DRAFT

Initial Study/Mitigated Negative Declaration

Sandmound Boulevard Water Systems Consolidation Project

Diablo Water District

December 2024



CEQA Initial Study Determination

- 1. Project title: Sandmound Boulevard Water Systems Consolidation Project
- 2. Lead agency name and address:

Diablo Water District P.O. Box 127 87 Carol Lane Oakley, CA 94561

- 3. Contact person and phone number: Sandra Leyba, (925) 625-3798
- 4. Project location: Unincorporated Contra Costa County and Oakley, CA
- 5. Project sponsor's name and address: Diablo Water District
- 6. General plan designation: Residential, commercial, 7. Zoning: Same as General Plan agricultural limited, specific plan
- 8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

 See Initial Study/Mitigated Negative Declaration Section 2
- 9. Surrounding land uses and setting: Briefly describe the project's surroundings: Residential, commercial, agricultural limited, specific plan
- 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)
 Permitting/Approving Agencies: Reclamation District 799, City of Oakley Public Works and Engineering Department, Contra Costa County Public Works and Engineering Department, Contra Costa Health, Contra Costa Water District, Bay Area Air Quality Management District, Central Valley Regional Water Quality Control Board, State Water Resources Control Board Division of Drinking Water, U.S. Bureau of Reclamation
 Financing: State Water Resources Control Board
- 11. 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.? Yes, three tribes have requested consultation. The Diablo Water District is in the process of communicating and scheduling consultation meetings with the tribes and will complete consultation prior to adoption of the Initial Study/Mitigated Negative Declaration. There are no known resources in the project area after completion of the Archeological Survey Report which researched the area via a Native American Heritage Commission, Sacred Lands Files, and California Historical Resources Information System (CHRIS). However, there are known resources nearby. Procedures to determine impacts and measures to protect resources discovered during construction will be finalized after consultation has ended. Confidentiality will also be discussed in the event of resource discovery.



ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist within the Public Draft Initial Study/Mitigated Negative Declaration						
	Aes	sthetics		Agriculture and Forestry Resources		Air Quality
	Bio	logical Resources		Cultural Resources		Energy
	Geo	ology/Soils		Greenhouse Gas Emissions		Hazards & Hazardous Materials
	Ну	drology / Water Quality		Land Use / Planning		Mineral Resources
	No	ise		Population / Housing		Public Services
	Red	creation		Transportation		Tribal Cultural Resources
	Uti	lities / Service Systems		Wildfire		Mandatory Findings of Significance
DETE	RM	INATION: (To be comple	eted by	the Lead Agency)		
On th	e ba	sis of this initial evaluat	ion:			
		I find that the proposed p NEGATIVE DECLARATIO		COULD NOT have a significant e	effect	on the environment, and a
×	3	will not be a significant e	ffect in	d project could have a significar this case because revisions in t ent. A MITIGATED NEGATIVE D	he pro	ject have been made by or
		I find that the proposed pENVIRONMENTAL IMPA	-	MAY have a significant effect on ORT is required.	the e	nvironment, and an
I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.						
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.					
0) M	Mushoth				12-16-2024
		rath, Diablo Water Disti	rict Ge	neral Manager	Ι	Date



Proposed Mitigated Negative Declaration

Sandmound Boulevard Water Systems Consolidation Project

Lead Agency: Diablo Water District

Mitigated Negative Declaration: Pursuant to Division 13, Public Resources Code, California Environmental Quality Act

Description

Project Location:

Sandmound Boulevard is located within unincorporated Contra Costa County, California. The project area is east of the City of Oakley, and a small part of the project is within the City limits. Sandmound Slough is to the east of the project area and is a waterway that collects water from the San Joaquin River system flows via Old River. Sandmound Slough is connected to other sloughs that surround farmland in the Holland Tract.

The project area is accessed regionally via State Route 4 and locally via Laurel Road, Main Street, East Cypress Road, Sandmound Boulevard, and Bethel Island Road. The project area includes East Cypress Road between East Summer Lake Drive and Sandmound Boulevard, Sandmound Boulevard approximately 0.37 miles south of East Cypress Road to the intersection with Bethel Island Road, and roadways within the Willow Park Marina (WPM). The WPM is accessed via the northern end of Sandmound Boulevard. Most of the pipeline would be within City and County rights-of-way (ROWs). Part of the pipeline would cross a levee on East Cypress Road and a stormwater drain that crosses under Sandmound Boulevard (Reclamation District 799 2012).

Purpose of the Project:

The proposed project would consolidate four, small, independent drinking water systems, including M-27 Willow Park Marina (consisting of Willow Park Marina and Mariner Estates), Sandy Point Mobile Home Park, Delta Mutual Water Company, and Oakley Municipal Water Company. These four water systems have been providing pumped groundwater to their water system users for many years. In 2006, after implementation of the new arsenic rule, three of the four water systems received compliance orders from Contra Costa Health for exceeding State water quality standards for arsenic and requiring them to permanently remove the elevated arsenic levels in their drinking water. A proposed new rule for manganese levels in drinking water is cause for concern because water quality analysis for manganese within the four water systems identified levels that were higher than those proposed under the new rule. The secondary standard for total dissolved solids was also exceeded in each of the four communities' groundwater wells. The State Water Resources Control Board Division of Drinking Water enforces California drinking water regulations (California Code of Regulations, Title 17, Division 1, Chapter 5, and Title 22, Division 4).

The four water systems are within the DWD sphere of influence. DWD, WPM, Sandy Point Mobile Home Park, Delta Mutual Water Company, and Oakley Municipal Water Company have agreed to



consolidate the four systems into the DWD system to improve the water quality and provide a sustainable water system to the communities. The proposed project would install a new water main pipeline, install and replace service pipelines, valves, and new fire hydrants within existing paved roadways to provide water service connections to the customers of the four small water systems. The proposed project would provide these communities with safe, reliable drinking water in perpetuity.

Determination

DWD has prepared an Initial Study to assess the significance of the effects of the Sandmound Boulevard Water Systems Consolidation Project. DWD has determined that the project, as proposed, could cause a significant effect on the environment. This determination is based upon the evidence provided in the attached Initial Study and other relevant documents and agency consultation. Mitigation measures have been incorporated into the project to reduce potential impacts to a less than significant level. These mitigation measures are listed below.

Air Quality

Mitigation AQ-1 Enhanced BMPs for Construction Related Fugitive Dust Emissions

- Limit the simultaneous occurrence of excavation, grading, and ground disturbing construction activities.
- Install windbreaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Windbreaks should have a maximum of 50 percent air porosity.
- Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and water appropriately until vegetation is established.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than 1 percent.
- Minimize the amount of excavated material or waste materials stored at the site.
- Hydroseed or apply non-toxic soil stabilizers to construction areas, including previously graded areas, which are inactive for at least 10 calendar days.

Biological Resources

Mitigation BIO-1 Measures to Minimize Impacts on Listed Raptors

For construction activities that occur between February 1 and August 31, a qualified biologist shall conduct preconstruction surveys for listed raptor species such as bald and golden eagles, Swainson's hawks, northern harriers, burrowing owls, and white-tailed kites no more than 10 days before ground disturbance. The preconstruction surveys shall include the proposed project footprint and a minimum of a 0.50-mile radius where access is permitted around the construction area in suitable nesting habitats (i.e., large trees for Swainson's hawk, white-tailed kite and bald eagle; cliff faces for golden eagle; and grasslands for northern harrier and burrowing owl). The preconstruction surveys shall be phased based on the construction schedule.



If nesting listed raptors are detected, a no-disturbance buffer (minimum of 250 feet for burrowing owl, 500 feet for northern harrier and white-tailed kite, 0.50 mile for bald eagle, golden eagle, and Swainson's hawk) shall be established and monitored daily by a qualified biologist. Buffers shall be maintained until a qualified biologist has determined that the young have fledged and are no longer reliant on the nest or parental care for survival. A 0.5-mile no-disturbance buffer also shall be maintained from any overwintering bald or golden eagles if they are detected in the project area or surrounding areas; the buffer shall be maintained for the duration that the bird(s) is(are) present. If any bald eagles or golden eagles are detected, DWD shall coordinate with USFWS, as necessary, to comply with the Bald and Golden Eagle Protection Act.

If maintaining the minimum no-disturbance buffer around an active listed raptor nest (or any overwintering eagles) is not practicable, CDFW shall be consulted to determine whether reduced minimum no-disturbance buffers are appropriate based on site-specific circumstances or to identify alternative measures to minimize the potential for project-related disturbance to the nest site that could result in nest abandonment or other forms of take. Measures may include, but are not limited to, continuous biological monitoring by a qualified biologist and delaying construction activities near the active nest site until the young have fledged. If the nesting pair shows signs of distress (e.g., adults leaving the nest when eggs or young chicks are present) because of project-related activities, the monitoring biologist shall have authority to stop work until it is determined that the adults have returned and are no longer showing signs of distress.

If the trees proposed for trimming are being used as nest sites by listed raptors, consultation with CDFW shall take place. If consultation with CDFW results in a determination that take of an active nest cannot be avoided, then either all activities that are likely to result in take shall be delayed until a qualified biologist has determined that the young have fledged and are no longer reliant on the nest or parental care for survival, or, take authorization pursuant to CESA shall be obtained from CDFW prior to initiation of any activities that are likely to result in such take.

Mitigation BIO-2 Measure to Minimize Impacts to Nesting Birds

To the extent practicable, vegetation trimming will be scheduled to avoid the breeding season for nesting raptors and other special-status birds (generally February 1 through August 31, depending on the species). Trimming of vegetation outside of the nesting season is intended to minimize the potential for delays in construction because of active nests.

Regardless of when vegetation trimming is scheduled, a qualified biologist will conduct a minimum of one preconstruction survey for nesting migratory birds and raptors within the project area and a buffer (250 feet for migratory birds, 500 feet for non-listed raptors) around the project area (where accessible) for all construction-related activities that shall occur during the nesting season. The preconstruction survey(s) shall be conducted no more than 15 days before starting construction in a given area and shall be phased based on the construction schedule. Because of the ongoing, phased approach to construction, multiple preconstruction surveys per year may be required.

If vegetation trimming occurs during the breeding season and an active nest is found, a construction-free buffer zone (250 feet for migratory birds, 500 feet for non-listed raptors) shall



be established around the active nest site. If establishment of the construction-free buffer zone is not practicable, appropriate conservation measures (as determined by a qualified biologist) shall be implemented. These measures may include, but are not limited to, consultation with CDFW to establish a different construction-free buffer zone around the active nest site, daily biological monitoring of the active nest site, and delaying construction activities near the active nest site until the young have fledged.

Mitigation BIO-3 Environmental Awareness Training for Construction Personnel

All construction personnel shall be given environmental awareness training by the project's environmental inspector or biological monitor before the start of construction. The training will familiarize all construction personnel with the covered species that may occur on-site, their habitats, general provisions, and protections afforded by the CESA/ESA; measures to be implemented to protect these species; and the project boundaries. This training will be provided within 3 days of the arrival of any new worker. As part of the environmental awareness training, construction personnel will be notified that no dogs or any other pets under control of construction personnel would be allowed in the construction area.

Mitigation BIO-4 Entrapment Prevention

To prevent entrapment of covered species, all vertically sided holes or trenches will be covered at the end of the workday or have escape ramps built into the walls of the excavation. If pipes are stored on-site or in associated staging areas, they will be capped when not in use. Construction materials that have the potential to entangle or entrap wildlife would be properly contained so that wildlife cannot interact with the materials. If a covered species is identified on-site, crews will immediately stop work within 50 feet of the individual and inform the construction supervisor and the CDFW-approved biologist. Work will not continue within 50 feet of the individual until it has traveled off the project site of its own volition.

Cultural Resources

Mitigation CR-1 Construction Working Training

A Workers Environmental Awareness Training program (WEAP) shall be prepared and provided to construction personnel prior to the start of ground disturbing activities. The program shall include the preparation of a WEAP manual that details archaeological sensitivity of the general area, legal requirements relating to the protection of cultural and tribal cultural resources, review of the types of artifacts and features that may be encountered, and information about procedures to follow should construction activities inadvertently encounter potential archaeological materials, features, or deposits. A qualified archeologist would also address identification and treatment of isolated finds. A WEAP manual and Tear Sheet shall be provided to crew that includes the protocols to follow and contact information for notifications in the event of the discovery of a potential archaeological resource. Training shall be repeated as needed as new work crews are added to the Project.



Mitigation CR-2 Construction Monitoring

A qualified archaeological monitor and, depending on the results of tribal consultation, a tribal cultural resource monitor shall be present to observe construction activities that include ground disturbance of disturbed or undisturbed native soils. In the event of an inadvertent discovery of archaeological deposits or features, work within 50 feet of the discovery shall halt until a qualified archaeologist and/or tribal cultural resource monitor has evaluated the find. If the find is determined to be a historical or unique archaeological resource, appropriate mitigation of the adverse impacts to the resource shall follow the guidelines in the Archaeological Monitoring and Inadvertent Discovery Plan. Preferred option is avoidance, however, if avoidance is not possible, other options may include data recovery excavations as identified in the Archaeological Monitoring and Inadvertent Discovery Plan.

Mitigation CR-3 Inadvertent Discovery Plan

An Archaeological Monitoring and Inadvertent Discovery Plan shall be prepared to guide monitoring and inadvertent discoveries during construction. The plan shall include guidance for archaeological monitoring, procedures to follow in the event of a discovery, communication protocols, evaluation of a discovery for CRHR eligibility, and actions to address of the adverse impacts, reporting, collection, and curation. If subsurface testing and/or data recovery are determined to be required, such activities shall not occur without first coordinating with tribes who requested such coordination during the CEQA tribal consultation process. The plan shall also address special procedures to be followed for treatment of human remains.

Mitigation CR-4 Discovery of Human Remains

Human remains and associated or unassociated funerary objects shall be treated in accordance with California state law (Section 7050.5 of the Health and Safety Code, and Sections 5097.94 and 5097.98 of the PRC). State law (PRC Section 5097) stipulates that if human remains are encountered during construction, work in the area of the find must halt, the find must be protected in place, and the Coroner must be immediately notified. Human remains include articulated (whole) skeletons or isolated bones (e.g., skull, long bones, and phalanges). If the Coroner has reason to believe that the human remains are those of a Native American individual, the Coroner is required by law to contact the Native American Heritage Commission (NAHC) within 24 hours of this determination. The NAHC will appoint a Most Likely Descendant (MLD), who will inspect the remains and make recommendations to DWD for the treatment and disposal of, with appropriate dignity, the human remains and any associated grave goods within 48 hours of being granted access to the site (PRC Section 5097.98). If subsurface testing and recovery are required, such activities shall not occur without first coordinating with tribes who requested such coordination during the CEQA tribal consultation process.

DWD shall make all reasonable efforts to develop an agreement with the MLD for the treatment of human remains and associated or unassociated funerary objects (PRC 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. If DWD and the MLD are unable to come to an agreement on the disposition and treatment of human remains, state regulations shall be followed including the



reinterment of the human remains and associated burial objects with appropriate dignity on the property in a location not subject to further disturbance (PRC section 15064.5(e)(2)(C)).

Geology and Soils

Mitigation GEO-1 Inadvertent Discovery

If inadvertent discovery of paleontological resources during construction occurs, the contractor shall stop construction in the area of the find and contact a paleontological expert to determine the appropriate course of action to either protect the resource or remove the resource for preservation.

Noise

Mitigation NOI-1 Scheduling and Planning

Summer Lake School staff shall be informed about construction schedule during school hours. Schedule planning shall be conducted with school staff to minimize the use of heavy machinery when working near Summer Lake Elementary School.

Mitigation NOI-2 Noise Reduction Strategies

Acoustic barriers or enclosures shall be installed to reduce noise propagation from the construction site to nearby residences and Summer Lake Elementary School as needed.

Tribal Cultural Resources

Mitigation Measures CR-1, CR-2, CR-3 and CR-4 shall be implemented as stated above during construction.



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Acronyms and Abbreviations

μg/L micrograms per liter

μg/m³ micrograms per cubic meter

AB Assembly Bill

ADI Area of Direct Impact

ASR Archeological Survey Report

BAAQMD Bay Area Air Quality Management District
BACLN Bay Area Conservation Lands Network
BERD Built Environment Resource Directory

BMP best management practice

Cal OES California Office of Emergency Services
CalEEMod California Emissions Estimator Model

CAL FIRE California Department of Forestry and Fire Protection

Caltrans California Department of Transportation

CAPCOA California Air Pollution Control Officers Association

CARB California Air Resources Board
CCR California Code of Regulations
CCWD Contra Costa Water District

CDC California Department of Conservation
CDFW California Department of Fish and Wildlife
CEQA California Environmental Quality Act
CESA California Endangered Species Act
CGS California Geological Survey

CH₄ methane

CHRIS California Historical Resources Information System

City City of Oakley

CNDDB California Natural Diversity Database

CO carbon monoxide CO₂ carbon dioxide

CO₂e carbon dioxide equivalent

Contra Costa Health Contra Costa County Environmental Health Program

County Contra Costa County

CRHR California Register of Historical Resources

DDW Division of Drinking Water
DPS Distinct Population Segment

DTSC California Department of Toxic Substances Control

DWD Diablo Water District
EAR Electronic Annual Report
EIR Environmental Impact Report

EPA U.S. Environmental Protection Agency

EQ Zapp California Earthquake Hazards Zone Application

ESA U.S. Endangered Species Act FIRM flood insurance rate map

FRAP Fire and Resources Assessment Program

GHG greenhouse gas



gpd gallons per day gallons per minute

HCP/NCCP Habitat Conservation Plan/Natural Community Conservation Plan

HEPA high efficiency particulate air

in./sec PPV inch per second peak particle velocity
IPaC Information for Planning and Consultation

IS Initial Study lb/day pound per day

LRA Local Responsibility Area
MBTA Migratory Bird Treaty Act
MCL maximum contaminant level

MG/yr million gallon per year mgd million gallon per day MHP Mobile Home Park

mL milliliter

MLD Most Likely Descendant

MMRP Mitigation Monitoring and Reporting Program

MND Mitigated Negative Declaration

mph miles per hour

MWC Mutual Water Company

n/a not applicable N_2O nitrous oxide

NAHC Native American Heritage Commission

NL Notification Level

NOAA National Oceanic and Atmospheric Administration

NO_x nitrogen oxides

NPDES National Pollutant Discharge Elimination System

NRHP National Register of Historic Places
NWIC Northwest Information Center

 O_3 ozone

PM particulate matter
PRC Public Resources Code
PVC polyvinyl chloride

RACM regulated asbestos-containing material
RCAC Rural Community Assistance Corporation
RCRA Resource Conservation and Recovery Act

RD Reclamation District
RL response level
ROG reactive organic gas

ROW right-of-way

RWQCB Regional Water Quality Control Board

SO₂ sulfur dioxide SLF Sacred Lands File

SRA State Responsibility Area

SWPPP Storm Water Pollution Prevention Plan SWRCB State Water Resources Control Board



TAC toxic air contaminant TDS total dissolved solids

tpy tons per year

USA Underground Service Alert

U.S.C. United States Code

USFWS U.S. Fish and Wildlife Service VOC volatile organic compound

WEAP Workers Environmental Awareness Training

WPM M-27 Willow Park Marina (Willow Park Marina and Mariner Estates)



Section 1

Introduction

The Diablo Water District (DWD), as the California Environmental Quality Act (CEQA) lead agency, has prepared this Initial Study (IS)/Mitigated Negative Declaration (MND) to evaluate the environmental effects of the proposed Sandmound Boulevard Water Systems Consolidation Project (proposed project) in Contra Costa County (County) near Oakley, California (City). Four, small, independent drinking water systems serving their customers would be consolidated, including M-27 Willow Park Marina (consisting of Willow Park Marina and Mariner Estates, WPM), Sandy Point Mobile Home Park (MHP), Delta Mutual Water Company (MWC), and Oakley MWC. Three of the four water systems received compliance orders from the Contra Costa County Environmental Health Program (Contra Costa Health) for exceeding state water quality standards for arsenic. The four waters systems are within the sphere of influence for DWD. The proposed project is to install new pipelines, valves, and fire hydrants within existing paved roadways and to provide service connections to the customers of the four small water systems.

1.1 Document Format

This IS/MND contains the following sections:

- **Section 1. Introduction.** This section provides an overview of the proposed project and the CEQA environmental documentation process.
- Section 2. Project Description. This section provides a detailed description of the proposed project's components.
- **Section 3. Environmental Evaluation.** This section identifies environmental resource areas that may be affected by the project, presents the CEQA determination based on the results of the IS, and describes the evaluation of environmental impacts.
- Section 4. Environmental Impact Analysis. This section presents the CEQA checklist questions for each impact area along with the environmental analysis for each issue area identified on the environmental checklist. If the proposed project would not have a significant impact on a given issue area, the relevant section provides a brief discussion of the reasons why no impacts or less than significant impacts are expected. If the proposed project could have a significant impact on a resource, a summary of the potential impact(s) is provided, and a mitigation measure is identified to lessen impact to a less than significant level, if available. This section also addresses mandatory findings of significance.

The environmental analysis included in Section 4 is consistent with the CEQA IS and MND formats identified in the State CEQA Guidelines. In accordance with the Guidelines, impacts are separated into the following categories:



- **Potentially Significant Impact.** This category is applicable if there is substantial evidence that an effect may be significant and requires additional evaluation. Environmental issues with this finding are required to be further evaluated in an EIR.
- Less than Significant Impact After Mitigation Incorporated. All impacts that are significant, but whose significance would be reduced with the implementation of mitigation measures, are evaluated in this MND, along with feasible mitigation measures that would reduce such impacts to a less than significant level.
- Less than Significant Impact. This category is identified when the proposed project
 would result in impacts below the threshold of significance, and no mitigation
 measures are required.
- **No Impact.** This category applies when the proposed project would not create an impact in the specific environmental issue area. "No Impact" answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency that show the impact does not apply to the specific project. A "No Impact" answer should be explained where it is based on project-specific factors and general standards.
- Section 5. Mitigation Monitoring and Reporting Program (MMRP). This section provides the required mitigation measures and monitoring requirements and the responsible parties.
- **Section 6.** References. This section provides a list of reference materials used during the preparation of the IS/MND.



Section 2

Project Description

2.1 Project Background

The four water systems (WPM, Sandy Point MHP, Delta MWC, and Oakley MWC) have been providing pumped groundwater to their water system users for many years. In 2006, after implementation of the new arsenic rule, three of the four water systems received compliance orders from Contra Costa Health for exceeding State water quality standards for arsenic and requiring them to permanently remove the elevated arsenic levels in their drinking water. A proposed new rule for manganese levels in drinking water is cause for concern because water quality analysis for manganese within the four water systems identified levels that were higher than those proposed under the new rule. The secondary standard for total dissolved solids (TDS) was also exceeded in each of the four communities' groundwater wells. The State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW) enforces California drinking water regulations (California Code of Regulations, Title 17, Division 1, Chapter 5, and Title 22, Division 4). The four water systems are within the DWD sphere of influence (Figure 2-1). DWD, WPM, Sandy Point MHP, Delta MWC, and Oakley MWC agreed to consolidate the four systems into the DWD system to improve the water quality and provide a sustainable water system to the communities (Rural Community Assistance Corporation [RCAC] 2024a).



Figure 2-1 Area Overview

Following are summaries of source water quality concerns:

 Arsenic levels exceeded the maximum contaminant level (MCL) at WPM, Delta MWC, and Oakley MWC. Each of these communities received environmental compliance orders from



Contra Costa Health to mitigate arsenic levels above the MCL of 10 micrograms per liter $(\mu g/L)$.

- Manganese levels exceeded the aesthetic-based U.S. Environmental Protection Agency (EPA) secondary MCL of 50 μg/L and DDW notification level (NL) of 20 μg/L at the four service areas. Manganese levels were higher for Sandy Point MHP and Delta MWC based on the proposed new rule for manganese with a response level (RL) of 200 μg/L.
- TDS exceeded the secondary MCL at the four service areas.

Existing service connections serve single-family residences and some small commercial users; no large commercial or industrial connections are currently provided, and none are anticipated through final buildout projections. **Table 2-1** presents the existing well capacity and water storage for each of the four water systems (RCAC 2024a).

Table 2-1 Existing Well Water Production Rate and Water Storage

		Total Existing \	Well Capacity	Total Existing Storage			
Existing Well Location	Number of Wells	gpm	gpd	Number of Tanks	Volume (gallons)		
WPM	2	600	864,000	2	5,600		
Delta MWC	2	80	115,200	2	2,000		
Sandy Point MHP	1	20	28,800	1	1,000		
Oakley MWC	2	80	115,200	2	2,000		
Total	7	780	1,123,200	7	10,600		

Source: RCAC 2024a.

Key: gpm = gallons per minute; gpd = gallons per day.

The Final Engineering Report for the project reports historical and projected water demands, including fire-flow demands for the four water systems (RCAC 2024a). WPM and Sandy Point MHP are currently at maximum build out, while Delta MWC and Oakley MWC still have land available for development. **Table 2-2** presents the number of historical and projected customer connections. The number of historical connections is based on Contra Costa Health's 2021 Electronic Annual Report (EAR), and the number of projected customer connections is based on the City's East Cypress Corridor Specific Plan (City of Oakley 2006).

Table 2-2 Historical and Projected Customer Connections

Year	Delta MWC	Oakley MWC	Sandy Point MHP	WPM	Total
2021 – Historical	126	49	24	125	324
2040 – Projected	142	65	24	125	356

Source: RCAC 2024a.

Workshops with the stakeholders during planning and early design discussed water quality goals and presented two proposed alternatives of pipeline connection and centralized treatment. The pipeline connection alternative was selected as the preferred alternative and is analyzed within this IS/MND and described in Section 2.3, Project Description.



The four water systems operate under permits from Contra Costa Health, and existing groundwater wells are permitted and monitored by the County until the supplier reaches 200 connections. Once the supplier exceeds 200 connections, the state takes over monitoring and compliance responsibilities (DWD 2020). Sandy Point MHP, Delta MWC, and Oakley MWC operate and maintain their systems under the state's recommended practices for operations and maintenance. WPM has their own plan for water system operations and includes DWD's operations and maintenance practices (RCAC 2024a). DWD owns the WPM water system's wells, and currently operates and maintains the WPM system, including performing laboratory testing in accordance with California Department of Public Health and Contra Costa Health drinking water requirements. DWD's supervisory control and data acquisition system monitors the WPM water system facilities (DWD 2020).

2.2 Project Location and Surrounding Land Uses

The proposed project is within unincorporated Contra Costa County, east of the City of Oakley, and a small part of the project is within the City limits. Sandmound Slough is to the east of the project area and is a waterway that collects water from the San Joaquin River system flows via Old River. Sandmound Slough is connected to other sloughs that surround farmland in the Holland Tract. The project area is accessed regionally via State Route 4 and locally via Laurel Road, Main Street, East Cypress Road, Sandmound Boulevard, and Bethel Island Road. The project area includes East Cypress Road between East Summer Lake Drive and Sandmound Boulevard, Sandmound Boulevard approximately 0.37 miles south of East Cypress Road to the intersection with Bethel Island Road, and roadways within the WPM. The WPM is accessed via the northern end of Sandmound Boulevard. Most of the pipeline would be within City and County rights-of-way (ROWs). Part of the pipeline would cross RD 799 facilities on East Cypress Road and above a stormwater drainage culvert under Sandmound Boulevard (Reclamation District 799 2012).

2.3 Project Description

The proposed project would construct and operate a new drinking water main distribution pipeline. Parts of the new main pipeline would be constructed within City and County ROWs on Sandmound Boulevard and East Cypress Road, as shown in **Figure 2-2**. This project would construct a new 12-inch polyvinyl chloride (PVC) water distribution pipeline and connect to an existing DWD main pipeline. The new pipeline would be approximately 2.6 miles long and approximately 4 to 8 feet below the ground surface.

The new main pipeline would be constructed within an open trench approximately 3 feet wide, 15,500 feet long, and to a depth of approximately 4 to 8 feet below the paved roadway or dirt shoulder area of the ROWs. The pipeline would be constructed in segments and require approximately 500 to 1,000 feet of trench open at one time. After completion of the pipeline segment installation, the trench would be backfilled at the end of the day or covered. The roadway, pavement sections, and road shoulder would be restored back to their existing condition. Trench plates would be placed in areas of vehicular and pedestrian traffic until the road is recompacted and paved in accordance with City and County standards. A work area of approximately 20 to 30 feet would be needed on either side of the trench to operate heavy equipment, and store or stockpile materials and excavated soil. Work areas would move with pipeline segment installation and would be located primarily within the ROW.





Figure 2-2 Proposed Pipeline Alignment

A second 8- or 12-inch-diameter pipeline (approximately 2,750 feet in length) would be constructed in WPM to a depth of approximately 4 to 8 feet below ground, also within an open trench. The purpose of this pipeline would be to replace an existing 6-inch asbestos cement pipe. Service connections and fire hydrants would be replaced in WPM and backflow preventers would be added as required to meet DWD standards. Service connections would be replaced to meet DWD standards.

The new main pipeline would cross a levee owned by Reclamation District (RD) 799 along part of East Cypress Road perpendicular and through the top of the levee core with sufficient earthen cover, as approved by the RD 799 engineer. DWD would own and construct the section of pipeline within the levee.



The pipeline would cross a large stormwater drain currently being constructed north of East Cypress Road on Sandmound Boulevard by the Summer Lake North developer. Once constructed, RD 799 would manage the new storm drain. The new stormwater drain would be designed to be at an approximate depth of 6.7 feet. DWD would closely coordinate with the Summer Lake North project developer during final design and construction of the stormwater drain crossing. The new water main would be constructed under Sandmound Boulevard and above the new stormwater drain culvert at a depth of 3 to 4 feet.

The new water main pipeline would connect to the existing DWD water distribution system at two locations: Connection 1 – Bethel Island Road, near the intersection of Sandmound Boulevard, and Connection 2 – East Cypress Road, near the intersection of East Summer Lake Drive. Each of the four water systems would connect to the new water main, either by one master connection or by individual service connections to each residence. Reconnecting individual water services would require a temporary shutdown while the new meter is installed and the service is switched to the DWD system. The project would be constructed while the existing water systems are active. Service interruptions would be minimized by installing a new service pipe adjacent to the existing active service pipe and planning for construction sequence and schedule restrictions. The contractor would be required to limit service interruptions to a set duration (e.g., 4 hours).

There are approximately 324 individual WPM connections that would be connected to the new distribution mains. Within WPM, service laterals would be replaced and reconnected to the existing meters to meet DWD standards. The existing service lateral system at Mariner Estates, located within the WPM service area, would connect its existing metered system to the new water main at two locations. Delta MWC and Oakley MWC service areas would include individual service connection replacements that follow DWD standard details for service lines. Existing asbestos cement pipeline would be removed and disposed of at an approved waste management facility that is permitted to accept the removed asbestos pipeline. Contaminated soil from the asbestos pipeline also would be removed and disposed of at the same facility as needed.

Disturbance to trees, their root systems, and vegetation would be avoided during construction. Some trees may need to be limbed to allow room for construction equipment access to the trench. Groundwater could be encountered during construction; therefore, dewatering activities would be required in compliance with Central Valley Regional Water Quality Control Board (RWQCB) requirements under the General Construction Stormwater Permit. A dewatering plan approved by the RWQCB under the General Construction Stormwater Permit would be prepared and implemented by the contractor.

Construction work hours would occur primarily Monday through Thursday from 7:00 am to 4:30 pm, and on Friday from 7:00 am to 3:00 pm. No nighttime work is proposed. Work may occur on DWD holidays and on Saturdays with advanced notice to DWD and their approval. Approximately 7 to 15 workers would be on-site each day. Equipment used during construction would include pick-up trucks, concrete saws, loaders, excavators, a boom lift truck, a water truck, dump trucks, excavators, asphalt pavers, and a hydraulic impact breaker.



2.3.1 Construction Controls

The contractor would be required to implement several construction and environmental controls to be included in the final plans and specifications, and as required under agency approvals and permit conditions. Section 4, Environmental Impact Analysis, and Section 5, Mitigation Monitoring and Reporting Program, describe mitigation measures. Construction controls follow.

2.3.1.1 Air Quality

- Construction equipment and vehicles shall not be left idling and would be shut down when not in use.
- Construction equipment shall be maintained in accordance with manufacturer's specifications to avoid excessive emissions.
- In accordance with Bay Area Air Quality Management District (BAAQMD) Rule 11-2-303, all exposed regulated asbestos-containing material (RACM) shall be wetted during cutting, stripping, demolition, renovation, removal, and handling operations; or a local high efficiency particulate air (HEPA) filter exhaust, ventilation, and collection system designed and operated to capture RACM emissions shall be operated. BAAQMD must be notified through their online asbestos notification system at least 10 business days before removing asbestos pipe.
- Authorization for coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Construction Stormwater Permit) from the Central Valley RWQCB is required. The permit conditions require the preparation and implementation of a fugitive dust control plan within the Storm Water Pollution Prevention Plan (SWPPP) for the project. The contractor shall prepare the SWPPP and the fugitive dust control plan that shall include best management practices (BMPs) on the site and around staging areas and stockpiles. Inspections shall be conducted in accordance with the requirements of General Construction Stormwater Permit and the SWPPP.
- Following are the basic BMPs for fugitive dust emissions to be included in the fugitive dust control plan:
 - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
 - All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
 - All visible mud or dirt track out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once daily. Dry power sweeping shall be prohibited.
 - All vehicle speeds on unpayed roads shall be limited to 15 miles per hour (mph).



- All roadways, driveways, and sidewalks to be paved shall be completed as soon as
 possible. Building pads shall be laid as soon as possible after grading unless seeding or
 soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off before leaving the site.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
- Publicly visible signs shall be posted with the telephone number and name of the
 person to contact at the lead agency regarding dust complaints. This person shall
 respond and take corrective action within 48 hours. BAAQMD's General Air Pollution
 Complaints number shall also be visible to ensure compliance with applicable
 regulations.

2.3.1.2 Biological Resources

- Construction equipment would include mufflers, installed according to factory design.
 This would limit noise disturbance to species.
- All trash created during construction would be properly contained (wildlife-proof containers) and removed at the end of each day.
- A SWPPP shall be prepared and implemented by the contractor, as required under authorization of coverage under the General Construction Stormwater Permit. Appropriate stormwater and erosion control BMPs shall be placed on-site and around staging areas and stockpiles. Inspections shall be conducted according to permit requirements and the SWPPP and shall comply with monitoring and reporting requirements. This would protect adjacent wetlands from erosion and runoff pollution from construction sites.
- Construction equipment used in construction would be kept free of invasive weed seed. All off-road equipment and vehicles used within the project implementation area would be required to be weed-free. All equipment and vehicles would be cleaned of attached mud, dirt, and plant parts. This would be done at a vehicle washing station or steam cleaning facility (power or high-pressure cleaning) before the equipment and vehicles enter the project area.

2.3.1.3 Geology and Soils

Following are the erosion control BMPs that shall be implemented in accordance with the SWPPP:



- Temporary erosion control devices shall be placed on the downhill side of all excavation and dirt piles. These shall include sediment fencing and/or sediment rolls.
- Dirt piles shall be covered during nonworking hours and during times of precipitation.
- All open trenches shall be covered during periods of precipitation.
- Vegetation protection fencing shall be placed around all vegetated areas near construction.

2.3.1.4 Greenhouse Gas Emissions

In addition to the construction controls identified in Section 2.3.1.1, Air Quality, the following measures would also help to reduce greenhouse gas emissions.

- Carpooling for construction workers to and from the site shall be encouraged to reduce vehicle emissions during construction.
- Use of renewable diesel fuels shall be required for construction equipment and recommended for other vehicles that operate with diesel unless unable to procure.

2.3.1.5 Hazards and Hazardous Materials

In addition to the construction controls related to asbestos-containing materials, identified in Section 2.3.1.1, Air Quality, the following measures would also be implemented during construction.

- Removed asbestos piping would be disposed of at an approved disposal facility in accordance with applicable laws and regulations.
- A traffic control plan shall be prepared and implemented in accordance with the City and County Encroachment Permit requirements. The Contractor shall notify the public, City, and County of road closures and detours during construction. The traffic control plan shall require the traffic control personnel to allow passage of vehicles and emergency services during an emergency.
- The contractor and construction workers shall keep exhaust systems and spark arresters in good working order and free from carbon buildup, refrain from driving vehicles or machinery on dry grass or brush, and keep fire extinguishers onsite.
- In accordance with the General Construction Stormwater Permit and the SWPPP, construction vehicles shall be serviced in specific paved areas to prevent accidental spills of fluids, oils, and lubricants into groundwater. All spills shall be reported to the Central Valley RWQCB and procedures and response protocols for immediate cleanup outlined in the SWPPP shall be implemented. These procedures shall include placement of sandbags, gravel, boards, or other approved methods to prevent spilled material from entering groundwater or leaving the site.
- Underground Service Alert (USA) shall be contacted 48 hours before grading activities to mark underground utility locations.



2.3.1.6 Hydrology and Water Quality

In addition to the construction controls identified in Section 2.3.1.3, Geology and Soils, the following measures would also help to protect hydrology and water quality. The SWPPP would outline additional requirements and protocols.

- A groundwater dewatering plan shall be prepared and implemented, which would be approved by the RWQCB in accordance with Attachment J, Dewatering Requirements of the General Construction Stormwater Permit and the SWPPP.
- Construction fencing shall be placed around mapped wetland boundaries according to the National Wetlands Inventory mapper that are within 50 feet of disturbance areas and these areas shall be avoided during construction. Temporary water quality BMPs shall be placed between the road shoulder and wetland boundary fencing in accordance with the SWPPP.
- Temporary erosion control devices shall be constructed as shown on the plans and as required by the SWPPP. These devices shall be maintained and left in a stable condition on-site or later removed, as directed by the engineer, and as specified in the Special Provisions.
- Dirt shall not be tracked off-site. Construction equipment shall be cleaned to remove any loose dirt or sediment before exiting the site.

2.3.1.7 Transportation

A traffic control plan shall be prepared and implemented in accordance with the City and County Encroachment Permit requirements. The contractor shall notify the public, City, and County of road closures and detours during construction. The traffic control plan shall require the traffic control personnel to allow passage of vehicles and emergency services during an emergency.

2.3.1.8 Utilities and Service Systems

- Before construction, the contractor shall contact USA 48 hours prior to grading activities to mark underground utility locations.
- Residents and businesses shall be notified about service interruptions in advance.
 Interruptions shall be minimized as much as possible.

2.3.2 Pipeline Testing and Flushing

Newly installed water main pipelines would be pressure tested for a period of 4 hours. No leakage would be permitted during this time. After completion of the hydrostatic test, the mains would be thoroughly flushed and chlorinated in accordance with the latest revision of American Water Works Association 651, Standards of Disinfecting Water Mains. All flushing water would be dechlorinated and discharged to local storm drains. At the end of the contact period, the mains again would be flushed, and bacteriological samples would be taken by DWD.

DWD would take water samples for bacteriological testing for approximately every 500 feet of water main, with a minimum of two samples, and one sample from each end of the water main.



After the samples have passed the bacteriological testing, the contractor would be allowed to make final tie-ins and connections to house services. Samples would be taken no sooner than 24 hours after final flushing. After 24 hours, DWD would perform another round of sampling. The second round of samples would be evaluated on a presence/absence basis. Each sample would pass the bacteria tests if they show zero total coliform per 100 milliliters (mL) and not more than 250 heterotrophic plate count colony-forming units per mL.

2.3.3 Operations

The existing wells would no longer be used for drinking water supply; however, the wells would be used for other purposes or abandoned. DWD would reuse the WPM wells as monitoring wells; Sandy Point MHP would maintain the existing well for irrigation and fire suppression; Oakley MWC would abandon the existing wells and disassemble the equipment; and Delta MWC is currently undecided about the use of their wells.

DWD would require approval from DDW to amend their operating permit because of the change from a groundwater supply to a treated surface water supply. Additional monitoring for disinfection byproducts, lead and copper corrosion control, and potentially other constituents would be required under the amended permit.

DWD is currently developing a Capital Improvement Program (CIP) and the Draft CIP report is currently under review. Operations and maintenance activities related to water quality monitoring consists of sampling each of the wells on a monthly basis by DWD and water samples collection by Contra Costa Water District (CCWD) from about a dozen locations throughout DWD's distribution system on a weekly basis. Fire hydrant flushing would occur if there were water quality complaints from customers and/or in combination with construction activities or emergency repair activities. DWD would replace pipes, valves, service lines, and other appurtenances as needed to continue service.

2.3.4 CEQA-Responsible Agencies and Other Anticipated Permits and Approvals

CEQA-responsible agencies with proposed project approval authority include SWRCB DDW and RWQCB, who will consider this CEQA IS/MND when making discretionary decisions to approve permits for the project. California Department of Fish and Wildlife (CDFW) is a trustee agency, which is a State agency that has jurisdiction by law over natural resources affected by the project held in trust for the people of California.

The City, County, and RD 799 are responsible for review and approval of permits for the project. The demolition plan must be submitted to BAAQMD through their online asbestos notification system at least 10 days before removing asbestos pipe. Approval of these permits does not require CEQA compliance because these approvals are nondiscretionary and authorized under their individual agency ordinances and/or rules. **Table 2-3** lists the permits and approvals that would be needed or could be required.

DWD purchases water from CCWD which is supplied by the U.S. Bureau of Reclamation (USBR). CCWD will consider annexation of the project area into their service area supplied with USBR



water. USBR is required to conduct a review of inclusion of the area to be annexed into CCWD's service area.

The project also would require coordination with Mariner Estates Condominium Association. A review of existing easement data for WPM found that public utilities may construct and operate utilities and underground pipelines within the WPM private road and property and are not limited to constructing solely within the ROW of the road. No new easements are anticipated for this project.

Table 2-3 Permits and Approvals

Agency	Permit Type
BAAQMD	Asbestos Demolition and Renovation Program, Online Asbestos Notification System
CCWD	Annexation approval
CDFW	Consultation or Take Permits for Listed Species (if required)
Central Valley RWQCB	NPDES General Construction Stormwater Permit Compliance with MS4 Permit Order No. R5-2010-0102, NPDES No. CAS083313 ¹
Contra Costa County Public Works and Engineering Department	Encroachment Permit Road Closure Permit
Contra Costa Health	Well Abandonment or Repurposed Use
Oakley Public Works and Engineering Department	Encroachment Permit – Utility
RD 799	RD 799 facilities
SWRCB DDW	Updated DWD Operating Permit
USBR	Central Valley Project Inclusion Review

Note:



¹ Central Valley RWQCB 2010.

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Section 3

Environmental Evaluation

This section discusses the environmental analysis of each of the following CEQA resource topics: aesthetics, agricultural and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, wildfire, and mandatory findings of significance. This IS/MND determined that the project would have no impacts to aesthetics, agricultural and forestry resources, mineral resources, and recreation. Section 4 of this IS/MND includes environmental analyses that support the impact determinations for all CEQA resource topics.

Significance criteria for determining potential direct, indirect, and cumulative impacts are based on the CEQA checklist, Appendix G of the 2024 CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.). Environmental resources are analyzed for both short-term construction and long-term operational impacts. This IS/MND includes Section 3, Environmental Impacts Analysis, with a subsection for each resource where impact statements are presented. This IS/MND considers construction controls and mitigation measures to minimize impacts during construction. Section 2, Project Description, Subsection 2.3.1, Construction Controls, provides descriptions of construction controls. Section 4 and Section 5, Mitigation Monitoring and Reporting Program, number and describe the mitigation measures where impacts would be less than significant with mitigation incorporated.

Cumulative impacts take into account past, present, and reasonably foreseeable future projects that might have an impact on the various resources being considered. Cumulative projects considered during cumulative impact analysis include those projects identified in the *East Cypress Corridor Specific Plan* (Specific Plan) (City of Oakley 2006). The City adopted the Specific Plan in 2006. The Specific Plan includes several projects proposed near the proposed project and six planning areas. The project area is entirely within the sphere of influence for the Specific Plan and within Planning Areas 2, 5, and 6 of the Specific Plan. Planning Areas 1 through 5 are within the City, and Planning Area 6 is within the unincorporated area of the County. A comprehensive engineered levee system will be constructed as part of the development of the Specific Plan for flood control for the proposed developments and result in flood risk reduction for some of the existing development in the Specific Plan areas. The new development will pay an annual assessment to RD 799, who will take ownership of the flood control levees after they are constructed.

One project identified with the Specific Plan has been constructed and considered to be a past cumulative project.



Summer Lake South Residential Community – Shea Homes developed a planned community for 628 new residential dwelling units in Planning Area 5. Road and utility infrastructure, an elementary school, and two parks were constructed in the development. Summer Lake South provides stormwater management facilities for the development. A floodwater control levee surrounds the development to reduce flood risk to the area and RD 799 manages it.

Following are the future cumulative projects listed in the Specific Plan:

- Summer Lake North Residential Community Shea Homes has proposed a planned residential community that is within Planning Area 2. The proposed community is planned for 816 residential dwelling units, public recreation and open space amenities, a middle school, a local commercial center, a fire station, and a light industrial center. A floodwater control levee would surround the development to reduce flood risk to the area and RD 799 would manage it. Shea Homes is also improving the culvert for the drainage way that crosses Sandmound Boulevard, which would be completed before construction of the proposed project. The site has been graded and construction has been delayed until further notice from Shea Homes.
- Dal Porto/Lesher KB Home Residential Community The proposed project is within Planning Area 1 of the Specific Plan. The proposed development is planned for 1,700 residential dwelling units, recreation, an elementary school, and open space amenities. A village commercial center is proposed that would serve the entire Specific Plan area of influence. Existing wetlands and dunes would be preserved, and a lake amenity would be provided for stormwater management.
- Dal Porto D.R. Horton Residential Community The proposed project is within Planning Area 3 of the Specific Plan. The proposed development is for 400 dwelling units, open space, parks, and recreational amenities.
- Bethel Island LLC Residential Community The proposed project is within Planning Area
 4. The proposed development is planned for 1,120 single-family and multifamily units, parks and open space amenities, and an elementary school.
- Planning Area 6 Buildout Planning Area 6 includes the project area and is within an unincorporated area of the County. Planning Area 6 includes some existing residential dwelling units, and commercial and vacant properties. A total of 1,095 units are possible with the Planning Area. Vacant areas would be developed over time until full buildout is reached.



Section 4

Environmental Impact Analysis

4.1 Aesthetics

LATCTUTTICS From the consideration Dublic December Cont.	Potentially Significant Impact	Less Than Significant with 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 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 which would adversely affect day or nighttime views in the area?				

The project area is in a non-urbanized residential area and within small communities surrounded by open space, agricultural land, and Sandmound Slough. The significant landscape features within the vicinity include the surrounding open space (**Figure 4-1**) and Sandmound Slough. A mix of multifamily and single-family residential homes and open space are on each side of Sandmound Boulevard (**Figure 4-2**). The Summer Lake South subdivision, a planned community, is south of East Cypress Road. WPM is a multifamily residential waterfront community (**Figure 4-3**).





Figure 4-1 East Cypress Road Looking East



Figure 4-2 Home on Sandmound Boulevard





Figure 4-3 Willow Park Marina

4.1.1 Impact Analysis

Except as provided in Public Resources Code Section 21099, would the project:

Impact Statement I.a) Have a substantial adverse effect on a scenic vista?

No Impact. A scenic vista is a vantage point with a broad and expansive view of significant landscape features that include mountains, waterways, the coastline, or significant historic or architectural features. The coastline along Sandmound Slough is to the east of the project area and Sandmound Slough is partially visible from the project area. The new pipeline would be constructed underground and would not be visible. During construction, equipment and materials would be visible on Sandmound Boulevard, East Cypress Road, and within the WPM; however, this would be temporary and would not impact scenic vistas.

Impact Statement I.b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The California Department of Transportation (Caltrans) designates scenic highways in California. The California State Scenic Highway System Map does not show any scenic highway within the project area or within the vicinity (Caltrans 2024). Therefore, there would be no impact to scenic resources within state scenic highways.

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



No Impact. The pipelines would be constructed underground and would not be visible. Equipment and materials would be visible temporarily during construction. The existing visual character or quality of public views would not be affected.

Impact Statement I.d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. No lighting or reflective materials are proposed that would create a new source of glare. All proposed improvements would be constructed underground. Construction activities would occur during the day.

4.1.2 Mitigation Measures

Based on the aforementioned impacts analysis for aesthetics, no mitigation measures would be required.

4.2 Agricultural and Forestry Resources

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



4.2.1 Impact Analysis

Would the project:

Impact Statement II.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?

No Impact. The project area does not contain prime farmland, unique farmland, or farmland of statewide importance, as identified on the California Important Farmland Finder (California Department of Conservation [CDC] 2024). Most of the project area is in a developed urban area classified as "urban built-up land." However, the project area does contain agricultural areas designated as "farmland of local importance." Prime farmland, unique farmland, and farmland of statewide importance occur within 5 miles of the project area. The proposed project would not result in conversion of farmland into nonagricultural use.

Impact Statement II.b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The proposed project does not conflict with agricultural zoning nor a Williamson Act contract. The project would be constructed within existing City and County ROWs and not on agricultural land.

Impact Statement II.c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. No forest land, timberland, or timberland zoned timberland production occurs within or near the project area. No impacts to forest land would occur under the proposed project (California Department of Forestry and Fire Protection [CAL FIRE] 2024a).

Impact Statement II.d) Result in the loss of forest land or conversion of forest land to nonforest use?

No Impact. The proposed project would be constructed within existing City and County ROWs and would not result in the loss of forest land or the conversion of forest land into non-forest use.

Impact Statement II.e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. Most project activities would occur in existing roads, which, in some sections, pass through land zoned as agricultural (City of Oakley 2006). However, construction work primarily would occur in the existing ROW. The proposed project would not involve other changes in the existing environment that would result in zoning changes or conversion of farmlands to nonagricultural use.



4.2.2 Mitigation Measures

Based on the aforementioned impacts analysis for agricultural and forestry resources, no mitigation measures would be required.

4.3 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY: Where available, the significance criteria e district or air pollution control district may be relied upon to				
a) Conflict with or obstruct implementation of the applicable air quality plan?			\boxtimes	
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?			\boxtimes	

The project area lies within the BAAQMD. The BAAQMD adopted the Final 2017 Clean Air Plan (BAAQMD 2017), which contains measures to decrease emissions of particulate matter (PM_{10} and $PM_{2.5}$), ozone (O_3), carbon monoxide (CO), and toxic air contaminants (TACs).

The BAAQMD published 2022 CEQA Guidelines (BAAQMD 2022) to provide guidance and recommendations to assist lead agencies through the CEQA process. **Table 4-1** provides thresholds of significance for project-level construction-related impacts. The County is designated nonattainment for PM_{2.5}, 8-hour O₃, and maintenance for CO according to EPA's Green Book information about National Ambient Air Quality Standards (EPA 2024). Furthermore, the County is designated nonattainment for the O₃, PM₁₀, and PM_{2.5} California Ambient Air Quality Standards (California Air Resources Board [CARB] 2022).



Table 4-1 BAAQMD Project-Level Thresholds of Significance

	Construction Related ¹	Operational		
	Criteria Air Polluta	ints and Precursors (Regional)		
Pollutant	Average Daily Emissions (lb/day)	Average Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)	
ROG	54	54	10	
NO _x	54	54	10	
PM ₁₀	82 (exhaust)	82	15	
PM _{2.5}	54 (exhaust)	54	10	
PM ₁₀ /PM _{2.5} (fugitive dust)	BMPs ²	None		
Local CO	None	9.0 ppm (8-hour average), 20.	0 ppm (1-hour average)	
	Local I	Risks and Hazards		
Risks and hazards for new sources and receptors (cumulative threshold)	Same as operational thresholds	 Cancer Risk: >100 in a million (from all local sources) Non-cancer: >10.0 Hazard Index PM_{2.5}: 0.8 μg/m³ annual average (from all local sources) 	OR Compliance with Qualified Community Risk Reduction Plan	
Risks and hazards for new sources and receptors (individual project)	Same as operational thresholds	 Cancer Risk: >10.0 in a million (from all local sources) Non-cancer: >1.0 Hazard Index PM_{2.5}: 0.3 μg/m³ annual average 	OR Compliance with Qualified Community Risk Reduction Plan	
Accidental Release of Acutely Hazardous Air Pollutants				
	None	Storage or use of acutely hazardous materials located near receptors or new receptors located near stored or used acutely hazardous materials considered significant		
		Odors		
	None	Five confirmed complaints per	r year averaged over 3 years	

Source: BAAQMD 2022.

Notes:

- ¹ For construction projects that require less than 1 year to complete, emissions should be annualized over the number of days when peak emissions would occur rather than over the full year. Additionally, for phased projects that result in concurrent construction and operational emissions, construction-related exhaust emissions should be combined with operational emissions for all phases when construction and operations would overlap.
- ² PM₁₀/PM_{2.5} (fugitive dust) impacts local communities. BAAQMD strongly recommends implementing all feasible fugitive dust management practices especially when construction projects are located near sensitive communities, including schools, residential areas, or other sensitive land uses. Chapter 5, Section 5.2.2, Construction-Related Criteria Air Pollutant Emissions, in the 2022 CEQA Guidelines details these measures.

Key: $\mu g/m^3$ = micrograms per cubic meter; CO = carbon monoxide; lb/day = pound per day; NO_x = nitrogen oxides; PM₁₀ = inhalable particulate matter with an aerodynamic diameter of 10 micrometers or less; PM2.5 = fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less; ppm = parts per million; ROG = reactive organic gas; tpy = tons per year



4.3.1 Impact Analysis

Would the project:

Impact Statement III.a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The proposed project would not impact implementation of the applicable air quality plan (i.e., the Final 2017 Clean Air Plan). During construction, there would be air emissions from vehicles and equipment. However, as shown in Table 4.2, pollutant emissions would not exceed the thresholds of significance established by the BAAQMD. Therefore, construction of the proposed project would not conflict with or obstruct implementation of the Final 2017 Clean Air Plan and impacts would be less than significant. Nevertheless, construction controls would be implemented to minimize impacts to air quality (Subsection 2.3.1.1). No emissions would occur during operation of the water lines. However, during maintenance activities, there would be air emissions from vehicles and equipment. As with construction emissions, as shown in Table 4-2, operational pollutant emissions from ongoing maintenance activities would not exceed the thresholds of significance established by the BAAQMD. Therefore, operation of the proposed project would not conflict with or obstruct implementation of the Final 2017 Clean Air Plan and impacts would be less than significant.

Table 4-2 Peak Daily Criteria Pollutant Emissions from Project Construction Activities

Year	VOC (lb/day)	NO _x (lb/day)	CO (lb/day)	SO₂ (lb/day)	PM ₁₀ (exhaust) (lb/day)	PM _{2.5} (exhaust) (lb/day)
2026	3.12	25.34	30.88	0.06	1.09	1.00
2027	2.98	23.63	30.65	0.06	0.99	0.91
2028	2.37	19.72	24.69	0.06	0.72	0.66
Significance Threshold	54	54	n/a	n/a	82	54
Significant?	No	No	n/a	n/a	No	No

Key: VOC = volatile organic compound; $SO_2 = sulfur dioxide$

Impact Statement III.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?

Less than Significant Impact: Fugitive dust generation contributing to PM₁₀ is a possibility during construction. Construction controls described in Subsection 2.3.1.1 include many measures to control fugitive dust, including covering truckloads of excavated materials and periodic watering or an equivalent measure of bare dirt areas. The SWPPP would include a fugitive dust control plan and similar construction control measures as those described in Subsection 2.3.1.1. For a project to have a less than significant impact from construction-related fugitive dust emissions, the BAAQMD's BMPs must be implemented (BAAQMD 2022). Basic BMPs for construction-related fugitive dust emissions are described in Section 2.3.1, Construction Controls. Additionally, because construction would occur near schools, residential areas, and other sensitive land uses, the BAAQMD's enhanced BMPs would be required as stated in mitigation measure AQ-1 in Subsection 4.3.2.



Construction Emissions

During construction, the project would excavate a 3-foot-wide trench and place excavated material next to the trench in a work area that is approximately 30 feet wide. Once the waterline is installed, the trench would be backfilled with excavated material and compacted once segment construction is completed. The area would then be temporarily stabilized until it is repaved. Approximately 500 to 1,000 feet of trench would be under construction and open on any one day.

The BAAQMD's 2022 CEQA Guidelines provide screening criteria to determine whether a construction project would exceed criteria air pollutant emissions thresholds. The screening criteria do not apply if a project would include extensive site preparation (e.g., grading, cut and fill, or earth movement). Because construction would be completed using an open trench (cut and cover) technique, which entails extensive cut and fill, the screening criteria published in the 2022 CEQA Guidelines would not apply. Therefore, emissions were estimated using the California Emissions Estimator Model (CalEEMod) (California Air Pollution Control Officers Association [CAPCOA] 2022) and compared to the significance thresholds shown in **Table 4-1**. Project-specific information was used where available; where unavailable, default assumptions were used. **Table 4-2** shows the maximum daily emissions that would occur during construction; no operational emissions would occur.

All pollutants would be less than their respective significance threshold. Therefore, construction of the project would result in a less than significant impact on criteria air pollutants and precursors.

Operational Emissions

Operational emissions would also occur during ongoing maintenance activities. While the extent of maintenance activities is not known, it is assumed that occasional truck trips would be necessary to complete inspections and repairs of the pipeline. These trips are expected to be minor and would result in negligible emissions. Because operational emissions are expected to be minimal, emissions would be expected to be less than the significance thresholds in **Table 4-1**. Therefore, operation of the project would result in a less than significant impact on criteria air pollutants and precursors.

Impact Statement III.c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact with Mitigation Incorporated. Summer Lake Elementary School is approximately 300 feet from construction activities at the southernmost segment of the pipeline on Sandmound Boulevard. Additional sensitive receptors include residences along Sandmound Boulevard and roadways within the WPM where construction activities would occur. In addition to air quality construction controls described in Subsection 2.3.1.1, Mitigation Measure AQ-1 would be implemented to minimize impacts, and the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Additionally, approximately 2,400 feet of existing asbestos pipe would be removed during construction. Removal of the pipe would follow the requirements in BAAQMD Rule 11-2, which contains various requirements to control asbestos emissions during demolition, renovation, milling, and manufacturing. Rule 11-2-303 specifies the necessary control measures, which include either wetting all exposed RACM during cutting, stripping, demolition, renovation,



removal, and handling operations or operating a local HEPA filter exhaust, ventilation, and collection system designed and operated to capture RACM emissions. Furthermore, the BAAQMD would be notified at least 10 business days before any removal or demolition of RACM occurs using its online asbestos notification system. Compliance measures for BAAQMD Rule 11-2 are listed as construction controls in Subsection 2.3.1.1 and would be implemented during construction. Because all applicable requirements in BAAQMD Rule 11-2-303 would be followed, impacts from asbestos would be less than significant.

Impact Statement III.d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact: Paving activities during construction and maintenance activities would cause odors; however, these would be temporary and would only affect nearby residences and drivers. Odors would not affect a substantial number of people. Therefore, impacts would be less than significant.

4.3.2 Mitigation Measures

Because of the extensive earthwork (e.g., cut and fill activities during trenching), the following mitigation measures are proposed:

AQ-1: Enhanced BMPs for Construction-Related Fugitive Dust Emissions

- Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities.
- Install windbreaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Windbreaks should have a maximum of 50 percent air porosity.
- Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and water appropriately until vegetation is established.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than 1 percent.
- Minimize the amount of excavated material or waste materials stored at the site.
- Hydroseed or apply nontoxic soil stabilizers to construction areas, including previously graded areas, which are inactive for at least 10 calendar days.



4.4 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			\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?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			×	

The project area is situated in the delta ecoregion of California, which is characterized by a network of sloughs and channels formed by the hydrology of major rivers like the Sacramento and San Joaquin mixing with the saltwater of the San Francisco Bay. The resulting estuary provides key habitat for many species. However, many of the wetland islands in the ecoregion have been diked and converted into agricultural lands, where crops like corn, alfalfa, hay, and wheat are cultivated. Over time, development has also encroached on the delta, replacing much of the natural habitat with urban developments (EPA 2016). The project area is located in one of these developments, in an unincorporated community east of the City of Oakley. The project area encompasses pre-disturbed roadways with small to non-existent roadside shoulders. The project area is bordered by agrarian and suburban land uses. The areas immediately adjacent to the project area are generally sparsely vegetated, though ornamentals such as palm trees, oleanders (*Nerium oleander*), and turf grasses are planted sporadically throughout. Some native lowland species like cottonwoods (*Populus fremontii*) and willows (*Salix sp.*) can still be found along the roadways as well. Adaptive animal species such as the racoon (*Procyon lotor*), turkey vulture



(*Cathartes aura*), and western fence lizard (*Sceloporus occidentalis*) are also commonly encountered in the area (iNaturalist 2024).

Most of the project area is about 200 feet from the waterways and island matrices of the Sand Mound Slough, which connects the community to the natural delta ecosystem. These natural wetlands feature brackish and seasonally freshwater marshes with native vegetation such as tules (*Schoenoplectus acutus*), cattails (*Typha sp.*), rushes (*Juncus sp.*), and saltgrass (*Distichlis spicata*) (EPA 2016). Animal species such as salmon (*Oncorhynchus sp.*) and the river otter (*Lontra canadensis*) are known to occur in the delta. Many bird species overwinter and breed in the delta, such as the sandhill crane (*Grus canadensis*) and waterfowl like mallards (*Anas platyrhynchos*) (iNaturalist 2024). Although nearby, these natural delta wetlands do not intersect the project area. Other wetland features, described in Section 4.10, Hydrology and Water Quality, occur nearby and may provide some aquatic habitat, but similarly do not intersect the project area.

The U.S. Endangered Species Act (ESA) of 1973, 16 United States Code (U.S.C.) §§ 1531–1544, and the California Endangered Species Act (CESA) of 1984, as amended in 1997, Chapter 1.5, Sections 2050–2115.5 of the Fish and Game Code of California, provide frameworks for the conservation of endangered and threatened species and their habitats. Federal and state agencies are required to ensure that actions they fund, authorize, or carry out are not likely to jeopardize the continued existence of any listed species (including plant species) or result in the destruction or adverse modification of designated critical habitats for such species. In compliance with the ESA and CESA, a preliminary search of the CDFW California Natural Diversity Database (CNDDB) and the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) was conducted in July 2024. Based on this search, the project area has the potential to contain 30 federally and/or state-listed or candidate species, California fully protected species, or California Species of Special Concern, as described in Table 4-3 (CDFW 2024b; USFWS 2024b). Of these species, 16 have been observed within 5 miles of the project area according to CNDDB records (CDFW 2024b). Based on a desktop review of habitat conditions and species observation data, there are eight special-status species and one proposed special-status species with potential to occur in the project area: California black rail (Laterallus jamaicensis coturniculus), Swainson's hawk (Buteo swainsoni), burrowing owl (Athene cunicularia), loggerhead shrike (Lanius ludovicianus), song sparrow Modesto population (Melospiza melodia), northern harrier (Circus hudsonius), white-tailed kite (Elanus leucurus), giant garter snake (Thamnophis gigas), and northwestern pond turtle (Actinemys marmorata) (CDFW 2024b; USFWS 2024b).



Table 4-3 Federally and/or State-Listed or Candidate Species, California Protected Species, and California Species of Special Concern with Potential to Occur in the Project Area

Species Name	Special Status	Suitable Habitat	Potential to Occur**
Mammals			
San Joaquin Kit Fox (Vulpes macrotis mutica)*	Fed: Endangered CA: Endangered	Use small remnants of native habitat (i.e., annual grassland "California Prairie" and various scrub and subshrub communities with loose textured soils) interspersed with development provided there is minimal disturbance, dispersal corridors, and a sufficient prey-base.	Unlikely to occur According to CNDDB, there are no recorded observations of this species within 5 miles of the project area (CDFS 2024b). The closest CNDDB recorded occurrence of this species was 6.5 miles away (CDFW 2024b). The proposed project area does not contain suitable habitat for this species. Furthermore, the project area is outside of this species' current mapped range. Therefore, it is unlikely that this species would occur in the project area. No critical habitat has been designated for this species.
Birds	•		
California Condor (Gymnogyps californianus)	Fed: Endangered CA: Endangered	Nesting habitat consists of steep remote canyon or mountainous terrain on cliffs or rocks. Foraging habitats are generally open grasslands and oak savannas but may consist of coastal habitat where carrion is present.	Unlikely to occur According to CNDDB, no recorded observations of the species have occurred within 5 miles of the project area (CDFW 2024b). The closest observation according to CNDDB was recorded about 105 miles south of the project area at Pinnacles National Park in May 2010 (CDFW 2024b). The project area is outside the species' known range. No suitable habitat occurs within the project area. Overall, it is unlikely that the species would occur in the project area. No designated critical habitat for the species occurs within 10 miles of the project area (USFWS 2024a).
California Ridgway's Rail (<i>Rallus obsoletus</i> <i>obsoletus</i>)	Fed: Endangered CA: Endangered	Occupy tidal salt and brackish marshes with extensive vegetation around San Francisco Bay. Primarily found in coastal salt marshes and lagoons that contain pickleweed and cordgrass (<i>Spartina sp.</i>).	Unlikely to occur According to CNDDB, no recorded observations of the species have occurred within 5 miles of the project area (CDFW 2024b). The closest observation was approximately 19.5 miles west of the project area on Suisun Bay (CDFW 2024b). Although nearby small and isolated wetland areas could contain suitable habitat for the rail, suitable habitat does not occur within the project area. Therefore, it is unlikely that this species would occur in the project area. No critical habitat has been designated for this species.



Species Name	Special Status	Suitable Habitat	Potential to Occur**
California Black Rail (Laterallus jamaicensis coturniculus)	CA: Threatened	Occupy saltwater, brackish, and freshwater marshes with dense vegetation. In San Francisco Bay, the species is associated with high vegetation, abundant <i>Frankenia sp.</i> and insects, and low amphipod presence.	Could occur According to CNDDB, 10 recorded observations of the species have occurred within 5 miles of the project area (CDFW 2024b). The closest observation was 0.7 miles east of the project area in waterways that comprise suitable habitat for the species (CDFW 2024b). Because of the nearby observations and adjacent suitable habitat, the species may occur transiently near the project area. However, no suitable nesting or foraging habitat occurs within the project area. Therefore, this species could occur within or immediately adjacent to the project area. No critical habitat has been designated for this species.
Swainson's Hawk (Buteo swainsoni)*	CA: Threatened	Nesting habitat is typically a solitary tree in a small grove of trees along a stream. Sometimes nests can be found in utility structures. Foraging habitats are open prairie, grasslands, and agricultural lands, where they opportunistically perch on fence posts and irrigation spouts.	Known to occur According to CNDDB, 20 recorded observations of the species have occurred within 5 miles of the project area (CDFW 2024b). The observations include multiple nesting occurrences, the closest of which has a recorded locale that overlaps the project area (CDFW 2024b). Suitable habitat occurs within and adjacent to the project area, and suitable nesting trees may occur within and immediately adjacent to the project area. Overall, this species is known to occur within or immediately adjacent to the project area. No critical habitat has been designated for this species.
Burrowing Owl (Athene cunicularia)	CA: Species of Special Concern	Inhabit burrows in open, treeless areas within grassland, steppe, and desert biomes. In winter, sometimes take shelter in tufts of vegetation. Frequently found in areas with high densities of burrowing mammals like ground squirrels.	Could occur According to CNDDB, 31 recorded observations of the species have occurred within 5 miles of the project area (CDFW 2024b). The closest observation was 0.6 mile west of the project area (CDFW 2024b). The agrarian areas adjacent to the project area provide suitable habitat for the species. However, the project area does not provide suitable habitat for the species. Therefore, the species may nest/burrow in areas adjacent to the project area and may occur transiently within the project area. Overall, the species could occur within the project area. No critical habitat has been designated for this species.



Species Name	Special Status	Suitable Habitat	Potential to Occur**
Loggerhead Shrike (Lanius ludovicianus)	CA: Species of Special Concern	Inhabit open areas with short vegetation, scattered shrubs, or low trees, particularly those with spines or thorns. Often occur in desert scrublands, savannas, and prairies. Also found in agricultural fields, pastures, golf courses, and cemeteries. Nest in trees and shrubs or opportunistically in brush piles or tumbleweeds.	Could occur According to CNDDB, 1 recorded observation of the species has occurred within 5 miles of the project area (CDFW 2024b). This observation was 3 miles west of the project area and included notes on a nest in an ornamental tree in a residential area. The agrarian areas and street trees adjacent to the project area provide suitable habitat for the species. However, the proposed project area does not provide suitable habitat for the species. Therefore, this species may nest directly adjacent to the project area and may occur transiently within the project area. Overall, the species could occur within the project area. No critical habitat has been designated for this species.
Song Sparrow Modesto Population (Melospiza melodia)	CA: Species of Special Concern	Occur in a variety of open habitats, including tidal marshes, grasslands, scrublands, agricultural fields, forest edges, and suburbs. Nest in grasses or weeds on the ground or up to 15 feet. Generally unbothered by human activity.	Could occur According to CNDDB, 7 recorded observations of the species have occurred within 5 miles of the project area (CDFW 2024b). The closest observation was 2.2 miles northwest of the project area (CDFW 2024b). The proposed project area provides suitable habitat for the species. Therefore, the species could occur within and immediately adjacent to the project area. No critical habitat has been designated for this species.
Northern Harrier (Circus hudsonius)	CA: Species of Special Concern	Occur in large, undisturbed wetlands and grasslands with low, thick vegetation. Breed in dry uplands, old fields, and drained marshlands. Nest on the ground in dense clumps of vegetation.	Could occur According to CNDDB, 1 recorded observation of the species has occurred within 5 miles of the project area (CDFW 2024b). The closest observation was 4.9 miles northwest of the project area (CDFW 2024b). The proposed project occurs near suitable upland marsh and agrarian habitats; however, suitable nesting habitat does not occur within or directly adjacent to the project area. Any individuals occurring in the project area are expected to be transient. Overall, the species could occur within the project area. No critical habitat has been designated for this species.
White-Tailed Kite (Elanus leucurus)	CA: Fully Protected	Commonly found in open savannas, woodlands, marshes, and agricultural fields. Tend to avoid heavily grazed areas. Nest in trees growing in isolation or at the edge of or within a forest.	Could occur According to CNDDB, 3 recorded observations of the species have occurred within 5 miles of the project area (CDFW 2024b). The closest observation was 2.6 miles west of the project area in a residential area (CDFW 2024b). The project area does not contain suitable habitat for the species. However, suitable open marsh and agrarian habitats occur adjacent to the project area. Therefore, transient individuals may occur in the project area. Therefore, the species could occur within the project area. No critical habitat has been designated for this species.



Species Name	Special Status	Suitable Habitat	Potential to Occur**
Reptiles	•		
Alameda Whipsnake (Masticophis lateralis euryxanthus)*	Fed: Threatened CA: Threatened	Inhabit chaparral foothills, shrublands with scattered grassy patches, rocky canyons and watercourses, and adjacent habitats. Mostly coastal sage scrub and northern coastal scrub (for breeding), and grasslands for foraging. Use small rodent burrows, rock and soil crevices, and brush and debris piles for retreat.	Unlikely to occur According to CNDDB, no recorded observations of the species have occurred within 5 miles of the project area (CDFW 2024b). There are many recorded observations of the whipsnake in the hills and foothills of Mount Diablo south and west of the project area; the closest recorded observation of this species was 10.3 miles away (CDFW 2024b). The project area does not provide suitable habitat for the species. Overall, it is unlikely that the species would occur within or adjacent to the project area. No designated critical habitat for the species occurs within 10 miles of the project area (USFWS 2024a).
Giant Garter Snake (Thamnophis gigas)*	Fed: Threatened CA: Threatened	Occur in marshes, sloughs, ponds, small lakes, low gradient streams, and other waterways. Also found in agricultural wetlands and adjacent uplands.	Could occur According to CNDDB, 4 recorded observations of the species have occurred within 5 miles of the project area (CDFW 2024b). The closest observation was about 3.1 miles north of the project area (CDFW 2024b). Suitable habitat for this species does not occur within the project area but does occur immediately adjacent to the project area. Although no suitable aquatic or upland habitat is found within the project area, if the species is present, it may cross through the project area from adjacent suitable habitat. Therefore, the species could occur transiently within the project area. No critical habitat has been designated for this species.
Northwestern Pond Turtle (Actinemys marmorata)	Fed: Proposed Threatened	Primarily inhabits aquatic habitats including ponds, lakes, streams, and permanent and ephemeral wetlands. Also requires upland habitat for nesting that is typically characterized by sparse vegetation and short grasses/ forbs.	Known to occur According to CNDDB, 16 recorded observations of the species have occurred within 5 miles of the project area (CDFW 2024b). The closest observation was recorded in a wetland area immediately west of the project area (CDFW 2024b). This wetland area provides suitable aquatic habitat for the species. Although no suitable aquatic or upland habitat is found within the project area, if the species is present, it may cross through the project area in search of suitable upland nesting habitat. Therefore, the species is known to occur and could occur transiently within the project area. No critical habitat has been designated for this species.



Species Name	Special Status	Suitable Habitat	Potential to Occur**
California Red-Legged Frog (<i>Rana draytonii</i>)*	Fed: Threatened	Varied freshwater breeding habitats (e.g., streams, creeks, ponds, and marshes) within a matrix of riparian and upland dispersal habitats.	Unlikely to occur No recorded observations of the species have occurred within 5 miles of the project area (CDFW 2024b). The closest recorded observation of the species was about 8.5 miles south of the project area (CDFW 2024b). The project area does not provide suitable habitat for the species. Surrounding suburban and agrarian lands would be suboptimal habitat for the species. Therefore, it is unlikely that the species would occur within or immediately adjacent to the project area. No designated critical habitat for the species occurs within 10 miles of the project area (USFWS 2024a).
California Tiger Salamander Central California Distinct Population Segment (DPS) (Ambystoma californiense)*	Fed: Threatened CA: Threatened	Live in vacant or mammal-occupied burrows throughout most of the year in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding. Non-breeding habitat includes humid forests, woodlands, grasslands, coastal shrub, and streamsides. Breeding occurs in shallow freshwater ephemeral or semipermanent vernal pools and ponds that fill during heavy winter rains.	Unlikely to occur No recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). The closest recorded observation of the species was about 7.5 miles south of the project area (CDFW 2024b). The project area does not provide suitable habitat for the species. Surrounding suburban and agrarian lands would be suboptimal habitat for the species. Overall, it is unlikely that the species would occur within or immediately adjacent to the project area. No designated critical habitat for the species occurs within 10 miles of the project area (USFWS 2024a).
Western Spadefoot (Spea hammondii)	Fed : Proposed Threatened	Occur primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egglaying.	Unlikely to occur No recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). The closest recorded CNDDB observation was about 10.2 miles southeast of the project area (CDFW 2024b). The project area does not provide suitable habitat for the species. Surrounding suburban and agrarian lands would be suboptimal habitat for the species. Therefore, it is unlikely that the species would occur within or immediately adjacent to the project area. No critical habitat has been designated for this species (USFWS 2024a).



Species Name	Special Status	Suitable Habitat	Potential to Occur**
Northern California Legless Lizard (Anniella pulchra)	CA: Species of Special Concern	Found in areas with loose organic soils and plentiful leaf litter of California's coastal ranges and San Joaquin Valley into the foothills of the Sierra Nevada Mountains.	Unlikely to occur According to CNDDB, 4 recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). The closest observation was about 3 miles west of the project area (CDFW 2024b). However, the project area does not provide suitable habitat for the species. Furthermore, the surrounding residential and agrarian lands would be considered poor habitat for the species. Therefore, it is unlikely that the species would occur within or immediately adjacent to the project area. No critical habitat has been designated for this species (USFWS 2024a).
Fish			
Delta Smelt (Hypomesus transpacificus)	Fed: Threatened CA: Endangered	Occur only in the San Francisco estuary. Typical habitat areas are found in north San Francisco Bay, San Pablo Bay, and throughout the Sacramento River and its tributaries, extending to Stockton. Spawning occurs in tidally influenced backwater sloughs and channel edgewaters. Streambeds with firm or sandy substrates are necessary for egg-laying.	Unlikely to occur According to CNDDB, 4 recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). The closest observation was about 2.7 miles northeast of the project area (CDFW 2024b). The project area crosses over a small, culverted drainage way that discharges to Sand Mound Slough but does not intersect wetlands. No in-water work would occur under the proposed project. Therefore, the project area does not provide suitable habitat for the species. There it is unlikely that the species would occur within the project area. The project area is located within designated critical habitat for the delta smelt (USFWS 2024a).
Longfin Smelt (Spirinchus thaleichthys)	Fed: Proposed Endangered CA: Threatened	Found in estuaries and river deltas along the California coast. Use various habitats from nearshore waters to estuaries and lower sections of freshwater rivers. Depend on fresh and salt water for spawning and rearing.	Unlikely to occur According to CNDDB, 4 recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). The closest observation was about 1.4 miles northeast of the project area (CDFW 2024b). The project area crosses over a small, culverted drainage way that discharges to Sand Mound Slough but does not intersect wetlands. No in-water work would occur under the proposed project. Therefore, it is unlikely that the species would occur within the project area. No critical habitat has been designated for this species (USFWS 2024a).



Species Name	Special Status	Suitable Habitat	Potential to Occur**
Green Sturgeon Southern DPS (Acipenser medirostris)	Fed: Threatened	Spawn in freshwater riverine habitats, but majority of lifespan is spent in bays, estuaries, and near coastal marine environments. Spawning habitat requires cool sections of mainstem rivers in deep pools with sand, gravel, cobble, or boulder substrates.	Unlikely to occur According to CNDDB, 1 recorded observation of the species occurs within 5 miles of the project area (CDFW 2024b). The observation was about 0.4 miles east of the project area in the directly adjacent waterway (CDFW 2024b). The project area crosses over a small, culverted drainage way that discharges to Sand Mound Slough but does not intersect wetlands. No in-water work would occur under the proposed project. Therefore, it is unlikely that the species would occur within the project area. Designated critical habitat for the species occurs in the Sand Mound Slough immediately east of the project area, about 230 feet away at the closest (USFWS 2024a).
Steelhead Central Valley DPS (Oncorhynchus mykiss irideus)	Fed: Threatened	Spawn in cold freshwater rivers. Juveniles migrate to marine and estuarian waters to mature before returning to natal streams to spawn.	Unlikely to occur According to CNDDB, 1 recorded observation of the species occurs within 5 miles of the project area (CDFW 2024b). The observation was about 1.4 miles southeast of the project area (CDFW 2024b). The project area crosses over a small, culverted drainage way that discharges to Sand Mound Slough but does not intersect wetlands. No in-water work would occur under the proposed project. Therefore, it is unlikely that the species would occur within the project area. Designated critical habitat for the species occurs in the Sand Mound Slough immediately east of the project area, about 200 feet away at the closest (USFWS 2024a).
Crustaceans			
Conservancy Fairy Shrimp (Branchinecta conservatio)	Fed: Endangered	Found in relatively large, turbid freshwater vernal pools.	Unlikely to occur According to CNDDB, no recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). No vernal pools are known to occur within or immediately adjacent to the project area (CDFW 2024d). Additionally, no in-water work would occur under the proposed project. Therefore, it is unlikely for the species to occur within the project area. No designated critical habitat for the species occurs within 10 miles of the project area (USFWS 2024a).



Species Name	Special Status	Suitable Habitat	Potential to Occur**
Longhorn Fairy Shrimp (Branchinecta longiantenna)*	Fed: Endangered	Endemic to the eastern margin of the Central Coast mountains in seasonally astatic grassland vernal pools. Inhabit small, clear-water depressions in sandstone and clear-to-turbid clay/grass-bottomed pools in shallow swales.	Unlikely to occur According to CNDDB, no recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). No vernal pools are known to occur within or immediately adjacent to the project area (CDFW 2024d). Additionally, no in-water work would occur under the proposed project. Therefore, it is unlikely for the species to occur within the project area. No designated critical habitat for the species occurs within 10 miles of the project area (USFWS 2024a).
Vernal Pool Fairy Shrimp (Branchinecta lynchi)*	Fed: Threatened	Occur in vernal pools and similar ephemeral wetlands, most commonly found in grassed or mud bottomed pools or basalt flow depression pools in unplowed grasslands.	Unlikely to occur According to CNDDB, no recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). No vernal pools are known to occur within or immediately adjacent to the project area (CDFW 2024d). Additionally, no in-water work would occur under the proposed project. Therefore, it is unlikely for the species to occur within the project area. The project area is about 8.3 miles northeast of designated critical habitat for the vernal pool fairy shrimp (USFWS 2024a).
Vernal Pool Tadpole Shrimp (<i>Lepidurus</i> packardi)*	Fed: Endangered	Inhabit seasonally ponded natural and artificial features including vernal pools, swales, ephemeral drainages, stock ponds, reservoirs, ditches, backhoe pits, and vehicle ruts.	Unlikely to occur According to CNDDB, no recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). No vernal pools are known to occur within or immediately adjacent to the project area (CDFW 2024d). Additionally, no in-water work would occur under the proposed project. Therefore, it is unlikely for the species to occur within the project area. No designated critical habitat for the species occurs within 10 miles of the project area (USFWS 2024a).
Insects			
Valley Elderberry Longhorn Beetle (<i>Desmocerus</i> californicus dimorphus)	Fed: Threatened	Endemic to the Central Valley of California and only found in association with its host plant, elderberry (Sambucus spp.).	Unlikely to occur According to CNDDB, no recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). No elderberry trees are known to occur within or immediately adjacent to the project area. Therefore, it is unlikely that this species would occur within or immediately adjacent to the project area, owing to an absence of suitable habitat. No designated critical habitat for the species occurs within 10 miles of the project area (USFWS 2024a).



Species Name	Special Status	Suitable Habitat	Potential to Occur**
Western Bumblebee (Bombus occidentalis)	CA : Candidate Endangered	Require habitats with rich floral resources throughout nesting season. Nests occur mainly in underground burrows or nests made by other species (i.e., rodents or birds) in open west–southwest facing slopes bordered by trees. Some nests have been found aboveground in logs and railroad ties.	Unlikely to occur According to CNDDB, 2 recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). The closest observation was about 2.7 miles west of the project area (CDFW 2024b). However, the project area does not support suitable nesting or foraging habitat for this species and provides very low-quality dispersal habitat. Therefore, it is unlikely that this species would occur within the project area. No critical habitat has been designated for this species (USFWS 2024a).
Plants	1		
Antioch Dunes Evening-Primrose (Oenothera deltoides ssp. howellii)	Fed: Endangered CA: Endangered	Restricted to riverine dune habitat on and immediately adjacent to the Antioch Dunes.	According to CNDDB, 2 recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). The closest observation was about 3.3 miles west of the project area (CDFW 2024b). Although there are observations of the species nearby, they are within the known habitat for the primrose adjacent to the Antioch Dunes. The proposed project area does not contain suitable habitat for the species. Therefore, it is unlikely that the species would occur within the project area. No designated critical habitat for the species occurs within 10 miles of the project area (USFWS 2024a).
Large-Flowered Fiddleneck (Amsinckia grandiflora)	Fed: Endangered CA: Endangered	Occur in hilly grasslands at lower elevations. Can be found on steep, north-facing slopes in shady areas that remain moist longer than surrounding terrain. Often associated with clay-rich soil.	Unlikely to occur According to CNDDB, no recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). The proposed project area does not contain suitable habitat for the species. Therefore, it is unlikely that the species would occur in the project area. No designated critical habitat for the species occurs within 10 miles of the project area (USFWS 2024a).



Species Name	Special Status	Suitable Habitat	Potential to Occur**
Soft Bird's-Beak (Cordylanthus mollis spp. mollis)	Fed: Endangered CA: Rare	Restricted to the high to upper middle tidal marsh zones of the San Joaquin River Delta. Can be found in various soils, including peat and claysilt tidal marsh soils or mineral alluvial sediments at the margins of salt pans.	Unlikely to occur According to CNDDB, no recorded observations of the species occur within 5 miles of the project area (CDFW 2024b). The proposed project area does not contain suitable habitat for the species. Therefore, it is unlikely that the species would occur in the project area. No designated critical habitat for the species occurs within 10 miles of the project area (USFWS 2024a).

Note:

Unlikely to occur: Species is unlikely to occur in the project area due to unsuitable habitat quality and/or the species' restricted current distribution.

Could occur: Suitable habitat is available adjacent to the project area and observation(s) of the species has/have been recorded by CNDDB within 5 miles of the project area.

Known to occur: The species was observed within the project area as recorded by CNDDB.



^{*}Potentially covered under the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) (East Contra Costa County Habitat Conservancy 2007).

^{**}Potential To Occur definitions:

The Migratory Bird Treaty Act (MBTA) of 1918, as amended, 16 U.S.C. §§ 703–712, protects migratory birds and their nests, eggs, and body parts from harm, sale, or other injurious actions. The MBTA protects all native birds, including common species. USFWS identifies 24 species of migratory birds that could be present in the project area (USFWS 2024b). Species include Allen's hummingbird (*Selasphorus sasin*), California gull (*Larus californicus*), oak titmouse (*Baeolophus inornatus*), and tricolored blackbird (*Agelais tricolor*) (USFWS 2024b).

The Bald and Golden Eagle Protection Act of 1940, 16 U.S.C. §§ 668 et seq., prohibits the take, possession, sale, or other harmful action of any golden eagle (*Aquila chrysaetos*) or bald eagle (*Haliaeetus leucocephalus*), alive or dead, including any part, nest, or egg. Bald eagles occur regularly in the project vicinity, particularly in the adjacent undeveloped areas of the San Joaquin River Delta (Cornell Lab of Ornithology 2024). Golden eagles occur regularly in the region surrounding the project area, particularly in the undeveloped hills around Mount Diablo about 11 miles due southwest (Cornell Lab of Ornithology 2024). Occasionally, the golden eagle has been recorded near the project area (Cornell Lab of Ornithology 2024). Suitable nesting habitat for bald and golden eagles is not known to occur in the project area or vicinity.

4.4.1 Impact Analysis

Would the project:

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

Less Than Significant Impact with Mitigation Incorporated. The project would be conducted within existing roadways and generally would avoid modifying plant or wildlife habitat. Described in Section 4.4.2, Mitigation Measures, BIO-1, a biological survey would be conducted within 10 days prior to ground disturbance activities to determine what protected species may be present near the project area. Construction BMPs related to biological resources described in Subsection 2.3.1.2, which are already part of the proposed project, include the following.

- Construction equipment would include mufflers, installed according to factory design.
 This would limit noise disturbance to species.
- A SWPPP would be prepared and implemented with appropriate stormwater and erosion control BMPs on-site and around staging areas and stockpiles. Inspections would be conducted according to permit requirements and the SWPPP, and they would comply with monitoring and reporting requirements. This would protect adjacent wetlands from erosion and runoff pollution from construction sites.



Based on desktop review, eight special-status species and one proposed special-status species have been identified as having the potential to occur in the project area. Of these nine, the presence of two species, Swainson's hawk and northwestern pond turtle, as well as birds protected under the MBTA, necessitate the implementation of mitigation measures in addition to the existing construction BMPs. **Figure 4-4** depicts the proximity of CNDDB species observations near the project area. Project activities within or near suitable habitats may affect these species. Vegetation along the project area roadways, including trees and other plants that overhang or grow nearby, may serve as habitat for special-status birds. Activities such as vegetation trimming and noise from the project potentially could impact special-status bird species, particularly during nesting season, which occurs February through August. Additionally, the project area is near wetlands suitable for the northwestern pond turtle and giant garter snake. As mobile species, the reptiles may be found on the roadway within the project area and could be crushed by vehicles or fall into trenches. Implementation of mitigation measure BIO-4 would prevent entrapment of species during construction. Based on these findings, Subsection 4.4.2 lists mitigation measures to minimize disturbance of and harm to special-status species. With the appropriate mitigation measures and BMPs described, there would be less than significant impact, directly or indirectly, on special-status species, their habitats, and related regulations.

Impact Statement IV.b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

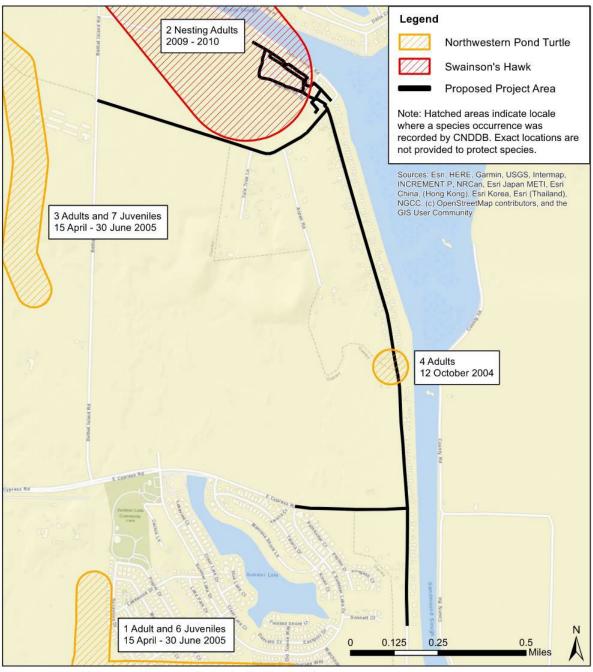
Less Than Significant Impact. A search of the USFWS Critical Habitat Mapper, National Marine Fishery Service Essential Fish Habitat Mapper, and CDFW Vernal Pools Mapper was conducted in July 2024. Based on the search, the project area is near critical or essential habitat for delta smelt (Hypomesus transpacificus), steelhead (Oncorhynchus mykiss), green sturgeon (Acipenser medirostris), and chinook salmon (Oncorhynchus tshawytscha) (USFWS 2024a; National Oceanic and Atmospheric Administration [NOAA] 2024a, 2024b). No vernal pools are known to occur in the project area (CDFW 2024d). However, the proposed project is not expected to impact riparian habitat or other sensitive natural communities. No in-water work would occur, and construction would primarily affect existing roadways in developed suburban neighborhoods. Additionally, as described in Section 4.10, Hydrology and Water Quality, construction BMPs would be implemented to prevent pollution of adjacent wetland habitat. Therefore, there would be less than significant impact on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS with implementation of standard construction controls.

Impact Statement IV.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?

Less Than Significant Impact. According to the USFWS National Wetlands Inventory Mapper, freshwater forested/shrub wetlands, freshwater emergent wetlands, riverine and lake features, and freshwater ponds occur near the project area, about 230 feet away at the shortest distance (USFWS 2024c). However, no wetlands occur within the project area. Proposed project activities would be limited to pre-disturbed roadways, and BMPs described in Section 4.10, Hydrology and



Water Quality, would prevent degradation and disturbance of nearby wetlands. Therefore, impact on wetlands would be less than significant.



Observation of Species Likely to Occur in the Project Area
Diablo Water District Sandmound Boulevard Water Systems Consolidation Project

Figure 4-4 Species Observations



Impact Statement IV.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?

Less Than Significant Impact with Mitigation Incorporated. According to the CDFW Biographic Information and Observation System Viewer, the project area is classified as having "limited connectivity opportunity" (CDFW 2024a). However, the project area is adjacent to "large natural habitat areas" and areas identified as providing essential connectivity (i.e., wildlife corridors); therefore, there is potential for resident and migratory species to occur in and around the site. Species commonly found in the project vicinity include the great egret (Ardea alba), red tailed hawk (Buteo jamaicensis), pond slider (Trachemys scripta), and desert cottontail (Sylvilagus audubonii) (iNaturalist 2024). The proposed project could interfere with the movement of resident or migratory species that attempt to pass over the roadways and suburban neighborhoods in the project area during construction activities. With adherence to the mitigation measures BIO-1 and BIO-2 discussed in Subsection 4.4.2, construction would comply with buffer zone and seasonal limitations adjacent to environmentally sensitive areas in accordance with the ESA and CESA. Construction workers would be educated on the specialstatus species that may occur in the project vicinity according to mitigation measure BIO-3 described in Subsection 4.4.2. This would allow workers to identify species so they would know when to stop work and allow animals to pass through the construction area unharmed. Activities would also comply with the Bald and Golden Eagle Protection Act and MBTA, including requirements to conduct required field surveys before construction during nesting season. During the February through August nesting season, birds are particularly sensitive to noise disturbance and construction activities could cause birds to abandon nests. Mitigation measures BIO-1 and BIO-2 would limit disturbance during sensitive seasons and BIO-3 and BIO-4 would help prevent species from entering construction sites. Thus, a less than significant impact with mitigation incorporated on wildlife movement is anticipated.

Impact Statement IV.e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact. The City and County have street tree ordinances (City of Oakley 2024; Contra Costa County 2024a). Disturbance to trees, their root systems, and vegetation would be avoided during construction. However, some vegetation does grow alongside the roadways in the project area and some trees may need to be trimmed as needed to allow room for construction equipment access to trench. Root disturbance may also occur, but no tree removal is anticipated. The City of Oakley Street Tree Ordinance (Chapter 6, Section 13) requires the issuance of a permit from the Public Works Department for planting, significant pruning, or removing a street or city tree. The Contra Costa County Tree Protection and Preservation Ordinance (Chapter 816-6) requires the issuance of a permit for the removal, destruction, topping, or cutting down of a protected tree or for trenching, grading, or filling within the dripline of any protected tree. A tree's protection status is determined by its characteristics, such as trunk size and species, as well as the attributes of the property on which it is situated. Any tree disturbance would conform with the City and County tree preservation ordinances. Therefore, less than significant impact concerning local policies or ordinances is anticipated.



Impact Statement IV.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?

Less Than Significant Impact. CDFW administers the National Community Conservation Plan program, which began in 1991 under California's Natural Community Conservation Planning Act. It is a cooperative effort between resource agencies and developers that takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. USFWS administers the HCPs, which are designed to identify how impacts would be mitigated when a project would impact endangered species or designated critical habitat. The project area is located within the East Contra Costa County HCP/NCCP (CDFW 2024c). The East Contra Costa County HCP/NCCP covers certain species and project types in eastern Contra Costa County (East Contra Costa County Habitat Conservancy 2007). Construction of new utilities in existing roadways outside HCP/NCCP preserves is covered under the plan. Species covered therein include the San Joaquin kit fox, golden eagle, Swainson's hawk, Alameda whipsnake, giant garter snake, California tiger salamander, California red-legged frog, longhorn fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp. Coverage under the HCP/NCCP is not automatic. The project would be required to apply for coverage under the HCP/NCCP and incorporate the appropriate mitigation protocols as required by the plan.

The Bay Area Conservation Lands Network (BACLN) is a regional conservation strategy for the San Francisco Bay Area. BACLN focuses on acquiring and managing land that is important for conservation and represents the region's biodiversity and supports ecological function. BACLN designates areas within the region that are essential, important, and contribute to conservation goals and areas that ensure a connected network. The direct project area overlaps lands designated as important and contribute to conservation goals (BACLN 2024). Additionally, the project area is adjacent to land that is classified as essential to conservation goals (BACLN 2024). However, the project would not affect natural lands. Project activities would be limited to existing roadways and would not conflict with BACLN conservation goals. Therefore, there would be no significant impact to the BACLN.

4.4.2 Mitigation Measures

Because of the potential for construction related noise and vegetation trimming to disturb special-status birds, the following mitigation measures are proposed:

■ BIO-1 Measures to Minimize Impacts on Listed Raptors: For construction activities that occur between February 1 and August 31, a qualified biologist shall conduct preconstruction surveys for listed raptor species such as bald and golden eagles, Swainson's hawks, northern harriers, burrowing owls, and white-tailed kites no more than 10 days before ground disturbance. The preconstruction surveys shall include the proposed project footprint and a minimum of a 0.50-mile radius where access is permitted around the construction area in suitable nesting habitats (i.e., large trees for Swainson's hawk, white-tailed kite and bald eagle; cliff faces for golden eagle; and grasslands for northern harrier and burrowing owl). The preconstruction surveys shall be phased based on the construction schedule.



If nesting listed raptors are detected, a no-disturbance buffer (minimum of 250 feet for burrowing owl, 500 feet for northern harrier and white-tailed kite, 0.50 mile for bald eagle, golden eagle, and Swainson's hawk) shall be established and monitored daily by a qualified biologist. Buffers shall be maintained until a qualified biologist has determined that the young have fledged and are no longer reliant on the nest or parental care for survival. A 0.5-mile no-disturbance buffer also shall be maintained from any overwintering bald or golden eagles if they are detected in the project area or surrounding areas; the buffer shall be maintained for the duration that the bird(s) is(are) present. If any bald eagles or golden eagles are detected, DWD shall coordinate with USFWS, as necessary, to comply with the Bald and Golden Eagle Protection Act.

If maintaining the minimum no-disturbance buffer around an active listed raptor nest (or any overwintering eagles) is not practicable, CDFW shall be consulted to determine whether reduced minimum no-disturbance buffers are appropriate based on site-specific circumstances or to identify alternative measures to minimize the potential for project-related disturbance to the nest site that could result in nest abandonment or other forms of take. Measures may include, but are not limited to, continuous biological monitoring by a qualified biologist and delaying construction activities near the active nest site until the young have fledged. If the nesting pair shows signs of distress (e.g., adults leaving the nest when eggs or young chicks are present) because of project-related activities, the monitoring biologist shall have authority to stop work until it is determined that the adults have returned and are no longer showing signs of distress.

If the trees proposed for trimming are being used as nest sites by listed raptors, consultation with CDFW shall take place. If consultation with CDFW results in a determination that take of an active nest cannot be avoided, then either all activities that are likely to result in take shall be delayed until a qualified biologist has determined that the young have fledged and are no longer reliant on the nest or parental care for survival, or, take authorization pursuant to CESA shall be obtained from CDFW prior to initiation of any activities that are likely to result in such take.

BIO-2 Measure to Minimize Impacts on Nesting Birds: To the extent practicable, vegetation trimming will be scheduled to avoid the breeding season for nesting raptors and other special-status birds (generally February 1 through August 31, depending on the species). Trimming of vegetation outside of the nesting season is intended to minimize the potential for delays in construction because of active nests.

Regardless of when vegetation trimming is scheduled, a qualified biologist will conduct a minimum of one preconstruction survey for nesting migratory birds and raptors within the project area and a buffer (250 feet for migratory birds, 500 feet for non-listed raptors) around the project area (where accessible) for all construction-related activities that shall occur during the nesting season. The preconstruction survey(s) shall be conducted no more than 15 days before starting construction in a given area and shall be phased based on the construction schedule. Because of the ongoing, phased approach to construction, multiple preconstruction surveys per year may be required.



If vegetation trimming occurs during the breeding season and an active nest is found, a construction-free buffer zone (250 feet for migratory birds, 500 feet for non-listed raptors) shall be established around the active nest site. If establishment of the construction-free buffer zone is not practicable, appropriate conservation measures (as determined by a qualified biologist) shall be implemented. These measures may include, but are not limited to, consultation with CDFW to establish a different construction-free buffer zone around the active nest site, daily biological monitoring of the active nest site, and delaying construction activities near the active nest site until the young have fledged.

Because of the potential for construction activities to crush or entrap terrestrial species, the following mitigation measures are proposed (based on Sacramento Fish and Wildlife Office's Programmatic Biological Opinion on FEMA's Disaster, Mitigation, and Preparedness Programs in California (USFWS 2019)):

- BIO-3 Environmental Awareness Training for Construction Personnel: All construction personnel shall be given environmental awareness training by the project's environmental inspector or biological monitor before the start of construction. The training shall familiarize all construction personnel with the covered species that may occur on-site, their habitats, general provisions and protections afforded by the CESA/ESA, measures to be implemented to protect these species, and the project boundaries. This training shall be provided within 3 days of the arrival of any new worker. As part of the environmental awareness training, construction personnel shall be notified that no dogs or any other pets under control of construction personnel shall be allowed in the construction area.
- **BIO-4 Entrapment Prevention:** To prevent entrapment of covered species, all vertically sided holes or trenches shall be covered at the end of the workday or have escape ramps built into the walls of the excavation. If pipes are stored on-site or in associated staging areas, they shall be capped when not in use. Construction materials that have the potential to entangle or entrap wildlife shall be properly contained so that wildlife cannot interact with the materials. If a covered species is identified on-site, crews shall stop work immediately within 50 feet of the individual and inform the construction supervisor and the CDFW-approved biologist. Work shall not continue within 50 feet of the individual until it has traveled off the project site of its own volition.



4.5 Cultural Resources

Waiting for	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESORCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?		×		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		×		
c) Disturb any human remains, including those interred outside of formal cemeteries?		×		

California Code of Regulations (CCR) Section 15064.5(a) establishes the basis for determining the significance of cultural resources. Under CEQA, the basis for defining the significance of cultural resources is found under Public Resources Code (PRC) Section 5024.1 and 14 CCR Section 4850 et seq. The CEQA *Guidelines* define a "historical resource" as: (1) a resource listed in the California Register of Historical Resources (CRHR); (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k), or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

The CRHR was established to identify the state's historical resources and indicate which properties are to be protected, to the extent prudent and feasible, from substantial adverse change. Cultural resources may be listed in the CRHR if they meet eligibility as defined under PRC Section 5024.1 According to CEQA *Guidelines* Section 15064.5(a)(3), a resource will generally be considered by the lead agency as "historically significant", thus a historical resource per CEQA, if the resource possesses integrity and meets at least one of the following criteria for listing in the CRHR:

- 1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California's history or the United States; or
- 2. It is associated with lives of persons important to local, California, or national history; or
- 3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or
- 4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.



Crucial to the argument of eligibility is the "integrity" of a resource.

CEQA *Guidelines* state that when a project would impact a cultural resource, the lead agency should first determine whether the resource represents a historical resource eligible for listing in the CRHR as defined above or if the resource meets the definition of a "unique archaeological resource" under PRC Section 21083.2(g).

A "unique archaeological resource" refers to an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

- contains information needed to answer important scientific research questions, and there
 is a demonstrable public interest in that information;
- has a special and particular quality such as being the oldest or best available example of its type; or,
- is directly associated with scientifically recognized important prehistoric or historic event or person."

If a unique archeological resource could be damaged by a project, the lead agency may require certain conditions to permit the resources to be preserved in place or left undisturbed. Typical measures that may be used include avoidance of the sites; deeding sites into permanent conservation easements; capping or covering with soil before building on the sites; planning parks, greenspace, or other open space to incorporate archaeological sites (CCR Title 14, Section 15000 et seq.).

Adverse impacts to cultural resources determined to be CRHR-eligible must be mitigated, to the extent prudent and feasible, prior to conducting project activities that might affect those qualities that render it eligible for listing in the CRHR. Cultural resources determined not eligible for listing in the CRHR require no further management consideration.

An Archeological Survey Report (ASR) for the Project has been prepared by Pacific Legacy, Inc. (Pacific Legacy) on behalf of DWD (Pacific Legacy 2024). The purpose of the investigation was to identify Native American or historic period resources within the Project Area of Direct Impact (ADI) that could be adversely affected by construction related activities. The report provides information about the physical and cultural context of the Project area; methods and findings of the archival and records searches; results of records searches and Native American outreach; pedestrian survey results; and a summary of findings and recommendations.

The ASR includes the results of environmental, ethnographic, precontact, and historic period data for the Project Area. An archival and records search was conducted through the California Historical Resources Information System (CHRIS) at the Northwest Information Center (NWIC). The CHRIS search revealed that the entire ADI has been previously surveyed with 6 overlapping studies and 18 other studies that have been conducted within the surrounding 0.25-to-0.5-mile radius. These studies identified 39 cultural resources within a 0.25-to-0.5-mile radius of the ADI, including 7 precontact Native American sites, 31 historic period sites, and 1 multicomponent site; no cultural resources were previously identified within the ADI. Most of the 39 sites have been



evaluated for listing in the National Register of Historic Places (NRHP), the CRHR, or local designation.

Four previously recorded resources have been determined to be eligible for the NRHP and 32 were determined ineligible. Three of the resources have not been evaluated. Seven of the 39 previously recorded resources were archaeological sites that included Native American human remains. Three of the seven sites are NRHP eligible, one site has been determined eligible or assumed eligible, two sites have been recommended not individually eligible for the NRHP/CRHR, and one site has not been evaluated.

Thirty-one of the 39 resources are historic resources (built environment) including single family residences, buildings and structures, ranch complexes, a bridge, levees, power lines, a gas well, and two historic period ranch sites with archaeological components. All but the one multicomponent site have been evaluated and determined not eligible for the NRHP or CRHR. Of these, eight are listed on the Contra Costa County Built Environment Resource Directory (BERD). These built environment resources consist of three single family residences, three one-story structures, the Hotchkiss Tract Levee, and a resource with three buildings with a wharf. Details about the resources are provided in the ASR (Pacific Legacy 2024).

Communication with the Native American Heritage Commission (NAHC) has been initiated. A Sacred Lands File (SLF) search and a current Native American tribal representative contact list was requested on July 2, 2024. The NAHC responded that results of the SLF search were positive for known cultural resources within the ADI and provided a list of 37 Native American individuals or tribal representative with knowledge of cultural resources within the Project vicinity (Pacific Legacy 2024). A letter was sent to each tribal representative in compliance with best practices and, in the case of some tribes, Assembly Bill (AB) 52 consultation requirements. DWD is keeping a record of this communication as described in Section 4.18, Tribal Cultural Resources.

A pedestrian inventory of the ADI was conducted on August 27, 2024, by Pacific Legacy, and no new resources, features, or artifacts were identified during the survey. Most of the ground is covered by asphalt which obscures the ground surface within the ADI.

4.5.1 Impact Analysis

Would the project:

Impact Statement V.a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less Than Significant Impact with Mitigation Incorporated. According to Section 15064.5 of the CEQA *Guidelines*, a project could cause a substantial adverse change in the significance of a historic resource through demolition, destruction, relocation, or alteration of the resource or its immediate surroundings that would materially impair the historic resource.

No historical resources have been identified within the ADI. Archival research identified numerous cultural resources within the vicinity of the ADI, including a series of Native American Mounds containing burials and human remains. These resources are not within the Project area



and would not be impacted by ground disturbance. However, there may be unknown historical resources that could be impacted during excavation and grading activities.

The findings determined that there is a moderate to high potential for cultural recourse to be present within undisturbed and disturbed native soils within the ADI during construction. There would be no impact to cultural resources from operation of the Project. Resources discovered in disturbed areas would not be considered eligible for the CRHR; however, the discovery of human remains would be significant and would require mitigation measures described in subsection 4.5.2, Mitigation Measures. Incorporation of mitigation measures CR-1, CR-2, and CR-3 would reduce potentially significant impacts to historical resources pursuant to CEQA *Guidelines* Section 15064.5 to a less than significant impact.

Impact Statement V.b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant Impact with Mitigation Incorporated. There are no known archeological resources within the ADI however there are known resources within the 0.25-to-0.5-mile radius of the ADI. These resources are not within the Project area and would not be impacted by ground disturbance. However, there may be unknown archeological resources underground that could be impacted during excavation and grading activities. Archival research identified many resources within the vicinity of the ADI, including a series of Native American mounds containing burials and human remains.

The findings determined that there is a moderate to high potential for cultural recourse to be present within undisturbed and disturbed native soils within the ADI. The archaeological sensitivity for project elements that would encounter disturbed soils is low for intact archaeological deposits and features with the potential for disturbed archaeological soils, materials, and human remains. Human remains and associated or unassociated funerary objects discovered in disturbed areas could potentially be considered to be a significant archaeological resource and would require mitigation measures described in Section 4.5.2, Mitigation Measures, if encountered. Incorporation of mitigation measures CR-1, CR-2, and CR-3 would reduce potentially significant impacts to archeological resources pursuant to Section 15064.5 to a less than significant impact.

Impact Statement V.c) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact with Mitigation Incorporated. Archival research identified seven resources within the vicinity of the ADI that contain human remains. These resources are not within the Project area and would not be impacted by ground disturbance. As stated above, there is a moderate to high potential for the discovery of human remains, which would be significant and require mitigation measures described in Section 4.5.2, Mitigation Measures. Incorporation of mitigation measures CR-1, CR-2, CR-3, and CR-4 would reduce potentially significant impacts to human remains to a less than significant impact.



4.5.2 Mitigation Measures

Because of the potential for the discovery of cultural resources and potential impacts to cultural resources during construction, the following mitigation measures shall be implemented during construction.

- **CR-1 Construction Worker Training**: A Workers Environmental Awareness Training program (WEAP) shall be prepared and provided to construction personnel prior to the start of ground disturbing activities. The program shall include the preparation of a WEAP manual that details archaeological sensitivity of the general area, legal requirements relating to the protection of cultural and tribal cultural resources, review of the types of artifacts and features that may be encountered, and information about procedures to follow should construction activities inadvertently encounter potential archaeological materials, features, or deposits. A qualified archeologist would also address identification and treatment of isolated finds. A WEAP manual and Tear Sheet shall be provided to crew that include the protocols to follow and contact information for notifications in the event of the discovery of a potential archaeological resource. Training shall be repeated as needed as new work crews are added to the Project.
- **CR-2 Construction Monitoring:** A qualified archaeological monitor and, depending on the results of tribal consultation, a tribal cultural resource monitor shall be present to observe construction activities that include ground disturbance of disturbed or undisturbed native soils. In the event of an inadvertent discovery of archaeological deposits or features, work within 50 feet of the discovery shall halt until a qualified archaeologist and/or tribal cultural resource monitor has evaluated the find in accordance with CEQA *Guidelines* Section 15064.5. If the find is determined to be a historical or unique archaeological resource, appropriate mitigation of the adverse impacts to the resource shall follow the guidelines in the Archaeological Monitoring and Inadvertent Discovery Plan (mitigation measure CR-3). The preferred option is avoidance; however, if avoidance is not possible, other options may include data recovery excavations as identified in the Archaeological Monitoring and Inadvertent Discovery Plan.
- Discovery Plan shall be prepared to guide monitoring and inadvertent discoveries during construction. The plan shall include guidance for archaeological monitoring, procedures to follow in the event of a discovery, communication protocols, evaluation of a discovery for CRHR eligibility, and actions to address the adverse impacts, reporting, collection, and curation. If subsurface testing and/or data recovery are determined to be required, such activities shall not occur without first coordinating with tribes who requested such coordination during the CEQA tribal consultation process. The plan shall also address special procedures to be followed for treatment of human remains.



• CR-4 Discovery of Human Remains: Human remains and associated or unassociated funerary objects shall be treated in accordance with California state law (Section 7050.5 of the Health and Safety Code, and Sections 5097.94 and 5097.98 of the PRC). State law (PRC Section 5097) stipulates that if human remains are encountered during construction, work in the area of the find must halt, the find must be protected in place, and the Coroner must be immediately notified. Human remains include articulated (whole) skeletons or isolated bones (e.g., skull, long bones, and phalanges). If the Coroner has reason to believe that the human remains are those of a Native American individual, the Coroner is required by law to contact the NAHC within 24 hours of this determination. The NAHC will appoint a Most Likely Descendant (MLD), who will inspect the remains and make recommendations to DWD for the treatment and disposal of, with appropriate dignity, the human remains and any associated grave goods within 48 hours of being granted access to the site (PRC Section 5097.98). If subsurface testing and recovery are required, such activities shall not occur without first coordinating with tribes who requested such coordination during the CEQA tribal consultation process.

DWD shall make all reasonable efforts to develop an agreement with the MLD for the treatment of human remains and associated or unassociated funerary objects (PRC 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. If DWD and the MLD are unable to come to an agreement on the disposition and treatment of human remains, state regulations shall be followed including the reinterment of the human remains and associated burial objects with appropriate dignity on the property in a location not subject to further disturbance (PRC Section 15064.5(e)(2)(C)).

4.6 Energy

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



4.6.1 Impact Analysis

Would the project:

Impact Statement VI.a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Impact. During construction and maintenance activities during operations, energy resources, primarily in the form of diesel fuel and gasoline, would be needed to provide power for construction and maintenance equipment as well as worker, vendor, and haul trips. Electricity would be needed for a temporary on-site construction office and may be used for electric construction equipment, tools, and vehicles. The proposed project would not result in substantial waste or inefficient use of energy. Several of the construction controls aimed at reducing air quality impacts and greenhouse gas emissions would also increase energy efficiency. For example, construction and maintenance controls would be implemented to limit equipment use only when needed, including limitations on equipment and vehicle idling. Moreover, the construction contractor would be required to conform with state and federal efficiency standards for cars, trucks, medium- and heavy-duty engines and construction equipment, as well as idling limits for construction equipment required by CARB's *In-Use Off-Road Diesel-Fueled Fleets Regulation*.

Construction-related energy expenditures would be relatively small and temporary in nature, lasting only the duration of project construction. Additionally, construction activities would be scheduled to occur during daylight hours, minimizing the need for electric lighting at the project site. Similarly, limited energy would be required during operations, primarily related to periodic maintenance activities.

For the aforementioned reasons, the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operations and impacts would be less than significant.

Impact Statement VI.b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The project would comply with the state's plan for renewable energy or energy efficiency. All equipment used during construction and maintenance would comply with state requirements to reduce the use of gas-powered equipment, resulting in a less than significant impact for conflicts with the state's plan for renewable energy and energy efficiency.

4.6.2 Mitigation Measures

Based on the impacts analysis for energy above, no mitigation measures would be required.



4.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS: Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			\boxtimes	
ii) Strong seismic ground shaking?			\boxtimes	
iii) Seismic-related ground failure, including liquefaction?			×	
iv) Landslides?				×
b) Result in substantial soil erosion or the loss of topsoil?			×	
c) Be located on a geological 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 geological feature?		×		

4.7.1 Impact Analysis

Would the project:

Impact Statement VII.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?



Less Than Significant Impact. According to the California Department of Conservation, California Geological Survey (CGS) California Earthquake Hazards Zone Application (EQ Zapp), the project area is not within the CGS Alquist-Priolo Fault Zone (CGS 2024). However, the nearest fault zones are about 15.5 miles southwest and 23 miles west, and the project area is in a seismically active region. The new pipeline would be built in compliance with the most up-to-date construction codes, including the California Building Code and City of Oakley Building Code, which would minimize potential impacts to the greatest degree feasible. The project would result in a less than significant impact related to substantial adverse effects or rupture of a known earthquake fault.

ii) Strong seismic ground shaking?

Less Than Significant Impact. The project area is in a seismically active area, and there is a high potential for the project site to experience strong seismic ground shaking or earthquakes from local or regional faults. Like other projects in the tectonically active Northern California region, the proposed project would likely experience shaking effects from nearby faults during seismic events. Incorporation of emergency planning and compliance with current construction design codes would minimize damage resulting from a seismic event (Shannon & Wilson 2024). The project would not construct any buildings and all new water pipelines would be located underground. Thus, impacts due to strong seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction is a phenomenon that occurs when soil transforms from a solid state to a liquefied condition because of the effects of increased pore-water pressure. This typically occurs where susceptible soils (e.g., medium sand, silt) are over a high groundwater table. Affected soils lose all strength during liquefaction and infrastructure damage, such as failure of structure foundations, which can occur. The project area is in a liquefaction zone according to CGS EQ Zapp; therefore, seismic-related ground failure, including liquefaction, at the project site was evaluated by a geotechnical investigation for the project (CGS 2024; Shannon & Wilson 2024). The geotechnical investigation found that liquefaction is a moderate risk for the project area and recommended that engineers consider liquefaction-induced settlement when designing plans, particularly at lateral connections (Shannon & Wilson 2024). The design considerations being implemented to minimize potential seismic-related impacts include enhanced joints and connections, restrained joints and thrust blocks, and replacement of about 13,000 linear feet of marsh soil to stabilize the pipe, which would be laid at a depth of 8 feet. Therefore, there would be a less than significant impact to geology and soils from seismic-related ground failure including liquefaction.

iv) Landslides?

No Impact. The project area is in a residential coastal area that is predominantly flat with no significant slopes nearby. Additionally, according to the CGS Earthquake Zones of Required Investigation interactive map, the area is not in a CGS landslide zone (CGS



2024). Therefore, the likelihood for landslides at the project site is nonexistent. Thus, there would be no impact associated with landslide risk.

Impact Statement VII.b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Construction activities at the project site would involve excavation and grading activities, which would disturb soils and could cause erosion. However, most of these activities would take place within existing paved roads in developed areas. The proposed project would implement construction controls and erosion and sediment control BMPs as described in Subsection 2.3.1.3, Geology and Soils, and Subsection 2.3.1.6, Hydrology and Water Quality. Additionally, a SWPPP would be prepared that would include measures to prevent sediment and runoff from entering nearby waterways and wetlands while also controlling soil erosion and topsoil loss during construction. With adherence to the SWPPP and required construction controls and BMPs, potential erosion-related impacts during construction and maintenance operations would be less than significant.

Impact Statement VII.c) Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. As noted previously, the project area is within a liquefaction zone. Liquefaction could lead to ground settlement and lateral spreading. Lateral spreading could damage the proposed underground utilities. Additionally, the project area is founded on weak marshland deposits (Shannon & Wilson 2024). Marsh soils are highly compressible and could cause significant differential settlement of the proposed pipeline. The geotechnical investigation for the project recommends setting the proposed pipeline 8-feet below grade beneath marsh soils, or, if not possible, removing marsh soils and replacing them with mineral soil fill. Additionally, low-strength concrete or aggregate base backfill combined with trench dams is recommended for trench backfill. These measures would stabilize the proposed pipeline and reduce differential settlement, though design should anticipate movement, particularly at lateral connections. The project design would include the recommended design measures and the impact to geology and soils because of landslides, lateral spreading, subsidence, liquefaction, or collapse would be less than significant.

Impact Statement VII.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?

Less Than Significant Impact. Expansive soils generally result from specific clay minerals that expand when saturated and shrink in volume when dry. The project area is in a liquefaction zone and much of the existing on-site soils consist of marshland peat with underlying sandy mineral soils (Shannon & Wilson 2024). These geologic deposits within the project area are generally not considered particularly expansive but are highly compressible, and areas where some clays were discovered could be expansive. Impacts resulting from expansive soils are expected to be controlled through incorporation of modern construction engineering and safety standards and compliance with current building regulations and engineering standards. Therefore, the risks and impacts associated with expansive soils would be less than significant.



Impact Statement VII.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?

No Impact. The proposed project would not involve the installation or modification of septic tanks or alternative wastewater disposal systems. The proposed project does not include structures or buildings. Therefore, no impact would occur.

Impact Statement VII.f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Less Than Significant Impact with Mitigation Incorporated. There are no unique geological features in the project area. The proposed project would include new ground disturbance in existing paved roadways and reach a maximum depth of approximately 8 feet. All construction activities would occur in pre-disturbed areas. Therefore, significant paleontological resources are not expected to be present in the project area and project construction is not anticipated to destroy a unique paleontological resource. To lessen impacts, the project would incorporate mitigation measure GEO-1, which includes stopping construction in the area of the find and contacting a paleontological expert to determine the appropriate course of action to either protect the resource or remove the resource for preservation if discovery of paleontological resources occurs. Therefore, the impact would be less than significant with mitigation incorporated.

4.7.2 Mitigation Measures

Because of the potential for inadvertent discovery of paleontological resources, the following mitigation measure is proposed:

■ **GEO-1: Inadvertent Discovery.** If inadvertent discovery of paleontological resources during construction occurs, the contractor shall stop construction in the area of the find and contact a paleontological expert to determine the appropriate course of action to either protect the resource or remove the resource for preservation.

4.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\boxtimes	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			\boxtimes	



4.8.1 Impact Analysis

Would the project:

Impact Statement VIII.a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. The construction period would occur from approximately July 2026 to May 2028 (480 working days) and would involve only a few pieces of equipment operating at one time. The emissions from the proposed project would primarily be a one-time impact because the project would not create any permanent, long-term greenhouse gas (GHG)-emitting facilities, though minor GHG emissions would occur during routine maintenance. The BAAQMD has not established a quantitative threshold to determine the significance of construction-related GHG emissions. However, its 2022 CEQA Guidelines recommend quantifying and disclosing construction-related GHG emissions. **Table 4-4** summarizes construction-related GHG emissions.

Table 4-4 Annual Greenhouse	Fac Emissions from Project	Construction Activities
Table 4-4 Annual Greenhouse	Jas Emissions mom Project	Construction Activities

Year	CO ₂ (metric tons/year)	CH₄ (metric tons/year)	N₂O (metric tons/year)	CO₂e¹ (metric tons/year)
2026	268	0.01	<0.01	269
2027	808	0.03	0.01	813
2028	118	<0.01	<0.01	119
Total ²	1,195	0.05	0.02	1,202

Key: CH_4 = methane; CO_2 = carbon dioxide; CO_2 e = carbon dioxide equivalent; N_2O = nitrous oxide Notes:

Additionally, the BAAQMD recommends incorporating BMPs to reduce GHG emissions. Some of the construction controls identified in Subsection 2.3.1.1, Air Quality, and 2.3.1.4, Greenhouse Gas Emissions, would be implemented to reduce GHG emissions: maintaining equipment according to manufacturers' specifications, minimizing idling times, encouraging worker carpooling, and use of renewable diesel fuels. The project would have a less than significant impact related to GHG emissions.

Impact Statement VIII.b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The County adopted its current Climate Action Plan in 2015 and is in the process of developing an updated Climate Action Plan (Contra Costa County 2015). The Contra Costa Climate Action Plan does not specifically address GHG issues related to construction and operation of the project. DWD adopted Regulation No. 11 Carbon Neutrality, which also does not specifically address GHG issues related to construction and operation of the project (DWD 2021). No long-term emissions would occur because of the proposed project, and only short-term construction emissions and periodic emissions from maintenance activities would occur.



 $^{^{1}}$ CO₂e emissions estimated using global warming potentials (GWPs) from the Intergovernmental Panel on Climate Change's Sixth Assessment Report (AR6) (CH₄ = 27 and N₂O = 273).

² Totals may not add exactly because of rounding.

Therefore, the project would not conflict with an applicable plan, policy, or regulation for the purposes of reducing GHG emissions, and impacts would be less than significant.

4.8.2 Mitigation Measures

Based on the impacts analysis for GHG emissions, no mitigation measures would be required.

4.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS: Would the pro	ject:			
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
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?			\boxtimes	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			\boxtimes	
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 evaluation plan?				
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			\boxtimes	

4.9.1 Impact Analysis

Would the project:

Impact Statement IX.a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. Agencies such as EPA, California Department of Toxic Substances Control (DTSC), Occupational Safety and Health Administration, and the East Contra Costa County Fire Protection District regulate the storage, handling, and disposal of hazardous materials. The



California Highway Patrol and Caltrans are responsible for enforcing regulations related to the transportation of hazardous materials on local roadways. Project construction activities would involve the transport, storage, use, and disposal of hazardous materials such as petroleum, hydrocarbons, and their derivatives (e.g., gasoline, diesel, oils, and lubricants) that are used routinely during construction activities. These types of materials are not acutely hazardous, and their transport, storage, handling, and disposal are strictly regulated.

Construction of the proposed project would involve removing a 6-inch asbestos cement pipe, which would necessitate specific construction controls to protect workers and the public from airborne asbestos particles. Notification to the BAAQMD is required if the removal involves 100 linear feet or more of asbestos piping. Construction controls described in Subsection 2.3.1.5, Hazards and Hazardous Materials, would be implemented. The removed asbestos piping would be disposed of at an approved facility, according to applicable laws and regulations. To meet the County's goal of reducing trash in waterways to zero by 2025, BMPs would be implemented to contain and prevent construction waste from entering waterways. Asbestos, classified as a "non-RCRA" (Resource Conservation and Recovery Act) hazardous waste in California, must be handled and packaged following federal and state air quality regulations and disposed of at a hazardous waste facility (DTSC 2006).

All hazardous materials used during construction of the proposed project would be used, stored, transported, and disposed of in compliance with applicable requirements. Such compliance would reduce the potential for the project to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Operation of the proposed project is not anticipated to involve the transport or use of substantial quantities of hazardous materials such that a significant hazard to the public or environment would occur. Small quantities of hazardous materials associated with maintenance activities may be used on-site. Therefore, the proposed project would have less than significant impact to the public or the environment through the routine transport, use, or disposal of hazardous materials

Impact Statement IX.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?

Less Than Significant Impact. The proposed project would involve ground disturbance associated with activities such as site preparation, excavation, pipeline installation, and roadway repair. As discussed above, construction activities would require the use and transport of hazardous materials such as asphalt, paints, and other solvents and the use of equipment that contains oil, gas, or hydraulic fluids that could be spilled during normal usage or during refueling. Quantities would be small, and routine construction practices would include measures to prevent/contain/clean up spills and contamination from fuels, solvents, concrete wastes, and other waste materials. Construction controls described in Subsections 2.3.1.5, Hazards and Hazardous Materials, and 2.3.1.6, Hydrology and Water Quality, would be implemented. Spill prevention and cleanup procedures for the proposed project would be addressed in a SWPPP implemented by the construction contractor. The SWPPP would define actions to minimize the potential for spills, including the proper storage of materials, perimeter control measures, and use of appropriate waste disposal practices, such as leak-proof containment. The SWPPP also



would provide efficient responses to spill events (i.e., locate the release quickly, prevent further releases, contain release, clean up) to minimize the magnitude of the spill and extent of impacts. During construction, the contractor would be required to comply with California Water Code Sections 13271 and 13272, which require that the California Office of Emergency Services (Cal OES) be notified in the event of a discharge in or on any waters of the state. Implementation of such construction provisions would minimize the potential for an accidental release of hazardous materials during construction activities and ensure that the public or the environment would not be exposed to a significant hazard.

The proposed project would involve removing 2,400 linear feet of 6-inch asbestos cement pipe, which would necessitate specific mitigation measures and construction controls to protect workers and the public from airborne asbestos particles. Notification to the BAAQMD is required if the removal involves 100 linear feet or more of asbestos piping. EPA does not regulate asbestos as hazardous waste under the RCRA; therefore, it is classified as a "non-RCRA" hazardous waste in California. Asbestos must be handled and packaged following federal and state air quality regulations and disposed of at a hazardous waste facility. The impact analysis in Section 4.3, Air Quality, describes construction controls to be implemented (as identified in Subsection 2.3.1.1, Air Quality) to control asbestos emissions during demolition of the asbestos pipeline.

The proposed project would be required to comply with existing laws and regulations regarding the handling of hazardous materials. These regulations are specifically designed to protect the public health and the environment and must be adhered to during project construction and operation. Compliance with applicable regulations and implementation of BMPs in compliance with BAAQMD Rule 11-2 related to asbestos pipe removal would ensure that impact to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.

Impact Statement IX.c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. The project area is within one-quarter mile of an existing school, Summer Lake Elementary, at 4320 East Summer Lake Drive (DTSC 2024). Construction at the area closest to the school could generate hazardous emissions that could affect the school environment, though asbestos pipe removal would not occur near the elementary school. Adherence to the construction and hazardous waste handling BMPs detailed previously would ensure that this impact would be less than significant.

Impact Statement IX.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?

No Impact. The Hazardous Waste and Substances Site List maintained by DTSC, pursuant to Government Code Section 65962.5, does not list the project site (DTSC 2024). GeoTracker identifies a leaking underground storage tank site near the project area (approximately 0.1 mile), though this site would not be affected by project activities (California SWRCB 2024). There is no potential for listed hazardous material sites to 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.

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

No Impact. The project area is not within an airport land use plan nor within 2 miles of a public airport or public use airport. The closest airport is Byron Airport, which is about 10.7 miles south of the project area in Byron, California. Therefore, there would be no impact on safety hazards or excessive noise for people residing or working within the project area.

Impact Statement IX.f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The City and County maintain their own emergency operations plans. These plans ensure that adequate emergency response and evacuation procedures are planned for and maintained. All major public streets serve as principal evacuation routes; however, in the event of an evacuation during construction, the specific emergency routes used would depend on the type, scope, and location of the incident. The proposed project would temporarily affect primary roadways during construction. Bethel Island Road is the only roadway that provides egress from Bethel Island to the mainland. Sandmound Boulevard does not have many cross streets and would be the primary egress for the neighborhood located along the waterfront. During construction, a traffic management plan would be implemented to allow passage of vehicles and emergency services, and the affected roadways would be returned to the existing condition following project construction. Therefore, the project would have a less than significant impact on an emergency response and evacuation plan.

Impact Statement IX.g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less than Significant Impact. The CAL FIRE mapping tool does not include the project area, because it is not in a State Responsibility Area (SRA), which are areas where CAL FIRE is the primary emergency response agency responsible for fire suppression and prevention (CAL FIRE 2024b). According to the CAL FIRE SRA viewer, the project area is in a Local Responsibility Area (LRA) (CAL FIRE 2024c). The County maps the broad scope of potential fire hazards within County limits. The project area is in a medium-low County-identified wildfire risk area (City of Concord 2020). According to the U.S. Census Urban Area Maps, the project area is within the wildland–urban interface "influence zone," which is an area that contains wildfire-susceptible vegetation and is up to 1.5 miles from wildland–urban intermix or interface areas (CAL FIRE 2024d). Intermix and interface areas are where structures meet or intermingle with wildland vegetation, therefore experiencing wildfires more often. Section 4.20.1, Wildfire Impact Analysis, describes the wildfire hazards in more detail.

To prevent wildfire ignition, construction of the proposed project would follow specific controls. California Department of Forestry and Fire Protection (CAL FIRE) recommends keeping exhaust



systems and spark arresters in good working order and free from carbon buildup, refraining from driving vehicles or machinery on dry grass or brush, and keeping fire extinguishers and/or on hand (CAL FIRE 2024). The project design includes installation of fire hydrants every 500 feet for residential areas and at the end of each cul-de-sac. Additionally, Sandy Point MHP would maintain its existing well partly for fire suppression. These features would enhance wildfire preparedness in the area. Therefore, the project would have a less than significant impact to people or structures to a significant risk of loss, injury, or death involving wildland fires.

4.9.2 Mitigation Measures

Based on the aforementioned impacts analysis for hazards and hazardous materials, no mitigation measures would be required.

4.10 Hydrology and Water Quality

	,			
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			×	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				\boxtimes
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site.			\boxtimes	
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.				\boxtimes
iv) Impede or redirect flood flows?			\boxtimes	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			\boxtimes	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				\boxtimes



The SWRCB DDW enforces California drinking water regulations (Title 17, Division 1, Chapter 5, and Title 22, Division 4). The arsenic rule is a standard to reduce exposure to arsenic in drinking water and has established the MCL of 0.01~mg/L and set a MCL goal of 0.0~mg/L. The proposed Manganese Rule would reduce the manganese NL to $20~\mu\text{g/L}$ and the RL to $200~\mu\text{g/L}$. Drinking water quality data (2016 to 2022) have been evaluated for the four water systems with data from the Safe Water Information System database. The data identified water quality concerns for arsenic and TDS levels, which exceeded the California MCL limit. In addition, manganese levels were higher based on a proposed new rule and California MCL limit. Contra Costa Health issued compliance orders to the four water systems regarding arsenic levels.

The project area is within the jurisdiction of the Central Valley RWQCB within the San Joaquin Hydrologic Basin and the San Joaquin Delta Hydrologic Unit (544.00) (Central Valley RWQCB 1986). Existing surface waters near the project site include Sacramento-San Joaquin Delta Waterways, Dutch Slough at the northern end, and Sandmound Slough to the east of the project area (approximately 230 feet). Summer Lake is southwest of the project area on East Cypress Drive (approximately 820 feet) and is a stormwater and recreational amenity for the Summer Lake South subdivision. A stormwater drain improvement project is currently being constructed north of East Cypress Road and crosses under Sandmound Boulevard within a culvert. Once constructed, RD 799 would manage the new storm drain. Areas of freshwater emergent and freshwater forested/shrub wetlands occur west of Sandmound Boulevard traveling north and south, north of Sandmound Boulevard traveling west and east, and southwest of WPM. Some wetland areas are within approximately 15-20 feet of the project area. The subdivision is protected by a levee, and Summer Lake only receives drainage from this small subdivision (Figure 4-5). Beneficial uses of the Sacramento-San Joaquin Delta waterways include municipal and domestic supply, agricultural, industrial, recreation, freshwater habitat, migration and spawning habitat, wildlife habitat, and navigation. The Water Control Plan (Basin Plan) for the California RWQCB Central Valley Region (Central Valley RWQCB 2019) describes water quality objectives established for beneficial uses.



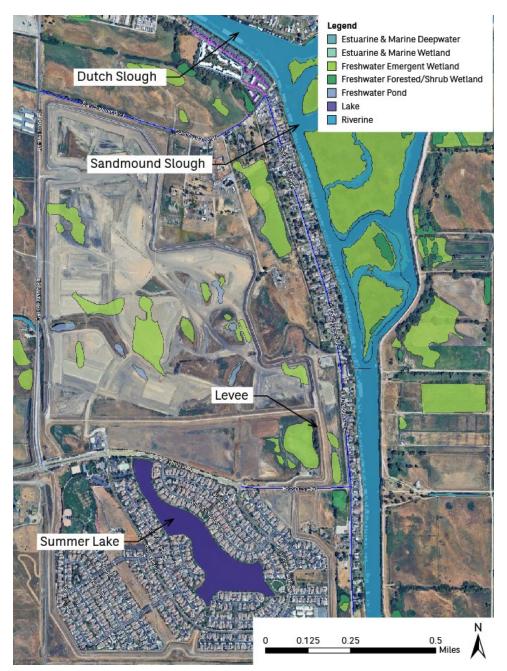


Figure 4-5 Area Hydrology and Wetlands Source: Google Earth, USFWS 2024c

The project area is within the East Contra Costa County groundwater subbasin. The *East Contra Costa Subbasin Groundwater Sustainability Plan* was prepared in 2021 and provides information about historical, current, and projected water supply. Groundwater conditions in the subbasin were determined to be stable over the past 30 years. Best available data and use of a robust water budget model projected that the subbasin would be sustainable under future scenarios (Luhdorff & Scalmanini 2021).



According to Federal Emergency Management Agency Flood Insurance Rate Maps (FIRMs) 06013C0360G (March 21, 2017), 0613C0170G (March 21, 2017), and 0613C0380F (June 16, 2009), the new pipeline and service lines would be constructed mostly within the 100-year floodplain Zone AE with a base flood elevation of 9 feet. The portion that would be placed within East Cypress Road west of the levee is within Zone X, an area of reduced flood risk because of the presence of a levee. The Public Review Draft Contra Costa County 2045 General Plan Health and Safety Element (General Plan) includes a Cal OES map depicting the project area to be within draft inundation areas of federally owned dams. The 2045 draft General Plan includes a tsunami hazard area map, and the project area is not within a tsunami zone (Contra Costa County 2023).

4.10.1 Impact Analysis

Would the project:

Impact Statement X.a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than Significant Impact. DWD, WPM, Sandy Point MHP, Delta MWC, and Oakley MWC agreed to consolidate the four systems into the DWD system to improve the water quality and provide a sustainable water system to the communities (RCAC 2024a). By eliminating the use of existing source water and connecting to the DWD system, drinking water quality would be improved and concerns related to arsenic, manganese, and TDS would be addressed. Drinking water quality to the customers would meet Safe Drinking Water Quality Standards.

Proposed construction activities could cause violations of water quality standards or waste discharge requirements under the Central Valley RWQCB standards during storm events. Temporary erosion control and sediment BMPs would be installed prior to excavation activities, which would lessen short-term impacts to water quality of nearby waterways and wetlands. The temporary BMPs are listed as construction controls in Subsections 2.3.1.4, Geology and Soils, and 2.3.1.6, Hydrology and Water Quality. No in-water work would occur for the stormwater drain crossing and the new pipeline would be installed over the top of the existing culvert. A SWPPP would be prepared to obtain authorization for coverage under the NPDES Construction Stormwater Permit from the Central Valley RWQCB prior to construction. Detailed BMPs and measures to protect water quality would be described in the SWPPP. Measures to prevent the accidental discharges of hazardous materials into surface or groundwater would also be described in the SWPPP.

Operation of the project would improve drinking water quality. Construction of the project would have a less than significant impact to water quality because of the violation of water quality standards or waste discharge requirements with implementation of construction controls identified in the Project Description.

Impact Statement X.b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact. The four water providers currently pump groundwater for their supply. Once the water systems are consolidated and the new pipeline is in service, the existing wells for each of



the four water systems would no longer contribute to the drinking water supply. DWD would use the WPM wells as monitoring wells. Sandy Point MHP would maintain its well for irrigation and fire suppression. Oakley MWC would abandon its wells and disassemble the equipment. Delta MWC is currently undecided about the future of usage of its well. DWD purchases surface water from CCWD and operates a groundwater supply system that provides additional water supply reliability throughout their system.

The DWD 2020 Facilities Plan includes the proposed project in the planning study and describes existing and future groundwater supply facilities that are planned. Eliminating the four separate water systems and tying them to the DWD water system would not affect groundwater supplies or interfere with groundwater recharge.

Impact Statement X.c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site.

Less than Significant Impact. Construction of the proposed project would be within existing paved roadways and no new impervious surfaces would result in additional erosion or siltation on- or off-site. There could be temporary impacts during construction that could result in erosion or sediment transport during storm events. Construction controls described in Subsections 2.3.1.3 and 2.3.1.5, and implementation of the SWPPP, would minimize erosion or siltation on- or off-site; therefore, impacts would be less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

No Impact. During construction, minor localized alterations to surface runoff would occur, though these changes would not result in flooding. In the long term, the project would not increase the rate or amount of surface runoff that would result in flooding onor off-site. There would be no increase in impervious surfaces or changes to the existing conditions once the project is constructed.

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.

No Impact. During construction, minor localized alterations to surface runoff would occur, though these changes are not expected to exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. In the long-term, the project would not create additional runoff water or sources of polluted runoff that would exceed the capacity of the stormwater system or contribute to polluted runoff. After construction, areas of disturbance would be repaved and stabilized. All potential pollutants used during construction would be removed and disposed of in accordance with federal, state, and local regulations.



iv) Impede or redirect flood flows.

Less Than Significant Impact. Construction of the pipeline would occur within the 100-year floodplain. During construction, flood flows could be redirected during a major storm event. However, the SWPPP and monitoring and reporting requirements of the General Construction Stormwater Permit require that BMPs be implemented and visually inspected before a predicted storm event. During the storm event BMPs must also be inspected to make sure they are operating properly. While flood flows may be temporarily redirected with implementation of stormwater BMPs and constructions staging and equipment, these impacts would be less than significant.

A portion of the new water main pipeline on East Cypress Road would likely cross the levee perpendicular and through the top of the levee core with sufficient earthen cover, as approved by the RD 799 engineer. Before construction, the design of the levee crossing would be approved by RD 799 and comply with their design requirements to avoid any problems with levee stability (RCAC 2024b). RD 799 would require that construction of the levee crossing be scheduled to avoid the flood season, which is November 1 through April 15. A variance to allow construction during the flood season may be approved by RD 799 when the long-range weather forecast agrees with specific construction activity.

There would be no change in the levee's ability to provide flood protection. The new pipelines would be placed underground and the surface area above the pipeline would be restored to existing conditions by repaving the roadways and stabilizing unpaved areas. No aboveground structures would be constructed that would impede or redirect flood flows. During construction, flood flows may be redirected temporarily with implementation of stormwater BMPs and constructions staging and equipment and would not substantially alter the drainage pattern. The impacts would be less than significant.

Impact Statement X.d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact. The project area is not within tsunami or seiche zones. During construction activities, if the project area was inundated by flooding there would be a short-term risk of release of pollutants. During construction, the project area would be stabilized prior to any predicted storm activity to minimize impacts to the floodplain, and stormwater BMPs would be in place during construction. Only 500 to 1,000 feet of open trench would be exposed each day and impacts to the floodplain would be minimal. There would be no risk for release of pollutants during operations because the pipeline would be underground. Therefore, impacts from the risk release of pollutants from the project due to inundation from floodwaters to the floodplain would be less than significant.

Impact Statement X.e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The project would comply with the standards of the Basin Plan to protect beneficial uses of surface waters from pollutant discharges during construction and planned discharge activities including flushing and testing of the waterlines. DWD would obtain authorization under



a Construction General Permit from the RWQCB before beginning construction and prepare a SWPPP to be implemented to comply with the General Permit authorization requirements. As stated, the project would comply with the East Contra Costa Subbasin Groundwater Sustainability Plan.

4.10.2 Mitigation Measures

Based on the impacts analysis for hydrology and water quality, no mitigation measures would be required.

4.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?				\boxtimes
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?			\boxtimes	

Dairy agricultural land, and medium- and high-density single-family residential uses surround the project area. The proposed project would serve existing residential and commercial uses in the area. Other existing land uses within the project area include Summer Lake Elementary School, two parks, and preserved natural wetlands and dunes (approximately 119 acres). Several marinas along Sandmound Slough provide access for boating and water recreation.

4.11.1 Impact Analysis

Would the project:

Impact Statement XI.a) Physically divide an established community?

No Impact. The proposed project involves consolidating four small water service providers and constructing a new water main pipeline and service line. The new water and service lines would be connected to the DWD pipelines and water would be provided to the existing water service areas by DWD. Existing wells that currently provide water to these service areas would no longer be used for drinking water, improving the community's access to potable water. Project activities would occur within existing roadways, which would be restored to prior conditions. Therefore, no new barriers or other land use changes would be established between communities that would cause physical or social divisions.

Impact Statement XI.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?



Less Than Significant Impact. The proposed project would provide safe and drinking water standard-compliant potable water to an existing community. The Contra Costa General Plan and the Oakley General Plan predict growth in the project area, and the ability to provide utilities to current and future neighborhoods is a priority for supporting these communities (City of Oakley 2022, Contra Costa County 2023). Additionally, the activities related to construction of the proposed project would not have significant environmental effects because the project would be constructed in existing disturbed areas and roadways. In addition, potential impacts would be minimized with mitigation measures described in this IS/MND and construction controls described in Subsection 2.3.1. Disturbed roadways would be restored to preexisting conditions once project work is complete. Therefore, the project would result in a less than significant impact.

4.11.2 Mitigation Measures

Based on the impacts analysis for land use and planning, no mitigation measures would be required.

4.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\boxtimes
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?				\boxtimes

The Contra Costa County 2045 General Plan and Climate Action Plan Draft Environmental Impact Report (EIR) describe known mineral resources areas within the County. There are no known mineral resource areas, operating mines, or known active oil and gas wells within the project area. However, according to the Geologic Energy Management Division of the California Department of Conservation, an oil and gas field is known to exist approximately 7 miles from the project area and may contain deposits of oil and natural gas resources. The Brentwood Oil and Gas Field is approximately 7 miles from the project area, and the associated well is approximately 9.5 miles from the project area. The Brentwood field has produced more than 9.3 million barrels of oil and more than 51 million cubic feet of natural gas as of 2018. Brentwood field is California's northernmost commercial oil-producing area (Contra Costa County 2024b).

4.12.1 Impact Analysis

Would the project:

Impact Statement XII.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?



No Impact. The installation of the proposed project waterlines would not result in a loss of availability of oil and natural gas resources or any other mineral resource because there are no known mineral resources in or near the project area that would be affected.

Impact Statement XII.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?

No Impact. There are no known mineral resource recovery sites delineated in or near the project area according to the current Contra Costa General Plan 2005–2020, Land Use Element (Contra Costa County 2005). Therefore, there would be no impact to mineral resource recovery sites.

4.12.2 Mitigation Measures

Based on the impacts analysis for mineral resources, no mitigation measures would be required.

4.13 Noise

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE: Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		\boxtimes		
b) Generation of excessive ground borne vibration or ground borne noise levels?			\boxtimes	
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 t project are to excessive noise levels?				X

Surrounding residences on Sandmound Boulevard, East Cypress Road, Bethel Island Road, and Summer Lake Elementary School would be within hearing range of construction noise. However, Chapter 2 of the City of Oakley Municipal Code allows construction to be performed Monday through Friday from 7:30 a.m. to 7:00 p.m. and Saturdays, Sundays, and holidays from 9:00 a.m. to 7:00 p.m.

4.13.1 Impact Analysis

Would the project result in:

Impact Statement XIII.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?



Less than Significant Impact with Mitigation Incorporated. Operation of the new pipeline would not contribute to increased ambient noise because the pipelines would be underground and would not create perceptible noise. Pipeline construction periodically would exceed the 55 hourly daytime average decibel level standard for non-transportation noise sources (City of Oakley General Plan 2022). Mitigation Measures NOI-1 and NOI-2 include planning and scheduling with school staff and construction noise reduction strategies to reduce noise propagation from the construction site to the nearby school. The proposed project would have a less than significant impact with mitigation incorporated with respect to noise, and construction activities would comply with construction noise requirements during daylight hours.

Impact Statement XIII.b) Generation of excessive ground borne vibration or ground borne noise levels?

Less Than Significant Impact. Pipeline construction would contribute to a slight increase in ground borne vibration or ground borne noise levels. Vibration levels produced by heavy equipment during construction are calculated to be 0.13 inches per second peak particle velocity (in./sec PPV) or less at 40 feet, which is well below the County threshold value of 0.3 in./sec PPV (Ball Estates Draft EIR 2018). The slight increase in vibration would result in a less than significant impact.

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

No Impact. There are no airports within 2 miles of the project area. The closest airport is Byron Airport, which is approximately 10.5 miles away.

4.13.2 Mitigation Measures

Because of the potential for construction noise disturbance to Summer Lake Elementary School, the following mitigation measures are proposed:

- **NOI-1: Scheduling and Planning**. Summer Lake School staff shall be informed about the construction schedule during school hours. Schedule planning shall be conducted with school staff to minimize the use of heavy machinery when working near Summer Lake Elementary School.
- NOI-2: Noise Reduction Strategies. Acoustic barriers or enclosures shall be installed to reduce noise propagation from the construction site to nearby residences and Summer Lake Elementary School as needed.



4.14 Population and Housing

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

The U.S. Census estimates the City population was 43,357 in 2020 and the County population was 1,165,927 (U.S. Census Bureau 2024a, 2024b). The City adopted the Specific Plan in 2006, which includes several residential housing, some neighborhood commercial, and school projects proposed near the proposed project within six different planning areas. Future planned projects if constructed would provide more than 4,800 new dwelling units. These projects are considered as cumulative projects described in Section 3 of this IS/MND.

4.14.1 Impact Analysis

Would the project:

Impact Statement XIV.a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The proposed project would not establish new residential uses or sufficient new employment opportunities that would result in the relocation of substantial numbers of people from outside of the region. Although the proposed project would include public utility improvements and road work, these changes would not have a direct or indirect impact on unplanned population growth. Planned growth for the area described in the Specific Plan (City of Oakley 2006) may eventually connect to the water main once developed. However, the proposed project would be constructed to consolidate the four existing water service companies and to allow continued water service to the existing customers. The proposed project would not promote additional growth.

The proposed project would result in temporary construction jobs, but the project is near well-established urban communities with large population bases and workforces. Given the relatively common nature of the construction anticipated, there would be a sufficient existing labor market in the region to fill the jobs. If some of the construction workers do live outside of the local area, these workers likely would not be relocated given the short-term duration of the jobs and a challenging housing market. Those workers instead would be expected to commute rather than relocate. Commuting occurs regularly in the region; workers in the county report an average commute time of 34 minutes (U.S. Census Bureau 2024b). Plan Bay Area 2050 identifies that



there were four million jobs within the Bay Area in 2015, with an expected increase of 1.4 million jobs in 2050. Of this increase, one-third or 466,666 new jobs are projected for Contra Costa and Alameda Counties by 2050 (Association of Bay Area Governments 2021). Therefore, employment growth is planned in the region and the proposed project would not result in substantial unplanned population growth.

Impact Statement XIV.b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. No displacement of existing people or housing would occur, and no construction of replacement housing would be required.

4.14.2 Mitigation Measures

Based on the impacts analysis for population and housing, no mitigation measures would be required.

4.15 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES.				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				\boxtimes
Police protection?			\boxtimes	
Schools?				\boxtimes
Parks?				\boxtimes
Other public facilities?				\boxtimes

4.15.1 Impact Analysis

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



Fire protection?

No Impact. The four existing independent water service providers currently provide water for fire protection within their service areas. After the four water service providers are consolidated into DWD, fire protection would continue to be provided for fire protection. The closest fire station is Contra Costa County Fire Station No. 95, which is approximately 0.42 mile from the proposed new pipeline on East Cypress Road. New fire hydrants would be installed in the WPM as part of the project. There would be no change to access to water for fire protection, and there would be no need for new facilities. The project would not impact fire protection.

Police protection?

Less Than Significant Impact. During construction and maintenance activities, there could be periodic lane or road closures. The traffic control plan described in Subsection 2.3.1.7, Transportation, would be prepared and implemented during construction and require workers to allow emergency access to the police and other emergency services through the construction area. The project would not increase the need for police protection or any new police facilities. The project would have a less than significant impact to police protection during construction and operational maintenance activities of the new pipeline.

Schools?

No Impact. One existing school, Summer Lake Elementary School, is approximately 800 feet west of the project area. Construction would be temporary and last approximately 1 week. Excavation and use of heavy equipment would occur and produce noise. However, the distance between the school and construction activities would not allow noise impacts to the school. Mitigation measures would be implemented for noise. The proposed project would not affect population in the area or promote growth; therefore, the project would not increase the need for new school facilities.

Parks?

No Impact. Two public parks within the Summer Lake South subdivision south of East Cypress Road are near a portion of the proposed water main pipeline. The project would not impact the parks or park operations during construction or during operation of the new pipeline.

Other public facilities?

No Impact. No other public facilities are known to be close to the project area.

4.15.2 Mitigation Measures

Based on the impacts analysis for public services, no mitigation measures would be required.



4.16 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				\boxtimes

4.16.1 Impact Analysis

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

No Impact. The project would not increase the use of existing neighborhood and regional parks or other recreational facilities.

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

No Impact. The proposed project does not include recreational facilities or require the construction or expansion of recreational facilities.

4.16.2 Mitigation Measures

Based on the impacts analysis for recreation, no mitigation measures would be required.



4.17 Transportation

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

Transportation facilities that would be affected within the project area include Sandmound Boulevard, East Cypress Road, and Bethel Island Road, which are two-lane highways with a 60-foot ROW as well as roadways within the WPM.

4.17.1 Impact Analysis

Would the project:

Impact Statement XVII.a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

No Impact. The project would not conflict with any circulation plan, program, or ordinance for roadways. All roadways disturbed during construction would be repaved to existing conditions. A construction traffic control plan would be prepared and implemented to manage traffic during construction according to City and County requirements described in Subsection 2.3.1.7, Transportation. There are no transit, bicycle, or pedestrian facilities within the project area that would be affected.

Impact Statement XVII.b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subsection (b)?

Less Than Significant Impact. Construction of the proposed project would result in vehicle trips by workers and vendors. As stated in Section 2.3, Project Description, approximately 7 to 15 workers are anticipated to be on-site each day. These trips would result in a minor number of trips per day on area roads. Occasional vehicle trips would also occur during operations associated with maintenance activities, resulting in minimal vehicle miles traveled. The Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA states that "projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact" (California Governor's Office of Planning and Research 2018). Project-related trips would be substantially



less than 110 trips per day. Therefore, impacts related to CEQA Guidelines Section 15064.3(b) would be less than significant.

Impact Statement XVII.c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed project does not propose changes to existing roads, and roadways disturbed during construction would be restored to their original condition.

Impact Statement XVII.d) Result in inadequate emergency access?

Less Than Significant Impact. During construction and maintenance activities, there could be periodic lane or road closures. The traffic control plan described in Subsection 2.3.1.7, Transportation, would be implemented during construction and would require workers to allow police and other emergency services to travel through the construction area as needed to minimize impacts to response time. The project would have a less than significant impact to emergency access during construction, as well as during operations and maintenance activities of the new pipeline.

4.17.2 Mitigation Measures

Based on the impacts analysis for transportation, no mitigation measures would be required.

4.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES.				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or		×		
ii) A resource determined by the lead agency, in its discretic 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 in subdivision (c) of Public Resources Code Section 5024.1, lead agency shall consider the significance of the resource California Native American Tribe.		⊠		



A search request of the SLF was submitted to the NAHC for the presence of known cultural resources within the Project Area. NAHC responded to the request on July 26, 2024, indicating the presence of known resources within the Project Area.

The NAHC response also provided a Native American contact list of 37 tribal representatives and individuals with potential interest in and knowledge of the Project vicinity. The list of tribal representatives and individuals are members or representatives from the: Amah Mutsun Tribal Band, Buena Vista Rancheria of Me-Wuk Indians, Calaveras Band of Mi-Wuk Indians, California Valley Miwok Tribe, Chicken Ranch Rancheria of Me-Wuk Indians, Confederated Villages of Lisjan, Guidiville Rancheria of California, Ione Band of Miwok Indians, Jackson Rancheria Band of Miwuk Indians, Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, Nashville Enterprise Miwok-Maidu-Nishinam Tribe, North Valley Yokuts Tribe, Pakan'yani Maidu of Strawberry Valley Rancheria, Ohlone Indian Tribe, Tule River Indian Tribe, and Wilton Rancheria.

The District sent letters in September 2024 serving as formal notification of the Project to the Native American individuals and/or tribes identified by the NAHC, which exceeded the requirements of Public Resources Code 21080.3.1 and Chapter 532 Statutes of 2014 (i.e., Assembly Bill [AB] 52) consultation requirements. Eight responses were received, four of which were either to defer to other tribes or state that they have no comments or questions at this time. Three tribes requested consultation and additional information: Confederated Villages of Lisjan Nation, the Northern Valley Yokuts/Ohlone Tribe, and Wilton Rancheria. In addition, the Ione Band of Miwuk Indians requested a copy of the cultural resources study. On October 25, 2024, the DWD sent letters to the three tribes that requested consultation to identify the lead contact, establish the agenda, and set a meeting date. The District will provide these tribes with the requested information and continue to conduct consultation in accordance with AB 52 and general best practices. Consultation between the District and the three tribes is ongoing. As a result, the conclusions reached in this Draft IS/MND are preliminary and subject to change. The District will keep a record of the communication and ongoing outreach and consultation activities, which will be summarized in the Final IS/MND.

According to the ASR, there are no previously recorded Native American sites within the ADI. Out of the 39 cultural resources previously recorded within a 0.25-to-0.5-mile radius of the ADI, there are seven precontact Native American sites, 31 historic period sites, and one multicomponent site. The Native American sites include two sand mounds, one occupation site, one midden site, one middenless burial site with burials, and two sites associated with the Hotchkiss Archaeological District. The multicomponent site is comprised of midden, lithics, historic period refuse, and structures located approximately 165 feet east of mounds associated with the Hotchkiss Archaeological District (Pacific Legacy 2024).

4.18.1 Impact Analysis

As stated above tribal consultation is ongoing and will be completed prior to the DWD's adoption of the Final IS/MND. The Final IS/MND will summarize the consultation process and identify any agreed-upon measures in addition to the mitigation measures described in Sections 4.5.2 and 4.18.2.



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

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
- ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Less Than Significant Impact with Mitigation Incorporated. There are no previously recorded Native American sites, and no known tribal cultural resources listed or eligible for listing in the CRHR or in a local register of historical resources, within the ADI; however, there are several Native American sites in the vicinity of the Project. There may be unknown tribal cultural resources that could be impacted during excavation and grading activities, including resources that would be eligible for listing and/or resources that are determined to be significant.

Archival research identified many archeological resources within the vicinity of the ADI, including a series of Native American mound sites containing burials and human remains. The findings of the Archaeological Survey Report determined that there is a moderate to high potential for cultural resources to be present within undisturbed and disturbed native soils within the ADI. Therefore, it is reasonable to assume that there is similarly a moderate to high potential for tribal cultural resources to be present within the ADI. Resources discovered in disturbed areas would not be considered eligible for the CRHR, although they could be considered to be tribal cultural resources. If a resource is discovered during construction, the lead agency must consider the significance of the resource to a Native American Tribe when making a determination whether a found resource is significant pursuant to PRC 5024.1. Moreover, the discovery of human remains would be considered to be a tribal cultural resource. Impacts to human remains, if discovered, would be considered significant and would require mitigation. Mitigation measures for the discovery of previously unknown cultural resources and potential impacts to human remains are described in Section 4.5.2, Mitigation Measures, of the Cultural Resources section. It is expected that incorporation of mitigation measures CR-1, CR-2, CR-3, and CR-4 would reduce potentially significant impacts to tribal cultural resources, determined pursuant to PRC 5024.1, to a less than significant level. Additional mitigation may be identified during the ongoing tribal consultation



process. If additional mitigation is agreed upon during consultation, such mitigation will be reflected in the Final IS/MND.

4.18.2 Mitigation Measures

Because of the potential for the discovery of tribal cultural resources and potential impacts to such tribal cultural resources during construction, Mitigation Measures CR-1, CR-2, CR-3 and CR-4 shall be implemented during construction as described in this IS/MND (Section 4.5.2). Additional mitigation may be identified during the ongoing tribal consultation process. If additional mitigation is agreed upon during consultation, such mitigation will be reflected in the Final IS/NND.

4.19 Utilities and Service Systems

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

Utility providers in the area were contacted to identify possible utility conflicts or crossings to inform design of the project. Local utility providers include AT&T, the City, Comcast, Ironhouse Sanitary District, CPN Pipeline Company, DWD, and CCWD as a supplier to DWD. Utility locations were provided by those entities with utilities that could be affected, and preliminary locations are included in the 30 percent design. It is confirmed that AT&T, Ironhouse Sanitary District, CPN Pipeline Company, and DWD have facilities within the project area. It is also likely that Comcast also has facilities in the area, but this has not been confirmed. Continued coordination with the utility providers would occur throughout design and construction. Potholing will verify the locations and depth of utilities at crossing locations.



4.19.1 Impact Analysis

Would the project:

Impact Statement XIX.a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. The proposed project would install a new water supply pipeline and hydrants to replace four existing independent water systems. An aerial survey of the project area revealed that construction of the project may avoid the relocation of other utility infrastructure. According to the design criteria, the pipeline would meet DDW separation requirements and cross over existing sewers and storm drains with a minimum 1-foot clearance (RCAC 2024a). Continued coordination and potholing investigations would inform final design to avoid relocation of other utility infrastructure or if relocation is required to avoid expansion of these facilities and significant environmental effects.

Impact Statement XIX.b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

No Impact. Construction of the proposed project would require minor amounts of water for the proposed temporary on-site construction office and for dust control. The amount of water that would be required would not affect local water supplies during normal, dry, or multiple dry years. DWD has sufficient water resources to accommodate the 28.6 million gallons per year (MG/yr) demand that would be added to the current 1,790 MG/yr DWD demand. DWD purchases Central Valley Project water (contract for 63,541 MG/yr) and Los Vaqueros Project water from CCWD (City of Oakley 2006). In addition, DWD is a groundwater sustainability agency and uses groundwater to supplement and provide resiliency to its water supplies. DWD uses the Randall-Bold Water Treatment Plant to treat water before distribution. DWD uses an average daily supply of 7.5 million gallons per day (mgd) of its current ownership capacity of 15 mgd from this treatment plant (DWD 2020). The water treatment plant has enough capacity to accommodate the 0.0791 mgd average daily water demand that combining the four previous water systems would add, since this would only increase the average daily supply to 7.5791 mgd for the treatment plant. Therefore, DWD would have enough water supplies available to serve the project during all year types.

Planned growth for the area described in the Specific Plan (City of Oakley 2006) may eventually connect to the water main once developed. However, the proposed project is being constructed to replace the four existing water systems and would not involve any new development. Therefore, the project would not result in any new water consumption during project operations; therefore, it would not have an impact on local water supplies.

Impact Statement XIX.c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?



No Impact. This project would construct a new drinking waterline and service lines. The project would not result in the generation of wastewater and would not affect wastewater treatment capacity.

Impact Statement XIX.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?

Less Than Significant Impact. During construction, excess soil could be generated and disposed of off-site. In addition, construction would generate other construction waste, such as asphalt. Most of the excavated material would be reused to backfill excavated trenches. Any material that cannot be reused on-site would be sent off-site for recycling or disposal at an appropriate inert waste landfill. Existing asbestos pipe would be removed and would be disposed of at a landfill that can accept this type of material. The proposed project would generate a small amount of solid waste, and it would not exceed the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals.

Impact Statement XIX.e) Comply with federal, state, or local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. Disposal of construction waste would comply with all applicable regulations. In addition, removal of a 6-inch asbestos cement pipe is part of the proposed project. Asbestos is classified as a "non-RCRA" hazardous waste in California and must be handled and packaged according to federal and state air quality regulations because of the airborne nature of asbestos. Additionally, this pipe must be disposed of in a hazardous waste facility (DTSC 2006). Altamont Landfill in Livermore is the nearest landfill that has enough capacity to accept asbestos and construction/demolition debris (Waste Management 2024). All disposal of materials would comply with applicable regulations. Therefore, the project would result in a less than significant impact to compliance with federal, state, or local management and reduction statutes and regulations related to solid waste.

4.19.2 Mitigation Measures

Based on the impacts analysis for utilities and service systems, no mitigation measures would be required.



4.20 Wildfire

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE: If located in or near state responsibility areas would the project:	or lands classi	fied as very high	n fire hazard s	everity zones,
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			\boxtimes	
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?				\boxtimes
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structure to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				\boxtimes

Public Resources Code Sections 4201–4204 direct CAL FIRE to map fire hazards based on relevant factors such as fuels, terrain, and weather. CAL FIRE, through its Fire and Resources Assessment Program (FRAP), has mapped areas of significant fire hazards throughout the state. As such, CAL FIRE establishes local and state responsibility areas for wildfire protection and identifies areas within fire hazard severity zones—classified as moderate, high, and very high fire hazard severity zones.

The CAL FIRE mapping tool does not include the project area since it is not in an SRA, areas where CAL FIRE is the primary emergency response agency responsible for fire suppression and prevention (CAL FIRE 2024b). According to the CAL FIRE SRA viewer, the project area is in an LRA (CAL FIRE 2024c). The county maps the broad scope of potential fire hazards within county limits. The project area is in a medium-low County-identified wildfire risk area (City of Concord 2020).

4.20.1 Impact Analysis

Would the project:

Impact Statement XX.a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The City and County maintain their own emergency operations plans. These plans ensure that adequate emergency response and evacuation procedures are planned for and maintained. All major public streets serve as principal evacuation routes; however, in the event of an evacuation during construction, the exact emergency routes used would depend on the type, scope, and location of the incident. The proposed project would



temporarily affect primary roadways during construction. Bethel Island Road is the only roadway that provides egress from Bethel Island to the mainland. Sandmound Boulevard does not have many cross streets and would be the primary egress for the neighborhood located along the waterfront. A construction traffic management plan, as described in Subsection 2.3.1.7, would be implemented to allow the passage of vehicles and emergency services during an emergency. During an emergency evacuation, all work on the project would halt, lane closures would cease, detours would be removed, and equipment properly staged to keep evacuation routes accessible. After construction, the affected roadways would be returned to their current condition. Therefore, the project would have a less than significant impact on an emergency response and evacuation plans.

Impact Statement XX.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?

No Impact. As noted, the proposed project is not located in or near an SRA or lands classified as very high fire hazard severity zones. According to the U.S. Census Urban Area Maps, the project area is within the wildland–urban interface "influence zone," which are areas that contain wildfire-susceptible vegetation and are up to 1.5 miles from wildland–urban intermix or interface areas (CAL FIRE 2024d). Intermix and interface areas are where structures meet or intermingle with wildland vegetation and, therefore, experience wildfires more often. The proposed project would not result in any changes to the topography of the project area, nor would it result in an increase to community populations; therefore, no impacts related to related pollutant exposure are anticipated.

Impact Statement XX.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?

No Impact. The proposed project would result in the installation of new water supply infrastructure. The infrastructure would be located in the ROW of existing roadways and would be entirely underground. The project would not result in the construction or maintenance of infrastructure that may exacerbate fire risk. Maintenance of the new pipelines would be required, but this is planned within the DWD Facilities Plan (DWD 2020). Therefore, no impact on infrastructure maintenance related to fire risk is anticipated.

Impact Statement XX.d) Expose people or structure to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The project area and surrounding area are flat and not located near steep slopes that could exacerbate wildfire risk or contribute to post-fire hazards, such as erosion and slope instability (Shannon & Wilson 2024). Therefore, no impact on slope-related wildfire risk is anticipated.



4.20.2 Mitigation Measures

Based on the impacts analysis for wildfire, no mitigation measures would be required.

4.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife 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?		\boxtimes		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		×		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		×		

4.21.1 Impact Analysis

Would the project:

Impact Statement XXI.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?

Less Than Significant Impact with Mitigation Incorporated. The Biological Resources and Cultural Resources analyses in this IS/MND have determined that potential impacts from the proposed project would not reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict range of a rare or endangered species, or eliminate important examples of the major periods of California history or prehistory. Section 5, Mitigation Monitoring and Reporting Program, describes mitigation measures and Section 2.3.1, Project Description, identifies construction controls for both biological, cultural, and tribal cultural resources.



Impact Statement XXI.b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less Than Significant Impact with Mitigation Incorporated. The City adopted the Specific Plan in 2006. The Specific Plan includes several projects proposed near the proposed project and seven planning areas. The project area is entirely within the City of Oakley Sphere of Influence for the Specific Plan and within Planning Areas 2, 5, and 6 of the Specific Plan. This IS/MND has determined that the impacts from the project would be less than significant or less than significant with mitigation incorporated. Some resources have been determined to not be impacted by the project.

There are no cumulatively considerable effects from the proposed project when viewed in conjunction with cumulative projects described in Section 3. The cumulative projects considered in this analysis are described within the Specific Plan which was adopted by the City. Environmental impacts associated with these planned projects were analyzed in the Specific Plan and the EIR was adopted by the City. Planning Areas 1, 3, and 4 were analyzed at a project level and Planning Area 2 and potential future development in Planning Area 6 were analyzed at a program level (City of Oakley 2006). The Specific Plan EIR and Supplemental EIR focused on cumulative impacts from development projects. Significant but mitigable cumulative impacts were identified for aesthetics (because of the loss of open space); biological resources (because of the loss of special-status species, habitat, and natural communities); hydrology/water quality (because of the increase in impervious surfaces and the related increase in stormwater flows); noise (following completion of construction); public services and utilities (because of increased demand for service); and traffic/circulation, which is no longer considered to be an impact under CEQA. In addition, cumulative air quality impacts were identified because projects with significant individual impacts are assumed to have significant cumulative impacts. Significant unavoidable cumulative impacts were identified for agricultural resources because of impacts to farmland.

The proposed project would not contribute to cumulative impacts associated with the development of these projects. The project would result in no impacts related to aesthetics, agricultural land, mineral resources, and recreation. The project would result in less than significant impacts to energy, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, population and housing, public services, transportation, utilities and service systems, and wildfire. Mitigation measures described in Section 5, Mitigation Monitoring and Reporting Program, are proposed for air quality, biological resources, cultural resources, geology and soils, noise, and tribal cultural resources to lessen temporary project impacts to a less than significant level.

Impact Statement XXI.c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact with Mitigation Incorporated. The proposed project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly as determined by this IS/MND.



Section 5

Mitigation Monitoring Program

The proposed project would not result in any significant unavoidable permanent or temporary adverse impacts to the environment. The IS/MND identified potentially significant impacts that can be mitigated to a less than significant level for air quality, biological resources, cultural resources, geology and soils, noise, and tribal cultural resources. **Table 5-1** lists the recommended mitigation measures. The table identifies the entity responsible for ensuring implementation of the required mitigation measures and monitoring.



Table 5-1 Mitigation Monitoring Program

Potential Significant Impacts	Environmental Mitigation Required	Implementation Responsibility	Monitoring Responsibility	Timing
Air Quality				
Impact Statement III.c) Expose sensitive receptors to substantial pollutant concentrations? Construction activities would occur near a school.	 AQ-1: Enhanced BMPs for Construction-Related Fugitive Dust Emissions: Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities. Install windbreaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Windbreaks should have a maximum of 50 percent air porosity. Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and water appropriately until vegetation is established. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than 1 percent. Minimize the amount of excavated material or waste materials stored at the site. Hydroseed or apply non-toxic soil stabilizers to construction areas, including previously graded areas, which are inactive for at least 10 calendar days. 	DWD or their Contractor	DWD or their Contractor	During Construction
Biological Resources				
Impact Statement IV.a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? Some special-status species have the potential to occur within or near the project area. Project activities during the nesting season could cause disturbance to special-status species.	BIO-1 Measures to Minimize Impacts on Listed Raptors: For construction activities that occur between February 1 and August 31, a qualified biologist shall conduct preconstruction surveys for listed raptor species such as bald and golden eagles, Swainson's hawks, northern harriers, burrowing owls, and white-tailed kites no more than 10 days before ground disturbance. The preconstruction surveys shall include the proposed project footprint and a minimum of a 0.50-mile radius where access is permitted around the construction area in suitable nesting habitats (i.e., large trees for Swainson's hawk, white-tailed kite and bald eagle; cliff faces for golden eagle; and grasslands for northern harrier and burrowing owl). The preconstruction surveys shall be phased based on the construction schedule. If nesting listed raptors are detected, a no-disturbance buffer (minimum of 250 feet for burrowing owl, 500 feet for northern harrier and white-tailed kite, 0.50 mile for bald eagle, golden eagle, and Swainson's hawk) shall be established and monitored daily by a qualified biologist. Buffers shall be maintained until a qualified biologist has determined that the young have fledged and are no longer reliant on the nest or parental care for survival. A 0.5-mile no-disturbance buffer also shall be maintained from any overwintering bald or golden eagles if they are detected in the project area or surrounding areas; the buffer shall be maintained for the duration that the bird(s) is(are) present. If any bald eagles or golden eagles are detected, DWD shall coordinate with USFWS, as necessary, to comply with the Bald and Golden Eagle Protection Act. If maintaining the minimum no-disturbance buffer around an active listed raptor nest (or any overwintering eagles) is not practicable, CDFW shall be consulted to determine whether reduced minimum no-disturbance buffers are appropriate based on site-specific circumstances or to identify alternative measures to minimize the potential for project-related disturbance to the nest site tha	DWD or Their Contractor	Contractor and Qualified Biologist	Before construction, no more than 10 days before ground disturbance. Daily monitoring shall be required if buffer zones are implemented.
Impact Statement IV.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? Migratory wildlife could be present during constructions. Project activities during nesting season could disturb migratory wildlife.	BIO-2 Measure to Minimize Impacts on Nesting Birds: To the extent practicable, vegetation trimming will be scheduled to avoid the breeding season for nesting raptors and other special-status birds (generally February 1 through August 31, depending on the species). Trimming of vegetation outside of the nesting season would minimize the potential for delays in construction because of active nests. Regardless of when vegetation trimming is scheduled, a qualified biologist will conduct a minimum of one pre-construction survey for nesting migratory birds and raptors within the project area and a buffer (250 feet for migratory birds, 500 feet for non-listed raptors) around the project area (where accessible) for all construction-related activities that would occur during the nesting season. The pre-construction survey(s) will be conducted no more than 15 days before starting construction in a given area and would be phased based on the construction schedule. Because of the ongoing, phased approach to construction, multiple pre-construction surveys per year may be required. If vegetation trimming occurs during the breeding season and an active nest is found, a construction-free buffer zone (250 feet for migratory birds, 500 feet for non-listed raptors) would be established around the active nest site. If establishment of the construction-free buffer zone is not practicable, appropriate conservation measures (as determined by a qualified biologist) will be implemented. These measures may include, but are not limited to, consultation with CDFW to establish a different construction-free buffer zone around the active nest site, daily biological monitoring of the active nest site, and delaying construction activities near the active nest site until the young have fledged.	DWD or their Contractor	Qualified Biologist	Prior to construction, no more than 15 days before ground disturbance. If nests are discovered, daily monitoring may be required.



Detected Circlifferent Investment		Implementation	Monitoring	Timbe
Potential Significant Impacts Impact Statement IV.d) Interfere substantially with the movement of any	BIO-3 Environmental Awareness Training for Construction Personnel: All construction personnel will be given environmental awareness training by the project's environmental inspector or biological monitor before the start of construction. The training will familiarize all	Responsibility DWD or their representative	Responsibility Contractor and Qualified Biologist	Timing Prior to Construction
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? Migratory wildlife including the pond slider	construction personnel with the covered species that may occur on-site, their habitats, general provisions, and protections afforded by the CESA/ESA; measures to be implemented to protect these species; and the project boundaries. This training will be provided within 3 days of the arrival of any new worker. As part of the environmental awareness training, construction personnel will be notified that no dogs or any other pets under control of construction personnel will be allowed in the construction area.			
(turtle species) could be present during constructions.				
Impact Statement IV.a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	BIO-4 Entrapment Prevention: To prevent entrapment of covered species, all vertically sided holes or trenches will be covered at the end of the workday or have escape ramps built into the walls of the excavation. If pipes are stored on-site or in associated staging areas, they will be capped when not in use. Construction materials that have the potential to entangle or entrap wildlife will be properly contained so that wildlife cannot interact with the materials. If a covered species is identified on-site, crews will immediately stop work within 50 feet of the individual and inform the construction supervisor and the CDFW-approved biologist. Work will not continue within 50 feet of the individual until it has traveled off the project site of its own volition.	DWD or their representative	Contractor and Qualified Biologist	During Construction
Some special-status species have the potential to occur within or near the project area.				
Cultural Resources				
Impact Statement V.a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5? Impact Statement V.b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	CR-1: Construction Worker Training . A Workers Environmental Awareness Training program (WEAP) shall be prepared and provided to construction personnel prior to the start of ground disturbing activities. The program shall include the preparation of a WEAP manual that details archaeological sensitivity of the general area, legal requirements relating to the protection of cultural and tribal cultural resources, review of the types of artifacts and features that may be encountered, and information about procedures to follow should construction activities inadvertently encounter potential archaeological materials, features, or deposits. A qualified archaeologist would also address identification and treatment of isolated finds. A WEAP manual and Tear Sheet shall be provided to crew that includes the protocols to follow and contact information for notifications in the event of the discovery of a potential archaeological resource. Training shall be repeated as needed as new work crews are added to the Project.	DWD or their representative	Contractor, Qualified Archaeological monitor and, Tribal Cultural Resource Monitor	Before and During Construction
Impact Statement V.c) Disturb any human remains, including those interred outside of formal cemeteries?				
Impact Statement V.a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5? Impact Statement V.b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? Impact Statement V.c) Disturb any human remains, including those interred outside of	CR-2: Construction Monitoring. A qualified archaeological monitor and, depending on the results of tribal consultation, a tribal cultural resource monitor shall be present to observe construction activities that include ground disturbance of disturbed or undisturbed native soils. In the event of an inadvertent discovery of archaeological deposits or features, work within 50 feet of the discovery shall halt until a qualified archaeologist and/or tribal cultural resources has evaluated the find in accordance with CEQA Guidelines Section 15064.5. If the find is determined to be a historical or unique archaeological resource, appropriate mitigation of the adverse impacts to the resource shall follow the guidelines in the Archaeological Monitoring and Inadvertent Discovery Plan. Preferred option is avoidance, however, if avoidance is not possible, other options may include data recovery excavations as identified in the Archaeological Monitoring and Inadvertent Discovery Plan.	DWD or their representative	Contractor, Qualified Archaeological monitor and, Tribal Cultural Resource Monitor	During Construction
formal cemeteries? Impact Statement V.a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5? Impact Statement V.b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	CR-3: Inadvertent Discovery Plan. An Archaeological Monitoring and Inadvertent Discovery Plan shall be prepared to guide monitoring and inadvertent discoveries during construction. The plan shall include guidance for archaeological monitoring, procedures to follow in the event of a discovery, communication protocols, evaluation of a discovery for CRHR eligibility, and actions to address adverse impacts, reporting, collection, and curation. If subsurface testing and/or data recovery are determined to be required, such activities shall not occur without first coordinating with tribes who requested such coordination during the CEQA tribal consultation process. The plan shall also address special procedures to be followed for treatment of human remains.	DWD or their representative	Contractor, Qualified Archaeological monitor and, Tribal Cultural Resource Monitor	Before and During Construction
Impact Statement V.c) Disturb any human remains, including those interred outside of formal cemeteries?				



Potential Significant Impacts	Environmental Mitigation Required	Implementation Responsibility	Monitoring Responsibility	Timing
Impact Statement V.c) Disturb any human remains, including those interred outside of formal cemeteries?	CR-4: Discovery of Human Remains. Human remains and associated or unassociated funerary objects shall be treated in accordance with California state law (Section 7050.5 of the Health and Safety Code, and Sections 5097.94 and 5097.98 of the PRC). State law (PRC Section 5097) stipulates that if human remains are encountered during construction, work in the area of the find must halt, the find must be protected in place, and the Coroner must be immediately notified. Human remains include articulated (whole) skeletons or isolated bones (e.g., skull, long bones, and phalanges). If the Coroner has reason to believe that the human remains are those of a Native American individual, the Coroner is required by law to contact the Native American Heritage Commission (NAHC) within 24 hours of this determination. The NAHC will appoint a Most Likely Descendant (MLD), who will inspect the remains and make recommendations to DWD for the treatment and disposal of, with appropriate dignity, the human remains and any associated grave goods within 48 hours of being granted access to the site (PRC Section 5097.98). If subsurface testing and recovery are required, such activities shall not occur without first coordinating with tribes who requested such coordination during the CEQA tribal consultation process. DWD shall make all reasonable efforts to develop an agreement with the MLD for the treatment of human remains and associated or unassociated funerary objects (PRC 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. If DWD and the MLD are unable to come to an agreement on the disposition and treatment of human remains, state regulations shall be followed including the reinterment of the human remains and associated burial objects with appropriate dignity on the property in a location not subject to further disturbance PRC section 15064.5(e)(2)(C).	DWD or their representative	Contractor, Qualified Archaeological monitor and, Tribal Cultural Resource Monitor	During Construction
Geology and Soils				
Impact Statement VII.f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	GEO-1: Inadvertent Discovery. If inadvertent discovery of paleontological resources during construction occurs, the contractor shall stop construction in the area of the find and contact a paleontological expert to determine the appropriate course of action to either protect the resource or remove the resource for preservation.	DWD or contractor	Contractor and qualified paleontologist	During Construction
Noise				
Impact Statement XIII.a) Generation of a substantial temporary or permanent increase in ambient noise levels in the	NOI-1: Scheduling and Planning. Summer Lake School staff will be informed about construction schedule during school hours. Schedule planning will be conducted with school staff to minimize the use of heavy machinery when working near Summer Lake Elementary School.	DWD or their Contractor	Contractor	Before and During Construction Near the School
vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Construction activities would occur near a school.	NOI-2: Noise Reduction Strategies . Acoustic barriers or enclosures will be installed to reduce noise propagation from the construction site to nearby residences and Summer Lake Elementary School as needed.	DWD or Contractor	Contractor	Before and During Construction Near the School
Tribal Cultural Resources				
Impact Statement XVIII.a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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?	As stated above: CR-1 CR-2 CR-3 CR-4	DWD or their representative	Contractor, Qualified Archaeological monitor and, Tribal Cultural Resource Monitor	Before and During Construction



Section 6

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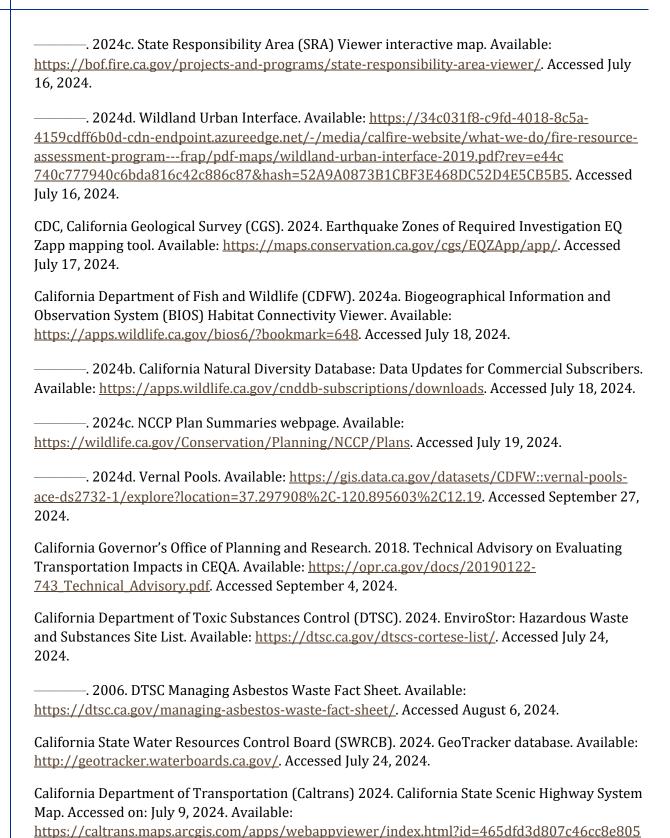
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