, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(A) hourly average (or ambient, whichever is higher) at the edge of habitat occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed the noise threshold. If the noise attenuation techniques implemented are determined inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16); or
- c. Prior to construction during the breeding season, the District shall prepare an MSHCP Consistency Analysis for review by the Western Riverside County Regional Conservation Authority and obtain incidental take coverage for coastal California gnatcatcher via the Participating Special Entity process. The proposed project would pay any necessary mitigation fees for impacts to 7.91 acres prior to construction.
- BIO-2: Migratory and Nesting Birds: Construction should be conducted outside the nesting season, which is generally defined as January 15 to August 31. If construction must take place during the nesting season, a qualified biologist shall perform a pre-construction survey for nesting birds. The nesting bird survey shall occur no more than seven days prior to the start of construction. Additionally, raptors (birds of prey) are known to begin nest building in January or February. If construction is to occur between January 1 and February 15, a nesting raptor survey will be conducted within the project area, including a 500-foot buffer. If active bird nests are confirmed to be present during the preconstruction survey, a buffer zone will be established by a qualified biologist until a qualified biologist has verified that the young have fledged or the nest has otherwise become inactive.

BIO-3: Aquatic Resources: The applicant for the proposed project shall avoid indirect impacts to potentially jurisdictional features with best management practices (BMPs), such as the use of silt fences, fiber rolls, and/or gravel bags, implemented. No equipment maintenance or fueling should be performed within or near the non-vegetated channel where petroleum products or other pollutants from the equipment may enter this area.

4.5 Cultural Resources

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of an historical resource pursuant to §15064.5?				
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to \$15064.5?				
C.	Disturb human remains, including those interred outside of formal cemeteries?				

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant

Construction of the water pipeline within the project site could result in significant impacts to historical resources if any occur within the impact areas. An Archaeological Resources Survey Report was prepared by RECON Environmental, Inc. in November 2022. The report contains a background research, review of historic aerial photographs, and the results of an on-foot survey of the project site (Appendix C). The survey area included the pipeline alignment (7.91-acre project site) and buffer, totaling 9 acres. No significant prehistoric or historic cultural resources were observed during the survey.

Prior to the survey, a records search was requested from the Eastern Information Center (EIC) to identify any previously recorded cultural resources located within a one-mile radius of the project area. In addition, a letter was sent on September 22, 2022 to the Native American Heritage Commission (NAHC) requesting a search of their Sacred Lands File to identify spiritually significant and/or sacred sites or traditional use areas in the project vicinity (see Attachment 2 of Appendix C). The NAHC was also asked to provide a list of local Native American tribes, bands, or individuals that may have concerns or interests regarding cultural resources potentially occurring within the area of potential effect. The record search results showed that there have been 57 previous archaeological investigations, and 33 resources have been recorded within one mile of the project area. Of these, 8 investigations and 2 resources (P-33-0293953 and P-33-006237) cross the project site. A response was received from the NAHC on November 3, 2022 indicating that their Sacred Lands File search results were positive.

The records search identified two cultural resources within the project area. P-33-006237 was recorded in 1995 as a single-family residence with associated outbuildings but the property has since been demolished. P-33-023953 is a 6.33-mile segment of Los Alamos Road recorded in 2014. The roadway has been present since 1891 but recommended not eligible under the National Register of Historic Places (NRHP) and under the California Register of Historical Resources (CRHR) because the road was not a primary route across the region and does not meet the criteria for listing. Therefore, because none of these resources are significant, the proposed project would not cause a substantial adverse change in the significance of an historical resource pursuant to §15064.5. Therefore, impacts would be less than significant.

b. Less Than Significant

The entire pipeline alignment/project site has been disturbed by past development and the possibility of buried significant cultural resources being present is considered low. Therefore, the proposed project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. Impacts would be less than significant.

c. Less Than Significant

There are no formal cemeteries or recorded burials in the vicinity of the project site. While no human remains are anticipated to be discovered during project construction, in the unexpected event that human remains are encountered during construction, the proposed project would follow the requirements of Health & Safety Code §7050.5 and Public Resources Code §5097.98. Conformance with these regulations would include contacting the County Coroner. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. Therefore, through regulatory compliance and NAHC protocol, impacts associated with found human remains would be less than significant.

4.6 Energy

Would the proposed project:

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

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

Construction of the water pipeline component of the proposed project would consume energy during both construction and operation. Energy use during construction would occur within two general categories: vehicle fuel used by workers commuting to and from the construction site, and fuel use by vehicles and other equipment to haul materials and conduct construction activities. While construction activities would consume fuels, project-related consumption of such resources would be temporary and would cease upon the completion of construction. In addition, mobile equipment energy usage during construction would be minimized as the proposed project would comply with CARB's idling regulations, which restrict idling diesel vehicles and equipment to five minutes. Additionally, consistent with state requirements, all construction equipment would meet CARB Tier 3 In-Use Off-Road Diesel Engine Standards. Engines are required to meet certain emission standards, and groups of standards are referred to as Tiers. A Tier 0 engine is unregulated with no emission controls, and each progression of standard level (i.e., Tier 1, Tier 2, Tier 3, etc.) generate lower emissions, use less energy, and are more advanced technologically than the previous tier. CARB's Tier 3 In-Use Off-Road Diesel Engine Standards requires that construction equipment fleets become cleaner and use less energy over time. The fuel consumed during construction would also be typical of similar construction projects and would not require the use of new energy resources beyond what are typically consumed in California. Therefore, construction of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.

Operational energy usage would be minimal and would consist of occasional maintenance worker vehicle trips. Pipeline construction would not use energy in a wasteful, inefficient, or unnecessary manner. Therefore, operation of the proposed project would not result in a wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.

b. Less Than Significant Impact

Equipment required for pipeline construction would be subject to CARB's idling regulations and Tier 3 In-Use Off-Road Diesel Engine Standards. Operation of the proposed project would not require ongoing or regular use of a substantial amount of energy. Therefore, the proposed project would not conflict with any state or local plans for renewable energy or energy efficiency, and impacts would be less than significant.

4.7 Geology and Soils

Would the proposed project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				
ii. Strong seismic ground shaking?				
iii. Seismic-related ground failure, including liquefaction?				
iv. Landslides?				
b. Result in substantial soil erosion or the loss of topsoil?				

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
C.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		\boxtimes		

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a.i, and ii. Less Than Significant Impact

Construction of the water pipeline within the project site could result in adverse effects from earthquakes. Although review of the Alquist-Priolo Earthquake Fault Zone Map (Appendix G of the Murrieta General Plan 2035) identified that no portions of the project area are located within a currently designated State of California or Riverside County earthquake fault zone, the project area is located in a seismically active southern California region. The nearest active fault zone is a Riverside County fault zone approximately 1,400 feet south of the intersection of Celia Road and Mary Place. The nearest fault is a Riverside County fault approximately 400 feet south of the intersection of Celia Road and Mary Place. The Elsinore fault zone is approximately 2.35 miles southwest of the Celia Road

and Mary Place. However, pipeline construction would be limited to construction of a water pipeline and would not introduce any residential, commercial, or other uses that could expose people to strong ground shaking and the potential for surface rupture and ground shaking resulting from earthquakes is not known with certainty but is considered very low. Nonetheless, the Geotechnical Investigation Report prepared for the proposed project (Converse Consultants 2022; Appendix D) includes construction and design recommendations, the implementation of which would ensure avoidance of potential impacts associated with seismic activity. Additionally, construction would be in accordance with the 2022 California Building Code (CBC) to meet all seismic design parameters (see Table 6 of Appendix D), Therefore, through code compliance and adherence to the Geotechnical Investigation recommendations, the impacts related to seismic activity would be less than significant.

a.iii. Less Than Significant Impact

Liquefaction is a phenomenon where water-saturated granular soil loses shear strength during strong ground shaking produced by earthquakes. The loss of soil strength occurs when cyclic pore water pressure increases below the groundwater surface. Potential hazards due to liquefaction include the loss of bearing strength beneath structures; feasibly causing foundation failure or significant settlements and differential settlements. Construction of the water pipeline could result in risk of liquefaction of soils if the soils in which the pipelines were placed were susceptible to liquefaction. However, based on the geotechnical review, there is a very low risk for liquefaction along Ruth Ellen Way, Los Alamos Road, Mason Avenue, and the northeastern section of Mary Place and there is no risk for liquefaction on Celia Road and the southwest section of Mary Place(see Appendix D).

Groundwater was not encountered during boring investigations. Due to the lack of groundwater, in combination with the proposed dense fill soils over Pauba Formation (bedrock), the potential for liquefaction and associated settlement of structures is low. Additionally, review of Exhibit 12-5 of the Murrieta General Plan 2035 determined that the project site is not located within a liquefaction hazard zone (City of Murrieta 2011). Therefore, impacts related to liquefaction would be less than significant.

a.iv. Less Than Significant Impact

Earthwork related to pipeline construction is expected to consist of road excavation and pipeline construction. Seismically induced landslides and other slope failures are common occurrences during or after earthquakes in areas of significant relief. No portions of the project area are located within a currently designated State of California or Riverside County Landslide Zone (Albert A. Webb Associates 2022). The pipeline alignment is located within a relatively flat, paved roadway, and project design and construction would adhere to the recommendations in the standard project-specific geotechnical engineering report. As such, grading and excavation required for the proposed project would not likely increase or exacerbate the potential for landslides to occur. Nonetheless, the Geotechnical Investigation Report prepared for the proposed project (Converse Consultants 2022; see Appendix D) includes construction and design recommendations, the implementation of which would ensure avoidance of potential impacts associated with seismic activity. Additionally, construction would be in accordance with the CBC to meet all seismic design parameters. Therefore, through code compliance and adherence to the Geotechnical Investigation recommendations, the

proposed project would not cause or increase the potential for landslides, and impacts would be less than significant.

b. Less Than Significant Impact

Construction activities associated with the pipeline would temporarily create the potential for increased erosion within existing unpaved roadways; however, as all developed areas would be stabilized consistent with City regulations and recommendations included in the Geotechnical Investigations (see Appendix D). For example, graded areas and fill materials would be stabilized through efforts such as backfill. Erosion potential would be higher in the short-term during construction than in pre-construction conditions. Design requirements include that surfaces exposed in sloped excavations should be kept moist but not saturated to retard raveling and sloughing during construction. Adequate provisions should be made to protect the slopes from erosion during periods of rainfall. Surcharge loads, including construction materials, should not be placed within 5 feet of the unsupported slope edge. Stockpiled soils with a height higher than 6 feet will require greater distance from trench edges (Converse Consultants 2022). Therefore, through regulatory compliance and adherence to the Geotechnical Investigation recommendations, impacts related to soil erosion and loss of topsoil would be less than significant.

c. Less Than Significant Impact

The project site is not underlain by unstable soils and all subsurface soil materials are expected to be excavatable by conventional equipment (Converse Consultants 2022). As described in 4.7aiii above, the project area is not located within a liquefaction hazard zone. As described in the Geotechnical Investigation Report prepared for the proposed project (Converse Consultants 2022; see Appendix D), there is a very low risk for liquefaction along Ruth Ellen Way, Los Alamos Road, Mason Avenue, and the northeastern section of Mary Place. Along Celia Road and the southwest section of Mary Place, there is no risk for liquefaction. Additionally, the potential for landslides or lateral spreading at the project site is considered very low. Furthermore, project excavation and construction would be conducted consistent with requirements of the CBC regarding unstable soils. Nonetheless, the Geotechnical Investigation Report prepared for the proposed project (Converse Consultants 2022; see Appendix D) includes construction and design recommendations, the implementation of which would ensure avoidance of potential impacts associated with seismic activity. Additionally, construction would be in accordance with the CBC to meet all seismic design parameters. Therefore, through code compliance and adherence to the Geotechnical Investigation recommendations, the proposed project would not cause or increase the potential for landslides, and impacts would be less than significant. Adherence to these guidelines would ensure that impacts associated with unstable soils would be less than significant.

d. Less Than Significant Impact

Expansive soils are those known to absorb water resulting in swelling. Expansive soils could cause serious damage to even lightweight structures such as roads, sidewalks, and driveways (https://definecivil.com/expansive-soils/). Construction of the water pipeline component could result in impacts if expansive soils are encountered during construction. According to the Geotechnical Investigation Report prepared for the proposed project (see Appendix D), the project area is underlain by soil types known as undocumented artificial fill and alluvium. Specific design

recommendations are included in the Geotechnical Investigation Report, the implementation of which would ensure avoidance of potential impacts associated with expansive soils. In addition, project excavation and construction would be conducted consistent with requirements of the CBC regarding expansive soils. Adherence to these guidelines and recommendations would ensure that impacts associated with expansive soils would be less than significant.

e. No Impact

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

f. Potentially Significant unless Mitigation Incorporated

The Murrieta area is generally underlain by highly fossiliferous rock units that include the Pauba formation and Unnamed Sandstone formation. The San Bernardino County Museum Earth Sciences Division has classified the majority of Murrieta as having a high potential for containing significant, nonrenewable paleontological resources (City of Murrieta 2010). Construction of the water pipeline would result in ground-disturbing activities that have the potential to uncover paleontological resources, the loss of which would be a significant impact (Impact GEO-1). Implementation of mitigation measure GEO-1 would ensure that impacts would be reduced to less than significant.

Mitigation Measure

Paleontological Monitor. Excavation shall be monitored by a qualified paleontologist. If paleontological resources are encountered, the paleontological monitor shall have the authority to temporarily halt or redirect work while the paleontological resources are documented and assessed. If significant deposits are found, additional data recovery shall be conducted, as necessary, in order to adequately mitigate project impacts. The fossil collection and all associated documentation shall be legally transferred to a qualified repository within Riverside County. Full-time paleontological monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the qualified paleontologist.

4.8 Greenhouse Gas Emissions

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

The District has not adopted its own greenhouse gas (GHG) thresholds of significance for CEQA. The SCAQMD published its Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans in 2008 (SCAQMD 2008). The interim thresholds are a tiered approach; projects may be determined to be less than significant under each tier or require further analysis under subsequent tiers. For the proposed project, the most appropriate screening threshold for determining GHG emissions is the SCAQMD proposed Tier 3 screening threshold (SCAQMD 2010); therefore, a significant impact would occur if the proposed project would exceed the SCAQMD proposed Tier 3 screening threshold of 3,000 metric tons carbon dioxide equivalent (MT CO₂E) per year. Based on guidance from the SCAQMD, total construction GHG emissions resulting from a project should be amortized over the lifetime of a project, which is defined as 30 years (SCAQMD 2009).

Construction of the water pipeline within the project site would result in short-term emissions from construction activities. Construction emissions were calculated using RCEM and the parameters discussed in detail in Section 4.3b above. Total construction GHG emissions are summarized in Table 6.

Table 6 Summary of Total Construction GHG Emissions				
Phase/Year	GHG Emissions (MT CO ₂ E)			
Grubbing/Land Clearing	15.60			
Grading/Excavation	185.75			
Drainage/Utilities/Sub-Grade	88.28			
Paving	9.42			
Total Construction Emissions	299.05			
Amortized Construction Emissions	10			
SOURCE: Appendix A				
NOTE: Totals may vary due to rounding				

As shown in Table 6, the proposed project would result in a total of 299 MT CO₂E over the entire construction period, which would be 10 MT CO₂E per year when amortized over the lifetime of the proposed project. After installation of the underground pipeline, there would be occasional inspection and maintenance trips. These trips would be minimal and currently occur within the District jurisdiction by existing staff. Inspection and maintenance trips would result in negligible operational emissions and there would be no other source of operational emissions. GHG emissions would be less than the 3,000 MT CO₂E annual screening threshold. Therefore, impacts from construction and operation of the proposed project would be less than significant.

b. Less Than Significant Impact

Executive Order (EO) S-3-05 and EO B-30-15 established GHG emission reduction targets for the state, and Assembly Bill 32 launched the CARB Climate Change Scoping Plan that outlined the reduction measures needed to reach the 2020 target, which the state has achieved. As required by Senate Bill 32, CARB's 2017 Climate Change Scoping Plan outlines reduction measures needed to achieve the interim 2030 target. As detailed in the response under 4.8a above, the proposed project would result in construction GHG emissions below the SCAQMD proposed Tier 3 screening threshold of 3,000 MT CO₂E per year. Construction of the water pipeline within the proposed project would not result in emissions that would adversely affect statewide attainment of GHG emission reduction goals as described in Assembly Bill 32, EOs S-3-05 and B-30-15, and Senate Bill 32. Project emissions would, therefore, have a less than cumulatively considerable contribution to global climate change impacts. The proposed project would not result in a significant increase in regional vehicle miles traveled since vehicle trips would be limited to occasional maintenance trips that would be performed by existing/planned District staff. The proposed project would be consistent with land use designations, as it would supply water for existing residential uses. Because the proposed project would provide water for existing development and because project trips would be limited to occasional maintenance activities, it would not conflict with the transportation-related GHG reduction goals outlined in the Regional Transportation Plan. Further, the proposed project would not conflict with energy efficiency standards or conflict with Southern California Edison's Renewables Portfolio Standard renewable energy goals as these are not applicable to project construction and operation. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and impacts would be less than significant.

4.9 Hazards and Hazardous Materials

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials?				
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
C.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
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?				
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?				
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

During the project construction period, hazardous substances used to maintain and operate construction equipment (such as fuel, lubricants, cleaners, paint, oils, adhesives, solvents, and asphalt) would be present. The use or generation of such construction-related hazardous materials could potentially result in significant impacts through accidental discharge associated with use, storage, operation, and maintenance activities. The transport, use, and disposal of hazardous materials would be conducted in accordance with applicable federal and state laws, including the Hazardous Materials Transportation Act and California Code of Regulations, Title 22, Division 4.5.

Construction of the water pipeline within the project site would not involve routine transport, use, or disposal of significant hazardous materials. Project construction may involve the use of small amounts of solvents, cleaners, paint, oils and fuel for equipment. The proposed project would comply with a National Pollutant Discharge Elimination System (NPDES) permit program which controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Additionally, project construction would be required to be undertaken in compliance with all applicable federal, state, and local regulations pertaining to the proper use of these common hazardous materials. Compliance with these regulations is mandatory per standard permitting conditions. Therefore, the proposed project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.

b. Less Than Significant Impact

As discussed above in Item 9.a, project construction would require small amounts of hazardous materials. Otherwise, the proposed pipeline would not involve the routine transport, use, or disposal of significant hazardous materials. In addition, the proposed project would be required to implement the Division of Occupational Safety and Health of California Construction Safety Plan/Hazard Communication Program; in case of accidental release, the proposed project would be required to

comply with the Code of Federal Regulations Section 1910.120. Furthermore, project construction would be conducted consistent with all applicable safety regulations and would not be expected to introduce accident conditions that could result in the release of hazardous materials into the environment. Therefore, the proposed project would not create upset and accident conditions that could result in the release of hazardous materials, and impacts would be less than significant.

c. Less Than Significant Impact

Avaxat Elementary School is located approximately 0.6 mile west of the project area. Construction of the water pipeline within the project site would not require the use of acutely hazardous materials and would be limited to the use of small amounts of lubricants, cleaners, paint, oils, adhesives, solvents, asphalt, and fuel for equipment. Use of these common hazardous materials in small quantities would not represent a significant hazard to the public or environment, and the use and handling of hazardous materials during construction would be conducted consistent with all applicable regulations (see Section 4.8a, above). Therefore, impacts related to hazardous emissions within 0.25 mile of a school would be less than significant.

d. Less Than Significant Impact

The project site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Department of Toxic Substances Control 2022). The proposed project would be required to comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to Title 49 of the Code of Federal Regulations implemented by Title 13 of the California Code of Regulations, which describes strict regulations for the safe transportation of hazardous materials. Compliance with all applicable federal, state, and local laws related to hazardous materials will ensure that impacts related to emitting hazardous emissions or materials within one-quarter mile of a school will be less than significant. Thus, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school and is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, impacts are less than significant.

e. No Impact

The project area is not located within the vicinity of a private airstrip. The nearest airport is the French Valley Airport, a County-owned public-use airport located on State Route 79, north of the city of Temecula in their sphere of influence, and adjacent to the City's eastern boundary and is located approximately 6.2 miles to the east. Therefore, the project site is not located within an airport land use plan or within two miles of a public airport and would not result in a safety hazard or excessive noise. No impact would occur.

f. Less Than Significant Impact

The emergency response plan in effect in the City is the Emergency Operations Plan approved by the City Council in 2017. The proposed project could temporarily impact street traffic adjacent to the project area during the construction phase due to construction activities into the ROW. Project

construction could temporarily reduce the number of lanes or temporarily close a portion of the project roads. The City requires that projects conducting construction work in City roadway ROWs get encroachment permits approved by the City Department of Public Works. Emergency access must be maintained. Compliance with City requirements for traffic management during construction in the public ROW would ensure that the proposed project would have a less than significant impact. Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g. Less Than Significant Impact

The project area is located in a Very High Fire Hazard Severity Zone as indicated in exhibit 5.17-1 in the Murrieta General Plan 2035 Final Environmental Impact Report (FEIR; City of Murrieta 2011); however, pipeline construction does not include the construction of habitable structures that could expose people to a significant risk of loss, injury, or death involving wildland fires. Human presence would be limited to temporary construction and periodic maintenance. All construction would be required to comply with fire protection and prevention requirements specified by state law (California Code of Regulations) and the California Division of Occupational Safety and Health. This includes various measures such as easy accessibility of firefighting equipment, proper storage of combustible liquids, no smoking in service and refueling areas, and worker training for firefighter extinguisher use. Further, all new construction is required to comply with the California Fire and Building Codes. Additionally, the proposed project would be required to comply with all regulatory requirements concerning fire protection. Therefore, the exposure of people or structures to significant risk of loss, injury, or death would not be likely to occur and impacts would be less than significant.

4.10 Hydrology and Water Quality

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				
b.	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
C.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner, which would:				
	 result in substantial erosion or siltation on- or off-site; 				
	ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;				
	iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
	iv. impede or redirect flood flows?				
d.	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			\boxtimes	

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

Pipeline construction would have the potential to generate erosion/sedimentation and pollutants that could impact water quality. However, the proposed project is subject to the NPDES permit requirements overseen by the District which includes preparation and implementation of a Storm Water Pollution Prevention Program (SWPPP) for the prevention of polluted runoff during construction. The proposed project would be required to prepare and implement a SWPPP identifying feasible BMPs prior to the commencement of construction activities, and to incorporate water quality design features to address potential erosion and siltation impacts. Upon completion of construction activities, the pipeline alignment would be restored to pre-existing conditions. Therefore, through regulatory compliance and implementation of project-specific BMPs, which would be conditions of project approval, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and impacts would be less than significant.

b. Less Than Significant Impact

Pipeline construction would not increase the amount of impervious surface area within the project area. Pre- to post-project conditions would not see any change in the amount of surface runoff and would not interfere substantially with groundwater recharge. The proposed project would install a water line connection and would not interfere with current ground water supplies in the immediate area since it will be supplying potable water to the area through existing water transmission and distribution systems. The proposed project would not introduce any residential, commercial, or other uses that would use groundwater. Therefore, the proposed project would not significantly decrease groundwater supplies or interfere with groundwater recharge or obstruct sustainable groundwater management, and impacts would be less than significant.

c.i. Less Than Significant Impact

The pipeline alignment would be located within existing ROW that is currently developed with paved and unpaved roads. Construction of the water pipeline within the project site would experience temporary disturbance during construction activities; however, the roads would be returned to existing conditions and drainage patterns would not be altered. The proposed project would implement construction BMPs, identified in the proposed project SWPPP, consistent with the NPDES Construction General Permit and related requirements that would prevent erosion and storm water runoff during construction. Therefore, the proposed project would not substantially alter the drainage pattern of the site or the surrounding area in a manner that could result in substantial erosion, runoff, impediment or redirection of flood flows, and impacts would be less than significant.

c.ii. Less Than Significant Impact

Pipeline construction would not increase in impervious surface areas and would not result in any change to the existing drainage pattern within or surrounding the proposed project pipeline alignment. As described in Section 4.10a above, the proposed project would implement construction BMPs, identified in the proposed project SWPPP, consistent with the NPDES Construction General Permit. Therefore, the proposed project would not substantially increase the rate or amount of

surface runoff in a manner which would result in flooding on- or off-site, and impacts would be less than significant.

c.iii. Less Than Significant Impact

As described in Section 4.10a above, the proposed project would implement construction BMPs, identified in the proposed project SWPPP, consistent with the NPDES Construction General Permit and related requirements that would minimize erosion and prevent pollution from affecting water quality. Post-project runoff flows would be the same as prior to construction. Therefore, the proposed project would not 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, and impacts would be less than significant.

c.iv. Less Than Significant Impact

As shown in exhibit 5.13-2, Flood Hazards in the City General Plan FEIR, the project site is not within a flood hazard zone (City of Murrieta 2011). The proposed project would be limited to construction of a pipeline that would be located underground within developed ROWs and would not impede or redirect flood flows. Additionally, the implementation of the proposed project would not add impervious surfaces. Therefore, the proposed project would not impede or redirect flood flows, and impacts would be less than significant.

d. No Impact

The City of Murrieta General Plan FEIR (Exhibit 5.13-2) identifies the project site as being outside the flood hazard zone. The project area is located approximately 30 miles inland from the Pacific Ocean, and therefore is not subject to risk associated with tsunami. The nearest body of water is Lake Skinner located approximately 13 miles east of the project area. Due to the distance the project site is from Lake Skinner and the low likelihood of a seiche forming, the proposed project would not be susceptible to seiche inundation events. Therefore, the proposed project would not result in impacts associated with flood hazard, tsunami, or seiche zones. No impact would occur.

e. Less Than Significant Impact

The pipeline component of the proposed project would implement construction BMPs, identified in the proposed project SWPPP, consistent with the NPDES Construction General Permit and related requirements that would prevent erosion and pollution from affecting water quality. The proposed project would not decrease groundwater supplies or interfere with groundwater recharge. Therefore, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and impacts would be less than significant.

4.11 Land Use and Planning

Would the proposed project:

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

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. No Impact

The proposed pipeline would be located within existing roadways. Portions of the roadways would be closed during construction, and some staging activities may also occur along the alignment. Traffic control measures could create a temporary nuisance to residents adjacent to the project area; however, construction activities would be temporary. Access for residents along the alignment would be maintained during construction. Operation of the proposed project would not result in any access restrictions since the pipeline is located underground. The proposed project would not introduce any divisions to the existing community. Ongoing maintenance would also not result in a disruption to the surrounding properties. Therefore, the proposed project would not physically divide an established community. No impact would occur.

b. Less Than Significant Impact

Pipeline construction would be limited to construction of a new water pipeline and would not conflict with the applicable land use/zoning designations within the project area. The pipeline would be located below ground and would not result in any permanent changes aboveground. Therefore, the proposed project would not conflict with any land use plan, policy, or regulation adopted for the

purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant.

4.12 Mineral Resources

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. No Impact

The Conservation Element of the Murrieta General Plan 2035 (Exhibit 8-1) shows no known mineral resources located within the project site (City of Murrieta 2011). Therefore, the proposed project would not result in the loss of availability of known mineral resources that would be of value to the region and the residents of the state or of a locally important mineral resource recovery site. No impact would occur.

b. No Impact

The Murrieta General Plan 2035 does not identify the project area as an existing or former mineral resource site. No impact would occur.

4.13 Noise

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b.	Generation of excessive ground borne vibration or ground borne noise levels?				
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 area to excessive noise levels?				

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Potentially Significant Unless Mitigation Incorporated

Noise Fundamentals

Noise is defined as sound that is loud, unpleasant, unexpected, or undesired, and therefore, may cause general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment. Decibels (dB) are the standard unit of measurement of the sound

pressure generated by noise sources and are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale for earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the noise energy would result in a 3 dB decrease.

The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-weighted scale, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds, was devised. Noise levels using A-weighted measurements are written as dB(A). It is widely accepted that the average healthy ear can barely perceive changes of 3 dB(A) (increase or decrease) and that a change of 5 dB(A) is readily perceptible. An increase of 10 dB(A) is perceived as twice as loud, and a decrease of 10 dB(A) is perceived as half as loud (Caltrans 2013).

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this study are the equivalent noise level (L_{eq}), the maximum noise level, and the community noise equivalent level (CNEL).

The L_{eq} is the equivalent steady-state noise level in a stated period of time that is calculated by averaging the acoustic energy over a time period; when no period is specified, a 1-hour period is assumed. The maximum noise level is the highest sound level occurring during a specific period.

The CNEL is a 24-hour equivalent sound level. The CNEL calculation applies an additional 5 dB(A) penalty to noise occurring during evening hours, between 7:00 p.m. and 10:00 p.m., and a 10 dB(A) penalty is added to noise occurring during the night, between 10:00 p.m. and 7:00 a.m. These increases for certain times are intended to account for the added sensitivity of humans to noise during the evening and night.

Regulatory Framework

The District, as a public agency, is not subject to other jurisdictional agencies' established noise standards. Likewise, as a public agency, the District is not subject to the City or County ordinances and would not be required to obtain variances. The District has not established an applicable noise standard of its own for permanent or temporary ambient noise levels. However, the District follows a "good neighbor" approach to adhering to local noise standards. The noise standards of the City are used for the purposes of evaluating the significance of the proposed project's noise levels for the purposes of this analysis under CEQA.

The City outlines their noise regulations and standards within the Municipal Code and the Noise Element of the Murrieta General Plan 2035. The proposed project would not construct a noise sensitive land use or create an operational source of noise. The regulations and standards applicable to pipeline construction would be those associated with construction noise. The Murrieta General Plan 2035 contains the following goal and policies related to construction noise:

- Goal N-4: Reduced noise levels from construction activities.
 - o Policy N-4.1: Regulate construction activities to ensure construction noise complies with the City's Noise Ordinance.
 - o Policy N-4.2: Limit the hours of construction activity in residential areas to reduce intrusive noise in early morning and evening hours and on Sundays and holidays.
 - Policy N-4.3: Employ construction noise reduction methods to the maximum extent feasible. These measures may include, but not limited to, shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied sensitive receptor areas, and use of electric air compressors and similar power tools, rather than diesel equipment.
 - Policy N-4.4: Encourage municipal vehicles and noise-generating mechanical equipment purchased or used by the City to comply with noise standards specified in the City's Municipal Code, or other applicable codes.
 - o Policy N-4.5: Allow exceedance of noise standards on a case-by-case basis for special circumstances including emergency situations, special events, and expedited development projects.
 - o Policy N-4.6: Ensure acceptable noise levels are maintained near schools, hospitals, convalescent homes, churches, and other noise-sensitive areas.

Section 16.30.130(A) of the City's Noise Ordinance regulates construction noise. The Noise Ordinance prohibits noise generated by construction activities between the hours of 7:00 p.m. and 7:00 a.m. and on Sundays and holidays. Construction activities shall be conducted in a manner that the maximum noise levels at the affected structures will not exceed those listed in Table 7.

Table 7 City of Murrieta Construction Noise Standards							
Single-Family Multi-Family							
	Residential	Residential	Commercial				
Mobile Equipment							
Daily, except Sundays and holidays, 7:00 a.m. to 8:00 p.m.	75 dB(A)	80 dB(A)	85 dB(A)				
Daily, except Sundays and holidays, 8:00 p.m. to 7:00 a.m.	60 dB(A)	64 dB(A)	70 dB(A)				
Stationary Equipment							
Daily, except Sundays and holidays, 7:00 a.m. to 8:00 p.m.	60 dB(A)	65 dB(A)	70 dB(A)				
Daily, except Sundays and holidays, 8:00 p.m. to 7:00 a.m.	50 dB(A)	55 dB(A)	60 dB(A)				
dB(A) = A-weighted decibels SOURCE: City of Murrieta Development Code Section 16.30.130.							

Construction of the water pipeline would require the use of mobile construction equipment. Construction equipment would move along the pipeline alignment and would not be located at any one location for a long period of time. Therefore, the applicable standards would be the "Mobile

Equipment" standards shown in Table 7. Construction activities would occur during the daytime hours; therefore, the applicable noise level limit is 75 dB(A) L_{eq}.

Section 16.30.130(K) states the following as it relates to vibration: Operating or permitting the operation of any device that creates vibration that is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property, or at 150 feet from the source if on a public space or public ROW is prohibited. The perception threshold shall be a motion velocity of 0.01 inch per second (in/sec) over the range of 1 to 100 Hertz.

Construction Noise

Noise impacts from construction are a function of the noise generated by equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Table 8 presents a list of noise generation levels for various types of equipment anticipated to be used for construction of the pipeline. The duty cycle is the amount of time that equipment generates the reported noise level during typical, standard equipment operation. The noise levels and duty cycles summarized in Table 8 are based on measurements and studies conducted by Federal Highway Administration (FHWA) and the Federal Transit Authority (FTA).

Table 8						
Typical Construction Equipment Noise Levels						
	Maximum Noise	Typical	Maximum Average			
	Level at 50 Feet	Duty	Hourly Noise Level			
Equipment	[dB(A) L _{max}]	Cycle ³	[dB(A) L _{eq}]			
Concrete Saw	90	20%	83			
Compressor	80	40%	76			
Dump Truck	84	5%	71			
Excavator	85	40%	81			
Generator	82	50%	79			
Paver	85	50%	82			
Sweeper ¹	84	40%	80			
Tractor/Loader/Backhoe	80	40%	76			
Utility Truck ²	78	5%	65			
Water Truck ¹	84	40%	80			

SOURCE: FHWA 2006, FTA 2006.

Due to the complex nature of construction sites, construction noise from a linear project, such as a pipeline project, is assessed from the centerline of the alignment and work area. Maximum noise levels would occur when the construction equipment is nearest to a noise sensitive receiver. Although construction equipment may temporarily be located at the point on the alignment nearest to a receiver, throughout the day equipment would move along the alignment. Therefore, the distance

¹Sweeper and water truck noise assumed to be comparable to tractor noise.

²Utility truck noise assumed to be comparable to flat-bed truck noise.

³The dump truck and utility truck duty cycle was adjusted to 5 percent to represent the time this equipment is arriving at and departing from the site. Engines would be idle all other times.

from a receiver to the centerline of the alignment is not the same as the average distance during a given day from the receiver to construction equipment. Thus, average noise levels correlate to the area of active construction. Residential receivers are located in the project vicinity at a distance of 50 feet or more from the pipeline alignment. The total linear length is 10,685 feet, and 200 feet of the pipeline would be constructed per day. For a receiver that is set back 50 feet from the active work area alignment, using the Pythagorean theorem ($a^2 + b^2 = c^2$), it is calculated that the receiver is at an average distance of 112 feet from the construction equipment ($\sqrt{(50^2 + 100^2)} = 112$).

Construction noise levels were calculated assuming the simultaneous use two pieces of construction equipment during each phase. Although more construction equipment would be present on-site, not all would be used at the same time. Noise levels from construction activities are typically considered point sources and would drop off at a rate of -6 dB(A) per doubling of distance over hard site surfaces, such as streets and parking lots. Construction noise attenuation is calculated using the following formula:

 $N_R = N_C + 20 \times Log(D_C/D_R)$

Where,

 N_R = Noise level at receiver

 N_C = Construction equipment reference noise level

D_C = Construction equipment reference noise level distance (i.e., 50 feet)

 D_R = Distance to receiver (i.e., 112 feet)

The average noise level at the residential receivers were then calculated for each phase. The results are summarized in Table 9.

Table 9 Construction Equipment Noise Levels								
		Maximum	101101100000		Average	Average		
		Average Hourly	Phase	Active	Distance	Noise		
		Noise Level at	Duration	Construction	to	Level at		
		50 Feet	(months/	Area	Receiver	Receiver		
Phase	Equipment	[dB(A) L _{eq}]	days) ¹	(feet/day)	(feet)	[dB(A) L _{eq}]		
Grubbing/	Concrete Saw	83						
Land Clearing	Dump Truck	71	0.25/5.5	200	112	76		
	Total	83						
Grading/	Excavator	81						
Excavation	Front End Loader	76	2.25/49.5	200	112	75		
	Total	82						
Drainage/	Excavator	81						
Utilities/	Utility Truck	74	1.5/33	200	112	74		
Subgrade Total		82						
Paving	Paver	82						
	Utility Truck	65	1/22	200	112	75		
	Total	82						
¹ Assumes 22 worki	¹ Assumes 22 working days per month.							

As shown in Table 9, construction noise levels have the potential to exceed 75 dB(A) L_{eq} during the grubbing/land clearing phase due to the use of a concrete saw. Construction noise levels during all other phases are not anticipated to exceed 75 dB(A) L_{eq} at the adjacent residential uses. Construction activities would occur during daytime hours between 7:00 a.m. to 8:00 p.m. Pipeline construction noise levels are not anticipated to exceed Noise Ordinance limits. 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 (Impact NOI-1). 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.

The below-ground pipeline would not generate noise during operation. Noise may be associated with occasional vehicle maintenance trips but these trips would be negligible. The proposed project would have less than significant long-term operational noise impacts.

b. Less Than Significant Impact

Human reaction to vibration is dependent on the environment the receiver is in, as well as individual sensitivity. For example, outdoor vibration is rarely noticeable and generally not considered annoying. Typically, humans must be inside a structure for vibrations to become noticeable and/or annoying (FTA 2006). Project construction would occur within public ROW. Section 16.30.130(K) of the Municipal Code states that vibration levels shall not exceed 0.01 in/sec peak particle velocity (PPV) at 150 feet from the public ROW.

Construction activities produce varying degrees of ground vibration depending on the equipment and methods employed. While ground vibrations from typical construction activities rarely reach levels high enough to cause damage to structures, special consideration must be made when sensitive or historic land uses are near the construction site. The construction activities that typically generate the highest levels of vibration are blasting and impact pile driving. The proposed project would not require pile driving or blasting. The equipment with the greatest potential to generate vibration would be a jack hammer. According to the FTA, jack hammers generate vibration levels of 0.035 in/sec PPV at 25 feet. This vibration level would attenuate to 0.005 in/sec PPV at 150 feet and would therefore not exceed the limit established in Section 16.30.130(K) of the Municipal Code.

Operation of the proposed project would not generate groundborne noise or vibration.

c. No Impact

The project site is not located within the vicinity of a private airstrip. The nearest airport is the French Valley Airport, which is located approximately two miles to the east. The project site is located well outside the noise contours for the French Valley Airport (Riverside County Airport Land Use Commission 2004). Further, the proposed project would not include any sensitive noise receivers. Therefore, the proposed project would not expose people to excessive noise levels. No impact would occur.

Mitigation Measure:

NOI-1: Construction Noise Reduction Measures

- District shall require its contractor to implement the following actions relative to construction noise: District shall conduct construction activities between 7:00 a.m. and 8:00 p.m. on weekdays in accordance with the City of Murrieta Municipal Code, Section 16.30.130(A).
- Prior to construction, the District 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 the District's program manager with noise concerns. Prior
 to construction commencement, the District 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., 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.

4.14 Population and Housing

Would the proposed project:

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

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

The project area is within the District's sphere of influence. The proposed water pipeline has been sized to serve the existing residential lots including the future development of the five vacant lots that are located within the project site (Albert A. Webb Associates 2022). The five vacant parcels are similarly zoned rural residential. Additionally, future connections of the pipeline to individual parcels would be provided to individual property owners who opt to connection for District water supply (Albert A. Webb Associates 2022). All future development proposals, including changes to land use, would require discretionary action and additional environmental review by the City. Therefore, the extension of the water pipeline not induce unplanned growth and impacts would be less than significant impact.

b. No Impact

Pipeline construction would construct a waterline to serve the existing project area. All construction would occur within existing easements and ROW. Thus, the proposed project would not displace any existing people or housing. No impact would occur.

4.15 Public Services

Would the proposed project:

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

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not in itself result in physical impacts on the environment. Therefore, the analysis that follows addresses pipeline construction within the project site. The water pipeline development provides an additional option for water supply and does not result in the increase in new development to the project area. There are no permits for development currently submitted with the City within the project site area. There are five vacant lots that are zoned rural residential and the proposed project has been designed to incorporate laterals to appropriately serve these lots if these lots are developed in the future. Any development plans, increase in density, or changes in land use within the project site would be subject to additional environmental review and would be at the discretion of the City. At the time of subsequent review, a determination regarding the adequacy of public services based on future proposed development plans would occur. Therefore, as described below, the currently proposed project would not result in a secondary effect for new or expanded public services.

a.i. Less than Significant Impact

Upon completion of construction, the project site would be paved and not require fire services beyond that which is currently required for the project area. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered facilities, the need for new or physically altered government facilities, or other performance objectives for fire protection services. Impacts would be less than significant.

a.ii. Less than Significant Impact

Pipeline construction would be limited to the construction of a water line. No new residential, commercial, or other uses that would require police protection services would result. Therefore, the proposed project would not require new or expanded police protection facilities. proposed water storage project would not increase in the need for new police protection. Impacts would be less than significant.

a.iii. No Impact

Pipeline construction would be limited to the construction of a water line to serve the existing project area. The proposed project would not construct any residential uses that would generate any new student enrollment that would increase demand for school services. Therefore, the proposed project would not require new or expanded school facilities. No impact would occur.

a.iv. No Impact

Pipeline construction would serve the existing project area and would not alter population in the area or construct any residential uses that would increase demand for parks. Therefore, the proposed project would not require new or expanded park facilities. No impact would occur.

a.v. No Impact

Other public facilities include libraries and government administrative services. The need for new or altered libraries or administrative services is typically associated with an increase in population. Pipeline construction would not construct any residential, commercial, or other uses that would require additional public services. No impact would occur.

4.16 Recreation

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b.	Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. No Impact

The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. No population growth would be generated that would increase the use and deterioration of existing recreational facilities. Therefore, no impacts to existing neighborhood and regional parks or other recreational facilities are anticipated to result from the proposed project.

b. No Impact

The proposed project would not result in the construction of recreational facilities, nor would it increase demand for construction or expansion of recreational facilities. No impact would occur.

4.17 Transportation/Traffic

Would the proposed project:

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

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

Physical improvements associated with the proposed project is limited to construction of the proposed pipeline. The proposed project does not include construction of residential, commercial, or other uses that would generate long-term vehicle trips. Construction activities would include temporary hauling, utility trucks, and employee vehicles.

Access to the project site for pipeline construction would occur along Los Alamos Road, Celia Road, Mason Avenue, Mary Place and Ruth Ellen Way. Consistent with the MMC Section 15.54.140, a Traffic Control Plan (TCP) would be submitted to the City for approval. Excavation areas within the easements and ROW would be plated during non-working hours. To allow the coordination of daily construction activity, the TCP would include measures to ensure that traffic conditions are maintained

as near normal as practicable (MMC Section 15.54.140(F)) and would maintain access and ensure safety. Such measures would likely include standard efforts such as the use of cones, barriers, signs, and flaggers, where applicable. The proposed project would generate vehicle trips during construction in the form of haul trucks and worker commute vehicles; however, the number of vehicles generated would be limited and would not likely result in congestion on nearby roadways. Roadways would be restored to pre-existing conditions once construction is completed.

The proposed project would not impact alternative modes of transportation. Construction would not occur within sidewalks, and the proposed project would maintain pedestrian access during construction. There are no bicycle lanes or bus stops located along Los Alamos Road, Celia Road, Mason Avenue, Mary Place, and Ruth Ellen Way. Therefore, the construction project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, and impacts would be less than significant.

Operational traffic trips would be limited to periodic maintenance and inspection that would not significantly affect intersection and roadway operations. Impacts would be less than significant.

b. Less Than Significant Impact

The proposed project would not result in any changes to the amount of travel required for local residents. Therefore, preparation of a Vehicle Miles Traveled Analysis per CEQA Guidelines Section 15064.3, subdivision (b) was not required, and impacts would be less than significant.

c. Less Than Significant Impact

Pipeline construction would be limited to the constriction of water service infrastructure located within existing easements and ROW along Los Alamos Road, Celia Road, Mason Avenue, Mary Place and Ruth Ellen Way and would not result in any permanent changes to the existing circulation network. Construction would be temporary and include a TCP to allow continued access. Roadways would be restored to pre-existing conditions once construction is completed. Therefore, the proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, and impacts would be less than significant.

d. Less Than Significant Impact

Pipeline construction within the easements and ROW would be temporary and include a TCP to allow continued access. The road would be restored to pre-existing conditions once construction is completed. As described in Section 4.17a above, vehicle trips generated during construction and operation would not affect intersection and roadway operations. Therefore, the proposed project would not result in inadequate emergency access to or from the project site, and impacts would be less than significant.

4.18 Tribal Cultural Resources

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
	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)?				
	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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?				

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a.i. Less than Significant

AB 52 establishes a formal consultation process between the lead agency, the District, 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 §21080.1).

As a part of the consultation pursuant Public Resources Code §21080.3.1(b), both parties may suggest mitigation measures (Public Resources Code §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 proposed project, or significant effects. The consultation may also include discussion on the environmental review, the significance of tribal cultural resources, the significance of the proposed project's impact on the tribal cultural resources, project alternatives, or the measures planned to preserve or mitigate impacts on resources. 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.

Per AB 52, the District initiated consultation with Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project to identify resources of cultural or spiritual value to the tribe. On October 7, 2022, the District sent consultation notification letters to Native American tribes on the District's Master List pursuant to the requirements of AB 52 pertaining to government-to government consultation. Table 10 summarizes the consultation efforts. Six Native American Tribes were contacted, but to date, none have responded.

	Table 10 Assembly Bill 52 Consultation				
	Individual		Response		
Tribe	Contacted	Date Letter Mailed	Received	Consultation Held	
Soboba	Joe Ontiveros	October 7, 2022	DNR	N/A	
Pechanga	Ebru Ozdil	October 7, 2022	DNR	N/A	
Rincon	Destiny Choloco	October 7, 2022	DNR	N/A	
	Katie Croft	October 7, 2022	October 13, 2022	Declined	
Agua Caliente				Consultation	
		October 7, 2022		Declined	
San Manuel	Jessica Mauck		November 7, 2022	Consultation	
Morongo	Travis Armstrong	October 7, 2022	DNR	N/A	
DNR = Did not res	DNR = Did not respond; N/A = Consultation was not requested				

Agua Caliente responded on October 13, 2022 and declined consultation and San Manuel responded on November 7, 2022 and declined consultation. Both Tribes responded within the 30-day period after receiving notification. Based on the level of past disturbance the possibility of buried significant cultural resources being present within the project site is considered low. Therefore, impacts to tribal cultural resources would be less than significant.

a.ii. Less Than Significant

RECON conducted a survey of the pipeline alignment and no significant prehistoric or historic cultural resources were observed during the survey. Given past disturbances, the possibility of buried significant cultural resources being present within the project site is considered low. The survey results coupled with the lack of response from the Native American tribes allows a finding that impacts to tribal cultural resources would be less than significant

4.19 Utilities and Service Systems

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Require or result in the relocation or construction of new or expanded water or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				
C.	Result in a determination by the wastewater treatment provided which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d.	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e.	Comply with federal, state, and local statutes and regulation related to solid waste?			\boxtimes	

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. No Impact

Pipeline construction would require electricity and a connection to the District's water distribution system but does not involve construction of new or expansion of existing wastewater, natural gas or telecommunication facilities. Upon completion of the pipeline construction, the proposed project would contain and convey potable water but would not generate water demand in and of itself. Further, it would not generate wastewater, nor would the proposed project change the existing onsite stormwater runoff conveyance, collection, or treatment, which would continue according to District standards. No impacts would occur.

b. Less Than Significant Impact

The annexation of the project area to the District would allow the provision of potable water via the new pipeline to an area currently served by private wells. Pipeline construction would be sized to serve the existing project area and would allow the provision of existing water demand levels (Albert A. Webb Associates 2022). Therefore, the proposed project would provide sufficient water supplies to serve the project area, and impacts would be less than significant.

c. No Impact

The proposed project would not construct any uses that would require expanded wastewater treatment capacity. Therefore, the proposed project would not exceed existing wastewater treatment capacity. No impact would occur.

d. Less Than Significant Impact

Project construction would generate small amounts of waste that would likely be disposed of at either the Badlands Sanitary Landfill, located in Moreno Valley, or the El Sobrante Landfill, located in Corona. The Badlands Landfill has a remaining capacity of 15,748,799 cubic yards and a maximum permitted throughput of 4,800 tons per day and the El Sobrante Landfill has a remaining capacity of 143,977,170 cubic yards and a maximum permitted throughput of 16,054 tons per day (California Department of Resources Recycling and Recovery 2020). Both landfills would have sufficient capacity to accommodate the small amounts of waste that would be generated during construction. Operation of the proposed project would not generate any solid waste. Therefore, the proposed project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, and impacts would be less than significant.

e. Less Than Significant Impact

As described in Section 4.19d above, the proposed project would generate small amounts of waste during construction that would be disposed of at either the Badlands Sanitary Landfill, located in Moreno Valley, or the El Sobrante Landfill, located in Corona, which both have adequate capacity. The proposed project would also comply with local regulations pertaining to recycling of construction waste. Operation of the proposed project would not generate any solid waste. Therefore, the proposed project would comply with federal, state, and local statutes and regulation related to solid waste, and impacts would be less than significant.

4.20 Wildfire

Would the proposed project:

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?				

	Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b.	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
C.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

EXPLANATIONS:

The proposed project includes annexation of the project area to the District and construction of approximately 10,685 linear feet of water pipeline. The annexation process is an administrative act that would not result in physical impacts on the environment. Specifically, the approval of the annexation by LAFCO to allow a District boundary change to include the project site is a regulatory function. The approval of the boundary change would not approve development nor implement any land use decisions. Therefore, the analysis that follows addresses potential impacts that could occur as a result of pipeline construction within the project site.

a. Less Than Significant Impact

Construction of the water pipeline component of the proposed project would not disrupt traffic operations. Construction within easements and ROW along Los Alamos Road, Celia Road, Mason Avenue, Mary Place, and Ruth Ellen Way would be temporary and a TCP to allow continued access. Roadways would be restored to pre-existing conditions once construction is completed. The TCP would include measures to ensure maintained access to hospitals, emergency response centers, school locations, communication facilities, highways and bridges, airports, and evacuation routes in

the event of an emergency. Therefore, the proposed project would not impair an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

b. No Impact

Because the proposed project includes a below ground water pipeline, it would not, in combination with environmental factors such as slope or prevailing winds, exacerbate fire risks. In addition, aside from temporary construction and maintenance workers, there would be no occupants on-site. Therefore, no impact would occur.

c. No Impact

Pipeline construction would be limited to construction of a below ground water pipeline. Roadways would be restored to pre-existing conditions once construction is completed, and new fire risks would result. Therefore, the proposed project would not require the installation or maintenance of infrastructure that could exacerbate fire risk or result in temporary or ongoing impacts to the environment. No impact would occur.

d. No Impact

Upon completion of pipeline construction, roadways would be restored to pre-existing conditions. As described in Sections 4.8 and 4.10, the proposed project would not result in any impacts associated with landslides or flooding. Therefore, the proposed project would not expose people or structures to significant risks from runoff, post-fire slope instability, or drainage changes. No impact would occur.

All construction would be required to comply with fire protection and prevention requirements specific by state law (California Code of Regulations) and the California Division of Occupational Safety and Health. This includes various measures such as easy accessibility of firefighting equipment, proper storage of combustible liquids, no smoking in service and refueling areas, and worker training for firefighter extinguisher use. Further, all new construction would be required to comply with the California Fire and Building Codes. Additionally, the proposed project would be required to comply with all regulatory requirements concerning fire protection. As discussed in more detail in Section 4.10, Hydrology and Water Quality, the proposed project would not significantly impact drainage patterns, flooding, or cause landslides. Thus, although the proposed project is located in a high fire hazard area, it would not exacerbate wildfire risks, due to slope, prevailing winds, and other factors, thereby exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire because the proposed project does not include occupants. Further, the proposed project does not require the installation 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 and does not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, impacts would be less than significant.

4.21 Mandatory Findings of Significance

Does the proposed project:

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

EXPLANATIONS:

a. Potentially Significant Unless Mitigation Incorporated

As described in Section 4.4a, implementation of mitigation measure BIO-1 would reduce the potential impacts on coastal California gnatcatcher to a level less than significant, implementation of mitigation measure BIO-2 would reduce impacts to migratory and nesting birds to a level less than significant, and implementation of mitigation measure BIO-3 would reduce impacts to aquatic

resources to a level less than significant. The proposed project does not have the potential to result in any other impacts that would 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. As described in Section 4.5a, the proposed project would not impact any historical or archeological resources.

b. Potentially Significant Unless Mitigation Incorporated

Project impacts requiring mitigation are limited to biological resources, paleontological resources and noise. As described in Section 4.4a, implementation of mitigation measure BIO-1 would reduce impacts related on coastal California gnatcatcher to a level less than significant, implementation of mitigation measure BIO-2 would reduce impacts to migratory and nesting birds species to a level less than significant, and implementation of mitigation measure BIO-3 would reduce impacts related to aquatic resources to a level less than significant. Implementation of BIO-1, BIO-2, and BIO-3 would also ensure consistency with the MSHCP. As described in 4.7f, implementation of mitigation measure GEO-1 would reduce impacts to paleontological resources to a level less than significant. As described in Section 4.13a, implementation of mitigation measure NOI-1, would reduce noise impacts to less than significant. By mitigating project-level impacts to a level less than significant, the proposed project would not contribute to existing cumulative impact. As described throughout the IS/MND, all other project-level impacts would be less than significant without mitigation. Consequently, the proposed project would not result in any project-level significant impacts that could contribute to an existing cumulative impact on the environment.

c. Less Than Significant Impact

As described in Sections 4.1 through 4.20, the proposed project would not result in any substantial adverse direct or indirect impacts to human beings. Therefore, impacts would be less than significant.

5.0 Preparers

Eastern Municipal Water District

Al Javier, Director of Environmental Regulatory Compliance Joseph Broadhead, Principal Water Resource Specialist, CEQA/NEPA Gustavo Gomez, Associate Engineer I

RECON Environmental, Inc., 3111 Camino del Rio North, Suite 600, San Diego, CA 92108

Michael Page, AICP, Project Director

Morgan Weintraub, Project Manager

Bronwyn Brown, Senior Project Manager

Lori Spar, Senior Project Manager

Carmen Zepeda-Herman, Senior Archaeologist

Cailin Lyons, Biology Director

Jessica Fleming, Air Quality/GHG/Noise Analyst

Benjamin Arp, GIS Specialist

Stacey Higgins, Senior Production Specialist

6.0 Sources Consulted

Project Description

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Initial Study/Mitigated Negative Declarat
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Under Separate Cover
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