Madison Community Services District Water System Improvements Project

Yolo County, California

Initial Study with Proposed Mitigated Negative Declaration

Madison Community Services District
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February 2023

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Proposed Mitigated Negative Declaration
Yolo County, California
Madison Community Services District
Water System Improvements Project

INTRODUCTION

This document has been prepared to evaluate the Madison Community Services District Water System Improvements Project (also referred to as "proposed Project" or "Project") for compliance under the California Environmental Quality Act (CEQA). The Madison Community Services District (Madison CSD) is the lead agency responsible for complying with the provisions of CEQA.

PROJECT DESCRIPTION

Madison CSD provides drinking water to the unincorporated town of Madison in Yolo County, California. The drinking water infrastructure owned by Madison CSD needs improvements to continue to provide safe and reliable drinking water to the community. In addition, there is no means of providing sufficient flow in case of a fire in the community since there is not sufficient storage or pumping capacity in the existing water system. Madison CSD has received funding from the Department of Water Resources (DWR) Small Community Drought Relief Program and will seek additional funding through the Clean Water State Revolving Fund administered by the State Water Resources Control Board.

FINDINGS

As lead agency for compliance with CEQA requirements, Madison CSD finds that the proposed Project would be implemented without causing a significant adverse impact on the environment, based on the analysis presented in this Initial Study/Mitigated Negative Declaration (IS/MND). Mitigation measures for potential impacts associated with biological resources, cultural resources, geology & soils, hazards and hazardous materials, hydrology and water quality, noise, and tribal cultural resources, would be implemented as part of the proposed Project through adoption of a mitigation monitoring and reporting program.

DETERMINATION

On the basis of this evaluation, Madison CSD concludes:

- The proposed Project does not have the potential to 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 species, or eliminate important examples of the major periods of California history or prehistory.

- The proposed Project would not achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The proposed Project would not have impacts that are individually limited, but cumulatively considerable.
- The proposed Project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.
- No substantial evidence exists to demonstrate that the proposed Project would have a substantive negative effect on the environment.

This document has been prepared to provide the opportunity for interested agencies and the public to provide comment. Pending public review and approval by the Planning Commission, this MND will be filed pursuant to CEQA Guidelines §15075. Written comments should be submitted to the Madison Community Services District at P.O. Box 40, Madison, CA 95653, Attention: Leo Refsland, by 5:00 p.m. on March 6, 2024.

Leo Refsland

Signature
Leo Refsland
General Manager

02/01/2024

Date

Table of Contents

List of Figures

List of Tables

Acronyms and Abbreviations

AB	Assembly Bill
AC	asbestos cement
ACM	asbestos containing material
ADL	aerially deposited lead
AMM	Avoidance and Minimization Measure
APE	Area of Potential Effect
APN	Assessor Parcel Number
AWWA	American Water Works Association
BMPs	Best Management Practices
BSA	Biological Study Area
CA-16	California State Highway 16
CalEEMod	California Emissions Estimator Model
CalFire	California Department of Forestry and Fire Protection
CalOSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CCRMP	Cache Creek Resources Management Plan
CDFW	California Department of Fish and Wildlife
CDOC	California Department of Conservation
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society National Marine Fisheries Service
CO_2e	carbon dioxide equivalent
CR-89	County Road 89
CSD	Community Services District
dB	decibel
dBA	A-weighted decibel
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map

FMMP	Farmland Mapping and Monitoring Program
FPD	Fire Protection District
FTA	Federal Transit Administration
GHG	greenhouse gas
HCP/NCCP	Habitat Conservation Plan/Natural Community Conservation Plan
hp	horsepower
IPaC	Information for Planning and Consultation Database
IS/MND	Initial Study/Mitigated Negative Declaration
LCP	lead-containing paint
L_{eq}	equivalent continuous sound level
L_{max}	maximum sound level
LUST	Leaking Underground Storage Tank
MMRP	Mitigation Monitoring and Reporting Program
MRZ	Mineral Resource Zone
NAHC	Native American Heritage Commission
NESHAP	National Emission Standard for Hazardous Air Pollutants
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resources Conservation Service
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OCMP	Off-Channel Mining Plan
OSHA	U.S. Occupational Safety and Health Administration
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PM_{10}	particulate matter less than 10 microns in diameter
Project	Madison CSD Water System Improvements Project
ROG	reactive organic compounds
ROW	right-of-way
RWQCB	Regional Water Quality Board
SMAQMD	Sacramento Metropolitan Air Quality Management District
SVAB	Sacramento Valley Air Basin
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
U.S.	United States
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

USGS	U.S. Geological Survey
WEAT	Worker Environmental Awareness Training
YSAQMD	Yolo-Solano Air Quality Management District
YSGA	Yolo Subbasin Groundwater Agency

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1.0 Introduction

1.1 Project Overview

The Madison Community Services District (Madison CSD) is proposing to improve the existing water distribution system owned by Madison CSD (Project). The Project includes replacement of the entire network of underground water distribution system pipes in the district and installation of a new section of pipe to provide an improved connection to the Madison Migrant Center located on the eastern side of the service area. Approximately 12,000 feet of 8-inch and 12-inch diameter pipe would be placed in public roads within County and State right-of-way (ROW). Valves and hydrants would be placed according to standard industry practices. Madison CSD also proposes construction of a water storage tank, booster pump station, and a storage and shop building. The new structures would be constructed to the south and east of the existing chlorination enclosure and groundwater wells. The three existing wells would be fitted with new piping to connect to the new distribution system, new water meters, and new well pump and motor adjustments to account for the change in discharge point. The Project is located within the unincorporated town of Madison in Yolo County, California.

1.2 Purpose of this Document

The purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to disclose environmental impacts that may result from the proposed Project. This IS/MND assesses the environmental effects of the proposed Project, as required by California Environmental Quality Act (CEQA), and is in compliance with state CEQA Guidelines (14 California Code of Regulations [CCR] Section 15000, et seq.), which requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects.

1.3 Public Review Process

This IS/MND is being circulated for a 30-day public review period to all individuals who have requested a copy and appropriate resource agencies. Pursuant to Assembly Bill 819 (Levine, 2021) signed into law on July 16, 2021, this report has been filed with the State Clearinghouse and is available on Madison CSD's website (https://www.madisoncsd.org/current-projects). A Notice of Intent (NOI) is also being distributed to all property owners of record identified by the Assessor's office as having property within 300 feet of the proposed Project, which includes all properties in the town of Madison. The NOI identifies where the document is available for public review and invites interested parties to provide written comments for incorporation into the final IS/MND.

1.4 Madison CSD Approval Process

After comments are received from the public and reviewing agencies, the Madison CSD must adopt the IS/MND and approve the mitigation monitoring and reporting program (MMRP) (Appendix A) before it can approve the proposed Project.

1.5 Organization of the Initial Study and Mitigated Negative Declaration

This IS/MND is organized into the following chapters:

Chapter 1 – Project Overview and Background: provides summary information about the proposed Project, describes the public review process for the IS/MND, and includes the CEQA determination for the proposed Project.

Chapter 2 – Project Description: contains a detailed description of the proposed Project.

Chapter 3 – Environmental Checklist: provides an assessment of proposed Project impacts by resource topic.

Chapter 4 – List of Preparers: identifies the individuals who contributed to the environmental document.

Chapter 5 – References Cited: identifies the information sources used in preparing this document.

Appendices – Contains the MMRP and air quality modeling results.

1.6 Environmental Factors Potentially Affected

Impacts to the environmental factors below are evaluated using the checklist included in Chapter 3. The Madison CSD determined that the environmental factors checked below would be less than significant with implementation of mitigation measures. It was determined that the unchecked factors would have a less than significant impact or no impact.

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

DETERMINATION: On the basis of this initial evaluation:

☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed Project COULD have a significant effect on the environment, there will not be a significant effect in this case because revisions in the proposed Project have been made by or agreed to by the proposed Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Leo Refsland
General Manager

February 1, 2024
Date

2.0 Project Description

The proposed Project would improve the existing water distribution system owned by Madison CSD located within the unincorporated town of Madison in Yolo County, California, as described in detail below.

2.1 Project Location

The Project is located within the unincorporated town of Madison in Yolo County, California, approximately 11 miles west of the City of Woodland (Figure 1). The Project is located within the *Madison, California.* U.S. Geological Survey (USGS) 7.5-minute quadrangle map (Figure 2). Elevation of the Project area ranges from approximately 144 to 147 feet above mean sea level.

2.2 Background and Setting

Madison CSD provides drinking water to the unincorporated town of Madison. The drinking water infrastructure owned by Madison CSD has served beyond its useful life and needs improvements to continue to provide safe and reliable drinking water to the community. In addition, there is no means of providing adequate fire protection since there is not sufficient storage or pumping capacity in the existing water system.

Existing infrastructure includes three wells: one primary well, one backup well, and one emergency well that is currently not in use. There is a chlorination system, which is used for the primary and backup well. The emergency well has its own disinfection system housed in a shed near the well. There is a hydropneumatics tank which is used to control pump cycling. There is no water storage in the system. Existing infrastructure is located immediately north of Quincy Street, between Stephens Street and Scott Street.

The existing pipe distribution system was built in the 1970's. Most pipe alignment is in front yards, behind the curb, inside public ROW. Current pipes are mostly 6-inch diameter asbestos cement (AC) pipes. There are approximately 170 service connections including residential, migrant housing connection, and commercial and/or institutional connections. Some fire hydrants are located in the system, although without water storage, they are of little effect. There are no water meters at service connections.

The Project area primarily consists of developed habitat with paved roads, residential properties, and commercial properties, with an undeveloped field and a narrow strip of undeveloped land running in a north-south direction on the west side of County Road 89 (CR-89) (Figure 3). Commercial properties are located along California State Highway 16 (CA-16) and CR-89: Madison Storage, and Guy's Corner gas station and convenience store are located on the northern portion of the site along CA-16; Four M Contracting and Ferrellgas are located along CR-89.

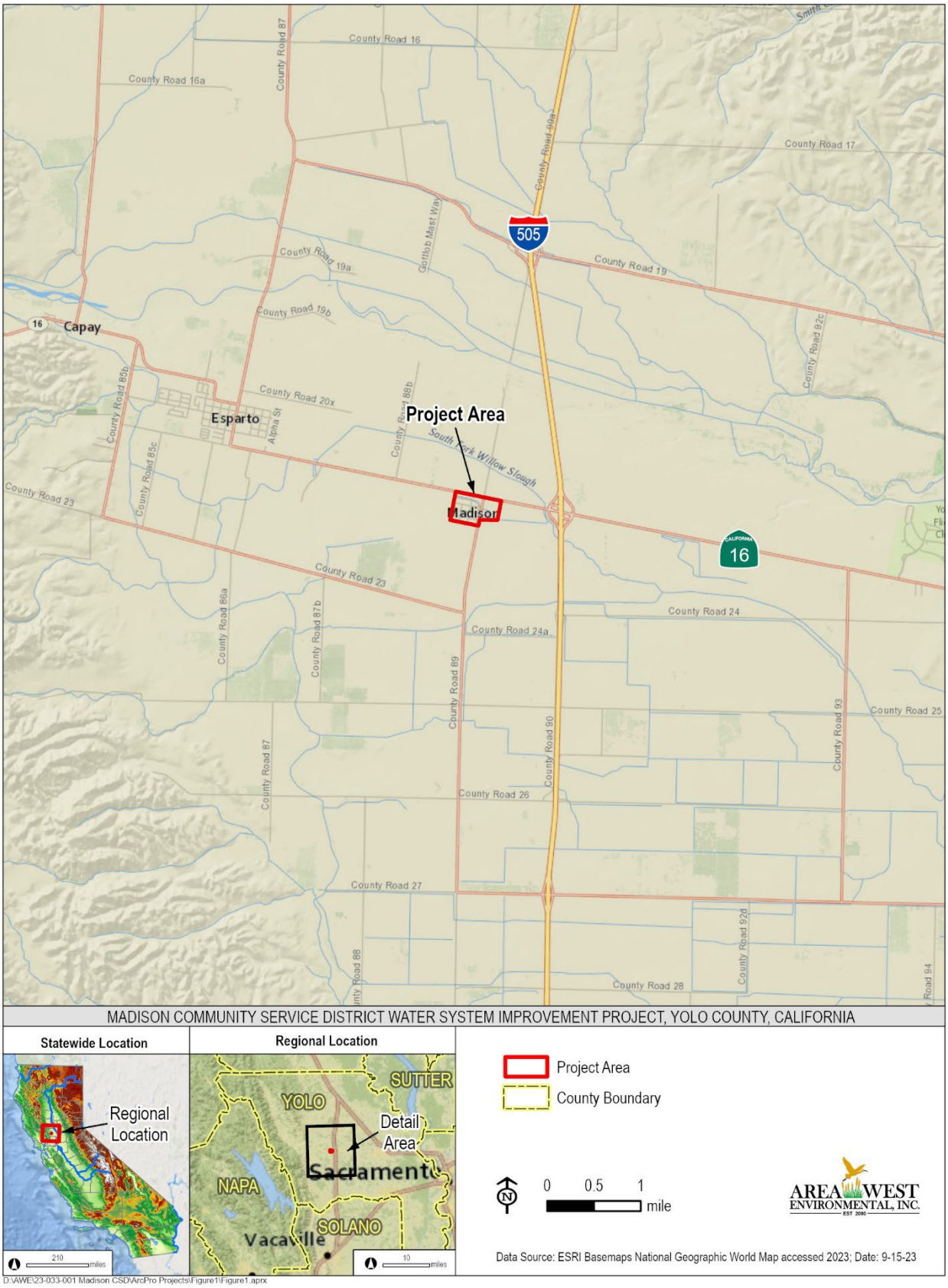


Figure 1. Project Vicinity

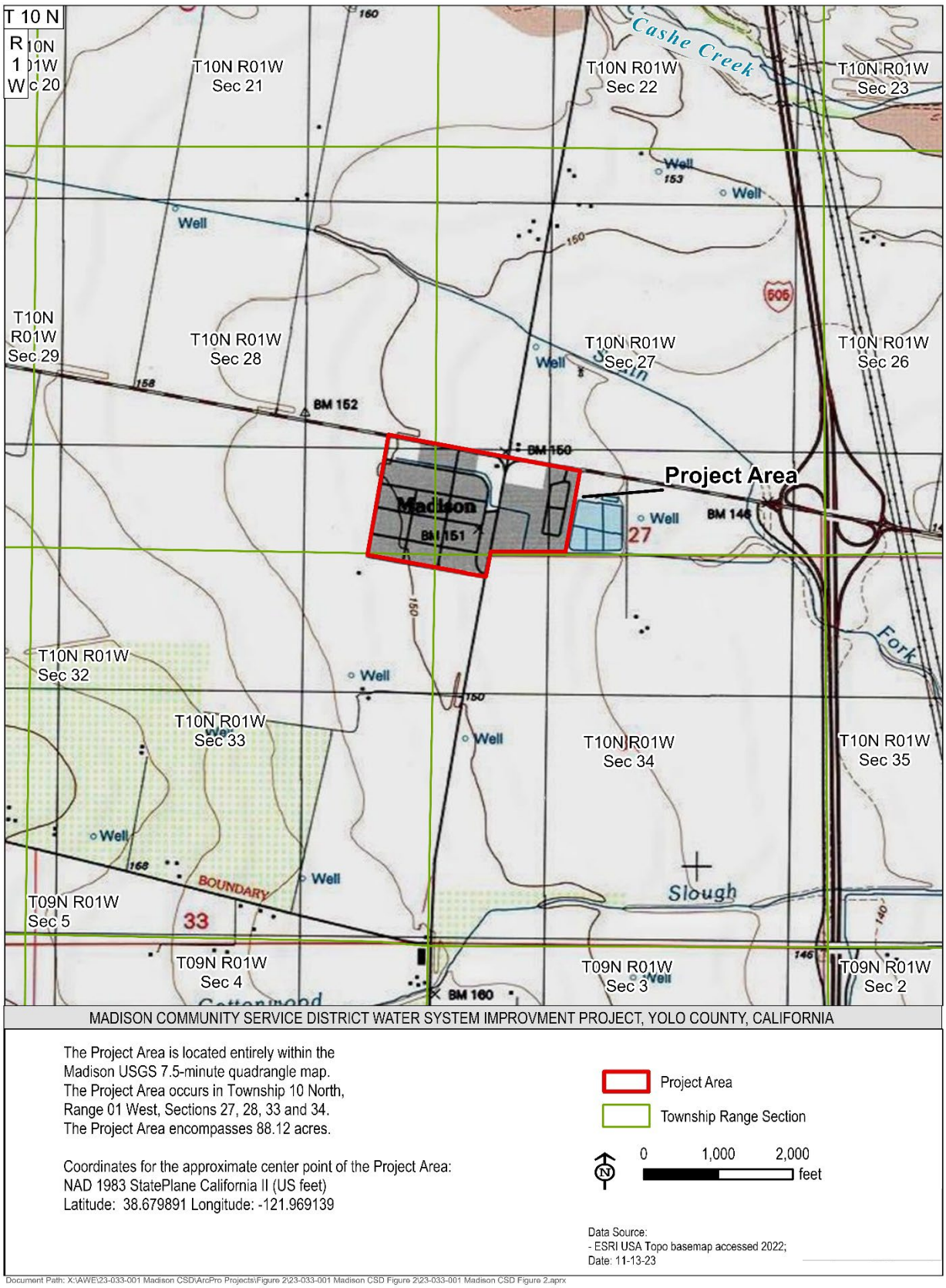


Figure 2. Project Location

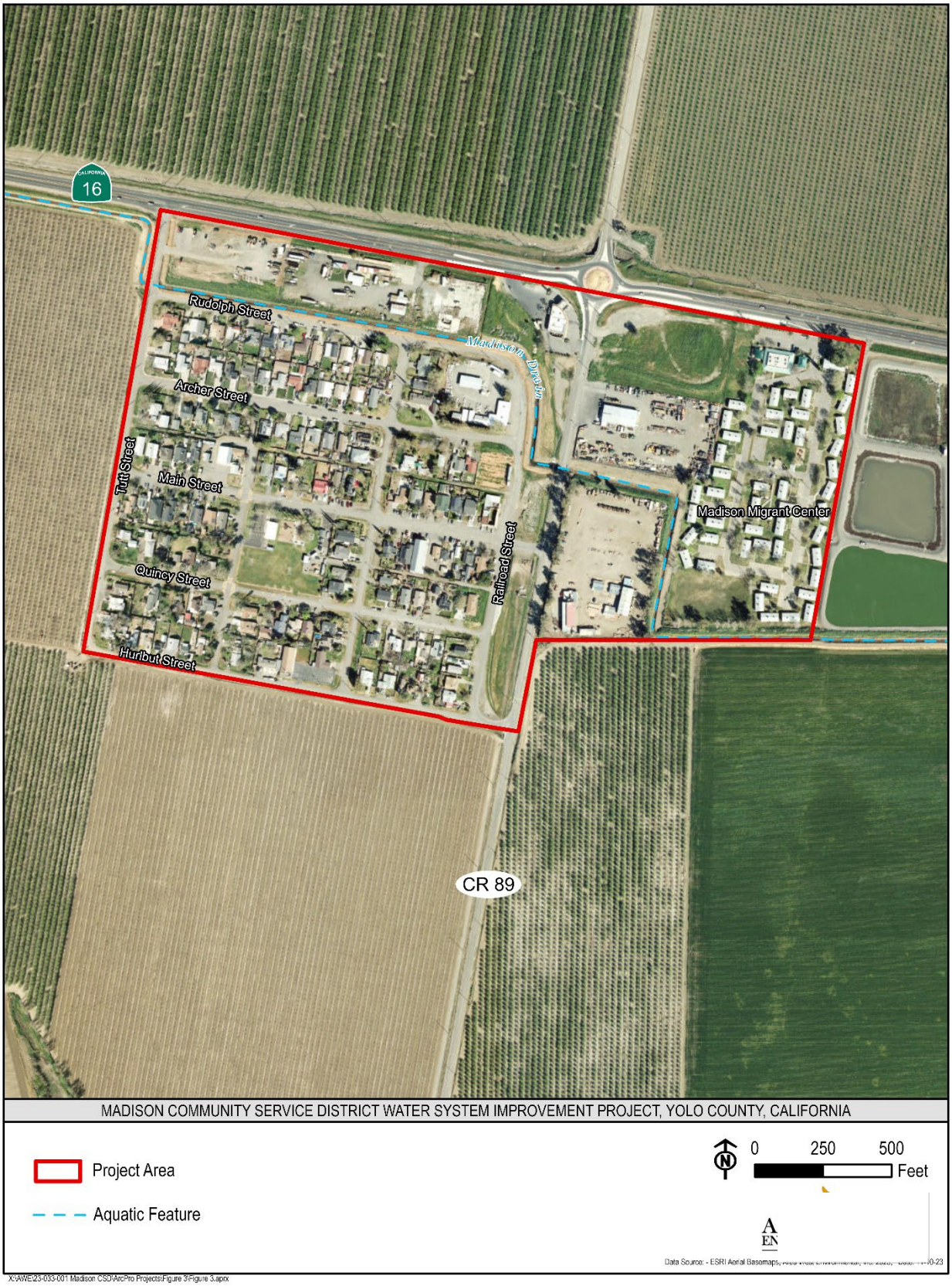


Figure 3. Madison Community Services District

Residential properties with community services such as a fire station, school, post office, and church are located on the west side of CR-89. A multi-family residential development, the Madison Migrant Center, is located on the east side of CR-89, near the eastern boundary of the Project area. CA-16 borders the Project area to the north and the Madison wastewater treatment plant borders the Project area to the east.

An irrigation canal (Madison Drain) flows through the Project area. The canal passes through a culvert under Tutt Street from the west and enters the northwest corner of the Project area, then runs parallel to and on the north side of Rudolph Street, then continues south and follows Railroad Street, before it continues east and pass through a culvert under CR-89, then flows south at the migrant facility, and finally continues east and runs along the southern boundary of the migrant facility and offsite (Figure 3).

Agricultural properties surround the Project area on all sides with pistachio orchard to the south and west, almond orchard to the southeast, alfalfa to the southeast, and almond orchard north of CA-16. Cache Creek is approximately 1.2 miles north of the Project area.

2.3 Yolo Habitat Conservation Plan/Natural Community Conservation Plan

The Project is covered under the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) and is required to comply with all applicable Avoidance and Minimization Measures (AMMs) required by that plan (Yolo Habitat Conservancy 2018). The applicable AMMs, applied to the Project and required in the conditions of approval for the Project, are listed in Section 3.4 Biological Resources.

2.4 Project Purpose and Need

The purpose of this Project is to assist Madison CSD with improvements to the drinking water system.

The American Water Works Association (AWWA) estimates the lifespan of AC pipes can be 50 to 70 years, depending on soil type, climate, and the nature of the water (AWWA 2012). AC pipes are known to deteriorate and their breakage frequency increases with age. The water distribution system experiences an average of four to six major breaks per year (Yolo County 2009). Park well number two is limited to 110 gallons per minute due to sand production at higher pumping rates. There is no water storage in the existing system. The service connections do not have water meters.

Overall, the purpose of this Project is to:

- Replace the undersized AC pipes that have reached the end of their useful life with new larger pipes;
- Provide redundancy in the system for increased reliability;
- Install residential metering; and
- Provide storage capacity that will allow the system to meet fire flow requirements.

2.5 Project Description

Madison CSD proposes to improve the existing water distribution system (Figures 4 and 5), including replacement of the network of underground water distribution system pipes, construction of a storage tank, and installation of a new section of pipe to provide an improved connection to the Madison Migrant Center.

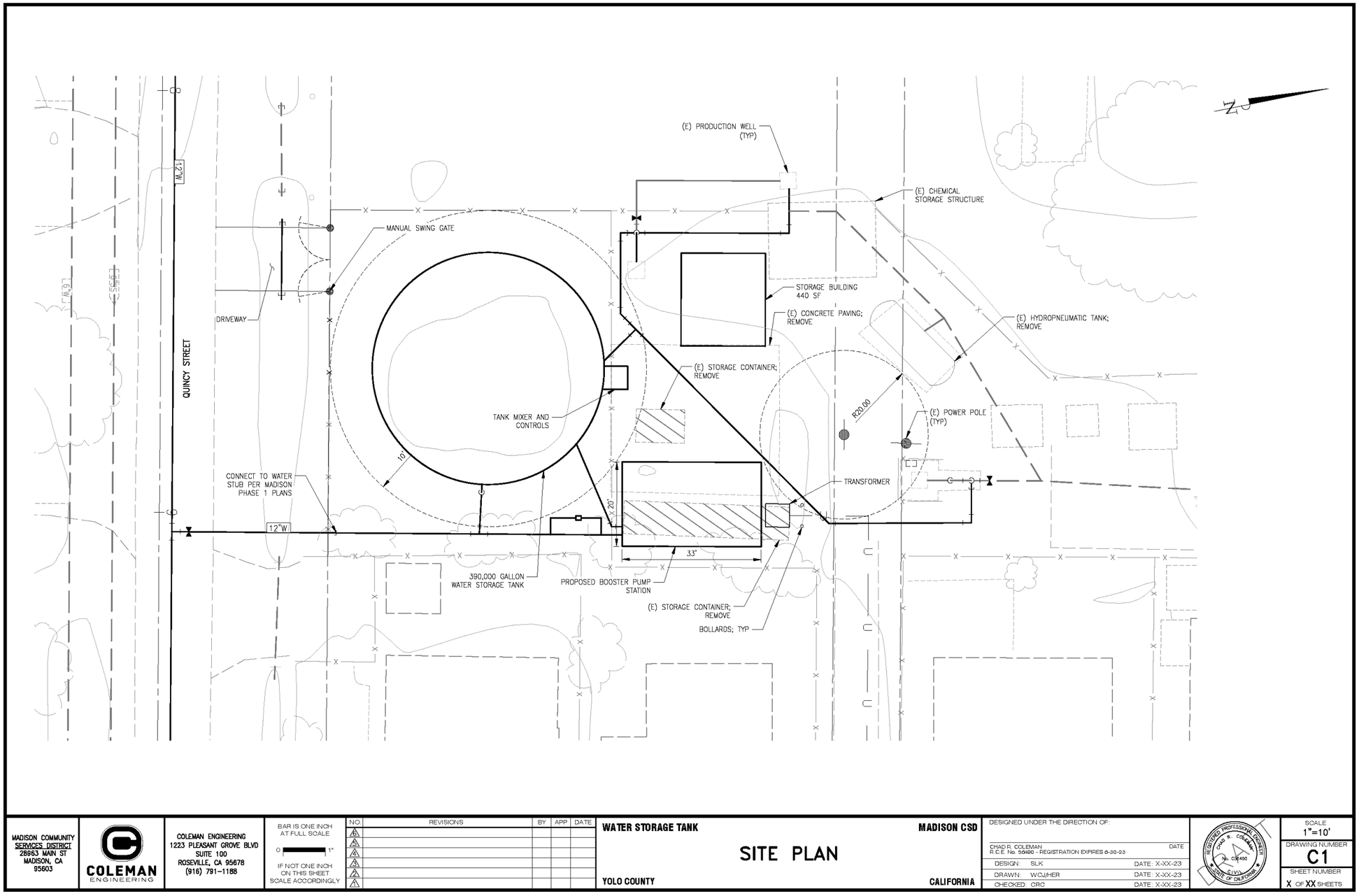
2.5.1 Pipes

Approximately 12,000 feet of 8-inch and 12-inch diameter C900 polyvinyl chloride (PVC) pressure pipe would be placed in public roads within County and State ROW. Valves and hydrants would be placed according to standard industry practices. The 12-inch diameter pipe would be placed on Quincy Street, Rudolph Street, Tutt Street, Railroad Street, CA-16, and CR-89, and the 8-inch pipe would be placed on Archer Street, Main Street, Huribut Street, and on both Tutt Street and Railroad Street, between Huribut Street and Quincy Street. A new pipe would extend approximately 160 feet north on Tutt Street, from Rudolph Street, under an existing culverted irrigation canal, to provide water service to the commercial property located at Assessor Parcel Number (APN) 049-440-012. A new pipe would extend from the east end of Archer Street to CR-89, crossing an irrigation canal (Madison Drain), then turn to the north and connect with a pipe that extends from the east end of Rudolph Street. Pending the outcome of easement negotiations, new pipe may continue from this point in the CR-89 ROW in an easterly direction towards the Madison Migrant Center through APN 049-462-011, or the Project would replace existing pipes along CR-89 and CA-16.

2.5.2 Structures

Madison CSD also proposes construction of a water storage tank, booster pump station, and a storage and shop building. The new structures would be constructed to the south and east of the existing chlorination enclosure and groundwater wells, immediately north of Quincy Street, between Stephens Street and Scott Street within APNs 049-455-007 and 049-456-008. The water storage tank would be a 390,000-gallon welded steel water storage tank, approximately 55 feet in diameter and 24 feet tall and located on a concrete slab or ring foundation, and would

Figure 4. Proposed Project Elements



MADISON COMMUNITY SERVICES DISTRICT 28963 MAIN ST MADISON, CA 95603	COLEMAN ENGINEERING	COLEMAN ENGINEERING 1223 PLEASANT GROVE BLVD SUITE 100 ROSEVILLE, CA 95678 (916) 791-1188	BAR IS ONE INCH AT FULL SCALE 0 1" IF NOT ONE INCH ON THIS SHEET SCALE ACCORDINGLY	NO.	REVISIONS	BY	APP	DATE
WATER STORAGE TANK			SITE PLAN					
YOLO COUNTY								

MADISON CSD — CALIFORNIA

DESIGNED UNDER THE DIRECTION OF:
CHAD R. COLEMAN R.C.E. No. 50490 - REGISTRATION EXPIRES 6-30-23 DATE
DESIGN: SLK DATE: X-XX-23
DRAWN: WCJ/HER DATE: X-XX-23
CHECKED: CRC DATE: X-XX-23

REGISTERED PROFESSIONAL ENGINEER CHAD R. COLEMAN No. CE 50490 CIVIL STATE OF CALIFORNIA

SCALE 1"=10'
DRAWING NUMBER C1
SHEET NUMBER X OF XX SHEETS

Figure 5. Structures Site Plan

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include associated inlet pipe from the three wells, an outlet pipe to the new booster pump station, an overflow pipe, a manway, and roof appurtenances. The booster pump station would be a single-story concrete masonry unit block structure on a concrete slab foundation, approximately 20 feet by 33 feet in size, depending on final design pipe layout. A single room would house pumps, electrical equipment, and an emergency generator with a sub-base fuel tank. An exterior room (covered by a roof but open on the end) would be used to store chlorine in an outdoor, covered facility, secured with a chain link gate. The storage and shop building would be a single-story, pre-engineered metal structure on a concrete slab foundation, approximately 20 feet by 20 feet in size, depending on site availability. During the final design phase, the function of the two buildings may be combined into a single structure (Figure 5).

2.5.3 Existing Wells

The three existing wells would be fitted with new piping to connect to the new distribution system, new water meters, and new well pump and motor adjustments to account for the change in discharge point. Existing crushed gravel access driveways to the wells, pump station, and storage tank from Main Street on the north and Scott Street on the east would be paved with asphalt concrete. A driveway would be added from Quincy Street on the south. Tubular steel picket fence with a manual swinging gate for vehicle access would be installed around the perimeter of the new structures. Shade structures would be constructed for wells number 1 and 3.

2.5.4 Construction Approach and Staging Areas

The duration of Project construction is estimated to be approximately 40 to 52 weeks, starting in Fall 2024. Construction staging and laydown areas may be located on a vacant lot (APN 049-461-004) at the east end of Quincy Street, east of Railroad Street (Figure 4), and would be negotiated with a lease during final design. Access to the Project area would occur from existing paved roads and crushed gravel driveways. The contractor would use potholing to confirm the location of underground utilities prior to construction. Construction activities would generally begin with clearing and grubbing, followed by structural foundations and buildings, major equipment process installation, piping installation, and electrical equipment installation. Existing pipes would be abandoned in place, except in rare instances when the existing pipe conflicts with the planned new pipe location. Two small, free-standing, existing storage containers would be removed from the Project area after construction is complete. Standard construction equipment would be used, including bulldozer, compactor, backhoe, excavator, loader, asphalt paver, and concrete truck.

Underground pipeline installation would generally involve digging a trench with a trencher or backhoe, laying the pipe in the trench, connecting the new pipe to the pipe that has already been laid, and backfilling the trench with the previously excavated material.

A temporary water diversion system may be necessary for the installation of the pipeline across the Madison Drain. The water diversion system would route flow through and around the immediate work area, maintain dewatered conditions, and return flow to the downstream channel network without causing harm to biological resources or affecting water quality.

Access to the parcel north of Quincy Street for construction of the new structures would be from Quincy Street, a driveway on Main Street, and alleyway off of Scott Street.

An undeveloped lot located west of CR-89 and north of Huribut Street may be utilized for the storage of construction equipment and materials, depending on negotiations with the owner of the property. Minor grading within the construction staging areas may be required.

2.5.5 Traffic Diversions

Residential streets would be closed asynchronously during construction, and alternative routes within the community's street grid system would be available to residents. Partial road closures would include one-way traffic control. Continuous vehicular and pedestrian ingress and egress to all private property adjacent to the work area would be maintained.

2.6 No-Build Alternative

The No-Build Alternative (No Project) maintains the existing water distribution system. The existing distribution system has reached the end of its service life and has been experiencing water pipe breaks, causing water to be shut off to commercial and residential properties for emergency pipe repairs. Under the No-Build Alternative, the frequency of water line breaks would likely increase leading to more frequent interruptions in access to drinking water for residents of the town of Madison and the Madison Migrant Facility.

2.7 Permits and Approvals Needed

Upon completion of final design for the proposed Project, the following agencies will be contacted to obtain their jurisdictional permits or approvals.

- Central Valley Regional Water Quality Control Board (RWQCB) –Clean Water Act National Pollutant Discharge Elimination System (NPDES) Construction General Permit and Porter Cologne Act General Waste Discharge Requirements (WDR)
- California Department of Fish and Wildlife (CDFW) – California Fish and Game Code (CFGC) Section 1602 Lake and Streambed Alteration Agreement
- Yolo County Flood Control & Water Conservation District – Encroachment permit
- Yolo County – Encroachment and Building permits
- California Department of Transportation (Caltrans) – Encroachment permit (required if pipe is installed along CA-16)

3.0 Environmental Checklist

The CEQA Environmental Checklist identifies physical, biological, social, and economic factors that might be affected by the Project. In many cases, background studies performed in connection with projects will indicate that there are no impacts to a particular resource. A "No Impact" answer in the "CEQA Determination" column of the impact summary tables at the beginning of each resource category section in this chapter reflects this determination. The words "significant" and "significance" used throughout this IS/MND are related to CEQA impacts. The questions in each impact summary table are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Sections 3.1 through 3.21 present the CEQA determinations under Appendix G of the CEQA Guidelines. The CEQA determinations depend on the level of potential environmental impact that would result from the proposed Project. The level of significance determinations is defined as follows:

- ***No Impact***: Indicates no physical environmental change from existing conditions.
- ***Less than Significant Impact***: Indicates the potential for an environmental impact that is not significant.
- ***Less than Significant Impact with Mitigation Incorporated***: Indicates the potential for a significant environmental impact that would be mitigated with the implementation of mitigation measures to a level of less than significant.
- ***Potentially Significant Impact***: Indicates the potential for a significant and unavoidable environmental impact.

Mitigation measures, if necessary, are noted following each impact discussion.

3.1 Aesthetics

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

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

Environmental Setting

The town of Madison is a rural residential community, surrounded on all sides by agricultural land use. The Project area primarily consists of developed land with paved roads, residential properties, and commercial properties, with an undeveloped field and a narrow strip of undeveloped land running in a north-south direction on the west side of CR-89. The topography in Madison is relatively flat with a general upward slope towards the eastern and western portions of the Project area; CR-89 represents the low point. Views from public roads are dominated by developed features (structures, fences, overhead utilities), ornamental landscaping, and expansive views of orchards and agricultural fields, with distant views of the Coastal Mountain range to the west and the Sierra Nevada Mountains to the east.

Impacts and Mitigation Measures

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

Scenic vistas are limited in Madison due to the flat topography, and the Project involves installation of primarily underground utility infrastructure. Therefore, there would be ***no impact***.

Mitigation Measures: None required.

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

The Project is not located on a state scenic highway. The nearest "officially designated" scenic highway is a segment of CA-16 starting in Capay, approximately 5 miles northeast of the Project (Caltrans 2018). The Project would not affect scenic resources within a state scenic highway.

Additionally, there are no trees, rock outcroppings or historic buildings that classify as notable scenic resources within the proposed Project area. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or the quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The proposed Project would involve improvements to and expansion of an existing water treatment facility. It would result in a negligible impact on the visual character of the existing Project area upon completion. Permanent land changes would be limited to new hardscape in previously disturbed or developed areas for the proposed new structures (water storage tank, booster pump station, and storage and shop building), conversion of existing crushed gravel driveways to asphalt concrete, and installation of a new driveway from Quincy Street. Asphalt concrete paving would be used around the new structures. The zoning of the parcels in which the proposed structures would be constructed (APNs 049-455-007 and 049-456-008) would not be changed. The addition of these structures and fencing in this developed area would not change the existing visual character of the neighborhood. Therefore, the Project would have a ***less than significant impact***.

Mitigation Measures: None required.

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

The proposed Project would not include installation of new lighting elements. Night construction work is not planned. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

3.2 Agriculture 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 the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the Project:

Question	CEQA Determination
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
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
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
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
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

Environmental Setting

The California Department of Conservation's (CDOC) Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status. The CDOC's 2020 FMMP "Important Farmland" map identifies the following land use categories in the vicinity of the Project.

- PRIME FARMLAND: Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- UNIQUE FARMLAND: Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

- URBAN AND BUILT-UP LAND: Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

- OTHER LAND: Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

CDOC FMMP also produced a California Williamson Act Enrollment 2021 map. The California Land Conservation Act of 1965, often referred to as the Williamson Act, is the State's primary program for the conservation of private land in agricultural and open space use. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive preferential property taxes based upon farming and open space uses as opposed to full market value.

The Project area is mapped as urban land and the land surrounding the Project area is mapped as Prime and Unique Farmland, and Other Land (Figure 6). There are no parcels zoned agricultural in the Project area (Yolo County 2014). There are pistachio orchards to the south and west, almond orchards to the north and southeast, and alfalfa to the southeast. There are no parcels within the Project area under Williamson Act, however, multiple parcels surrounding the Project area are under Williamson Act 2021 enrollment (Figure 6).

Figure 6. Farmland Designations

Impacts and Mitigation Measures

a and b. Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural uses; conflict with any existing zoning for agricultural use, or a Williamson Act contract?

There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the Project area. The surrounding farmland would not be converted as a result of the proposed Project. The proposed Project will have no impact on Williamson Act parcels. Therefore, the Project would have ***no impact.***

Mitigation Measures: None required.

c, d, and e. Would the Project conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production; or result in the loss of forest land or conversion of forest land to non-forest use; 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?

There is no forestland, timberland, or areas zoned for timberland production in the proposed Project vicinity. There is no land zoned for agricultural use within the Project area. Therefore, the Project would have ***no impact.***

Mitigation Measures: None required.

3.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the Project:

Question	CEQA Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant Impact
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
c) Expose sensitive receptors to substantial pollutant concentrations?	Less than Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant Impact

Environmental Setting

The Project area is located in the Sacramento Valley Air Basin (SVAB) and is under the jurisdiction of the Yolo-Solano Air Quality Management District (YSAQMD). The YSAQMD has adopted rules to help fulfill its mission to protect human health and property from the harmful effects of air pollution. These rules are based on federal and state air quality requirements established by the United States Environmental Protection Agency (EPA) and the California Air Resources Board (CARB). Yolo County is currently designated non-attainment for both the State and federal ozone standards and for the State respirable particulate matter (less than 10 micrometers in diameter) (PM_{10}) standard.

Existing land uses in the Project area and vicinity generally consist of residential, commercial, and agricultural. Sensitive receptors, including Madison Community High School and 138 residences, are located within the Project area, with an additional 92 residences at the Madison Migrant Facility located adjacent to the Project area. The migrant facility maintains a daycare/pre-school on site.

Impacts and Mitigation Measures

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

In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants that the area is designated non-attainment, the YSAQMD has established recommended thresholds of significance (Table 1), including mass emission thresholds for construction-related and operational PM_{10} and ozone precursors (i.e., reactive organic compounds

[ROG] and oxides of nitrogen [NO_X]), as the area is under non-attainment for PM_{10} and ozone (YSAQMD 2011). Proposed projects that generate emissions in excess of the YSAQMD's recommended significance thresholds, would be considered to potentially conflict with or obstruct implementation of the applicable air quality plan, result or contribute substantially to an existing or projected air quality violation, including increases in emissions for which the region is designated non-attainment, and/or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is designated non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).

Table 1. Thresholds of Significance for Criteria Pollutants of Concern

Pollutant	Thresholds of Significance (Construction and Operational)
NO_x	10 tons/year
ROG	10 tons/year
PM_{10}	80 pounds/day

ROG – reactive organic gases
NO_x – nitrogen oxides
PM_{10} – particulate matter less than 10 micrometers in diameter

In order to determine whether the proposed Project would result in ozone or PM_{10} emissions in excess of the applicable thresholds of significance presented above, the Project's construction-related and operational emissions have been estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0 software – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions from land use projects. The model applies inherent default values for various land uses, including trip generation rates, vehicle mix, trip length, average speed, etc. The results of the proposed Project's emissions estimates were compared to the thresholds of significance above to determine the associated impact level. A summary of the CalEEMod results for criteria pollutants is provided in Table 2 and all CalEEMod modeling results are included as Appendix B to the IS/MND.

Table 2. Maximum Unmitigated Emissions

Emissions Source	NO_x (tons/year)	ROG (tons/year)	PM_{10} (pounds/day)
Construction	0.4300	0.0493	0.2284
Operational	0.0000	0.0214	0.0000
Threshold	*10 tons/year*	*10 tons/year*	*80 pounds/day*
Exceeds threshold?	No	No	No

Source: CalEEMod, October 2023 (see Appendix B)

Construction Emissions

During construction, the proposed Project would require the use of construction vehicles to deliver construction personnel and materials to the site, complete trenching and grading, and install new structures. Construction activities would result in short-term increases in emissions from the use of heavy machinery, soil disturbance, materials used in construction, and construction traffic. Construction activities are expected to take 40 to 52 weeks. Emissions would consist of fugitive dust (particulate matter), mainly from ground-disturbance, as well as ROG and NO_x from equipment operations and vehicle use (Table 2).

Emissions are not anticipated to exceed the threshold of significance for ROG, NO_x, or PM_{10}, would be short-term, and are expected to remain localized and dissipate within the immediate vicinity. Additionally, these emissions would be minimized through implementation of fugitive dust emission control measures (Mitigation Measure AQ-1) as part of the Project's conformity to the YSAQMD *Handbook for Assessing and Mitigating Air Quality Impacts*, adopted in July 2011, Section 6.1 "Construction Dust Mitigation" and construction equipment exhaust control measures (Mitigation Measures AQ-2 and AQ-3) found in Section 6.2 "Construction Equipment Exhaust Mitigation".

Operational Emissions

During normal operation of the facilities, the proposed Project would not result in criteria pollutant emissions or cause a change in air quality. The Project would require additional electrical power supply for the new pump station. Offsite emissions by the utility provider associated with additional electric usage are provided in Table 2 (discussed in Section 3.6 Energy). Operational emissions are not anticipated to exceed the threshold of significance for ROG, NOx, or PM_{10}. A backup generator will be installed within an enclosure. Use of the generator would be for essential water supply facilities (well and treatment facility) and would only be used during prolonged power outages and periodic testing.

Construction and operation of the proposed Project would have a ***less than significant impact***. Although not required, the following mitigation measures from the YSAQMD are recommended to further reduce this impact.

Mitigation Measures

AQ-1 Dust Control Measures. Implement dust control measures to minimize airborne dust and soil particles generated from construction-related activities, including watering or applying dust palliative to disturbed areas, preventing and promptly removing trackouts on public roadways affected by construction traffic, and covering soils or construction materials or providing adequate freeboard (space from the top of the material to the top of the truck) during transport.

AQ-2 Construction Vehicles and Equipment. Maintain and tune the construction vehicles and equipment in accordance with manufacturer's specifications.

AQ-3 Limit Idling. Limit idling times either by shutting construction equipment off when not in use or reducing the maximum idling time to 5 minutes.

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

Sensitive receptors in the Project area include 138 residences in the town of Madison, 92 residences in the Madison Migrant Facility and associated daycare/pre-school, Madison Community High School, and the Madison community park. Implementation of the proposed Project would not result in the long-term operation of new stationary emission sources and therefore would not result in long-term increases in exposure to localized pollutant concentrations. Construction activities may result in temporary increases of construction-generated emissions, which are short-term, lasting only as long as construction activities occur. Due to the linear nature of this Project, construction activities would not occur in close proximity to any single sensitive receptor for an extended period of time. These emissions would be temporary and limited to the immediate area surrounding the construction site. Additionally, these emissions would be further minimized through implementation of Mitigation Measures AQ-1 through AQ-3.

Therefore, the Project would have a ***less than significant impact***.

Mitigation Measures: None required.

d. Would the project result in other emissions, such as those leading to odors adversely affecting a substantial number of people?

Minor sources of odors would be present during construction from diesel engines, which may be considered offensive to some individuals. However, because odors would be temporary and would disperse rapidly with distance from the source, construction-generated odors would not result in frequent objectionable odorous emissions. Sodium hypochlorite, another potential source of odor, is currently used as part of the water treatment process and would continue to be used following implementation of the Project. When handled in accordance with good industrial hygiene and safety practice, there are no odor emissions associated with the use of sodium hypochlorite in the routine disinfection of water. There would be temporary odors associated with use of the generator during power outages. The Project would have a ***less than significant impact***.

Mitigation Measures: None required.

3.4 Biological Resources

Would the Project:

Question	CEQA Determination
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, or National Marine Fisheries Service?	Less than Significant Impact with Mitigation Incorporated
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 with Mitigation Incorporated
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?	No Impact
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
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
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 with Mitigation Incorporated

Environmental Setting

The Project is located in the town of Madison in a rural area of unincorporated Yolo County and surrounded by agricultural land use. The town of Madison is located within the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP) area. Elevation within the Project area is approximately 145 feet above mean sea level. The topography within the Project area is relatively flat with a general upward slope towards the eastern and western portions of Madison; CR-89 represents the low point. The region around the town of Madison is characterized by hot dry summers and wet winters. Climate details in the Project area are based on historical data collected by the Western Regional Climate Center monitoring station at Winters, located approximately 11 miles south of the Project area. Average annual rainfall is approximately 21.94 inches, mostly occurring from October through May.

A Biological Resources Evaluation Report was prepared for the Project (AWE 2023) and is summarized in this section. On September 13, 2023 a biological field survey was conducted within the Biological Study Area (BSA), which includes the Project area and a 250-foot buffer. Field surveys consisted of a botanical survey, a wildlife habitat assessment, a tree survey, and a nest survey.

The BSA supports three generalized vegetation communities consisting of one aquatic vegetation community (riverine [the irrigation canal]) and two upland vegetation communities (developed and semiagricultural/incidental to agriculture). A vast majority of the Project area is developed habitat. Figure 7 shows generalized vegetation communities in the BSA. Acreages of vegetation communities within the BSA are provided in Table 3.

Table 3. Vegetation Communities within the Biological Study Area

Vegetation Community	Acres within the Biological Study Area
Developed	82.96
Riverine	0.68
Semiagricultural/Incidental to Agriculture	4.49
Total	**88.13**

Information about habitat types and special-status species with the potential to occur within the BSA was obtained from multiple sources, including the Yolo HCP/NCCP, CDFW California Natural Diversity Database (CNDDB), the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation Database (IPaC), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, the National Marine Fisheries Service (NMFS) database, the USFWS National Wetlands Inventory, and the Natural Resources Conservation Service (NRCS) soils and noxious weed information.

A preliminary review of these species lists identified two special-status plant and 14 special-status wildlife species with potential to be present within the geographic region. Of the special-status species identified, the two plant species and five of the wildlife species are not expected to occur in the BSA or have the potential to be affected by the Project because the BSA lacks suitable habitat for the species or is outside the species' known range. The following species have potential to occur within the Project area:

- Monarch butterfly (*Danaus plexippus*) (Federal candidate)
- Crotch's bumble bee (*Bombus crotchii*) (State candidate endangered [SCE])
- Western pond turtle (*Actinemys marmorata*) (State species of special concern) [SSC])
- Swainson's hawk (*Buteo swainsoni)* (State threatened [ST])
- White-tailed kite (*Elanus leucurus*) (Fully protected)
- Western burrowing owl (*Athene cunicularia*) (SSC)
- Black-crowned night heron (*Nycticorax nycticorax*) rookery (No listing status)
- Tricolored blackbird *(Agelaius tricolor)* (ST)
- Western red bat *(Lasiurus frantzii)* (SSC)

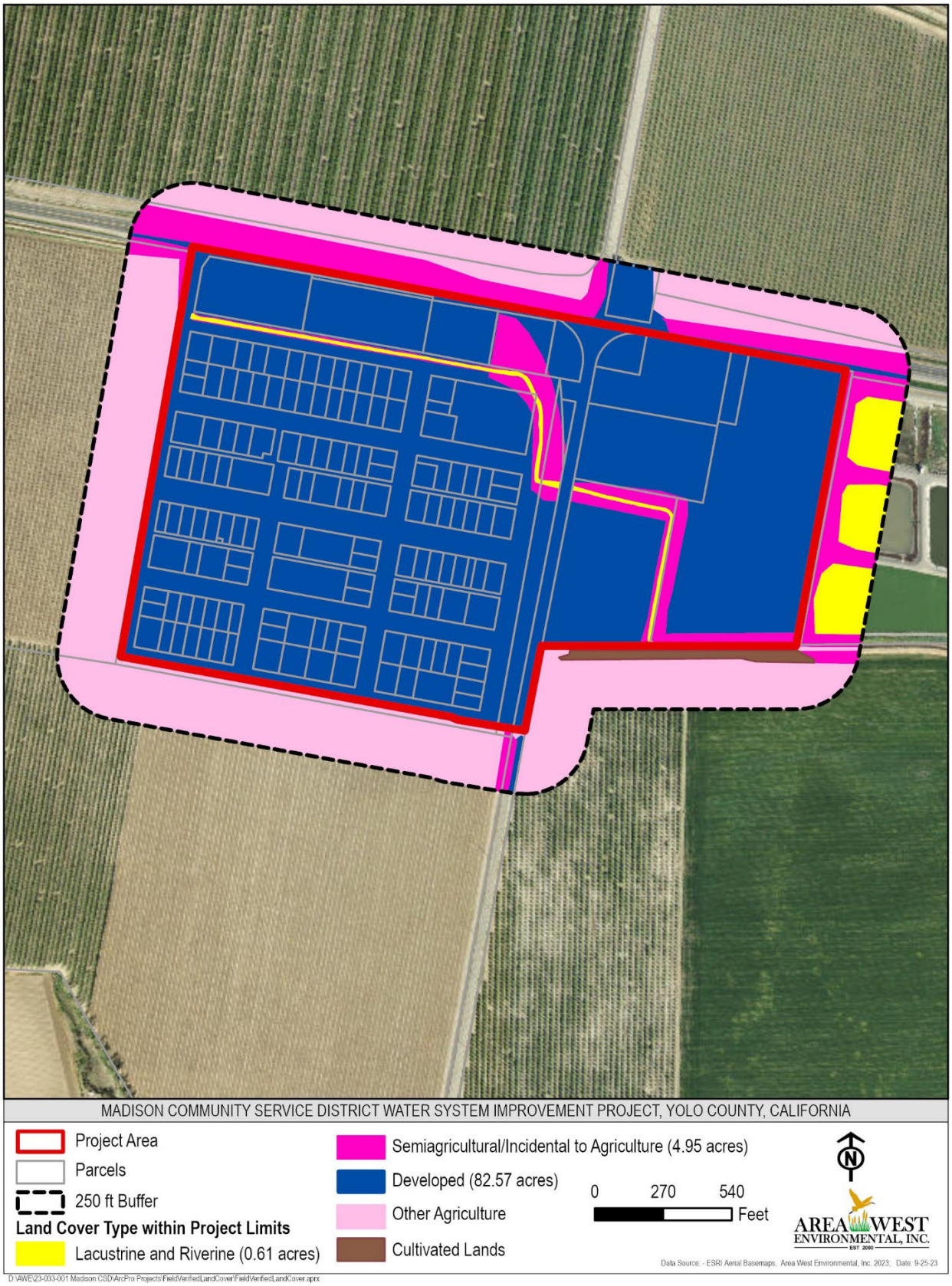

Figure 7. Vegetation Communities within the BSA

One special-status species, Swainson's hawk, was observed during the survey. The hawk was observed roosting in a cottonwood tree adjacent to CA-16 at the northern boundary of the Project area; it flew from a cottonwood tree and landed in a large eucalyptus tree along CR-89 within the Project area. A great egret and a juvenile black night-crowned heron were observed in a known rookery identified by CNDDB, which was inactive at the time of the biological survey, but old stick nests were observed. Narrowleaf milkweed, a host plant for Monarch butterfly, was observed in a disturbed grass area on the south side of the gas station property. Trees within and adjacent to the Project area provide potential nesting habitat for migratory birds and raptors and roosting habitat for special-status bats.

Impacts and Mitigation Measures

a. Will the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

The Project was designed to minimize potential impacts to constituent habitats and covered species. Yolo HCP/NCCP general and species-specific AMMs would be implemented and sensitive habitat areas avoided. The following discussion provides an analysis of potential impacts on sensitive biological resources from implementation of the Project, followed by recommended AMMs and/or compensatory mitigation to minimize these potential impacts and reduce them to a less than significant level.

Potential Impacts to Special-status Insects

Potentially suitable habitat for monarch butterfly is found within the Project area. Narrowleaf milkweed was observed south of the gas station, between CR-89 and the irrigation canal. Replacement of an existing water pipe in this area may directly affect milkweed plants that provide suitable habitat for the species. Direct mortality of monarch individuals could occur if construction occurs when larva or eggs are present on affected milkweed. Fugitive dust on host plants could reduce the health and vigor of any monarch larvae present on the plants and could affect the ability of adults to lay eggs if host plants are covered in dust. Implementation of AMMs 3, 5, 6, 8, and 9 from the Yolo HCP/NCCP, and BIO-11, described at the end of this section, would reduce impacts to monarch butterfly.

The Project area has low potential to support Crotch's bumblebee. Crotch's bumble bee is typically found in grassland and scrub areas containing dense floral resources from coastal California east to the Sierra-Cascade crest. The Project area does not contain the dense floral resources the species typically relies on; additionally, a vast majority of the Project area is regularly disturbed and does not contain undisturbed nesting sites. It is unlikely the species would occur onsite and bumblebees (of any species) were not observed during the biological survey. The Project would not affect this species.

Potential Impacts to Special-status Reptiles

The irrigation canal (Madison Drain), the ponds at the adjacent wastewater treatment plant, and surrounding uplands provide suitable aquatic and breeding habitat for western pond turtle. No turtles were observed during the survey, however, western pond turtle may be affected if present within the irrigation canal during Project activities in that location. Effects could include disturbance or destruction of nests containing eggs or young resulting from contact with vehicles or other construction equipment; entrapment in trenches; a reduction in prey or forage items caused by silting, fill placement, or spill of oils or other chemicals; obstruction of movement due to the presence of people, equipment, and topographic changes; displacement from the Project area due to the presence of people and equipment; and an increased risk of predation by wildlife inadvertently attracted by the Project.

The Project would result in temporary and permanent impacts to potential upland and aquatic habitat for western pond turtle. However, over the long term, the site would continue to function for western pond turtle as it currently does as the Project activities within suitable habitat are temporary. Implementation of AMMs 3 through 6, 8 through 10, and 14 from the Yolo HCP/NCCP, described at the end of this section, would reduce impacts to western pond turtle.

Potential Impacts to Special-status and Migratory Birds

Large trees within and immediately adjacent to the Project area provide suitable nesting habitat for Swainson's hawk, white tailed kite and other migratory birds and raptors. The Project does not involve the removal of large trees that could provide suitable nesting habitat for Swainson's hawk or white-tailed kite. If Swainson's hawks or white-tailed kites were to nest in or near the Project area, noise associated with the construction activities during the breeding season (generally March 15 through August 31) could affect nesting. The portions of the Project area containing ruderal vegetation where construction activities could disturb the groundcover would recover quickly post construction as they would be reseeded with native seed mix. Over the long term, the Project area would continue to function for Swainson's hawk and white-tailed kite as it currently does as most impacts are temporary. Implementation of AMMs 3, 5, 6, 8 and 16 from the Yolo HCP/NCCP, described in the following section, would reduce impacts to nesting Swainson's hawk and white-tailed kite.

For ground-nesting birds, removal of the groundcover could directly affect their ability to reproduce. Any disturbance that causes migratory bird or raptor nest abandonment and subsequent loss of eggs or developing young at active nests located at or near the construction work area would violate CDFW CFGC Sections 3503 or 3503.5 and the Migratory Bird Treaty Act. Implementation of AMMs 3, 5, 6, 8 and 16 from the Yolo HCP/NCCP, described in the following section, would reduce impacts to nesting migratory birds and raptors.

Potential Impacts to Special-status Mammals

Trees within and immediately adjacent to the Project area provide suitable roosting habitat for western red bats. The Project does not involve the removal of large trees that could provide suitable roosting habitat. The noise associated with construction activities involving heavy equipment could disturb roosting bats if they are using habitat near these activities. Construction activities are not expected to disturb foraging bats, as these activities would not be conducted during dusk or dawn when bats would be actively foraging. Following Project activities, temporarily disturbed areas would be restored and continue to function as they currently do. Implementation of AMMs 3, 5, 6, and 8 from the Yolo HCP/NCCP, and BIO-10 (AMM-Bat), described at the end of this section, would reduce impacts to roosting bats.

The Project would have ***no impact*** on special-status plant species. The Project would have would ***less than significant impact with mitigation incorporated*** on special-status wildlife species.

Mitigation Measures

The following mitigation measures would reduce potential impacts to aquatic habitat and special-status species with potential to occur within the Project area. Where measures are taken from the Yolo HCP/NCCP, the AMM numbering is shown in parentheses.

BIO-1 (AMM-3) Confine and Delineate Work Area. Where natural communities and covered species habitat are present, workers will confine land clearing to the minimum area necessary to facilitate construction activities. Workers will restrict movement of heavy equipment to and from the project site to established roadways to minimize natural community and covered species habitat disturbance. The project proponent will clearly identify boundaries of work areas using temporary fencing or equivalent and will identify areas designated as environmentally sensitive. All construction vehicles, other equipment, and personnel will avoid these designated areas.

BIO-2 (AMM-4) Cover Trenches and Holes during Construction and Maintenance. To prevent injury and mortality of giant garter snake, western pond turtle, and California tiger salamander, workers will cover open trenches and holes associated with implementation of covered activities that affect habitat for these species or design the trenches and holes with escape ramps that can be used during non-working hours. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.

BIO-3 (AMM-5) Control Fugitive Dust. Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.

BIO-4 (AMM-6) Conduct Worker Training. All construction personnel will participate in a worker environmental training program approved/authorized by the Conservancy and administered by a qualified biologist. The training will provide education regarding sensitive natural communities and covered species and their habitats, the need to avoid adverse effects, state and federal protection, and the legal implications of violating the Federal Endangered Species Act (FESA) and NCCPA Permits. A pre-recorded video

presentation by a qualified biologist shown to construction personnel may fulfill the training requirement.

BIO-5 (AMM-8) Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas. Project proponents should locate construction staging and other temporary work areas for covered activities in areas that will ultimately be a part of the permanent project development footprint. If construction staging and other temporary work areas must be located outside of permanent project footprints, they will be located either in areas that do not support habitat for covered species or are easily restored to prior or improved ecological functions (e.g., grassland and agricultural land).

Construction staging and other temporary work areas located outside of project footprints will be sited in areas that avoid adverse effects on the following:

- Serpentine, valley oak woodland, alkali prairie, vernal pool complex, valley foothill riparian, and fresh emergent wetland land cover types.
- Occupied western burrowing owl burrows.
- Nest sites for covered bird species and all raptors, including noncovered raptors, during the breeding season.

Project proponents will follow specific AMMs for sensitive natural communities and covered species in temporary staging and work areas. For establishment of temporary work areas outside of the project footprint, project proponents will conduct surveys to determine if any of the biological resources listed above are present.

Within one year following removal of land cover, project proponents will restore temporary work and staging areas to a condition equal to or greater than the covered species habitat function of the affected habitat. Restoration of vegetation in temporary work and staging areas will use clean, native seed mixes approved by the Conservancy that are free of noxious plant species seeds.

BIO-6 (AMM-9) Establish Buffers around Sensitive Natural Communities. The buffers for each sensitive natural community are as follows:

Lacustrine and riverine: Outside urban planning units, 100 feet from the top of banks. Within urban planning units, 25 feet from the top of the banks.

BIO-7 (AMM-10) Avoid and Minimize Effects on Wetlands and Waters. Project proponents will comply with stormwater management plans that regulate development as part of compliance with regulations under National Pollutant Discharge Elimination System (NPDES) permit requirements. Covered activities that result in any fill of waters or wetlands will also comply with requirements under Section 404 of the Clean Water Act, State Water Resources Control Board, CFGC Section 1602, and Regional Board regulations. Other than requirements for buffers, minimizing project footprint, and species-specific measures for wetland-dependent covered species, this HCP/NCCP does not include specific best management practices for protecting wetlands and waters because they may conflict with measures required by the USACE, State Board, Regional Board, and CDFW.

BIO-8 (AMM-14) Minimize Take and Adverse Effects on Habitat of Western Pond Turtle. There are no specific design requirements for western pond turtle habitat, however, project proponents must follow design requirements for the valley foothill riparian and lacustrine and riverine natural communities described in AMMs 9 and 10, which require a 100-foot (minimum) permanent buffer zone from the canopy drip-line (the farthest edge on the ground where water will drip from the tree canopy, based on the outer boundary of the tree canopy). If modeled upland habitat will be impacted, a qualified biologist must be present and will assess the likelihood of western pond turtle nests occurring in the disturbance area (based on sun exposure, soil conditions, and other species habitat requirements).

If a qualified biologist determines that there is a moderate to high likelihood of western pond turtle nests within the disturbance area, the qualified biologist will monitor all initial ground disturbing activity for nests that may be unearthed during the disturbance and will move out of harm's way any turtles or hatchlings found.

BIO-9 (AMM-16) Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite. The project proponent will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. Up to 20 Swainson's hawk nest trees (documented nesting within the last 5 years) may be removed during the permit term, but they must be removed when not occupied by Swainson's hawks.

For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the project proponent will conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30

within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

BIO-10 Conduct Preconstruction Survey for Roosting Bat. Prior to the start of construction, a qualified biologist will conduct a preconstruction roost survey. Field surveys shall be conducted early in the breeding season before any construction activities begin, when bats are establishing maternity roosts but before pregnant females give birth (April through early May). If no roosting bats are found, then no further survey is required. If a bat maternity roost is found, then disturbance of the roost shall be avoided by establishing a minimum 250-foot avoidance buffer around the roost until it is no longer occupied as determined by the qualified biologist. The avoidance buffer may be reduced if a qualified biologist monitors the construction activities and determines the roost is not being disturbed. Reduction of the buffer depends on the species of bat, location of the roost relative to Project activities, activities during the time the roost is active, and other project-specific conditions. No work shall occur in the buffer until it is determined that the bats have left on their own, or until the end of the maternity season.

BIO-11 Conduct Preconstruction Survey for Monarch Butterfly. If construction is scheduled between June 1 and September 30 (peak flight period), a qualified biologist would conduct a preconstruction survey for monarch butterfly at known milkweed plants within the Project area. If the species is not discovered, no further action is required. If monarch eggs, larvae, or adults are discovered, the milkweed would be avoided until the qualified biologist determines the species is no longer utilizing the milkweed.

If the milkweed present south of the gas station cannot be avoided during pipe replacement activities, native milkweed seeds would be added to the seed mix used to reseed temporarily disturbed areas within this area.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?

The Project would temporarily affect the Madison Drain, a riverine habitat, to install pipeline for the water system. It is anticipated that 3-foot-wide open trenching would be utilized to install the pipe across the Madison Drain, and the trench would be backfilled and recontoured to preconstruction conditions. Construction activities within the canal could result in increased sediment loads, turbidity, and siltation. The accidental introduction of solvents, oil, or other pollutants during construction could harm the aquatic environment present. Approximately 0.05 acre of riverine habitat would be temporarily affected by the installation of pipe within the banks of the irrigation canal. Project construction is not expected to alter the riparian habitat quality from existing conditions. Implementation of AMMs 3, 5, 6, 8, 9, and 10 from the Yolo HCP/NCCP, described in the previous section, would reduce impacts to riverine habitat/waters of the U.S. and state.

The Project would have ***less than significant impact with mitigation incorporated***.

Mitigation Measures

BIO-1 (AMM-3) Confine and Delineate Work Area.

BIO-3 (AMM-5) Control Fugitive Dust.

BIO-4 (AMM-6) Conduct Worker Training.

BIO-5 (AMM-8) Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas.

BIO-6 (AMM-9) Establish Buffers around Sensitive Natural Communities.

BIO-7 (AMM-10) Avoid and Minimize Effects on Wetlands and Waters.

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

There is no wetland habitat present in the BSA, therefore no substantial adverse impact will occur on federally protected wetlands. Therefore, the Project would have ***no impact.***

Mitigation Measures: None required.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?

The BIOS searches of the Essential Connectivity Areas and Natural Landscape Blocks of the California Essential Habitat Connectivity Program, which depicts large, relatively natural habitat blocks that support native biodiversity and areas essential for connectivity between them, show there are no essential connectivity areas or natural landscape blocks within the Project area. Several landscape blocks and essential connectivity areas are found to the north of Madison near Zamora and to the east of Capay. The majority of the Project area is developed habitat, although the irrigation canal that traverses the site provides connectivity to the South Fork of Willow Slough. The irrigation canal could provide a pathway for some species to travel through the Project area.

As described under Question (a), large trees within and immediately adjacent to the Project area provide suitable nesting habitat for Swainson's hawk, white tailed kite and other migratory birds and raptors, and the milkweed provides breeding habitat for the monarch butterfly. Additionally, ground nesting birds may choose to nest in the BSA. A night-crowned heron rookery is identified by the CNDDB on the eastern portion of the Project area, but construction activities will not occur in the vicinity of the rookery. During Project construction, construction noise and human presence could temporarily deter wildlife from moving or dispersing through the active construction area. Wildlife could continue to migrate through existing habitat adjacent to the active construction area.

There would be no permanent impact to riparian habitat, and the habitat would continue to function as it had prior to the Project. Implementation of the mitigation measures described above would reduce impacts to migrating or dispersing species.

The Project would have a ***less than significant impact*** on the movement of wildlife, migratory corridors, and native nursery sites.

Mitigation Measures: None required.

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

Yolo County has an Oak Woodland Conservation and Enhancement Plan to coordinate voluntary oak woodlands conservation. No trees will be removed as part of the proposed Project, therefore, the Project would not conflict with local policies or ordinances protecting biological resources. Therefore, the Project would have ***no impact.***

Mitigation Measures: None required.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The proposed Project is a covered activity under the Yolo HCP/NCCP. In accordance with Yolo HCP/NCCP implementing guidance, Madison CSD contracted with a Yolo Habitat Conservancy-qualified biologist to prepare a planning level survey report (i.e., Biological Resources Evaluation Report [AWE 2023]), and Madison CSD and their consulting biologists coordinated directly with Yolo Habitat Conservancy staff regarding survey results and Project impacts. Madison CSD submitted an application for incidental take coverage under the Yolo HCP/NCCP on September 26, 2023. The Yolo Habitat Conservancy issued a Certificate of Approval of the Project on October 5, 2023. Therefore, the Project is consistent with the provisions of the Yolo HCP/NCCP. The Project would have ***less than significant impact.***

Mitigation Measures: None required.

3.5 Cultural Resources

Would the Project:

Question	CEQA Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	Less than Significant Impact with Mitigation Incorporated
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less than Significant Impact with Mitigation Incorporated
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	Less than Significant Impact with Mitigation Incorporated

Environmental Setting

The townsite for Madison was laid out in 1877 when the Vaca Valley and Clearwater Lake railroad reached this location after expanding north from Winters. The name was bestowed by Daniel Bradley Hulbert after his hometown, Madison, Wisconsin (Crull 2018). The Vaca Valley and Clearwater Lake railroad was bought out in 1886 by the Southern Pacific's Northern Railroad Division, which operated until 1957, then the tracks were removed from Vacaville to Esparto circa 1975.

A *Cultural Resources Report* (AWE 2023) was prepared for the Project. AWE contacted the Northwest Information Center (NWIC) of the California Historical Resources Information System located at Sonoma State University, Rohnert Park with a request for a records search. The purpose of this review is to determine whether any portion of the Project area has been surveyed for cultural resources and whether there are known archaeological or historic-era resources in the immediate area. The NWIC provided the results of a record search dated August 28, 2023. The record search was requested for the proposed Project area and within a ¼-mile radius of that location.

The NWIC reported that there are five historic resources within the Project area: one historic-era building, one site and one district for the historic Vaca Valley & Clearlake railroad, the historic Madison Town site, and the Madison Hotel and Flour Mill site. The railroad site within the Project area includes sections of the railroad grade berm, but all rails have been removed, and in many cases the grade sections are being used as access roads. The sites of the Madison Hotel and Historic Town no longer have remaining structures. The historic era building (P-57-001292) is the remnants of the Madison Market, circa 1895. The building is located on the northwest corner of Main Street and Railroad Street.

No pre-historic resources were identified in the NWIC record search. The Native American Heritage Commission (NAHC) was contacted on August 15, 2023, and November 13, 2023, by email advising the organization of the project and requesting a search of their Sacred Land files and a current list of interested Native American tribes for the project area. A reply was received

on December 1, 2023, with negative results for records in the Sacred Lands file within or adjacent to the project. A list with contact information for Yolo County Native American Tribes was also received. AWE sent contact letters to Native American tribes on October 23, 2023, and December 6, 2023. A letter was received from Yocha Dehe Wintun Nation on November 27, 2023, initiating formal consultation. Please refer to Section 3.18 Tribal Cultural Resources for more information on Native American Consultation.

An intensive cultural resource pedestrian survey was performed by archaeologist Mary Bailey of AWE on the Area of Potential Effect (APE) (Figure 8). The field survey was conducted on October 16, 2023. No new cultural materials, features, or sites were identified within the APE during the survey. The developed portions of the APE within and immediately adjacent to the roadway have been significantly disturbed over decades of use.

The Project area is considered low sensitivity for the presence of pre-historic resources as the site was subject to annual inundation until flood control measures were taken in the early 1900's. The Project area is considered moderate to high sensitivity for the presence of historic-era resources.

Impacts and Mitigation Measures

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

There are five historic resources within the Project area. The historic-era sites and districts have few features of significance that remain. No features were identified during the pedestrian survey, and most areas within the APE have been significantly disturbed. However, there remains the possibility that previously undiscovered resources may be found during ground disturbing activities associated with the Project. Potential significant impacts to previously undiscovered historic and/or archaeological resources would be avoided through implementation of Mitigation Measures CUL-1 and CUL-2. Therefore, the Project would have ***less than significant impact with mitigation incorporated***.

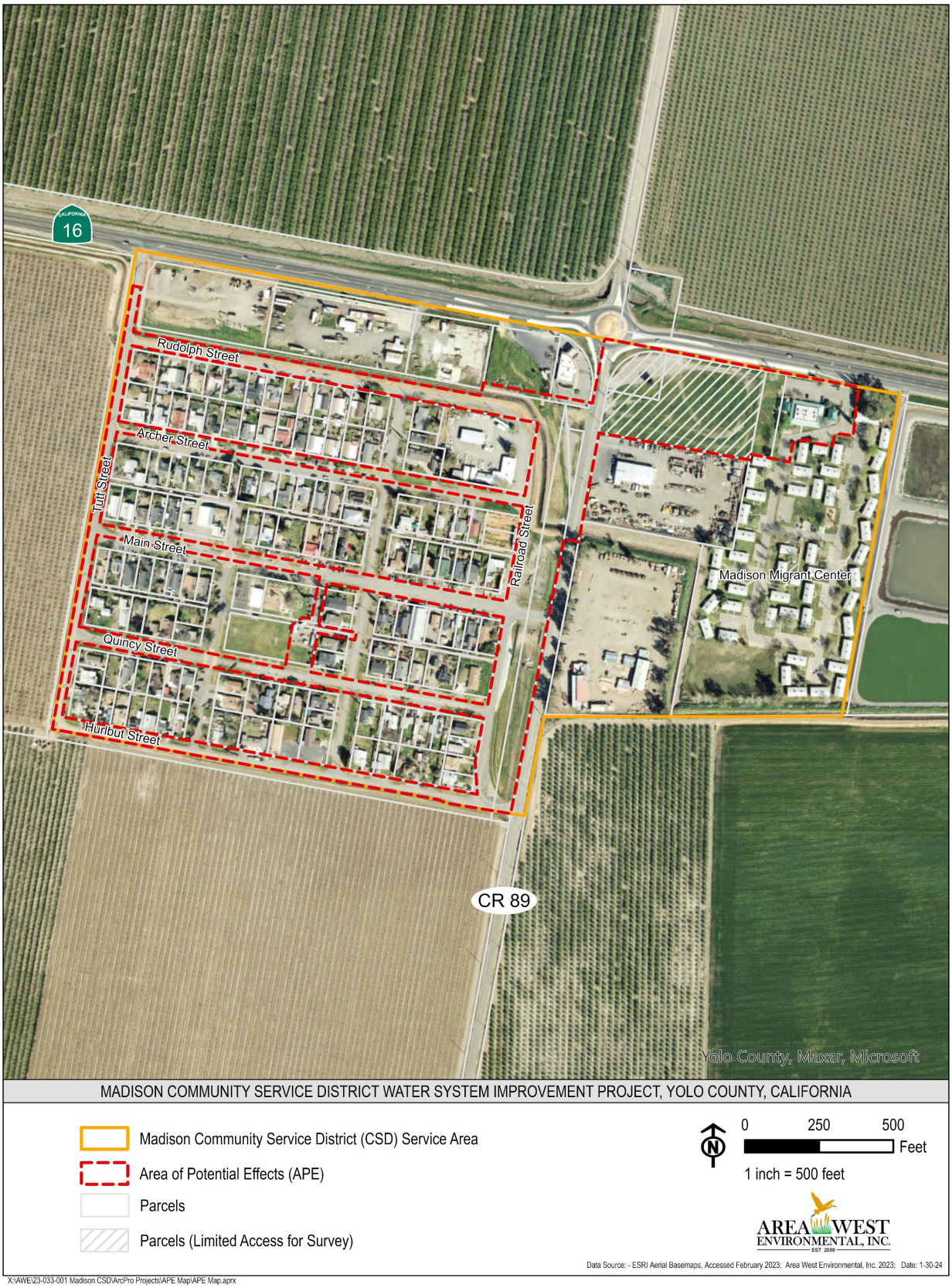

Figure 8. Area of Potential Effects

Mitigation Measures

CUL-1 Conduct Worker Environmental Awareness and Cultural Respect Training. All construction personnel must receive Tribal Cultural Resources Sensitivity and Awareness Training (Worker Environmental Awareness Training [WEAT]), including field consultants, equipment operators, and construction workers. The WEAT shall be developed in coordination with interested Native American Tribes (i.e., Yocha Dehe Wintun Nation). The WEAT shall be conducted before any project-related construction activities begin at the project area. The WEAT will include relevant information regarding sensitive Tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The WEAT will also describe appropriate avoidance and impact minimization measures for Tribal cultural resources that could be located at the project area and will outline what to do and who to contact if any potential Tribal cultural resources are encountered. The WEAT will emphasize the requirement for confidentiality and culturally appropriate treatment of any discovery of significance to Native Americans and will discuss appropriate behaviors and responsive actions, consistent with Native American Tribal values. The training may be done in coordination with the project archaeologist. During excavation or other substantial subsurface disturbance activities, all construction personnel must follow procedures and the direction of archeologists and Tribal monitors if any cultural resource materials are observed.

CUL-2 Implement Procedures for Inadvertent Discovery of Cultural Resources. If workers observe any evidence of indigenous (precontact-era) cultural resources (freshwater shells, beads, bone tool remnants or an assortment of bones, soil changes including subsurface ash lens or soil darker in color than surrounding soil, lithic materials such as flakes, tools or grinding rocks, other artifacts, cultural belongings, chipped stone, exotic rock etc.), or historic-era cultural resources (adobe foundations or walls, structures and remains with square nails, refuse deposits or bottle dumps, often associated with wells or old privies), all work within 60 feet must immediately cease. Madison CSD and Yolo County will be notified of the potential find and a qualified archeologist shall investigate its significance. If the qualified archaeologist determines the archaeological material to be Native American in nature, the Consulting Tribe(s) shall be immediately notified and shall determine if the find is a Tribal cultural resource (pursuant to PRC section 21074). The Tribal representative will make recommendations for further evaluation and treatment, as necessary. Preservation in place is the preferred alternative, and every effort must be made to preserve the resources in place. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, and returning objects to a location within the project area where they will not be subject to future impacts.

If the find is determined to be significant by the archaeologist (i.e., because it is determined to constitute a unique archaeological resource), the archaeologist shall work with Madison CSD and Yolo County to develop and implement appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected. Procedures could include but would not necessarily be limited to preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery.

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

No archaeological resources listed on or eligible for the California Register of Historical Resources, or that meet other criteria of significance under CEQA Section 15064.5, were identified within the proposed Project area. However, because earthmoving activities associated with the Project would occur, there is potential to encounter previously undiscovered resources within the Project area. Potential significant impacts to previously undiscovered historic and/or archaeological resources would be avoided through implementation of Mitigation Measures CUL-1 and CUL-2. Therefore, the Project would have a ***less than significant impact with mitigation incorporated***.

Mitigation Measures

CUL-1 Conduct Worker Environmental Awareness and Cultural Respect Training.

CUL-2 Implement Procedures for Inadvertent Discovery of Cultural Resources.

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

No human remains have been previously encountered in the vicinity of the proposed Project. However, this does not preclude the potential for discovering buried human remains during ground disturbance associated with construction of the proposed Project. Although unlikely, if human remains are discovered during proposed Project construction, California Health and Safety Code regulations shall be followed, as required by law. Therefore, the Project would have ***less than significant impact with mitigation incorporated.***

Mitigation Measure

CUL-3 Procedures for Discovery of Human Remains. If human remains are discovered, all work must immediately cease, and the local coroner must be contacted. Procedures for the discovery of human remains will be followed in accordance with provisions of the State Health and Safety Code, Sections 7052 and 7050.5 and the State Public Resources Code (PRC) Sections 5097.9 to 5097.99. If the Coroner determines that the remains are those of a Native American, the Coroner shall contact the NAHC and subsequent procedures shall be followed, according to State Public Resources Code Sections 5097.9 to 5097.99, regarding notification of the Native American Most Likely Descendant.

3.6 Energy

Would the Project:

Question	CEQA Determination
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	Less than Significant Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

Environmental Setting

The Yolo County 2030 Countywide General Plan (Yolo County 2009) establishes goals and policies to achieve energy conservation and increase use of cleaner, renewable, and locally controlled energy sources. These goals include increasing the use of sustainable energy sources and reducing reliance on non-sustainable energy sources to the extent possible.

Impacts and Mitigation Measures

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

Construction

During construction, the proposed Project would require consumption of petroleum fuels (primarily diesel) through the use of construction vehicles to deliver construction personnel and materials to the site, complete trenching and grading, and install new structures. Additional energy usage would occur as power for tools and equipment used onsite. Construction will be temporary in nature and will follow typical processes. Construction vehicles will be maintained, and it is reasonable to assume that construction contractors will avoid wasteful or unnecessary fuel consumption to reduce construction costs and waste. Therefore, the proposed Project would not involve the wasteful, inefficient, or unnecessary consumption of energy resources during construction. Therefore, the Project construction would have ***less than significant impact***.

Operational

During operation, the proposed Project would require additional electrical power supply for the new pump station. The Project would include construction of a new booster pump station which would require electrical power and lighting for three 15 horsepower (hp) low flow pumps, three 50 hp high flow pumps, one 1.5 hp tank mixing pump, and instrumentation and controls. The building would not be fitted with air conditioning; it would have thermostat-controlled ventilation. Roof skylights would be constructed to provide lighting inside the building. The Project would

contribute to higher energy efficiency through updates and enhancement of the old water system. Water consumption patterns will not change as a result of the Project. Increased energy consumption would be commensurate with increased water production and would not result in wasteful, inefficient, or unnecessary consumption of energy resources during Project operation. Therefore, the Project operation would have ***less than significant impact***.

Mitigation Measures: None required.

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

The proposed Project is a domestic water system improvements project. Yolo County General Plan 2030 Policy CO-7.3 requires all projects incorporate energy-conserving design, construction, and operation techniques and features into all aspects of the project including buildings, roofs, pavement, and landscaping. Policy CO-7.6 further encourages the use of building materials and methods that increase energy efficiency. The Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that result in the efficient use of energy resources. The Project elements would not interfere with the Yolo County General Plan 2030 goals and policies surrounding renewable energy or energy efficiency. Therefore, the proposed Project would have ***no impact***.

Mitigation Measures: None required.

3.7 Geology and Soils

Would the Project:

Question	CEQA Determination
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.	No impact
(ii) Strong seismic ground shaking?	No impact
(iii) Seismic-related ground failure, including liquefaction?	No impact
(iv) Landslides?	No impact
b) Result in substantial soil erosion or the loss of topsoil?	Less than Significant Impact with Mitigation Incorporated
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	No impact
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?	No impact
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
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less than Significant Impact with Mitigation Incorporated

Environmental Setting

The proposed Project is located in central Yolo County, along the western border of the physiographic unit referred to as the Great Valley Province. The Great Valley is a trough in which sediments have been deposited almost continuously for about 160 million years (CDOC 2002). Geologic units in the Great Valley area generally consist of Quaternary alluvium or basin deposits, and the Quaternary Modesto and Riverbank Formations, both of which consist of somewhat older alluvium (Yolo County 2009).

The geological formations that underline Yolo County are generally paleontologically sensitive. The Project area is located within the southern extent of Capay Valley. The valley is drained by Cache Creek and, aside from recent Holocene alluvium in and near the creek bed, is primarily comprised of the Pleistocene-age Modesto-Riverbank Formation fluvial terrace deposits. Pleistocene alluvium is highly sensitive for paleontological resources (Yolo County 2009).

Soils within the Project area are generally Capay-Clear Lake association: moderately well drained to poorly drained, nearly level silty clays and clays; on basin rims and in basins (Yolo County 2009). The soils within the Project area have been identified by the Yolo County 2030 General Plan Environmental Impact Report (EIR) as having a Very High Linear Extensibility Percent and are classified as expansive soils (NRCS 2007, Yolo County 2009).

The only fault in Yolo County that has been identified by the California Geological Survey (CGS) as an Alquist-Priolo Earthquake Fault zone is the Hunting Creek Fault located in the extreme northwestern corner of the county. The only other potentially active fault in the county is the Dunnigan Hills Fault (approximately 21 miles to the northwest of Woodland). This fault is considered potentially active but is not delineated by the CGS as an Alquist-Priolo Earthquake Fault zone (Yolo County 2009).

According to the CGS Earthquake Shaking Potential for California, central Yolo County generally experiences lower levels of infrequent shaking due to active faults (CGS 2016). In addition to the above-mentioned faults, major regional faults in the Coast Ranges to the west of the Project are capable of producing ground shaking within the county. The project area is generally at relatively low risk of liquefaction, due to being in a relatively upland area (Yolo County 2009). The relatively flat terrain of the Project area lowers the potential for landslides.

Impacts and Mitigation Measures

a, (i)-(iv). Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?

The Project area is not within an active fault zone. The CGS has identified the region of the Project as an area of moderately low earthquake shaking potential (DOC 2016). The Project would not expose people or structures to additional risk associated with seismic activity or liquefaction. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

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

Project excavation would primarily be of paved developed surfaces. It is anticipated that open trenching would be utilized to install the pipe across the Madison Drain. Excavation and earthmoving activities would expose soils at the site and could result in soil erosion. However, the contractor would implement standard BMPs for erosion and sediment control through implementation of HYDRO-1 (See section 3.9 Hydrology and Water Quality). Because of the lack of erodible surfaces over most of the Project, and implementation of erosion control and stabilization measures, the Project would have limited potential to result in substantial soil erosion

and no significant potential for loss of topsoil. Therefore, the Project would have ***less than significant impact with mitigation incorporated.***

Mitigation Measure

HYDRO-1 Implement Water Quality Best Management Practices (BMPs). Described in Section 3.10 Hydrology and Water Quality.

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

The proposed Project area is not located within an active fault zone or active liquefaction zone. The Project would conduct a geotechnical investigation to obtain the engineering properties of the soil and rock to assist with final design and construction of the proposed Project. Therefore, the proposed Project would have ***no impact.***

Mitigation Measures: None required.

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

The soils within the Project area have been identified by the Yolo County 2030 General Plan EIR as having a Very High Linear Extensibility Percent and are classified as expansive soils (NRCS 2007, Yolo County 2009). The Project would not create a new substantial risk to life or property. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

e. Would the proposed project have soils incapable of adequately supporting the use of septic tanks or alternate wastewater disposal systems where sewers are not available for the disposal of wastewater?

No septic tanks or alternative wastewater disposal systems are proposed as part of the Project. Therefore, the Project would have ***no impact.***

Mitigation Measures: None required.

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

Paleontological sensitivity of the site is tied to the underlying geologic unit. Fossils are typically found in sedimentary rocks, which are formed by the deposition of sediment on the earth's surface. The Project area is primarily underlain by Pleistocene-age Modesto-Riverbank Formation fluvial terrace deposits (Yolo County 2009). Pleistocene alluvium is highly sensitive for paleontological

resources. The sediments within the Project area, except in areas of artificial fill, have a potential to contain paleontological resources.

The Project primarily involves installation of new pipe to replace old and failing pipe in existing asphalt roads throughout the town of Madison. Pipe replacement is occurring in already disturbed locations containing existing water facilities within public road ROW.

California PRC Sections 5097 to 5097.6 prohibit the unauthorized disturbance or removal of paleontological resources. If previously unidentified paleontological resources are unearthed during construction, work will be halted in that area until a qualified specialist can assess the significance of the find. Therefore, the Project would have a ***less than significant impact with mitigation incorporated***.

Mitigation Measures

GEO-1 Protect Discovered Paleontological Resources. If any evidence of paleontological resources is inadvertently unearthed during construction, all work will cease within 50 feet of the discovery, Madison CSD and Yolo County will be notified, and a qualified paleontologist shall be consulted to assess the significance of the resources and recommend appropriate conservation measures.

3.8 Greenhouse Gas Emissions

Would the Project:

Question	CEQA Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	No Impact

Environmental Setting

Carbon dioxide equivalent (CO_2e) is a measurement of the total GHGs emitted, expressed in terms of the equivalent measurement of carbon dioxide. The YSAQMD has not yet established a significance threshold for the emissions of GHG from land use development projects and construction projects. The Sacramento Metropolitan Air Quality Management District (SMAQMD) has identified a construction threshold of significance as 1,100 metric tons per year of CO_2e (SMAQMD 2021). The Yolo 2030 Countywide General Plan includes a Climate Action Plan indicating that the County shall take all feasible measures to reduce its CO_2e emissions within the unincorporated area.

Impacts and Mitigation Measures

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant effect on the environment?

GHG emissions would occur during construction of the proposed Project as a result of the use of construction vehicles to deliver construction personnel and materials to the site, complete trenching and grading, and install new structures, as well as the use of power for tools and equipment. Additional offsite GHG emissions by the utility provider would occur during operation of the proposed Project due to the electrical power required to run the new booster pump station. The generator would produce onsite GHG emissions but would only operate during extended power outages and periodic testing.

Emissions from proposed Project implementation were quantified using CalEEMod as described in Section 3.3 Air Quality. Based on the modeling results presented in Table 4, proposed Project construction would result in less than 133 metric tons per year of CO_2e emissions, which is below the SMAQMD significance threshold of 1,100 metric tons per year.

Due to the scale and nature of construction activities, the short-term construction-generated GHG emissions would not result in a significant individual or cumulative contribution to GHG emissions. Increased operational energy consumption is proportional to increased GHG emissions.

As discussed in Section 3.6 Energy, increased energy consumption would be commensurate with increased water production and would be only nominally higher than existing conditions. Therefore, the Project would have ***less than significant impact***.

Mitigation Measures: None required.

Table 4. Annual Unmitigated Emissions

Emissions Source	CO_2e (metric tons/year)
Construction	132.6637
Operational	0.00012
Threshold	*1,100*

Source: CalEEMod, October 2023 (see Appendix B)

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

The Project would not significantly increase the generation of emissions upon completion of construction because water production and distribution operations would be similar to the current operations. Increased GHG emissions associated with increased energy usage for increased water production would be nominal. The water system improvements could improve distribution operations and potentially reduce the long-term operations emissions. The generator would only be used during extended power outages and periodic testing. The Project would also eliminate the energy use and GHG emissions associated with emergency maintenance activities required to restore water supply to the residents of Madison under current conditions.

California legislation has been adopted to address GHG impacts and set goals for GHG emissions reductions state-wide. These include Assembly Bill (AB) 32, Senate Bill 97, and Senate Bill 375. After AB 32 was adopted, the Governor's Office of Planning and Research published a Technical Advisory *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review* (OPR 2008). Additionally, Yolo County has adopted a Climate Action Plan (Yolo County 2011) and the nearby SMAQMD has prepared guidance for CEQA analysis of GHG emissions in their *Guide to Air Quality Assessment in Sacramento County* (SMAQMD 2009). Although the proposed Project would generate GHG emissions during construction, the Project does not substantially increase operational GHG emissions, and does not impede regional goals for reducing GHG emissions. The Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

3.9 Hazards and Hazardous Materials

Would the Project:

Question	CEQA Determination
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
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 with Mitigation Incorporated
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
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
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
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than Significant Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

Environmental Setting

A review of the California Department of Toxic Substances Control (DTSC) EnviroStor database identified no hazardous waste sites within one mile of the Project (DTSC 2023). A review of the State Water Quality Control Board GeoTracker database identified two Leaking Underground Storage Tank (LUST) facilities approximately 1 mile north of the Project area (GeoTracker 2023). Each of the sites are identified as cases of closed cleanup status, one with a date of March 19, 1996, and the other with a No Further Action letter dated May 1, 1991.

The Yolo County Environmental Health Division maintained a list until 2008 of known LUSTs (Yolo County 2008). Hernandez Trucking, located within the Project area, completed a cleanup of hydrocarbons (oil and diesel) from surface soils. The Sac/Yolo Mosquito Control Madison facility was formerly located at 28864 Main Street, where the fire station is currently located. Residuals of chlorinated pesticides and petroleum fuels were identified in shallow soils, but not in the groundwater. Following cleanup activities, the site was issued a no further action required letter in 2004. Viking Propane, located at 1111 Railroad Street, within the Project limits, reported anhydrous ammonia release in 1992 and the case has been closed. The Yolo Housing Authority reported waste oil soil contamination where an asphalt pad was removed and the case is closed.

An underground storage tank site qualifies as "closed" once the owner or operator meets all appropriate corrective action requirements, and the RWQCB has determined that the LUST case is generally considered to present a low threat to human health, safety, and the environment. Based on the closed case status for each of the above-mentioned sites, there is no impact anticipated on the Project soil and groundwater.

The Project area has a long history of agricultural use, which may be a source of hazardous materials through application of pesticides or herbicides resulting in residual pesticides in shallow soils.

The Madison Community High School is located within the Project area at 17923 Stephens Street. The Madison Migrant Facility, located on the eastern side of the service area, maintains a daycare/pre-school on site. No airports are located within 2 miles of the Project area. The nearest airports are the public use Watts-Woodland Airport located at 17992 CR-94B in Woodland, approximately 5 miles east of the Project area, and the Ala Doble private airport located on CR-25 in Esparto, approximately 4 miles southwest of the Project area. The Project is not located in a high fire severity hazard area.

Impacts and Mitigation Measures

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

The proposed Project would not generate any reportable quantities of hazardous materials. During construction, the Project is expected to temporarily involve the transport, storage, use, and disposal of hazardous materials (e.g., fuels, cleaners, solvents, lubricants) that could pose a significant threat to human health and environment if they are not properly managed. The transport, storage, use, and disposal of hazardous materials are subject to local, state, and federal hazardous waste regulations designed to reduce risks associated with hazardous materials. Compliance with the existing regulations is mandatory, therefore, implementation of the Project is not expected to create a significant hazard to construction workers, the public, or the environment. All aspects of Project construction would be done in accordance with appropriate California Health and Safety Codes.

Because the Project would disturb more than 1 acre of land, it also would be subject to the requirements of the NPDES Construction General Permit. This permit requires preparation and implementation of a Stormwater Pollution Prevention Plan, which includes good site housekeeping measures, including protocols for proper storage, capture, and disposal of hazardous materials.

Liquid sodium hypochlorite is and will continue to be used for disinfection purposes. In addition, the generator would hold diesel in a sub-base fuel storage area. The volume of diesel fuel would be less than 1,320 gallons, thus, it would not require a Spill Prevention, Control, and Countermeasure Plan. Operation of the proposed Project is not expected to involve the routine

transport, use, or disposal of new hazardous materials; there is no reasonably foreseeable accident involving the release of hazardous materials. The proposed Project would comply with all regulations regarding the routine transport, use, or disposal of hazardous materials. The Project would have ***less than significant impact.***

Mitigation Measures: None required.

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

During construction, the Project has the potential to encounter hazardous substances. Due to the age of the roads, there is potential for aerially deposited lead (ADL) along CA-16 and asbestos-containing material (ACM) within the road material. To evaluate the potential for ADL from the historical use of leaded gasoline in the surface and near-surface soils within the Project footprint, soil sampling for total lead would be conducted along CA-16, if the pipeline will be installed in this location. If road striping is removed along CA-16, the material would be disposed of at an approved facility for lead-containing paint. Road materials would be tested for ACM and, if found to contain ACM, removed and disposed of in accordance with YSAQMD Rule 9.9 (YSAQMD 2015). If ADL or ACM are present, handling of these materials would be in accordance with applicable regulations for construction worker safety including Occupational Safety and Health Administration (OSHA) and California Division of Occupational Safety and Health (Cal/OSHA) regulations.

Most of the existing AC pipes will be abandoned in place, however, some new pipes will be placed in the same alignment, necessitating removal of limited sections of the existing AC pipes. The U.S. EPA regulates the removal of AC pipes under the Asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61, subpart M. Contractors must use an approved NESHAP pipe replacement method and comply with the OSHA Asbestos in Construction Standard found in 29 CFR 1926.1101, as it relates to worker protection and work practices, which includes sufficient wetting of the disturbed area.

To address the potential for organochlorine and organophosphorus pesticides, arsenic, lead and mercury (metals) from surrounding agricultural use, soil sampling for herbicides, pesticides, and heavy metals within the Project area would be completed prior to construction. Sampling along the southern (Huribut Street) and western (Tutt Street) pipeline alignments is recommended because of the adjacent agricultural use. Soil sampling, removal, and disposal would be consistent with the DTSC *Interim Guidance for Sampling Agricultural Properties (Third Revision)*, dated August 7, 2008 (DTSC 2008).

The Project has the potential to encounter hazardous substances during construction, however, mitigation measures HAZ-1 and AQ-1 would minimize this impact. Therefore, the Project would have ***less than significant impact with mitigation incorporated***.

Mitigation Measures

HAZ-1 Hazardous Materials Handling. BMPs will be implemented to prevent and control spills or leaks from construction equipment and from storage of fuels, cleaners, solvents, and lubricants, including preparation of a Spill Response Plan and no refueling, storage, servicing, or maintenance of equipment within 50 feet of any aquatic resource (Madison Drain). Handling and management of hazardous materials will comply with all regulations.

AQ-1 Dust Control Measures. Described in Section 3.3 Air Quality.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?

The Madison Community High School is located within the Project area. Students are present at the school from approximately 8:00 a.m. to 12:30 p.m. Monday through Friday from mid-August through May with breaks when school is not in session; fall, winter, and spring break weeks occur in November, December/January, and March/April. The migrant facility and onsite daycare/pre-school are located within ¼ mile of construction activities. The Project would not emit hazardous emissions or acutely hazardous materials or substances. Therefore, the Project would have a ***less than significant impact***.

Mitigation Measures: None required.

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

The proposed Project is not located on a site which is included on a list of hazardous materials sites. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required**.**

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 a public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

There are no airports located within 2 miles of the Project area. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

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

The proposed Project is anticipated to include partial road closure and one-way traffic control for the installation of new pipes. There is no anticipated detour, residential streets would be closed asynchronously, and alternative routes within the community's street grid system will be available. During construction, the contractor will provide access for emergency services providers to all private property adjacent to the work area. See Mitigation Measure TRANS-1 in Sections 3.15 Public Services and 3.17 Transportation. Therefore, the Project would have a ***less than significant impact***.

Mitigation Measures: None required.

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

The Project is located in a Local Responsibility Area that is unzoned for fire severity risk. It is a small rural community surrounded by agricultural fields and not located adjacent to wildlands. The proposed Project would not expose people or structures to increased wildland fire risks (see Section 3.20 Wildfire). Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

3.10 Hydrology and Water Quality

Would the Project:

Question	CEQA Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less than Significant Impact with Mitigation Incorporated
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the Project may impede sustainable groundwater management of the basin?	Less than Significant Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site;	Less than Significant Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	No Impact
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	No Impact
(iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No impact

Environmental Setting

Surface Water

The Project area is located in the largest river basin in California, the Sacramento River Basin, and its tributaries cover approximately 27,000 square miles (National Oceanic and Atmospheric Association [NOAA] 2023). The Project lies within the Willow Slough watershed. The South Fork Willow Slough runs approximately 0.3 miles north of the Project area. The Willow Slough watershed extends from Rocky Ridge in the west, the drainage divide between the Willow Slough watershed and the Lake Berryessa (Putah Creek) watershed, to the Yolo Bypass near the Sacramento River in the east (Yolo County Resource Conservation District 1997). The Project is near the northern boundary of the watershed, which borders the Cache Creek watershed. Cache Creek is approximately 1.2 miles north of the Project area.

An irrigation ditch, Madison Drain, crosses the Project area and is hydrologically connected to South Fork Willow Slough, identified by the CDFW as a blue line stream, and managed by the Yolo County Flood Control and Water Conservation District. This irrigation canal crosses from

the northwestern portion of the site to the southeastern portion of the site and flows in a generally southeasterly direction.

Groundwater

In September 2014, the Sustainable Groundwater Management Act was signed into law to provide for the local control of groundwater while requiring proof of sustainable management of the groundwater resource. In June 2017, the Yolo Subbasin Groundwater Agency (YSGA) was formed to serve as the Groundwater Sustainability Agency for the Yolo Subbasin and to develop, adopt, and implement a Groundwater Sustainability Plan (YSGA 2022). The Project is located within the Central Yolo management area of the YSGA. The Madison CSD is a member of the YSGA.

Water Quality

Within the Yolo Subbasin, a particularly large strip of nitrate concentration exists between West Sacramento and Davis, with other pockets of high nitrate present near Woodland, Knight's Landing, and Madison water systems (YSGA 2022). The Groundwater Quality Assessment Report prepared for YSGA 2022 Groundwater Sustainability Plan showed elevated salinity near Madison (NCWA 2016).

Flooding

The majority of the Project area is designated as a Special Flood Hazard Area on the Federal Emergency Management Agency (FEMA) flood hazard map (Figure 9). Cache Creek to the north is designated as a Regulatory Floodway. A large portion of the area surrounding the Project is mapped as Area of Minimal Flood Hazards. However, the areas surrounding irrigation ditches, South Fork Willow Creek and to the east of the Project are all mapped as Special Flood Hazards Area. The Project area is located within the 100-year floodplain (FEMA 2023).

Impacts and Mitigation Measures

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

Runoff from construction activities could contain sediment and other pollutants with the potential to affect the environment. The Project would temporarily affect a small portion of the irrigation canal (Madison Drain) to install pipeline for the water system. It is anticipated that open trenching would be used to install the pipe across the Madison Drain, and the trench would be backfilled and recontoured to preconstruction conditions. Construction activities within the canal could result in increased sediment loads, turbidity, and siltation. Implementation of BIO-1, BIO-3, BIO-5, BIO-7 (described in Section 3.4 Biological Resources) and HYDRO-1 would reduce impacts, therefore, the Project would have ***less than significant impact with mitigation incorporated***.

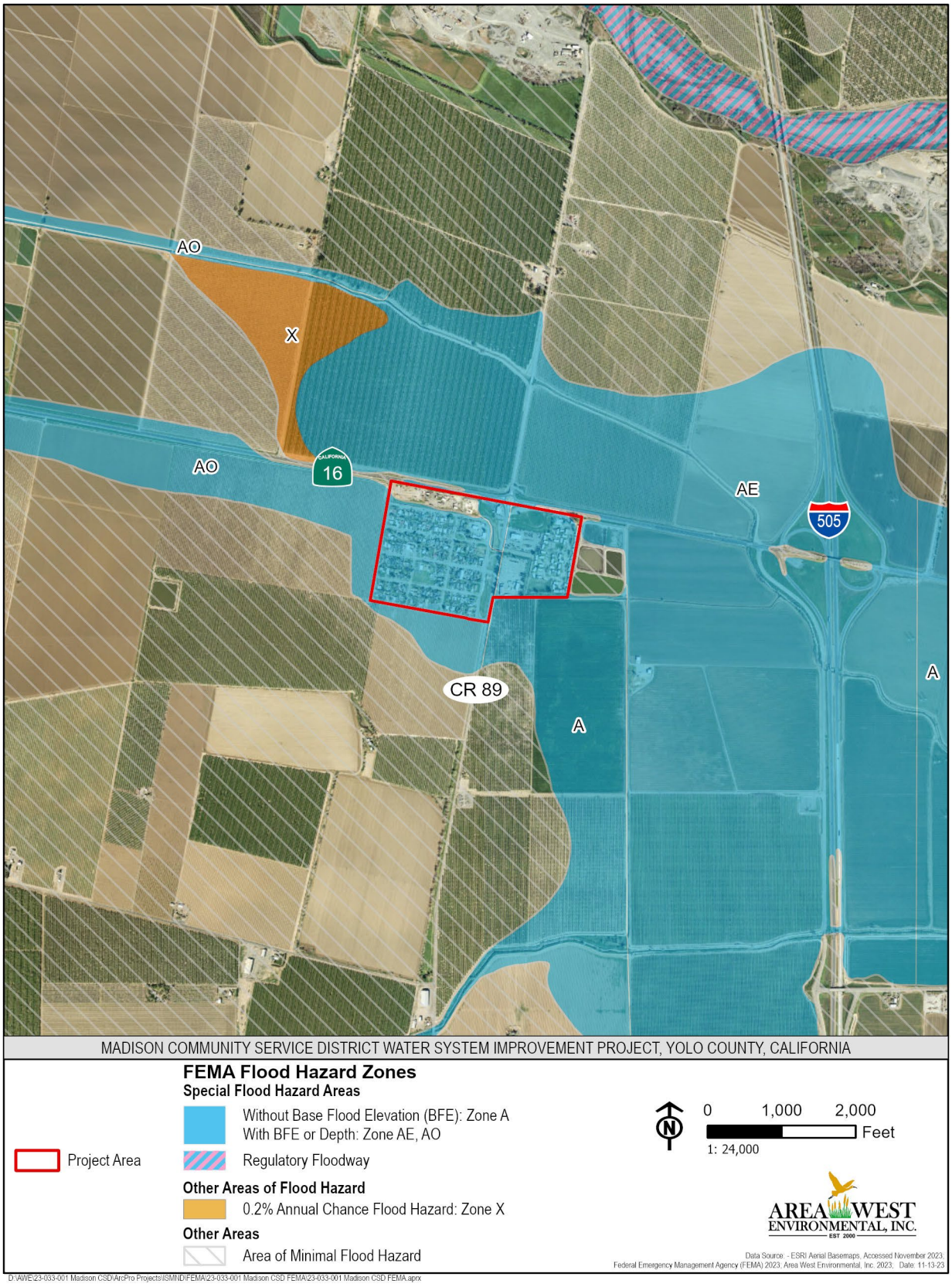

Figure 9. FEMA Flood Hazard Map

Mitigation Measures

BIO-1 (AMM-3) Confine and Delineate Work Area.

BIO-3 (AMM-5) Control Fugitive Dust.

BIO-5 (AMM-8) Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas.

BIO-7 (AMM-10) Avoid and Minimize Effects on Wetlands and Waters.

HYDRO-1 Implement Water Quality Best Management Practices (BMPs).

The contractor shall prepare a Stormwater Pollution Prevention Plan and implement BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the Project during construction, as required by the NPDES Construction General Permit. These BMPs may include, but are not limited to:

- Install sediment fencing, fiber rolls, or other equivalent erosion and sediment control measures between designated work areas and Madison Drain as necessary, to avoid construction debris and sediment inadvertently entering the drainage.
- Cover or otherwise stabilize all exposed soil 24 hours prior to potential precipitation events of greater than 0.5 inch.
- No refueling, storage, servicing, or maintenance of equipment shall take place within 100 feet of aquatic habitat.
- All machinery used during construction of the Project shall be properly maintained and cleaned to prevent spills and leaks that could contaminate soil or water.
- Any spills or leaks from construction equipment (i.e., fuel, oil, hydraulic fluid, and grease) shall be cleaned up in accordance with applicable local, state, and/or federal regulations.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The Project would not decrease groundwater supplies or interfere substantially with groundwater recharge. The Project aims to improve the existing water distribution system. The Project would continue to obtain water from the existing wells. The three existing wells would be fitted with new piping to connect to the new distribution system. Groundwater extraction patterns would not change as a result of this Project. Madison CSD also proposes construction of a water storage tank, booster pump station, a storage and shop building on a concrete slab foundation, and an additional driveway. The structures would increase the amount of impervious surface, this change is negligible and would not impact groundwater recharge. Therefore, the Project would have a ***less than significant impact***.

Mitigation Measures: None required.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site, substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or impede or redirect flood flows?

The proposed Project would not substantially alter the existing drainage pattern of the site in a manner that would result in significant erosion, siltation, or flooding on- or off-site. A temporary creek diversion system may be necessary for the installation of the pipeline across the Madison Drain. The water diversion system would route flow through and around the immediate work area, maintain dewatered conditions, and return flow to the downstream channel network without affecting water quality. After the pipe is installed the trench would be backfilled and recontoured to preconstruction conditions. The proposed Project would not create or contribute runoff water that would exceed the capacity of stormwater drainage systems, provide additional sources of polluted runoff, or impede or redirect flood flows. Therefore, the Project would have a ***less than significant impact***.

Mitigation Measures: None required.

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

The proposed Project is located within a Special Flood Hazard Area (FEMA 2023). The Project does not include features that would release pollutants or expose people and property to flooding in the event of inundation. There is no risk of tsunami or seiche at this inland location. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

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

The proposed Project would not conflict with the Central Valley RWQCB plans or the YSGA 2022 Groundwater Sustainability Plan. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

3.11 Land Use and Planning

Would the Project:

Question	CEQA Determination
a) Physically divide an established community?	No impact
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?	No impact

Environmental Setting

The proposed Project is located within Yolo County and is governed by the Yolo County 2030 General Plan (2009). Yolo County is generally rural with over 96 percent of the County area designated for agricultural and open space uses (Yolo County 2009).

The Land Use Designation of the Project area is residential (low and medium density), public and quasi-public, commercial (general and local), and industrial, and is surrounded by agricultural land use (Land Use and Community Character Element 2018). The town of Madison has a long farming history and includes one of two migrant labor camps located in Yolo County. Madison has been identified for residential, commercial, and industrial growth in the Yolo County 2030 General Plan Land Use and Community Character Element (2018).

A portion of the Project area is within the Cache Creek Area Plan (CCAP). CCAP is a rivershed management plan adopted by Yolo County for lower Cache Creek, between the Capay Dam and the town of Yolo. The CCAP consists of two distinct complementary plans governing different areas of the overall plan area: the Cache Creek Resources Management Plan (CCRMP) and the Off-Channel Mining Plan (OCMP). The Project is within the OCMP boundary (See Section 3.12 Mineral Resources for more information).

Impacts and Mitigation Measures

a and b. Would the project physically divide an established community; conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed Project would not physically divide an established community. The Project would rehabilitate an existing water distribution system. There will be no direct impact on land use as a result of the Project.

The proposed Project does not conflict with CCAP goals and policies. The proposed Project would comply with the County's goals, policies, and strategies with regards to community planning and maintaining growth. The Land Use and Community Character Element (2018) of the Yolo County 2030 General Plan has identified **Goal CC-2: Community Planning:** protect, enhance and redevelop existing communities. The proposed Project will comply with the following policy:

- Policy CC-2.2: Ensure that the appropriate base level of rural services and infrastructure for existing development in each community is required in connection with new development.

The proposed Project would improve existing connections within the Madison CSD, ensuring that existing infrastructure in community areas is appropriately up to date. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

3.12 Mineral Resources

Question	CEQA Determination
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
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

Environmental Setting

The California Surface Mining and Reclamation Act was enacted in 1975 with the purpose of identifying economically significant mineral deposits that occur. Special emphasis has been given to the study of construction aggregate because it is the state's most important mineral commodity. Yolo County has two primary mineral resources, mined aggregate and natural gas. These resources are located throughout the County. There are six aggregate mines and 25 natural gas fields currently in operation in Yolo County. The Cache Creek area, including the Project area, is a significant high-grade aggregate deposit known to contain over 900 million tons of sand and gravel (Yolo County 2009).

Mineral Resources Zones (MRZs) are used by the State to define areas containing valuable deposits based on geologic factors alone. The Project area is in an area identified as MRZ-3. As defined in the Yolo County General Plan, Conservation and Open Space Element, MRZ-3 refers to an area of undetermined mineral resource significance. Further exploration work within this area could result in the reclassification of specific localities into the MRZ-2 category which refers to an area of identified mineral resource significance (Yolo County 2009). A portion of the Project area is within the OCMP boundary (as identified in Section 3.11 Land Use and Planning). The OCMP is a scientifically based aggregate resource management plan that allows for off-channel mining adjacent to Cache Creek (Yolo County 2019).

Impacts and Mitigation Measures

a and b. Would the project result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State, or 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?

The Project area is classified as MRZ-3. Therefore, there are no known significant mineral resources associated with the proposed Project area. The Project would not affect mineral rights or resources in the Project area. Therefore, the Project would have ***no impact.***

Mitigation Measures: None required.

3.13 Noise

Would the Project result in:

Question	CEQA Determination
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
b) Generation of excessive groundborne vibration or groundborne noise levels?	No Impact
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

Environmental Setting

The Project is located in a rural community. The proposed Project includes construction activities within public road ROW in front of residential properties. Sensitive receptors, including Madison Community High School and residences, are located within the Project area.

Yolo County does not have a noise ordinance. No federal laws, regulations, or policies for construction-related noise and vibration apply to the proposed Project. However, the Federal Transit Administration (FTA) Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 decibels (dB) L_{eq}[1] should be used for residential areas (FTA 2006).

Impacts and Mitigation Measures

a. Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The proposed Project would not result in long-term changes in vehicle traffic or noise compared to existing conditions within the Project area. The emergency generator with sub-base fuel tank and associated automatic transfer switch will be housed in a self-contained sound-attenuated enclosure. Therefore, noise generated by the proposed Project would be limited to short-term construction activities.

[1] The Equivalent Sound Level (L_{eq}) is a single value of a constant sound level for the same measurement period duration, which has sound energy equal to the time–varying sound energy in the measurement period.

The proposed Project construction would take place within the State and County ROW, adjacent to nearby residences and community buildings including Madison Community High School. During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Noise generated by standard construction equipment can reach high levels but diminishes in volume with distance. The noise levels generated by construction equipment vary greatly depending upon factors such as the type and specific model of the equipment, the operation being performed, the condition of the equipment and the prevailing wind directions. Table 5 shows typical noise levels from construction equipment.

Table 5. Typical Noise Levels from Construction Equipment

Construction Equipment	Noise Level (dB, L_{max} at 50 feet)
Air Compressor	78
Backhoe	78
Concrete Mixer Truck	79
Concrete Pump Truck	81
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Grader	85
Jackhammer	89
Loader	79
Paver	77
Pickup Truck	75
Roller	80

L_{max} is the maximum sound level.
Source: Federal Highway Administration (FHWA) 2006

Noise associated with construction would follow FTA Guidelines for Construction within residential areas. Mitigation Measure NOISE-1 would reduce construction-related noise impacts to the surrounding area. Therefore, the Project would have ***less than significant impact with mitigation incorporated***.

Mitigation Measure

NOISE-1 Limit Construction Noise. Construction activities shall be limited to daytime hours between 7 a.m. and 7 p.m. Monday through Friday. Construction activities would be prohibited on weekends and legal holidays. Haul truck operation shall be limited to these same hourly restrictions.

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

Construction of the Project would not require vibratory or impact pile driving. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

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 in or working in the project area to excessive noise levels?

The proposed Project is not located within 2 miles of a public or public use airport or in the vicinity of a private air strip. The nearest airports are the public use Watts-Woodland Airport located at 17992 CR-94B in Woodland, approximately 5 miles east of the Project area, and the Ala Doble private airport located on CR-25 in Esparto, approximately 4 miles southwest of the Project area. The proposed Project area is generally not subject to high levels of aircraft noise and would not result in a safety hazard for individuals or construction workers located in the proposed Project area. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

3.14 Population and Housing

Would the Project:

Question	CEQA Determination
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
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

Environmental Setting

The Yolo County General Plan Housing Element (Housing Element 2021) provides goals and policies to retain the rural character, while directing urban development to existing cities and unincorporated communities such as Madison. The General Plan land use map for Madison establishes growth boundaries which identify the only areas for growth as infill development on underutilized parcels. Extensive 100-year floodplain designation in Yolo County is a constraint to housing production. The Project area is located within the 100-year floodplain (see Section 3.10 Hydrology and Water Quality). Madison has a long farming history and includes one of two migrant labor camps in the County with 384 residents and 137 housing units (General Plan).

The Land Use Designation of the Project area is residential (low and medium density), public and quasi-public, commercial (general and local), and industrial, and is surrounded by agricultural land use (Land Use and Community Character Element 2018). See Section 3.11 Land Use and Planning for more information. It is located in the rich agricultural region of California's Central Valley and the Sacrament River Delta. The County of Yolo had a population of 222,155 in 2022 (U.S. Census Bureau). The county's population has grown by more than 10 percent since the 2010 census population of 200,849. Overall, the county is characterized by its agricultural land and uses, the high percentage of young family households, and its racial and ethnic diversity (Housing Element 2021).

Impacts and Mitigation Measures

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

The Project is intended to improve and provide redundancy to the existing drinking water system. The Project would not create a demand for new housing or businesses that would induce substantial direct growth in the area. Implementation of the Project is not anticipated to increase planned development trends in the town of Madison or stimulate growth beyond what the General Plan has

anticipated, which is limited to infill development of underutilized parcels. The Project would not induce substantial population growth because it does not involve construction of new residential buildings and businesses, expand roads, or other infrastructure into areas that are not designated for development in the county. The Project may indirectly incentivize limited population growth as it would allow for new development that has been constrained by the town not meeting fire flow requirements for fire suppression equipment in commercial buildings. Therefore, the Project would have a ***less than significant impact***.

Mitigation Measures: None required.

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

The proposed Project would involve the construction of new water treatment facilities that would increase the infrastructure footprint but would do so in an area of currently unoccupied public and quasi-public land use. The Project would not require the displacement of existing housing or the construction of replacement housing. Therefore, the Project would have ***no impact.***

Mitigation Measures: None required.

3.15 Public Services

Question	CEQA Determination
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?	No Impact
Police protection?	No Impact
Schools?	No Impact
Parks?	No Impact
Other public facilities?	No Impact

Environmental Setting

In the Project area, fire response is provided by the Madison Fire Protection District (FPD) located at 17880 Stephens Street in Madison. Madison FPD covers approximately 65 square miles and serves a population of 1,390. The existing water system has no water storage capacity, therefore, there is no means of providing sufficient flow from the hydrants in case of a fire in the community. The Madison FPD has arrangements for a cooperative response from the neighboring Esparto FPD, and also has arrangements for the provision, when needed, of water tanker trucks to provide additional flows from other agencies such as Yocha Dehe Fire Department, Plainfield FPD, and Willow Oak FPD (Yolo County General Plan Housing Element 2021).

Police services are provided by the Yolo County Sheriff's Office located in Woodland, California about 14 miles east of the Project area. Medical services are also located in Woodland, California. Madison Community High School, part of the Esparto Unified School District, is located within the Project area. The Madison Migrant Facility maintains a daycare/pre-school on site. The next nearest schools are located in Esparto, California, approximately 3 miles west of the Project area. The Madison community park is located in the middle of town, south of Main Street, between Stephen Street and Scott Street.

Impacts and Mitigation Measures

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 fire protection, police protection, schools, parks, or other public facilities?

The proposed Project would not involve residential or commercial development that would generate a new population or result in the need for new or altered government facilities. The Project may indirectly incentivize limited population growth by removing the constraint of not meeting fire flow requirements. It would not affect local population centers or increase demands for emergency services.

The reliability of the water system and fire flow capacities would increase and would be a long-term benefit to the Madison residents. The Project would have a beneficial impact on fire response. Construction of a new storage tank, preliminary design size of approximately 390,000 gallons, would be capable of providing 1,500 gallons per minute of water for more than four hours of fire protection.

Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

3.16 Recreation

Question	CEQA Determination
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
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?	No Impact

Environmental Setting

The Project is located in a rural area of the County that is primarily used for agricultural and farming practices. The Madison community park (former elementary school grounds) is located in the middle of town, south of Main Street, between Stephen Street and Scott Street. Playground facilities are located between Madison Community High School to the west and the Madison CSD water treatment operations to the east. A soccer field is located south of the playground. Madison Drain is not a fishing destination.

Impacts and Mitigation Measures

a and b. 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; or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

The proposed Project would not involve residential or commercial development that would generate an increase in population, increasing the demand for park facilities. The Project may indirectly incentivize limited population growth by removing the constraint of not meeting fire flow requirements. The Project would not increase the use of recreational facilities and does not include recreational facilities. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

3.17 Transportation

Would the Project:

Question	CEQA Determination
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less than Significant Impact
b) Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No Impact
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
d) Result in inadequate emergency access?	Less than Significant Impact with Mitigation Incorporated

Environmental Setting

The proposed Project is located within the town of Madison in rural Yolo County. The Project is bound to the north by CA-16 and bisected by CR-89. CA-16 is a two-lane conventional highway that serves east-west traffic through the western rural area of Yolo County (Yolo County 2009). CA-16 is a minor arterial road (Caltrans 2023). CR-89 is a minor two-lane county road (Yolo County 2009).

Madison is a small community with a grid pattern of streets that provide residents access to properties and local businesses. Yolobus route 215 provides service between Cache Creek Casino and Woodland and stops within the Project area at the intersection of Railroad Street and Main Street. The bus operates seven days a week and travels south on CR-89 from CA-16, then west on Huribut Street and north on Railroad Street to the bus stop, then exits the Project area by turning east on Main Street, then north on CR-89 back to CA-16.

Impacts and Mitigation Measures

a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The proposed Project does not conflict with the Transportation and Circulation Element of the Yolo County General Plan (2009) or any other applicable plan, ordinance, or policy. The Project would not increase the roadway capacity or permanently alter the circulation system. There would be no long-term impact on the circulation system.

During construction, residential streets would be closed asynchronously, and alternative routes within the community's street grid system would be available. Partial road closures would include

one-way traffic control. Therefore, the Project would have a temporary, ***less than significant impact***. Implementation of measure TRANS-1 would further reduce this impact.

Mitigation Measure

TRANS-1 Transportation Management Plan. The Contractor will prepare and implement a Transportation Management Plan. The plan will be approved by Yolo County and Madison CSD prior to the start of construction. During construction, the contractor will provide for continuous vehicular and pedestrian ingress and egress to all private property adjacent to the work area. The contractor will coordinate construction schedule with transit operators to maintain transit service throughout construction. The contractor will provide access for emergency services providers to all property adjacent to the work area. As part of the Transportation Management Plan, the contractor will implement a communication plan to inform residents, businesses, transit providers, schools, community organizations and emergency providers of construction schedule and road closures.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The proposed Project would not increase nor reduce the number of vehicle trips in the Project area and vehicle miles traveled in the region. Construction activities would result in a negligible temporary increase in vehicle trips to the Project area by construction personnel. The proposed Project is consistent with CEQA Guidelines §15064.3(b) in that projects that reduce or have no impact on vehicle miles traveled should be presumed to cause a less than significant transportation impact. Therefore, the Project would have ***no impact.***

Mitigation Measures: None required.

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

The purpose of the proposed Project is to improve the Madison CSD drinking water system; no new roadway or other design features would be created or modified as a result of the Project. All disturbed roadway striping and surfacing would be replaced. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

d. Would the project result in inadequate emergency access?

During construction, the proposed Project would include partial road closures and one-way traffic control for the installation of new pipes. There is no anticipated detour. Mitigation Measure TRANS-1 would reduce impacts related to partial road closure. Therefore, the Project would have a ***less than significant impact with mitigation incorporated***.

Mitigation Measure

TRANS-1: Transportation Management Plan. Described above.

3.18 Tribal Cultural Resources

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:

Question	CEQA Determination
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	Less than Significant Impact with Mitigation Incorporated
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less than Significant Impact with Mitigation Incorporated

Environmental Setting

The Yocha Dehe Wintun Nation, Cachil Dehe Band of Wintun Indians of the Colusa Indian Community, United Auburn Indian Community of the Auburn Rancheria, Kletsel Dehe Wintun Nation, and Wilton Rancheria are federally recognized Tribes traditionally and culturally affiliated with the proposed Project area. These Tribes possess expertise concerning Tribal cultural resources in the area and are contemporary stewards of their culture and the landscapes.

Under PRC section 21080.3.1 and 21082.3, lead agencies must consult with Tribes traditionally and culturally affiliated with the project area that have requested formal notification and responded with a request for consultation (PRC 21080.3.1(b)). Consultation is deemed concluded when the parties agree to measures to mitigate or avoid a significant effect on a Tribal cultural resource when one is present (PRC 21080.3.2 (b)(1)) or when a party concludes that mutual agreement cannot be reached (PRC 21080.3.2(b)(2)). Mitigation measures agreed on during the consultation process must be included in the environmental document.

The Native American Heritage Commission (NAHC) was contacted on August 15, 2023, by email advising the organization of the project and requesting a search of their Sacred Land files and a current list of interested Native American Tribes for the project area. A follow-up request was sent on November 13, 2023. A reply was received on December 1, 2023, with negative results for records in the Sacred Lands file within or adjacent to the project. While awaiting the NAHC reply, Yolo County provided a list of Tribal contacts to Madison CSD.

AWE on behalf of Madison CSD, sent notification letters on October 23, 2023, as required by PRC 21080.3.1(d), to the Tribes that are traditionally and culturally affiliated with the area or have previously expressed interest in projects within the Project vicinity. The notification included a brief description of the Project and its location. Follow-up emails were sent to Tribes on October

24, 2023. Additional follow-up emails and telephone calls were made on November 27, 2023, to confirm that the notifications were received.

A letter was received from Yocha Dehe Wintun Nation on November 27, 2023, initiating formal consultation. A response was received from United Auburn Indian Community on November 28, 2023, declining consultation. A meeting was held on December 6, 2023, with Yocha Dehe Wintun Nation, Madison CSD, and AWE. At the meeting, Yocha Dehe Wintun Nation requested a copy of the records search and draft cultural and environmental reports for review, and recommended mitigation measures for Tribal cultural resources, including sensitivity and awareness training and spot check monitoring. Those recommendations are reflected in the mitigation measures in this document.

Additional Tribal contact information was identified in the NAHC reply. AWE on behalf of Madison CSD, sent notification letters on December 6, 2023 to the new additional contacts. A follow-up email was sent on January 3, 2024. No other responses have been received to date.

Impacts and Mitigation Measures

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

No Tribal cultural resources were located during the background search, survey and through outreach with Native American representatives. However, while unlikely, construction of the proposed project could result in the inadvertent discovery of undocumented Tribal cultural resources such as Native American archaeological sites, Native American human remains and associated objects and materials, features, sacred places or objects with value to a Tribe that is culturally or traditionally affiliated with the Project area, and the disturbance or destruction of these resources. Therefore, the proposed Project could result in a potentially significant impact on Tribal cultural resources. Potential significant impacts to previously undiscovered Tribal cultural resources would be avoided through implementation of Mitigation Measures TCR-1 and CUL-1 through CUL-3 (as described in Section 3.5 Cultural Resources). Therefore, the Project would have a ***less than significant impact with mitigation incorporated***.

Mitigation Measures

TRC-1 Spot Check Monitoring for Tribal Cultural Resources. Madison CSD shall invite representatives of Yocha Dehe Wintun Nation to periodically (weekly or bi-weekly) inspect the active areas of the project construction, including any soil piles, trenches, or other disturbed areas. Yocha Dehe Wintun Nation shall be notified at least 48 hours prior to the start of construction.

CUL-1 Conduct Worker Environmental Awareness and Cultural Respect Training. Described in Section 3.5 Cultural Resources.

CUL-2 Implement Procedures for Inadvertent Discovery of Cultural Resources. Described in Section 3.5 Cultural Resources.

CUL-3 Procedures for Discovery of Human Remains. Described in Section 3.5 Cultural Resources.

3.19 Utilities and Service Systems

Would the Project:

Question	CEQA Determination
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
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less than Significant Impact
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
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
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than Significant Impact

Environmental Setting

Buried utilities include the Madison CSD water mains and sewer lines, and cable television/internet connections, and could also include other fiber optic, telephone, and natural gas. Overhead utilities include Pacific Gas and Electric electric service. Before final design, Madison CSD will contact USA Design Services to identify utility companies and request existing utility plans and records to identify any potential conflicts with this Project.

The Madison CSD water system is based on groundwater and composed of an AC pipe distribution network that is prone to water main breaks and leaks, with approximately four to six major breaks per year (Yolo County 2009). The existing system is not capable of providing firefighting flow volumes and rates. The system requires several near-term improvements to address these issues, including replacement of the AC water main pipes, upsizing of the existing water mains from 6-inch to 12-inch, and the addition of a storage tank.

Impacts and Mitigation Measures

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

The Project would result in the construction of new water distribution pipes to replace use of the existing distribution system. The existing pipes would be abandoned in place, with the exception of a short segment of pipe that would be removed because of a conflict with the new pipe location. Construction activities would occur in the vicinity of existing pipes and within the State and County ROW. The water treatment system would be expanded and improved to include water storage, which would aid in providing fire suppression services to the town. The water treatment system would not be expanded to accommodate growth but would be expanded to provide improved service to existing customers. New electric service would be required for the new booster pump station. Energy use of the booster pump station equipment is discussed in Section 3.6 Energy. Some limited temporary disruption of water utility services may occur because of construction; however, Madison CSD would communicate with water customers at least 48 hours prior to any scheduled interruption of water service. The Project would also result in the undergrounding of some aboveground utilities, which would be coordinated with those utility providers. Therefore, the Project would have a ***less than significant impact***.

Mitigation Measure: None required.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The Project would not require the expansion of water supply services and would not result in significant additional water usage by customers. The Project would provide greater reliability of water supplies to the existing customers with storage capacity and redundancy built into the distribution system. The Project may indirectly incentivize water demand as it would allow for new development that has been constrained by the town not meeting fire flow requirements. However, as discussed in Section 3.14 Population and Housing, this demand would be modest. The Project is a benefit to the water supply system in Madison. Therefore, the Project would have a ***less than significant impact***.

Mitigation Measures: None required.

c. Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The Project would not require wastewater services. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

d, e. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Although construction activities would generate solid waste that may require off-site disposal, all solid waste generated during construction would be collected by the contractor and disposed of in accordance with applicable local, state and federal regulations. The proposed Project would only generate a small amount of solid waste; therefore, the Project would not generate waste in excess of standards or current landfill capacity and would comply with regulations related to solid waste. Therefore, the Project would have a ***less than significant impact***.

Mitigation Measures: None required.

3.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

Question	CEQA Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	Less than Significant Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No Impact
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
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	No Impact

Environmental Setting

The Project is located within a Local Responsibility Area (LRA) and fire response is provided by the Madison FPD (described in Section 3.15 Public Services). The California Department of Forestry and Fire Protection (CalFire) designated the western portion of Yolo County (areas west of Esparto and Winters) as a Very High Fire Severity Zone in a State Responsibility Area. The Project area is unzoned for fire hazard severity (CalFire 2007).

Impacts and Mitigation Measures

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

The proposed Project is anticipated to include partial road closure and one-way traffic control for the installation of new pipes inside the town of Madison. As discussed in Section 3.17 Transportation, Mitigation Measure TRANS-1, the contractor would communicate traffic disruptions with emergency service providers. The Project potentially would include new water pipe installation along CA-16, dependent upon easement negotiations with private property owners. CA-16 westbound from Woodland into the Capay Valley is a designated evacuation route. TRANS-1 would include measures to minimize impacts to traffic if an evacuation is required during construction. The proposed Project would not require lane closures that would constrict emergency access or interfere with an emergency evacuation plan. Therefore, the Project would have a ***less than significant impact***.

Mitigation Measure

TRANS-1 Transportation Plan. Described in Section 3.17 Transportation.

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?

The Project area is generally level and no factors have been identified that would exacerbate wildfire risk, expose residents to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

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?

The Project does not require the installation or maintenance of associated infrastructure that could exacerbate wildfire risk. Design will incorporate measures such as fire-safe building materials and fire suppression systems. Access to Project structures would be fitted with a Knox Box to allow fire department access to the facility, if needed. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

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

The proposed Project will not expose people or structures to significant risks. Once the Project is completed, there will be no changes in flood risk, drainage patterns or volumes. Therefore, the Project would have ***no impact***.

Mitigation Measures: None required.

3.21 Mandatory Findings of Significance

Question	CEQA Determination
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?	Less than Significant Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	Less than Significant Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Less than Significant Impact

Impacts and Mitigation Measures

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The proposed Project would not 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, or reduce the number or restrict the range of rare or endangered plants or animals. The Project would not have permanent, long-term effects on sensitive fish or wildlife species and habitats. Mitigation measures described in Section 3.4 Biological Resources would avoid and minimize construction-related effects on sensitive wildlife and habitat. Furthermore, the proposed Project would not affect known historical resources, and mitigation measures described in Section 3.5 Cultural Resources address procedures to minimize impacts on previously undiscovered cultural resources.

Given the existing conditions of the Project area, the fact that potential impacts to biological and cultural resources would primarily occur during construction, and that measures have been identified to reduce these temporary impacts, the overall potential of the proposed Project to degrade the environment is considered ***less than significant***.

b. Does the project have impacts that are individually limited, but cumulatively considerable?

Section 15064(h)(1) of CEQA Guidelines states that the lead agency shall consider whether the cumulative impact is significant, and the incremental effects of the project are cumulatively considerable. The lead agency may determine that a project's incremental contribution would be less-than-cumulatively considerable when one or more of the following occur: 1) the contribution would be rendered less-than-cumulatively considerable through implementation of mitigation measures; 2) the project would comply with the requirements of a previously approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the project's cumulative effects; and/or 3) the project's incremental effects would be so small that the environmental conditions would be essentially the same regardless of whether the project is implemented.

Past, present, and reasonably foreseeable future projects in the vicinity of the proposed Project include construction of a roundabout at the intersection of CA-16 and CR-89 in 2019, the proposed 147-acre Gibson Solar Farm 3,000 feet west of the Project on CA-16, a planned 180-unit residential development (Orciuoli Subdivision) 3 miles northwest of the Project on CA-16 in Esparto, and the Yolo County 2023 road rehabilitation project in Esparto. Potential impacts associated with the proposed Project are primarily short-term (construction-related) and would be mitigated to less-than-significant levels. Long-term operational effects of the proposed Project are so small that local environmental conditions would be unchanged. Any future development project in the Project vicinity will be subject to the same laws and regulations as the proposed Project. Therefore, the proposed Project's incremental contribution to cumulative conditions would be less-than-cumulatively considerable. The Project would have ***less than significant*** cumulative impacts.

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

The Project has long-term beneficial effects on the Madison community. By providing a more reliable water distribution system that meets fire flow requirements, the Project would benefit the residents and businesses in Madison. During construction, potential adverse effects to human beings include temporary increases in noise and air quality emissions, and traffic disruptions. The impacts would be short-term, would cease upon completion of the construction process, and would be minimized with adoption of mitigation measures described in this IS/MND. Overall, the Project would not cause substantial adverse effects on human beings and is considered ***less than significant***.

4.0 List of Preparers

The Public Review Draft IS/MND for the proposed Project was prepared by Area West Environmental, Inc. in cooperation with the Madison CSD and consulting engineers. The following individuals contributed to this IS/MND.

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5.0 References

American Water Works Association (AWWA). 2012. *Buried No Longer: Confronting America's Water Infrastructure Challenge*. February. Available: https://www.awwa.org/Portals/0/AWWA/Government/BuriedNoLonger.pdf?ver=2013-03-29-125906-653. Accessed September 2023.

Area West Environmental, Inc. (AWE) 2023. Biological Resource Evaluation Report, Planning-level Survey Report for the Madison Community Services District Water System Improvements Project. September.

AWE. See Area West Environmental, Inc.

AWWA. American Water Works Association.

CalFire. See California Department of Forestry and Fire Protection

California Department of Conservation. 2002. California Geological Survey, California Geomorphic Provinces. Accessed October 2023. Available: https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf.

_____. 2016. California Geological Survey, Earthquake Shaking Potential for California. Accessed October 2023. Available online: https://www.conservation.ca.gov/cgs/Documents/Publications/Map-Sheets/MS_048.pdf

_____. 2020. Division of Land Resource Protection, Farmland Mapping and Monitoring Program. Accessed November 2023. Available: https://maps.conservation.ca.gov/DLRP/CIFF/.

_____. 2022. Division of Land Resource Protection, California Williamson Act Enrollment Finder. Accessed November 2023. Available: https://gis.conservation.ca.gov/portal/apps/webappviewer/index.html?id=180acf4745ff40a5a764c65a4a8278eb.

California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Data Base (CNDDB). Available at: http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp. Accessed September 2023.

California Department of Forestry and Fire Protection (CalFire). 2007. Draft Fire Hazard Severity Zones in LRA. Yolo County.

_____. 2022. California Fire Hazard Severity Zones in State Responsibility Area viewer. November 21. Available at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=4466cf1d2b9947bea1d4269997e86553. Accessed November 2023.

California Department of Toxic Substances Control (DTSC). 2008. Interim Guidance for Sampling Agricultural Properties (Third Revision). August 7, 2008. Available at: https://dtsc.ca.gov/wp-content/uploads/sites/31/2020/06/Ag-Guidance-Rev-3-August-7-2008-2_Accessible.pdf. Accessed November 2023.

California Department of Transportation (Caltrans). 2018. California State Scenic Highway System Map. Available: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed October 2023.

Caltrans. California Department of Transportation

CDFW. California Department of Fish and Wildlife

CDOC. California Department of Conservation

Crull, Scott. 2018. *Ghost towns of Yolo County, CA*. Accessed through the Northwest Information Center database.

California Office of Planning and Research. 2008. Technical Advisory CEQA AND CLIMATE CHANGE: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review. Published Date: June 19, 2008. Available: https://opr.ca.gov/docs/june08-ceqa.pdf. Accessed October 2020.

DTSC. See California Department of Toxic Substances Control

DWR. See California Department of Water Resources

Federal Emergency Management Agency. 2023. National Flood Hazard Layer. Available: https://www.fema.gov/flood-maps. Accessed November 2023.

Federal Highway Administration (FHWA). 2006. Roadway Construction Noise Model User's Guide.

Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment. Available online: https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/fta-noise-and-vibration-impact-assessment.

National Oceanic and Atmospheric Association (NOAA). 2023. The West Coast Region's Sacramento River Basin Branch - About us: Sacramento River Basin, California. Available: https://www.fisheries.noaa.gov/west-coast/about-us/sacramento-river-basin-california#:~:text=The%20Sacramento%20River%20Basin%20is,the%20state's%20total%20surface%20water. Accessed November 2023.

Northern California Water Association (NCWA). 2016. Sacramento Valley Water Quality Coalition Groundwater Quality Assessment Report. June. Available: https://norcalwater.org/res/docs/NCWA_GWQ_Assessment_7-18-2014_FinalDRAFT.pdf.

Natural Resources Conservation Service. 2023. Web Soil Survey. Accessed September 2023. Available: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

NOAA. See National Oceanic and Atmospheric Association.

NRCS. See Natural Resources Conservation Service.

OPR. See California Office of Planning and Research.

Sacramento Metropolitan Air Quality Management District (SMAQMD). 2021. Guide to Air Quality Assessment in Sacramento County (Adopted December 2009; Current Revision April 2021). Available: https://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf. Accessed October 2023.

SMAQMD. See Sacramento Metropolitan Air Quality Management District

Western Regional Climate Center. 2023. Winters, California. Available: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca9742. Accessed November 2023.

WRCC. See Western Regional Climate Center

Yolo County. 2009. 2030 Countywide General Plan. Final Environmental Impact Report (EIR). Available: https://www.yolocounty.org/government/general-government-departments/county-administrator/general-plan/final-environmental-impact-report-eir. Accessed October 2023.

_____. 2019. Off-Channel Mining Plan (OCMP) for Lower Cache Creek. Adopted July 30, 1996, updated December 17, 2019. Available at: https://www.yolocounty.org/home/showpublisheddocument/70402/637637699257070000.

Yolo County Environmental Health Division. 2008. *Yolo County Hazardous Waste and Leaky Underground Tank Cases*. April 16. Available at: https://www.yolocounty.org/home/showpublisheddocument/402/635936530222000000. Accessed November 2023.

Yolo County Resource Conservation District. 1997. Willow Slough Watershed Integrated Resources Management Plan. Accessed November 2023. Available: https://yolorcd.org/wp-content/uploads/willow_slough_watershed_irmp.pdf

Yolo Habitat Conservancy. 2018. *Yolo Habitat Conservation Plan/Natural Community Conservation Plan, VOLUME* 1. April. Available at: https://www.yolohabitatconservancy.org. Accessed September 2023.

Yolo-Solano Air Quality Management District (YSAQMD). 2007. *Handbook for Assessing and Mitigating Air Quality Impacts.* July 11. Available at: http://www.ysaqmd.org/wp-content/uploads/Planning/CEQAHandbook2007.pdf. Accessed October 2023.

_____. 2015. Rule 9.9 Asbestos. Adopted May8, 1996. Revised June 10, 2015.

Yolo Subbasin Groundwater Agency (YSGA). 2022. *2022 Groundwater Sustainability Plan*. Accessed November 2023. Available: https://www.yologroundwater.org/files/acff83c75/YoloGSP_Adopted.pdf.

YSAQMD. See Yolo-Solano Air Quality Management District.

YSGA. See Yolo Subbasin Groundwater Agency.

Appendix A. Mitigation Monitoring and Reporting Program

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Appendix A – Mitigation Monitoring and Reporting Program

Introduction

This mitigation monitoring and reporting program (MMRP) summarizes identified mitigation measures, implementation schedule, and responsible parties for the Madison Community Services District (Madison CSD) Water System Improvements Project (Project). The Madison CSD will use this MMRP to ensure that identified mitigation measures, adopted as a condition of project approval, are implemented appropriately. This monitoring program meets the requirements of CEQA Guidelines Section 14074(d), which mandates preparation of monitoring provisions for the implementation of mitigation assigned as part of project approval or adoption.

Mitigation Implementation and Monitoring

The Madison CSD will be responsible for monitoring the implementation of mitigation measures designed to minimize impacts associated with the proposed Project. While the Madison CSD has ultimate responsibility for ensuring implementation, others may be assigned the responsibility of implementing the mitigation. The Madison CSD will retain primary responsibility for ensuring that the proposed Project meets the requirements of this MMRP and other permit conditions imposed by participating regulatory agencies.

The Madison CSD will designate specific personnel who will be responsible for monitoring implementation of mitigation during Project construction. The designated personnel will be responsible for submitting documentation and reports to the Madison CSD to demonstrate compliance with mitigation requirements. The designated personnel will have authority to require implementation of mitigation requirements and will be capable of halting construction activities found inconsistent with mitigation objectives or project approval conditions.

The Madison CSD and its appointed contractor will also ensure that construction personnel understand their responsibilities for adhering to the performance requirements of the MMRP. The following table lists each mitigation measure, the party responsible for ensuring implementation of the mitigation measure, and the corresponding monitoring and reporting requirement.

Mitigation Enforcement

The Madison CSD will be responsible for enforcing mitigation measures. If alternative measures are identified that would be equally effective in mitigating the identified impacts, implementation of these alternative measures will not occur until agreed upon by the Madison CSD.

Final Mitigation Monitoring and Reporting Program

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
Air Quality	***Mitigation Measure* AQ-1 Dust Control Measures.** Implement dust control measures to minimize airborne dust and soil particles generated from construction-related activities, including watering or applying dust palliative to disturbed areas, preventing and promptly removing trackouts on public roadways affected by construction traffic, and covering soils or construction materials or providing adequate freeboard (space from the top of the material to the top of the truck) during transport	Contractor	During construction	Madison CSD will check that dust control measures are in use.
Air Quality	***Mitigation Measure* AQ-2 Construction Vehicles and Equipment.** Maintain and tune the construction vehicles and equipment in accordance with manufacturer's specifications.	Contractor	During construction	Contractor will ensure this measure.
Air Quality	***Mitigation Measure* AQ-3 Limit Idling.** Limit idling times either by shutting construction equipment off when not in use or reducing the maximum idling time to 5 minutes.	Contractor	During construction	Contractor will ensure this measure.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
Biological Resources	***Mitigation Measure BIO-1*** **(AMM-3) Confine and Delineate Work Area**. Where natural communities and covered species habitat are present, workers will confine land clearing to the minimum area necessary to facilitate construction activities. Workers will restrict movement of heavy equipment to and from the project site to established roadways to minimize natural community and covered species habitat disturbance. The project proponent will clearly identify boundaries of work areas using temporary fencing or equivalent and will identify areas designated as environmentally sensitive. All construction vehicles, other equipment, and personnel will avoid these designated areas.	Qualified Biologist and Contractor	Prior to and during construction	Qualified Biologist will check that work areas are confined and delineated.
Biological Resources	***Mitigation Measure BIO-2*** **(AMM-4) Cover Trenches and Holes during Construction and Maintenance**. To prevent injury and mortality of giant garter snake, western pond turtle, and California tiger salamander, workers will cover open trenches and holes associated with implementation of covered activities that affect habitat for these species or design the trenches and holes with escape ramps that can be used during non-working hours. The construction contractor will inspect open trenches and holes prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches or holes.	Contractor	During construction	Madison CSD will check construction site regularly.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
Biological Resources	***Mitigation Measure BIO-3*** **(AMM-5) Control Fugitive Dust**. Workers will minimize the spread of dust from work sites to natural communities or covered species habitats on adjacent lands.	Contractor	During construction.	The Contractor is responsible for enforcing all measures to control fugitive dust.
Biological Resources	***Mitigation Measure BIO-4*** **(AMM-6) Conduct Worker Training**. All construction personnel will participate in a worker environmental training program approved/authorized by the Conservancy and administered by a qualified biologist. The training will provide education regarding sensitive natural communities and covered species and their habitats, the need to avoid adverse effects, state and federal protection, and the legal implications of violating the FESA and NCCPA Permits. A pre-recorded video presentation by a qualified biologist shown to construction personnel may fulfill the training requirement.	Qualified Biologist and Contractor	Prior to construction	Contractor will submit WEAT sign-in sheets to Madison CSD. Madison CSD will confirm completion of WEAT at the onset of construction activities.
Biological Resources	***Mitigation Measure BIO-5*** **(AMM-8) Avoid and Minimize Effects of Construction Staging Areas and Temporary Work Areas**. Project proponents should locate construction staging and other temporary work areas for covered activities in areas that will ultimately be a part of the permanent project development footprint. If construction staging and other temporary work areas must be located outside of permanent project footprints, they will be located either in areas that do not support	Contractor	Prior to, during, and following completion of construction.	Madison CSD will inspect post-Project conditions to ensure temporarily disturbed areas have been restored.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
	habitat for covered species or are easily restored to prior or improved ecological functions (e.g., grassland and agricultural land). Construction staging and other temporary work areas located outside of project footprints will be sited in areas that avoid adverse effects on the following: ▪ Serpentine, valley oak woodland, alkali prairie, vernal pool complex, valley foothill riparian, and fresh emergent wetland land cover types. ▪ Occupied western burrowing owl burrows. ▪ Nest sites for covered bird species and all raptors, including noncovered raptors, during the breeding season. Project proponents will follow specific AMMs for sensitive natural communities and covered species in temporary staging and work areas. For establishment of temporary work areas outside of the project footprint, project proponents will conduct surveys to determine if any of the biological resources listed above are present. Within one year following removal of land cover, project proponents will restore temporary work and staging areas to a condition equal to or greater than the covered species habitat function of the affected habitat. Restoration of vegetation in temporary work and staging areas will use clean, native seed mixes approved by			

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
	the Conservancy that are free of noxious plant species seeds.			
Biological Resources	***Mitigation Measure BIO-6*** **(AMM-9) Establish Buffers around Sensitive Natural Communities**. The buffers for each sensitive natural community are as follows: Lacustrine and riverine: Outside urban planning units, 100 feet from the top of banks. Within urban planning units, 25 feet from the top of the banks.	Contractor to install fencing, in coordination with Qualified Biologist	Prior to construction	Madison CSD will check fencing/flagging regularly. Maintenance and repairs will be completed by Contractor.
Biological Resources	***Mitigation Measure BIO-7*** **(AMM-10) Avoid and Minimize Effects on Wetlands and Waters**. Project proponents will comply with stormwater management plans that regulate development as part of compliance with regulations under National Pollutant Discharge Elimination System permit requirements. Covered activities that result in any fill of waters or wetlands will also comply with requirements under Section 404 of the Clean Water Act, State Water Resources Control Board, CFGC Section 1602, and Regional Board regulations. Other than requirements for buffers, minimizing project footprint, and species-specific measures for wetland-dependent covered species, this HCP/NCCP does not include specific best management practices for protecting wetlands and waters because they may conflict with measures required by the	Contractor to install fencing, in coordination with Qualified Biologist	Prior to construction	Madison CSD will check fencing/flagging regularly. Maintenance and repairs will be completed by Contractor.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
	USACE, State Board, Regional Board, and CDFW.			
Biological Resources	***Mitigation Measure BIO-8*** **(AMM-14) Minimize Take and Adverse Effects on Habitat of Western Pond Turtle.** There are no specific design requirements for western pond turtle habitat, however, project proponents must follow design requirements for the valley foothill riparian and lacustrine and riverine natural communities described in AMMs 9 and 10, which require a 100-foot (minimum) permanent buffer zone from the canopy drip-line (the farthest edge on the ground where water will drip from the tree canopy, based on the outer boundary of the tree canopy). If modeled upland habitat will be impacted, a qualified biologist must be present and will assess the likelihood of western pond turtle nests occurring in the disturbance area (based on	Qualified Biologist	Prior to construction	Madison CSD will submit documentation to applicable permitting agencies, if required.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
	sun exposure, soil conditions, and other species habitat requirements). If a qualified biologist determines that there is a moderate to high likelihood of western pond turtle nests within the disturbance area, the qualified biologist will monitor all initial ground disturbing activity for nests that may be unearthed during the disturbance and will move out of harm's way any turtles or hatchlings found.			
Biological Resources	***Mitigation Measure BIO-9*** **(AMM-16) Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite**. The project proponent will retain a qualified biologist to conduct planning-level surveys and identify any nesting habitat present within 1,320 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the project proponent will retain a qualified biologist to conduct preconstruction surveys for active nests consistent with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 15 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the	Qualified Biologist	Prior to construction	Madison CSD will submit documentation to applicable permitting agencies, if required.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
	Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the project proponent, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW and USFWS. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. Up to 20 Swainson's hawk nest trees (documented nesting within the last 5 years) may be removed during the permit term, but they must be removed when not occupied by Swainson's hawks. For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the project proponent will conduct preconstruction surveys that are consistent with the			

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
	guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.			
Biological Resources	***Mitigation Measure BIO-10*** **Conduct Preconstruction Survey for Roosting Bat.** Prior to the start of construction, a qualified biologist will conduct a preconstruction roost survey. Field surveys shall be conducted early in the breeding season before any construction activities begin, when bats are establishing maternity roosts but before pregnant females give birth (April through early May). If no roosting bats are found, then no further survey is required. If a bat maternity roost is found, then disturbance of the roost shall be avoided by establishing a minimum 250-foot avoidance buffer around the roost until it is no longer occupied as determined by the qualified biologist. The avoidance buffer may be reduced if a qualified biologist monitors the construction activities and determines the roost is not being disturbed. Reduction of the buffer depends on the species of bat, location of the roost relative to Project activities, activities during the time the roost is	Madison CSD	Prior to construction	Madison CSD will submit documentation to applicable permitting agencies, if required.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
	active, and other project-specific conditions. No work shall occur in the buffer until it is determined that the bats have left on their own, or until the end of the maternity season.			
Biological Resources	***Mitigation Measure BIO-11*** **Conduct Preconstruction Survey for Monarch Butterfly.** If construction is scheduled between June 1 and September 30 (peak flight period), a qualified biologist would conduct a preconstruction survey for monarch butterfly at known milkweed plants within the Project area. If the species is not discovered, no further action is required. If monarch eggs, larvae, or adults are discovered, the milkweed would be avoided until the qualified biologist determines the species is no longer utilizing the milkweed. ▪ If the milkweed present south of the gas station cannot be avoided during pipe replacement activities, native milkweed seeds would be added to the seed mix used to reseed temporarily disturbed areas within this area.	Qualified Biologist	Prior to construction	Madison CSD will submit documentation to applicable permitting agencies, if required.
Cultural and Tribal Cultural Resources	***Mitigation Measure CUL-1*** **Conduct Worker Environmental Awareness Training (WEAT).** Prior to excavation or other subsurface disturbance activities, individuals conducting the work will be required to participate in Worker Environmental Awareness and Cultural Respect Training. Workers will be	Contractor	Prior to construction	Contractor will submit WEAT sign-in sheets to Madison CSD. Madison CSD will confirm completion of

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
	advised to watch for cultural resources materials and informed about regulations and procedures to follow in case of discovery.			WEAT at the onset of construction activities.
Cultural and Tribal Cultural Resources	***Mitigation Measure CUL-2*** **Implement Procedures for Inadvertent Discovery of Cultural Resources.** If workers observe any evidence of prehistoric cultural resources (freshwater shells, beads, bone tool remnants or an assortment of bones, soil changes including subsurface ash lens or soil darker in color than surrounding soil, lithic materials such as flakes, tools or grinding rocks, etc.), or historic cultural resources (adobe foundations or walls, structures and remains with square nails, refuse deposits or bottle dumps, often associated with wells or old privies), all work within 60 feet must immediately cease, and a qualified archaeologist must be consulted to assess the significance of the cultural materials. Madison CSD and Yolo County will be notified of the potential find and a qualified archeologist shall be retained to investigate its significance. If the qualified archaeologist determines the archaeological material to be Native American in nature, Mitigation Measure TCR-2 shall be implemented. If the find is determined to be significant by the archaeologist (i.e., because it is determined to constitute a unique archaeological resource), the archaeologist shall work with Madison	Contractor	During construction (upon discovery)	Contractor will report and document any discovered subsurface resources to Madison CSD, who will take appropriate additional measures, as needed.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
	CSD and Yolo County to develop and implement appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected. Procedures could include but would not necessarily be limited to preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery.			
Cultural and Tribal Cultural Resources	***Mitigation Measure CUL-3*** **Procedures for Discovery of Human Remains.** If human remains are discovered, all work must immediately cease, and the local coroner must be contacted. Procedures for the discovery of human remains will be followed in accordance with provisions of the State Health and Safety Code, Sections 7052 and 7050.5 and the State Public Resources Code (PRC) Sections 5097.9 to 5097.99. If the Coroner determines that the remains are those of a Native American, the Coroner shall contact the NAHC and subsequent procedures shall be followed, according to State Public Resources Code Sections 5097.9 to 5097.99, regarding notification of the Native American Most Likely Descendant	Contractor	During construction (upon discovery)	Contractor will report and document any discovered human remains to Madison CSD and the County Coroner, who will take appropriate additional measures, as needed.
Cultural and Tribal Cultural Resources	***Mitigation Measure TCR-1*** **Conduct Worker Environmental Awareness and Cultural Respect Training.** All construction personnel must receive Tribal Cultural Resources Sensitivity and Awareness Training (Worker	Contractor	Prior to construction	Contractor will submit WEAT sign-in sheets to Madison CSD.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
	Environmental Awareness Training [WEAT]), including field consultants, equipment operators, and construction workers. The WEAT shall be developed in coordination with interested Native American Tribes. The WEAT shall be conducted before any project-related construction activities begin at the project area. The WEAT will include relevant information regarding sensitive Tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The WEAT will also describe appropriate avoidance and impact minimization measures for Tribal cultural resources that could be located at the project area and will outline what to do and who to contact if any potential Tribal cultural resources are encountered. The WEAT will emphasize the requirement for confidentiality and culturally appropriate treatment of any discovery of significance to Native Americans and will discuss appropriate behaviors and responsive actions, consistent with Native American Tribal values. The training may be done in coordination with the project archaeologist. During excavation or other substantial subsurface disturbance activities, all construction personnel must follow procedures and the direction of archeologists and Tribal monitors if any cultural resource materials are observed.			Madison CSD will confirm completion of WEAT at the onset of construction activities.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
Cultural and Tribal Cultural Resources	***Mitigation Measure TCR-2* Procedures for Unanticipated Discovery of Tribal Cultural Resources.** If any suspected Tribal cultural resources are discovered during ground disturbing construction activities, including midden soil, artifacts, cultural belongings, chipped stone, exotic rock (nonnative), or unusual amounts of baked clay, shell, or bone, all work shall pause within 100 feet of the find. Consulting Tribe(s) shall be immediately notified and shall determine if the find is a Tribal cultural resource (pursuant to PRC section 21074). The Tribal representative will make recommendations for further evaluation and treatment, as necessary. Preservation in place is the preferred alternative, and every effort must be made to preserve the resources in place. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, and returning objects to a location within the project area where they will not be subject to future impacts. Curation of Tribal cultural resources is not considered appropriate or respectful; materials would not be permanently curated, unless approved by the consulting Tribe. Treatment that preserves or restores the cultural character and integrity of a Tribal cultural resource may include Tribal monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil	Contractor	During construction (upon discovery)	Contractor will report and document any discovered subsurface Tribal resources to Madison CSD, who will take appropriate additional measures, as needed.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
Geology and Soils	***Mitigation Measure GEO-1*** **Protect Discovered Paleontological Resources.** If any evidence of paleontological resources is inadvertently unearthed during construction, all work will cease within 50 feet of the discovery, Madison CSD and Yolo County will be notified, and a qualified paleontologist shall be consulted to assess the significance of the resources and recommend appropriate conservation measures.	Contractor	During construction (upon discovery)	Contractor will report and document any discovered subsurface paleontological resources to Madison CSD, who will take appropriate additional measures, as needed.
Hazardous Materials	***Mitigation Measure HAZ-1*** **Hazardous Materials Handling.** BMPs will be implemented to prevent and control spills or leaks from construction equipment and from storage of fuels, cleaners, solvents, and lubricants, including preparation of a Spill Response Plan and no refueling, storage, servicing, or maintenance of equipment within 50 feet of any aquatic resource (Madison Drain). Handling and management of hazardous materials will comply with all regulations.	Contractor	During construction	Madison CSD will ensure the BMPs are being followed.
Hydrology and Water Quality	***Mitigation Measure HYDRO-1*** **Implement Water Quality Best Management Practices (BMPs).** The contractor shall prepare a Stormwater Pollution Prevention Plan and implement BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the Project during construction, as required by the NPDES Construction General Permit.	Contractor	During construction	Madison CSD will ensure the BMPs are being followed.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
	These BMPs may include, but are not limited to: ▪ Install sediment fencing, fiber rolls, or other equivalent erosion and sediment control measures between designated work areas and Madison Drain as necessary, to avoid construction debris and sediment inadvertently entering the drainage. ▪ Cover or otherwise stabilize all exposed soil 24 hours prior to potential precipitation events of greater than 0.5 inch. ▪ No refueling, storage, servicing, or maintenance of equipment shall take place within 100 feet of aquatic habitat. ▪ All machinery used during construction of the Project shall be properly maintained and cleaned to prevent spills and leaks that could contaminate soil or water. ▪ Any spills or leaks from construction equipment (i.e., fuel, oil, hydraulic fluid, and grease) shall be cleaned up in accordance with applicable local, state, and/or federal regulations.			
Noise	***Mitigation Measure NOISE-1* Limit Construction Noise.** Construction activities shall be limited to daytime hours between 7 a.m. and 7 p.m. Monday through Friday. Construction activities would be prohibited on weekends and legal holidays. Haul truck operation shall	Contractor	During construction	Contractor will monitor construction activities and adherence to noise mitigation.

Impact Area	Mitigation Measure	Responsible Party	Implementation Timing	Monitoring Activity
	be limited to these same hourly restrictions.			
Transportation	***Mitigation Measure TRANS-1*** **Transportation Management Plan.** The Contractor will prepare and implement a Transportation Management Plan. The plan will be approved by Yolo County and Madison CSD prior to the start of construction. During construction, the contractor will provide for continuous vehicular and pedestrian ingress and egress to all private property adjacent to the work area. The contractor will coordinate construction schedule with transit operators to maintain transit service throughout construction. The contractor will provide access for emergency services providers to all property adjacent to the work area. As part of the Transportation Management Plan, the contractor will implement a communication plan to inform residents, businesses, transit providers, schools, community organizations and emergency providers of construction schedule and road closures.	Contractor	Prior to Construction	Contractor will submit Transportation Management Plan to Madison CSD and Yolo County for approval, including communication plans.

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Appendix B. Air Quality Modeling Results

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