CITY OF WILLITS

LITTLE LAKE MOBILE HOME PARK WATER SYSTEM IMPROVEMENTS: NORTH MAIN STREET PIPELINE EXTENSION PROJECT

DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

MENDOCINO COUNTY, CALIFORNIA
OCTOBER 2026

PREPARED FOR:
City of Willits
Willits, CA

PREPARED BY:
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APPENDICES

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ACRONYMS & ABBREVIATIONS

AB ---------- Assembly Bill
APE ---------- Area of Potential Effect
BMP ---------- Best Management Practices
CalEEMod ---------- California Emissions Estimator Modeling (software)
CARB ---------- California Air Resources Board
CALFIRE ---------- California Department of Forestry and Fire Protection
CCAA ---------- California Clean Air Act
CCR ---------- California Code of Regulations
CDFW ---------- California Fish and Wildlife
CEQA ---------- California Environmental Quality Act
CFC ---------- chlorofluorocarbon
CH_4 ---------- Methane
CHRIS ---------- California Historical Resources Information System
City ---------- City of Willits
CNDDB ---------- California Natural Diversity Database
CNPS ---------- California Native Plant Society
CO ---------- Carbone Monoxide
CO_2 ---------- Carbon dioxide
CO_2e ---------- Carbon dioxide-equivalents
Cortese ---------- Hazardous Waste and Substances Sites List
County ---------- Mendocino County
CWHR ---------- California Wildlife Habitat Relationships
DOC ---------- Department of Conservation
DTSC ---------- Department of Toxic Substances Control
ECORP ---------- ECORP Consulting Inc.
EIR ---------- Environmental Impact Report
EOC ---------- Emergency Operations Center
EOP ---------- Emergency Operations Plan
°F ---------- degrees Fahrenheit
FEMA ---------- Federal Emergency Management Agency
FMMP ---------- Farmland Mapping and Monitoring Program
FYLF ---------- foothill yellow-legged frogs
GCP ---------- General Construction Permit
GHG ---------- Greenhouse Gas
GWMP ---------- Groundwater Management Plan
GWP ---------- Global Warming Potential
HFC ---------- hydrofluorocarbon
IPaC ---------- U.S. Fish and Wildlife Service's Information for Planning and Consultation system
IS ---------- Initial Study
IS/MND ---------- Initial Study/Mitigated Negative Declaration
LLMHP ---------- Little Lake Mobile Home Park
MCAQMD ---------- Mendocino County Air Quality Management District
MCL ---------- maximum contaminant level
MHP ---------- mobile home park
MJLHMP ---------- Multi-Jurisdictional Local Hazard Mitigation Plan
MMRP ---------- Mitigation Monitoring and Reporting Program
MND ---------- Mitigated Negative Declaration
$MTCO_2e$ ---------- Metric tons of carbon dioxide equivalent

N_2O ---------- Nitrous oxide
NAHC ---------- Native American Heritage Commission
NCAB ---------- North Coast Air Basin
ND ---------- Negative Declaration
NO_2 ---------- Nitrogen dioxide
NOx ---------- Oxides of nitrogen
NRCS ---------- Natural Resources Conservation Service
NRHP ---------- National Register of Historic Places
NWI ---------- National Wetlands Inventory
NWIC ---------- Northwest Information Center
O_3 ---------- Ozone
O&M ---------- operations and maintenance
OHP ---------- Office of Historic Preservation
Pb ---------- Lead
PFC ---------- perfluorocarbon
PM_{10} ---------- particulate matter 10 microns in size
$PM_{2.5}$ ---------- particulate matter 2.5 microns in size
Project- Little Lake Mobile Home Park Water System Improvements: North Main Street Pipeline Extension
Provost & Pritchard ---------- Provost & Pritchard Consulting Group
psi ---------- pounds per square inch
PVC ---------- polyvinyl chloride
ROW ---------- right of way
RWQCB ---------- Regional Water Quality Control Board
SF_6 ---------- Sulfur Hexafluoride
SLF ---------- Sacred Lands File
SO_2 ---------- Sulfur Dioxide
SR ---------- Suburban Residential
SWPPP ---------- Storm Water Pollution Prevention Plan
SWRCB ---------- State Water Resources Control Board
USACE ---------- United States Army Corps of Engineers
USDA ---------- United States Department of Agriculture
USEPA ---------- United States Environmental Protection Agency
USFWS ---------- United States Fish and Wildlife Service
USGS ---------- United States Geological Survey
USPS ---------- United States Postal Service
UST ---------- underground storage tank
µg/m3 ---------- micrograms per cubic meter
µg/L ---------- micrograms per cubic liter
WEAP ---------- Worker Environmental Awareness Program

CHAPTER 1 INTRODUCTION

Provost & Pritchard Consulting Group (Provost & Pritchard) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of the City of Willits (City) to address the potential environmental effects of the Little Lake Mobile Home Park Water System Improvements: North Main Street Pipeline Extension Project (proposed Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq. The City of Willits is the CEQA lead agency for the proposed Project.

The site and the proposed Project are described in detail in Chapter 2 Project Description.

1.1 REGULATORY INFORMATION

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, Section 15000, *et seq.*)-- also known as the CEQA Guidelines--Section 15064 (a)(1) states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the Project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels. A negative declaration (ND) may be prepared instead if the lead agency finds that there is no substantial evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed Project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a ND or *mitigated* ND shall be prepared for a project subject to CEQA when either:

a. The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed Project may have a significant effect on the environment, or
b. The IS identified potentially significant effects, but:
    1. Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed MND and IS is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and
    2. There is no substantial evidence, in light of the whole record before the agency, that the proposed Project as revised may have a significant effect on the environment.

1.2 DOCUMENT FORMAT

This IS/MND contains six chapters. Chapter 1 Introduction, provides an overview of the proposed Project and the CEQA process. Chapter 2 Project Description, provides a detailed description of proposed Project components and objectives. Chapter 3 Determination includes the Lead Agency's determination based upon this initial evaluation. Chapter 4 Environmental Impact Analysis presents the CEQA checklist and environmental analysis for all impact areas, mandatory findings of significance, and feasible mitigation measures. If the proposed Project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why no impacts are expected. If the proposed Project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts, and appropriate mitigation measures and/or permit requirements that would reduce those impacts to a less than significant level. Chapter 5 Mitigation, Monitoring, and Reporting Program (MMRP) provides the proposed mitigation measures, implementation timelines, and the entity/agency responsible for ensuring implementation. Chapter 6 References details the documents and reports this document relies upon to provide its analysis.

The Air Quality and Greenhouse Gas Emissions Model Output Files, Biological Evaluation, and Archaeological Resources Inventory and Built Environment Evaluation Report, are provided as Appendix A, Appendix B, and Appendix C, respectively, at the end of this document.

CHAPTER 2 PROJECT DESCRIPTION

2.1 PROJECT BACKGROUND

2.1.1 PROJECT TITLE

Little Lake Mobile Home Park Water System Improvements: North Main Street Pipeline Extension Project

2.1.2 LEAD AGENCY NAME AND ADDRESS

City of Willits
111 E. Commercial Street
Willits, CA 95490

2.1.3 CONTACT PERSON AND PHONE NUMBER

Dusty Duley
Community Development Director
(707) 459-7112

2.1.4 CEQA CONSULTANT

Provost & Pritchard Consulting Group
Briza Grace Sholars, Environmental Project Manager
(559) 449-2700

2.1.5 PROJECT LOCATION

The proposed water pipeline Project is located in Mendocino County (County), California, with the pipeline extending directly from the City of Willits (City) to an existing mobile home park approximately 1.1 miles north of the City. The City is approximately 115 miles northwest of Sacramento and 120 miles north of San Francisco (see Figure 2-1 and Figure 2-2). The centroid of the Project site is 39° 25’ 47.577” N, -123° 21’ 28.38” W. The Area of Potential Effect, or APE, is approximately 13.3 acres. The APE was used for the biological and cultural resource pedestrian surveys completed for the IS/MND.

2.1.6 DESCRIPTION OF THE PROJECT

2.1.6.1 PROJECT BACKGROUND AND PURPOSE

The Little Lake Mobile Home Park (LLMHP) water system (Public Water System Identification No. CA 2300705) serves the existing LLMHP community in unincorporated Mendocino County, situated approximately 1.1 miles north of the City. LLMHP is just west of Highway 101 in a forested and rural residential area. The LLMHP water system provides water service through 20 connections, comprised of one unmetered connection to a shared laundry facility, and 19 metered residential connections. The system currently serves a population of approximately 38 residents. In addition, the LLMHP is considered a severely disadvantaged community with a household income less than approximately 60 percent of the State of California’s (State) median household income.[1]

[1] Public Resources Code (PRC) 75005 (g) states that a "[d]isadvantaged community" means a community with a median household income less than 80% of the statewide average. ‘Severely disadvantaged community’ (SDAC) means a community with a median household income less than 60% of the statewide average.”

The sole water supply for LLMHP was a groundwater well (Well 01) with a depth of approximately 105 feet, but its steel, six-inch casing began to fail for the lower eight feet in 2023 before the well completely failed in 2025. The well is presently not operational, and water is currently delivered to the LLMHP community via truck. Funding assistance for the trucking of water has been provided through the State Water Resources Control Board's Urgent Drinking Water Needs program.

Manganese is a common issue for groundwater wells in the area, and before the failure of the well, manganese levels consistently exceeded the maximum contaminant level (MCL). Manganese is regulated as a secondary constituent, with a secondary MCL of 50 µg/L; the LLMHP well produced manganese results ranging from 280 to 1,400 µg/L from February to November in 2024, with a general upward trend in manganese concentration in recent years. Water quality test reports have also identified odor and color issues with water samples from the well. The existing LLMHP well will be cut, capped, and abandoned according to Mendocino County standards.

Due to these issues, the City is proposing the North Main Street Pipeline Extension Project (proposed Project) to complete a master meter consolidation Project with the City, which would include approximately 1.1 miles of pipeline to connect the City water system to LLMHP's system via a master meter.

2.1.6.2 PROJECT DESCRIPTION

A pipeline extension to serve the LLMHP would require the installation of approximately 1.1 miles of up to eight-inch pipeline along N Main Street. N Main Street used to be the main route of Highway 101 before a Highway 101 bypass was constructed around the City. Since the completion of the Highway 101 bypass, much of the N Main Street right-of-way (ROW) has been transferred to the County, and N Main Street is now primarily a County maintained roadway. However, the bridge over Upp Creek and a portion of the road to the south of the bridge is still maintained by the California Department of Transportation. The new pipeline would need to cross Upp Creek by connecting to the existing roadway bridge, which is located between the City limits and the LLMHP, or by jack and bore under Upp Creek. An access route at the intersection of North Main Street south of the bridge would be a part of the APE as well as an extended area east of the road to allow for jack and bore as shown in Figure 2-2. It is anticipated that the majority of the pipeline would be under the roadway pavement or right off the shoulder of the roadway (between three to five feet from the edge of the pavement). Either open-cut or trenchless installation methods would be used for pipe installation. For segments of the pipeline that would require open-cut installation, this would require the cutting and rehabilitation of the pavement.

Pressures at the connection point are anticipated to be around 60 pounds per square inch (psi). The proposed LLMHP meter location is approximately 40 feet lower in elevation than the connection point to the City system, and it is anticipated that the City could deliver water to the LLMHP at pressures in the range of 60 psi to 80 psi without the need for a booster pump. The highest residential lot within the LLMHP is approximately 100 feet higher than the proposed City meter location.

In order to connect the LLMHP system to the City, the proposed Project is anticipated to involve the following project components:

- Approximately 6,000 feet of up to eight-inch polyvinyl chloride (PVC) pipe installed along/within N Main Street;
- Connection to existing 10-inch City water main;
- Up to eight-inch gate valve assemblies;
- Up to four-inch City meter and backflow prevention device at LLMHP property entrance;
- Attachment of pipeline to existing Upp Creek bridge;
- Three fire hydrants; and

- Minor onsite LLMHP distribution system modifications to connect system to new City meter.

2.1.6.3 CONSTRUCTION SCHEDULE

Excavation during construction would generate spoils would be used as backfill ideally or, if necessary, hauled off-site to approved City or County locations. For all excavation in roadway areas, once filled and compacted, the roadways would be resurfaced to County standards. Excavations in bare ground areas would be resurfaced with hardscape (pavement or concrete) or revegetated with native grasses indigenous to the disturbed area or landscaped in accordance with County-approved building permit plans. The pipe installation would be within the existing road ROW, and accessibility and staging would be on the roadway; single-lane traffic control would be required and coordinated with the County during construction.

Construction of the proposed Project could require various equipment including, but not limited to, excavators, backhoes, front-end loaders, skid loader, compactors, double transfer trucks for soil hauling, concrete trucks, concrete/industrial saws, rollers, and paving equipment. Equipment and staging areas for the construction activities would be stationed along the stretch of pipeline within County ROW or, for the sake of the on-site distribution improvements, within LLMHP-owned property. Construction activities would generally be limited to weekdays from 7 a.m. to 5 p.m. Nighttime construction is not expected to be necessary.

Project construction would involve the storage, use, and transport of small amounts of hazardous materials (e.g., asphalt, fuel, lubricants, and other substances) on roadways. Regulations governing hazardous materials transport are stated in Title 22 California Code of Regulations (CCR) and the California Vehicle Code (Title 13 CCR). The timing of the completed design and construction of the proposed Project is dependent on grant funding for the proposed Project. It is anticipated that the proposed Project would take approximately six months to construct.

2.1.6.4 OPERATION AND MAINTENANCE

The City would operate and maintain the new pipeline. Operations of the pipeline would be similar to its existing operations and maintenance (O&M) for City existing mains, consisting of standard, routine maintenance and inspections. These would be expected to be on as-needed basis.

2.1.7 SITE AND SURROUNDING LAND USES AND SETTINGS

The Project site includes County road ROW. The table below lays out the existing use, general plan designation, and zoning for the lands surrounding the proposed Project.

Table 2-1: Existing Uses, General Plan Designation, & Zone Districts of Surrounding Properties

Direction from Project Site	Existing Use	General Plan Designation	Zone District
NORTH	Highway, Vacant Lands, and Rural Residences	Agricultural (AG 40) and Suburban Residential (SR)	Agricultural (AG 40) and Suburban Residential (SR)
EAST	Highway and Vacant Lands	AG 40	Agricultural (AG 40)
SOUTH	City of Willits (planned Log Yard)	City of Willits Industrial General (M-G)	City of Willits Heavy Industrial (MH)
WEST	Rural Residences	SR and Rangeland (RL)	Suburban Residential (SR) and Rangeland (RL)

2.1.8 OTHER PUBLIC AGENCIES WHOSE APPROVAL MAY BE REQUIRED

- State Water Quality Resources Control Board
- Mendocino County Air Quality Management District

- Mendocino County

2.1.9 CONSULTATION WITH CALIFORNIA NATIVE AMERICAN TRIBES

Public Resources Code Section 21080.3.1, *et seq. (codification of Assembly Bill (AB) 52, 2013-14)*) requires that a lead agency, within 14 days of determining that it will undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate request formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement will be made.

The City has received written correspondence from tribes pursuant to Public Resources Code Section 21080.3.1 requesting notification of proposed Project. Tribes notified of the proposed Project are listed in Section 4.5.1.3. Tribal letters for AB 52 were sent to all tribes listed on the Native American Heritage Commission's (NAHC) tribal list. Responses were received from two tribes but no requests for consultation or monitoring.

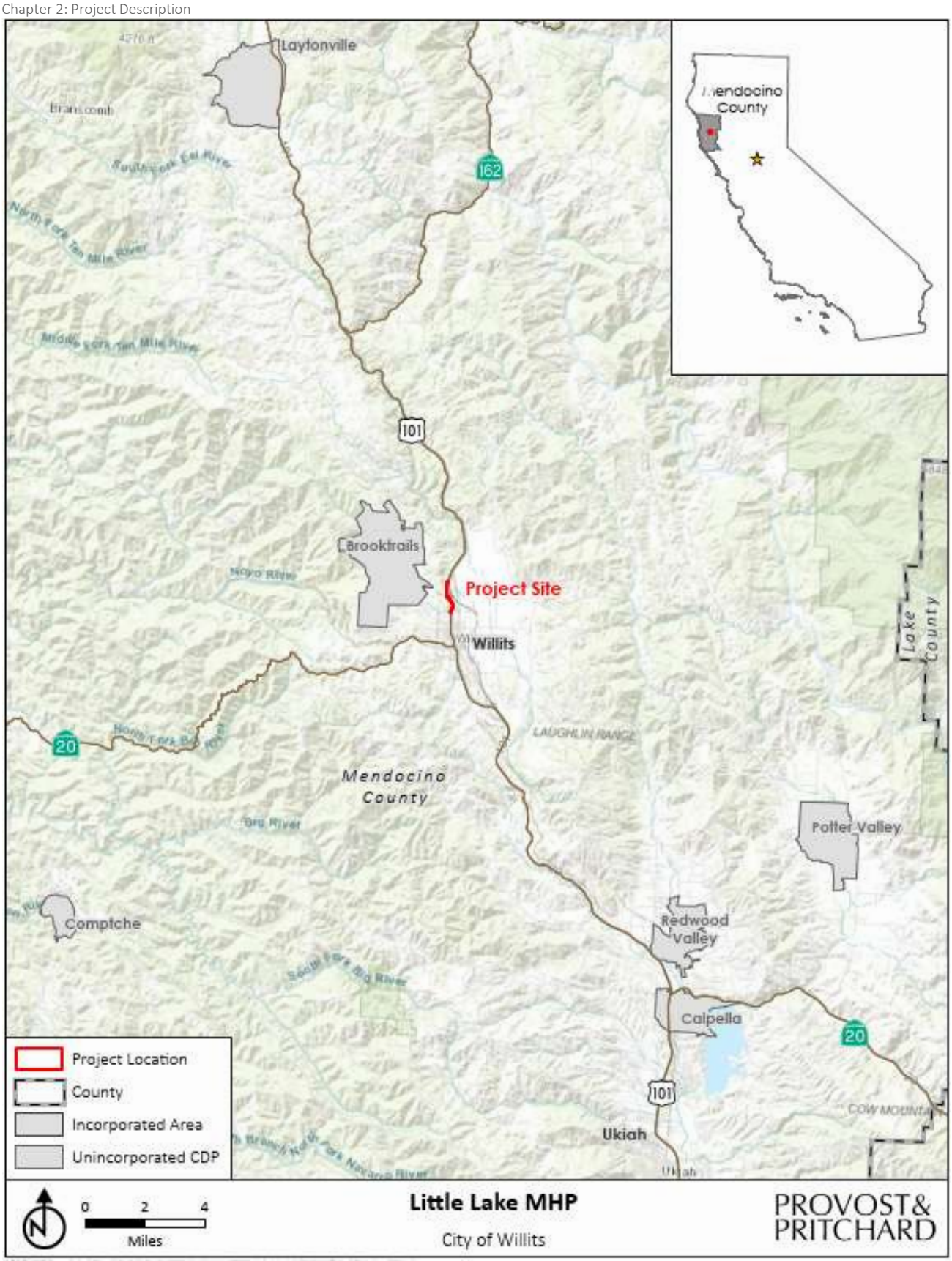


Figure 2-1: Regional Location Map

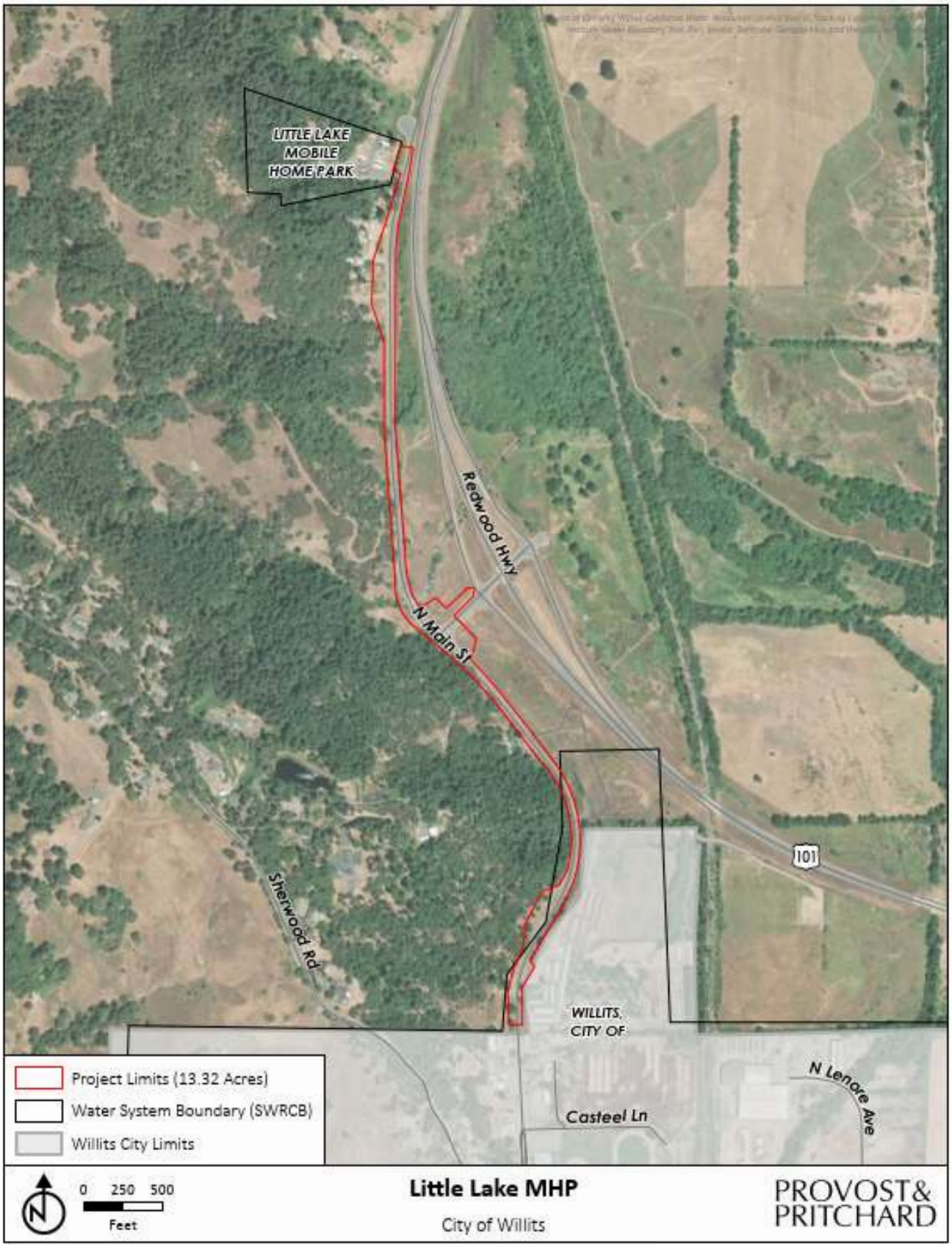


Figure 2-2: Aerial Site Map

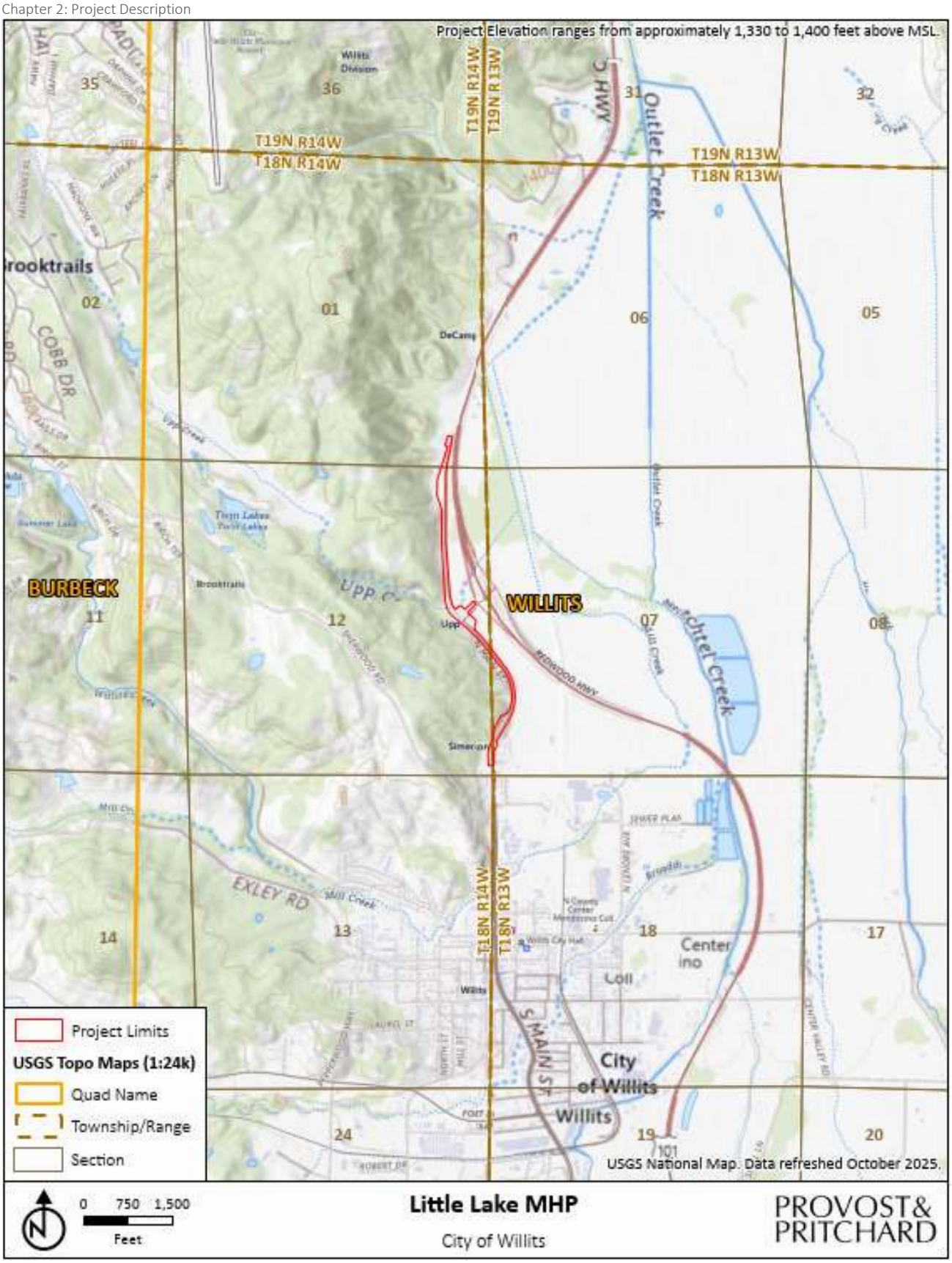


Figure 2-3: Topo Quad Map

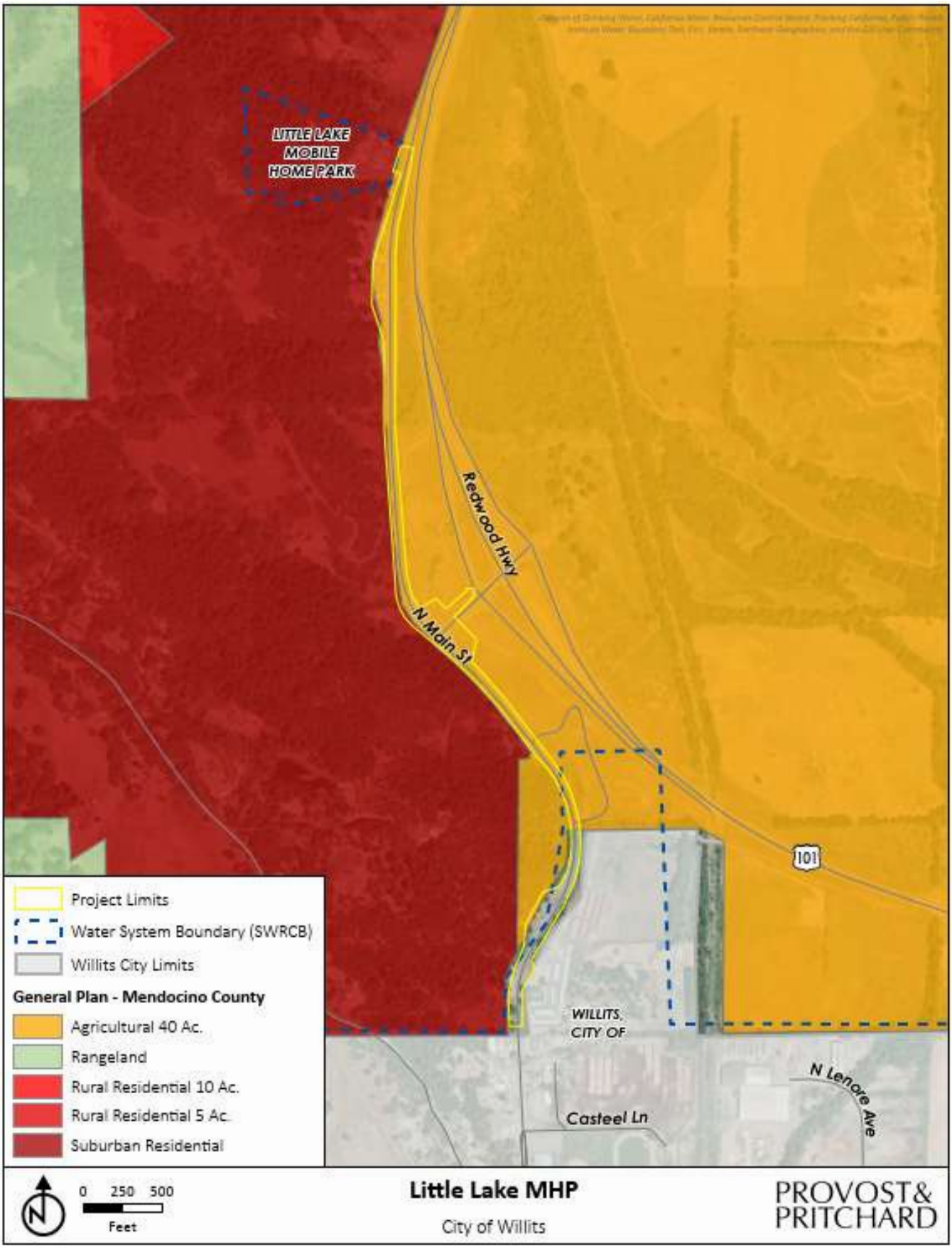


Figure 2-4: General Plan Land Use Designation Map

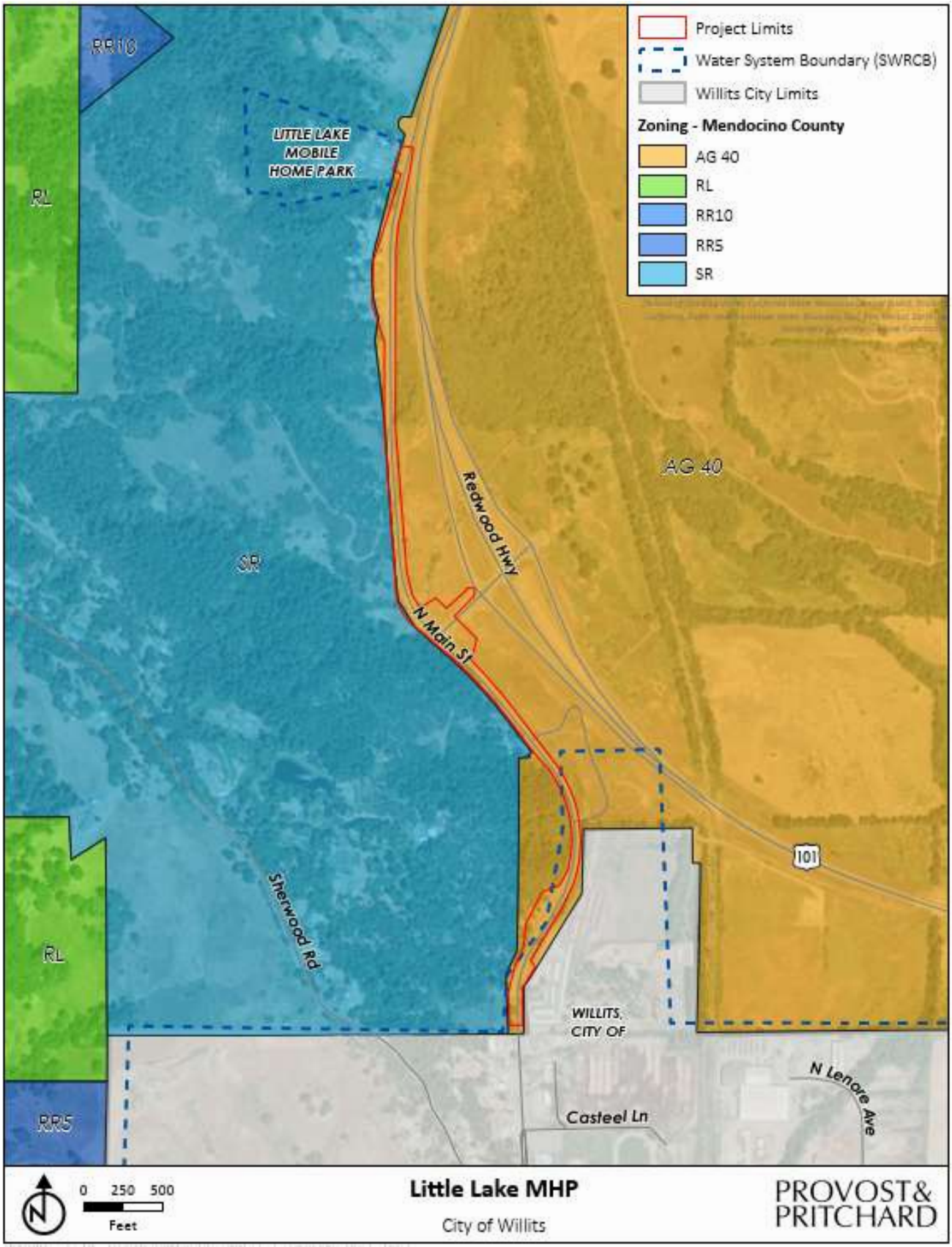


Figure 2-5: Zone District Map

CHAPTER 3 DETERMINATION

3.1 POTENTIAL ENVIRONMENTAL IMPACTS

As indicated by the discussions of existing and baseline conditions, and impact analyses that follow in this Chapter, environmental factors not checked below would have no impacts or less than significant impacts resulting from the project. Environmental factors that are checked below would have potentially significant impacts resulting from the proposed Project. Mitigation measures are recommended for each of the potentially significant impacts that would reduce the impact to less than significant.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ 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	☒ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

The analyses of environmental impacts in Chapter 4 Impact Analysis result in an impact statement, which shall have the following meanings.

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Less than Significant with Mitigation Incorporated. This category applies where the incorporation of mitigation measures would reduce an effect from a "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

Less than Significant Impact. This category is identified when the proposed Project would result in impacts below the threshold of significance, and no mitigation measures are required.

No Impact. This category applies when a project would not create an impact in the specific environmental issue area. "No Impact" answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

3.2 DETERMINATION

On the basis of this initial evaluation (to be completed by the Lead Agency):

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

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

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

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

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

Signature

8-12-2026
Date

Dusty Duley - Community and Economic Dev. Director
Printed Name/Position

CHAPTER 4 ENVIRONMENTAL IMPACT ANALYSIS

4.1 AESTHETICS

Table 4-1: Aesthetics Impacts

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

4.1.1 BASELINE CONDITIONS

The proposed Project would be located in the County, immediately north of the City and extending just over one mile from the City to the north along North Main Street. The Project site includes County road ROW, connecting the City water system to the LLMHP water system. The Project area is comprised of roadways and sparse residences and is surrounded by heavily wooded areas and steep terrain to the west, the City to the south, Highway 101 and agricultural lands to the east, and Highway 101 and heavily vegetated and steep terrain to the north.

4.1.2 IMPACT ANALYSIS

a) Have substantial adverse effect on a scenic vista?

No Impact. The proposed Project includes the construction of an approximately 1.1-mile pipeline for a master meter consolidation with the City and LLMHP. The pipeline would be constructed within County ROW. The pipeline would be entirely underground except for when it briefly daylights to attach to the existing bridge that crosses Upp Creek before it returns to being below ground. As such, the proposed Project would not have a substantial adverse effect on a scenic vista. There would be 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. The proposed Project is not located along a State Scenic Highway; however, a segment of State Route 20 that terminates on the southern end of the City is considered a State scenic highway.[2] The proposed Project would not be visible from the segment. Therefore, the proposed Project would not damage scenic resources within a State Scenic Highway, and there would be 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 publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact. The proposed Project is located outside of the City limits and would be located wholly underground apart from a brief crossing of the bridge over Upp Creek in which it will daylight on one side, attach to the bridge, and return underground on the other side. The pipeline would be constructed within existing road ROW and would not degrade the existing visual character or quality of public views. As such, there would be no impact.

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

No Impact. The proposed Project would not create a new source of light or glare. The proposed Project consists of a water pipeline connecting the City water system to LLMHP; the pipeline would be entirely underground except for when it is attached to the bridge to cross Upp Creek. There would be no impact.

[2] (California Department of Transportation, 2023)

4.2 AGRICULTURE AND FORESTRY RESOURCES

Table 4-2: Agriculture and Forest Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

4.2.1 BASELINE CONDITIONS

The proposed Project would be located immediately north of the City, extending northerly in unincorporated Mendocino County. The area is characterized by urban uses to the south, steep and heavily vegetated terrain to the west, Highway 101 and agricultural lands to the east, and Highway 101 and heavily vegetated and steep terrain to the north. The proposed Project would not be located within or in the immediate vicinity of any land currently being utilized for agricultural production.

Farmland Mapping and Monitoring Program (FMMP): The California Department of Conservation's (DOC) 2012 FMMP is a non-regulatory program that produces "Important Farmland" 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 best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance. The Important Farmland maps identify eight land use categories, five of which are agriculture related: prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and grazing land – rated according to soil quality and irrigation status. Each is summarized below:[3]

- PRIME FARMLAND (P): 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

[3] (California Department of Conservation, 2022)

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.

- FARMLAND OF STATEWIDE IMPORTANCE (S): Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- UNIQUE FARMLAND (U): 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.
- FARMLAND OF LOCAL IMPORTANCE (L): Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- GRAZING LAND (G): Land on which the existing vegetation is suited to the grazing of livestock. The minimum mapping unit for Grazing Land is 40 acres.
- URBAN AND BUILT-UP LAND (D): 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 (X): 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.
- WATER (W): Perennial water bodies with an extent of at least 40 acres.
- WILLIAMSON ACT: According to the California DOC, Williamson Act program lands are agreements between landowners and local governments to specify lands for agricultural or open space use over a length of time.[4] The agreement locks land use for the length of the contract, and landowners receive property tax assessments that are much lower because they agree to use the space for uses below market value.

According to the FMMP, the proposed Project would be located on land that is designated Grazing Land, Urban and Built-Up Land, and Semi-Ag. It would not be located on any land that has been designated as Prime Farmland, Unique Farmland, or Farmland of Statewide importance.

4.2.2 IMPACT ANALYSIS

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. According to the California DOC's FMMP, the proposed Project would be located on land that is designated as Grazing Land, Urban and Built-Up Land, and Semi-Ag.[5] The proposed Project would not be located on or in the vicinity of any land that has been designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, nor does it propose to alter any existing farmland, regardless of

[4] (California Department of Conservation, 2024)
[5] (California Department of Conservation, 2022)

designation. Construction associated with the proposed Project would be located within existing ROW, connecting a water pipeline from the City to LLMHP. Therefore, there would be no impact.

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

No Impact. Construction associated with the proposed Project would be located within existing ROW, connecting a water pipeline from the City to LLMHP. There would be no changes to zoning as a result of the proposed Project, nor would there be any loss of or conversion of farmland. Additionally, the proposed Project would not be located on a parcel with an existing Williamson Act contract.[6] Therefore, there would be 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))?

d) Result in the loss of forest land or conversion of forest land to non-forest use?

c) and d) No Impact. The proposed Project would not be located in an area that is zoned for timberland or timberland production by the County.[7] The proposed Project would not conflict with any zoning or cause rezoning of lands. No conversion of forest land or timberland to another use would result from this Project. There would be 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. As discussed above, the proposed Project would not be located on land that is currently being used for agricultural production, nor has it been designated as forest land or timberland. The proposed Project would be constructed entirely within the road ROW. As such, there would be no impact.

[6] (California Department of Conservation, 2024)
[7] (Mendocino County, 2025)

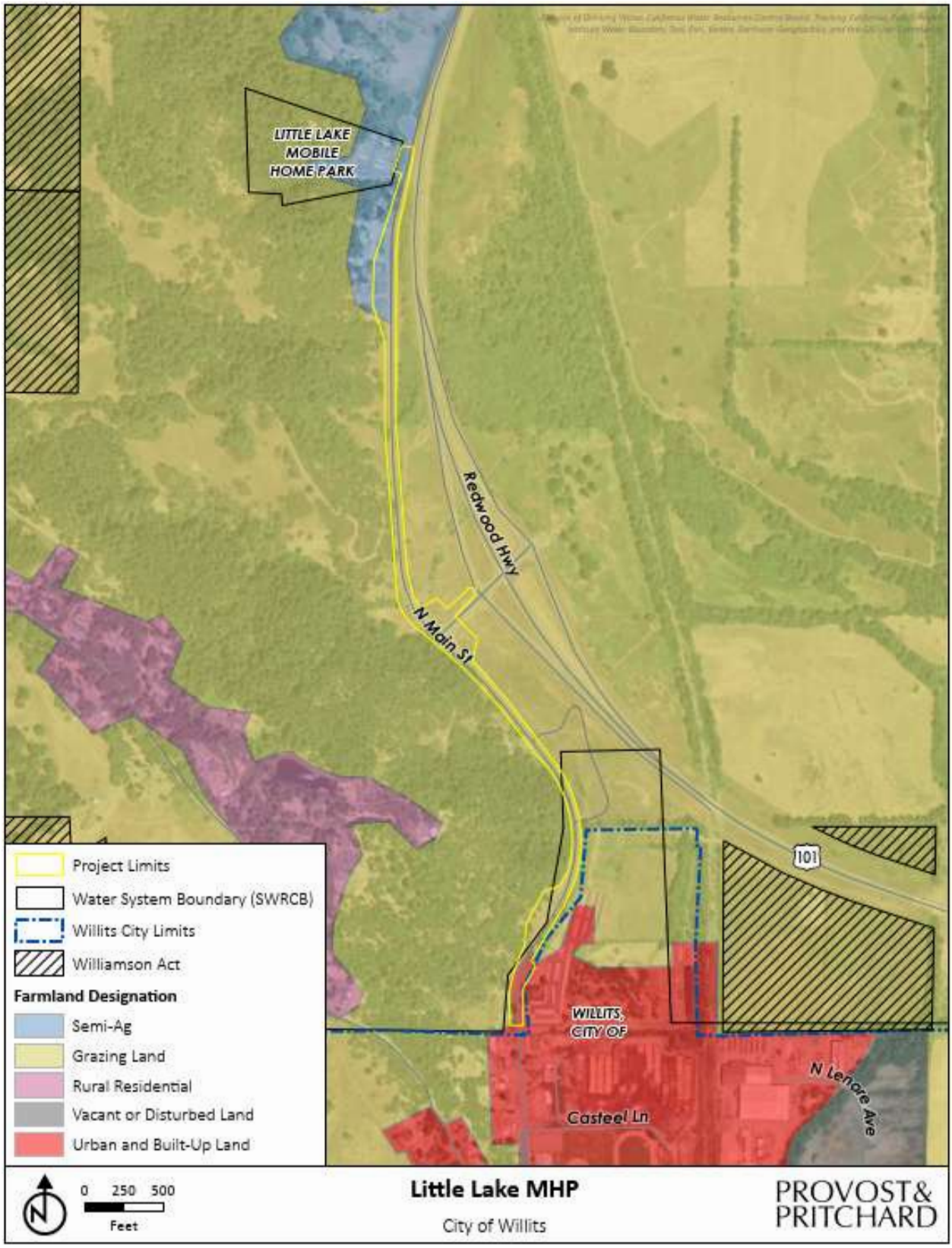


Figure 4-1: Farmland Designation Map

4.3 AIR QUALITY

Table 4-3: Air Quality Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

4.3.1 BASELINE CONDITIONS

The proposed Project would be located in the County, within the boundaries of the Mendocino County Air Quality Management District (MCAQMD) and lies within the North Coast Air Basin (NCAB). The NCAB is comprised of the Counties of Del Norte, Trinity, Humboldt, Mendocino, and the region of Sonoma County designated as the Northern Sonoma County Air Pollution Control District.

4.3.1.1 REGULATORY ATTAINMENT DESIGNATIONS

Under the California Clean Air Act (CCAA), the California Air Resources Board (CARB) is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data does not support either an attainment or nonattainment designation. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The United States Environmental Protection Agency (USEPA) designates areas for ozone, carbon monoxide (CO), and nitrogen dioxide (NO_2) as "does not meet the primary standards," "cannot be classified," or "better than national standards." For sulfur dioxide (SO_2), areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used. The USEPA uses the same sub-categories for nonattainment status: serious, severe, and extreme. In 1991, USEPA assigned new nonattainment designations to areas that had previously been classified as Group I, II, or III for particulate matter 10 microns in size (PM_{10}) based on the likelihood that they would violate national PM_{10} standards. All other areas are designated "unclassified."

The State and national attainment status designations pertaining to the NCAB are summarized in Table 4-4. The entire NCAB is currently designated as "non-attainment," or in excess of allowable limits, for the state 24-hour allowable limits for breathable PM_{10}, and as "attainment," or within allowable limits, with respect to the balance of the criteria pollutants. The MCAQMD has been determined to be in "attainment", or within allowable limits, for all federal and State ambient air quality standards, except for the State annual average PM_{10} standard and the 24-hour PM_{10} standard. The CCAA does not require attainment plans or transportation conformity for districts that exceed the PM_{10} standard but only requires that the Districts make reasonable efforts toward coming into attainment, defined as a five percent reduction in emissions per year, until the standard is attained. Although not required for coming into attainment for the state standard, the MCAQMD adopted the PM Attainment Plan in 2005. The PM Attainment Plan includes a description of local air quality, the sources of local PM emissions, and recommended control measures to reduce future PM_{10} levels. While PM_{10} levels have dropped over the last 20 years, due to changing industrial base, enhanced regulations, and increased enforcement by the MCAQMD, the MCAQMD still exceeds the state PM_{10} level several times a year. The majority of these exceedances result from wildfires, residential wood burning, unpaved roads, and construction activities. Some of the automobile emissions are the result of "pass-though" traffic on 101 because of its nature as a major transportation corridor in the State. The MCAQMD has full monitoring stations (NO_x, Ozone, CO, and PM_{10}) in Willits.

Table 4-4: Summary of Ambient Air Quality Standards and Attainment Designation

Pollutant	Averaging Time	State Standard	Federal Standard	State Attainment Status	Federal Attainment Status
O_3	1 hour	0.09 ppm	N/A	Attainment	N/A
O_3	8 hours	0.070 ppm	0.070 ppm (4th highest in 3 years)	Attainment	Attainment
CO	1 hour	20 ppm	35 ppm	Attainment/ Unclassified	Attainment/ Unclassified
CO	8 hours	9.0 ppm	9 ppm	Attainment/ Unclassified	Attainment/ Unclassified
PM_{10}	24 hours	50 µg/m3	150 µg/m3 (expected number of days above standard < or equal to 1)	Nonattainment	Attainment
PM_{10}	Annual	20 µg/m3	N/A	Nonattainment	N/A
$PM_{2.5}$	24 hours	N/A	35 µg/m3	N/A	Attainment
$PM_{2.5}$	Annual	12 µg/m3	12.0 µg/m3	Attainment	Attainment
NO_2	1 hour	0.18 ppm	0.100 ppm	Attainment	Attainment/ Unclassified
NO_2	Annual	0.030 ppm	0.053 ppm	Attainment	Attainment/ Unclassified
SO_2	1 hour	0.25 ppm	0.075 ppm (99th percentile over 3 years)	Attainment	Attainment/ Unclassified
SO_2	3 hours	N/A	0.5 ppm	N/A	Attainment/ Unclassified
SO_2	24 hours	0.04 ppm	0.14 ppm	Attainment	Attainment/ Unclassified
SO_2	Annual	N/A	0.030 ppm	N/A	Attainment/ Unclassified
PB	Monthly	1.5 µg/m3	N/A	Attainment	N/A
PB	Rolling 3-month average	N/A	0.15 µg/m3	N/A	Attainment/ Unclassified

Pollutant	Averaging Time	State Standard	Federal Standard	State Attainment Status	Federal Attainment Status
SULFATES	24 hours	25 µg/m3	N/A	Attainment	N/A
H_2S	1 hour	0.03 ppm	N/A	Unclassified	N/A
VISIBILITY REDUCING PARTICLES (VRP)	8 hours	Visibility of 10 miles or more at relative humidity less than 70 %	N/A	Unclassified	N/A
VINYL CHLORIDE	24 hours	0.01 ppm	N/A	Attainment	N/A

** For more information on standards visit: https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf*
*** No Federal 1-hour standard. Reclassified extreme nonattainment for the Federal 8-hour standard, accessed 04/30/2026.*
****Secondary Standard*
Source: Mendocino County Air Quality Management District. January 2005. Particulate Matter Attainment Plan. https://www.co.mendocino.ca.us/aqmd/pdf_files/Attainment%20Plan_DRAFT.pdf

4.3.2 IMPACT ANALYSIS

4.3.2.1 CONSTRUCTION-GENERATED EMISSIONS

Short-term construction emissions associated with the proposed Project were calculated using the California Emissions Estimator Modeling (software) (CalEEMod), Version 2022.1.1.37. The emissions modeling includes emissions generated by off-road equipment, haul trucks, and worker commute trips. Greenhouse Gases (GHGs) impact the environment over time as they increase and contribute to climate change. Emissions were quantified based on an anticipated construction schedule of approximately six months. Remaining assumptions were based on the default parameters contained in the model. Modeling assumptions and output files are included in Appendix A. Estimated construction-generated emissions are summarized in Table 4-5 and Table 4-6. Operational emissions of the proposed Project would be considered negligible due to the proposed Project including a water pipeline with only as needed maintenance.

Table 4-5: Unmitigated Short-Term Construction Generated Emissions of Criteria Air Pollutants

Source	Annual Emissions (tons per year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Construction Emissions	0.014	0.132	0.214	0.0003	0.004	0.004
MCAQMD Threshold[8]	*40*	*40*	*125*	-	*15*	*10*
Threshold Exceeded?	No	No	No	No	No	No

Table 4-6: Maximum Daily Construction-Related Emissions of Criteria Air Pollutants

Source	Daily Emissions Maximum (in pounds)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Construction – Summer	0.263	2.448	3.735	0.006	0.077	0.071
Construction – Winter	0.263	2.448	3.735	0.006	0.060	0.055
MCAQMD Threshold	*54*	*54*	-	-	*82*	*54*
Threshold Exceeded?	No	No	No	No	No	No

[8] The MCAQMD issued a recommendation that agencies use the adopted Bay Area CEQA thresholds for projects in Mendocino County. However, in an effort to resolve any conflicts or issues between Bay Area standards and MCAQMD rules, MCAQMD issued some clarifications for certain thresholds, such as the annual emissions thresholds for NO_x, ROG, and CO.

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

Less than Significant Impact. The proposed Project is not regionally significant and is not anticipated to conflict with or obstruct implementation of the MCAQMD rules, regulations, or plans. The proposed Project would comply with all applicable Air District rules. The proposed Project would not exceed MCAQMD thresholds, as depicted in Table 4-5 and Table 4-6. As such, impacts would be less than significant.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. The proposed Project would comply with all applicable Air District rules. To determine the extent to which a project would impact air quality, MCAQMD has established significance thresholds for criteria pollutants generated during construction and operation. A significant impact would occur if the proposed Project would result in construction or operational emissions that exceed the established significance thresholds. Projects with emissions below established thresholds would not have a significant impact on air quality.

Construction emissions are temporary emissions, concluding when construction is complete. Construction emissions originate primarily from the combustion of fossil fuels used by mobile on-road sources (e.g., workers' vehicles, material and equipment delivery trucks, and soil haul trucks) and mobile off-road sources (e.g., excavators, backhoes, front-end loaders, skid loader, compactors, double transfer trucks for soil hauling, concrete trucks, concrete/industrial saws, rollers, and paving equipment). Operational emissions of the proposed Project would be considered negligible due to the proposed Project including a water pipeline with only as needed maintenance. The proposed Project would not exceed MCAQMD thresholds, as depicted in Table 4-5 and Table 4-6. As such, impacts would be less than significant.

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

Less than Significant Impact. Due to the linear nature of the proposed Project, the proposed Project would be constructed in segments resulting in the generation of emissions in segments as well. Rather than total construction emissions being generated at one location over the course of six months, emissions would be lesser due to the various segments along the proposed pipeline corridor. In addition, emissions would be temporary and exposure to toxic air contaminants to each individual sensitive receptor would decrease as construction progresses. Moreover, as noted, the proposed Project would not exceed MCAQMD thresholds, as depicted in Table 4-5 and Table 4-6. Therefore, impacts would be less than significant.

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

Less than Significant Impact. Heavy-duty equipment in the Project area during construction could emit odors, primarily from the equipment exhaust. However, the construction activity would cease to occur after construction is completed. No other sources of objectionable odors have been identified for the proposed Project. The proposed Project operations are not anticipated to emit any objectionable odors. Therefore, objectionable odors affecting a substantial number of people would not occur as a result of the proposed Project. There would be a less than significant impact.

4.4 BIOLOGICAL RESOURCES

Table 4-7: Biological Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

4.4.1 BASELINE CONDITIONS

A reconnaissance-level field survey of the Project site was conducted on January 29, 2026, by a Provost & Pritchard biologist. The survey consisted of walking throughout the Project site while identifying and noting land uses, biological habitats and communities, and plant and animal species encountered. Habitats were also assessed to help with determining if they could be suitable for various rare or protected plant and animal species. Representative photographs of the site were taken and are presented in Appendix B.

Provost & Pritchard biologists then utilized the results of the field survey to analyze potential Project-related impacts to biological resources based on the resources known to occur or with the potential to occur within the Project site. Sources of information used in preparation of this analysis included: California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB; see Appendix B

for the species list) and California Wildlife Habitat Relationships (CWHR) database; California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California; CalFlora's online database of California native plants; Jepson Herbarium's online database (i.e., Jepson eFlora); United States Fish and Wildlife Service's (USFWS) Environmental Conservation Online System (ECOS), Information for Planning and Consultation (IPaC; see Appendix B for the species list) system, and National Wetlands Inventory (NWI); iNaturalist; NatureServe Explorer's online database; United States Department of Agriculture (USDA) Natural Resources Conservation Service's (NRCS) Web Soil Survey (see Appendix B for the Web Soil Survey Report); California Herps website; and various manuals, reports, and references related to plants and animals of the Little Lake Valley region.

The field survey did not include focused surveys for special status species. The field survey conducted included the appropriate level of detail to assess the significance of potential impacts to sensitive biological resources resulting from implementing the proposed Project. Furthermore, the field survey was sufficient to generally describe aquatic features of the Project site that could be claimed as jurisdictional by federal and/or State agencies, such as the United States Army Corps of Engineers (USACE), CDFW, Regional Water Quality Control Board (RWQCB), and the State Water Resources Control Board (SWRCB).

4.4.1.1 TOPOGRAPHY

The Project site is located within the *Willits* U.S. Geological Survey (USGS) 7.5-minute quadrangle within the southwest corner of Section 07 and Section 01, and the northeast corner of Section 12, Township 18 North, Range 14 West. The topography of the site is relatively flat along the roadway with slopes generally down to the surrounding areas to the east and up towards forested areas to the west. Elevations within

the site range from approximately 1,310 to 1,640 feet above mean sea level (see Figure 2-3

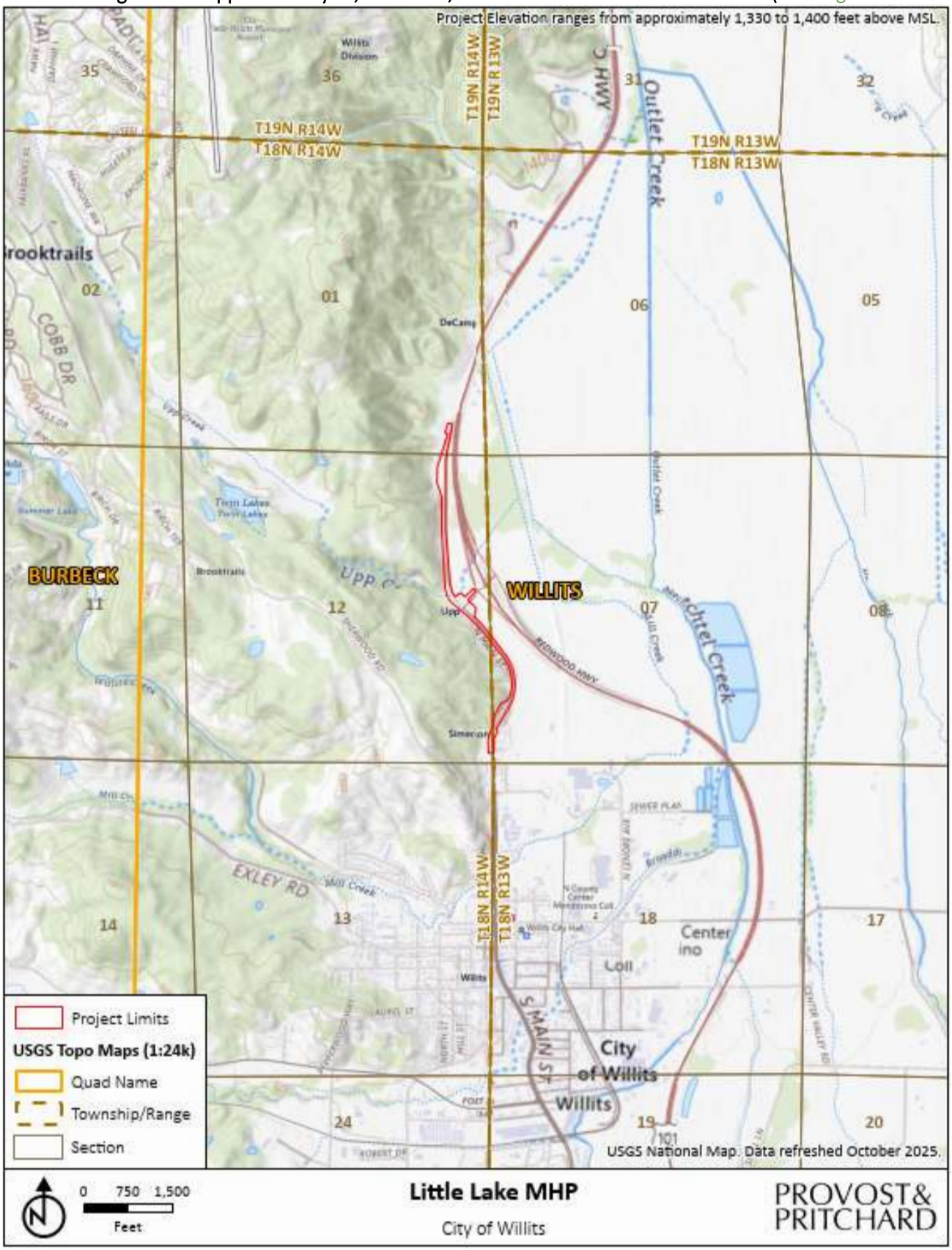


Figure 2-3).

4.4.1.2 CLIMATE

The site experiences a temperate climate with wet, mild winters and warm, dry summers. In the summer, average high temperatures range between 75- and 85-degrees Fahrenheit (°F), but do not often exceed 90 °F, and the humidity is generally low. Winter temperatures are often below 55 °F during the day and rarely exceed 60 °F. On average, the City receives approximately 48 inches of precipitation in the form of rain yearly, most of which occurs between October and April, and the Project site would be expected to receive similar amounts of precipitation.[9]

4.4.1.3 HYDROLOGY

The nearest surface water to the Project is Upp Creek which flows under an existing bridge halfway along the Project site, bisecting the alignment. Upp Creek begins in the mountains to the west and flows down through the site and joins other streams until it exits the valley to the north and flows into Outlet Creek. Outlet Creek flows into the Eel River which eventually flows into the Pacific Ocean.

4.4.1.4 SOILS

Five soil mapping units representing five soil types were identified within the Project site and are listed in Table 4-8 (see Appendix B for the Web Soil Survey Report). The soils are displayed with their core properties in the table below, according to the Major Land Resource Area of California. These soils are primarily used for production of orchards, vineyards, truck crops, and irrigated pasture, or watershed, wildlife habitat, recreation, and limited firewood production.

Table 4-8: List of Soils Located on the Site and Their Basic Properties

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Cole	Silty clay loam, 0 to 1 percent slopes, MLRA 14	23.2%	Predominantly Nonhydric	Somewhat poorly drained	Slow	High
Gielow	Sandy loam, 0 to 5 percent slopes	70.8%	Predominantly Hydric	Somewhat poorly drained	Moderate	Low
Hopland-Sanhedrin-Kekawaka complex	30 to 50 percent slopes	0.7%	Nonhydric	Well drained	Moderately slow	Very high
Yorktree-Hopland-Woodin complex	30 to 50 percent slopes	2.1%	Nonhydric	Well drained	Slow	Very high
Xerochrepts-Haploxeralfs-Argixerolls complex	9 to 30 percent slopes, low ffd	3.2%	Predominantly Nonhydric	Somewhat poorly drained	Moderate	Low

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions, hydrophytic vegetation can be supported. Hydric soil ratings are derived from specific soil properties as well as climate, parent

[9] (myPerfectWeather, 2026)

material, vegetation, landform type, and biological activity of a certain location. One of the major soil mapping units is predominately hydric and makes up 70.8% of the site. Four of the major soil mapping units are nonhydric or predominantly nonhydric and make up 29.2% of the Project site.

4.4.1.5 BIOTIC HABITATS

Five biotic habitats were observed within the Project site and included developed, non-native grassland, creek, riparian, and ruderal. These habitats and their constituent plant and animal species are described in more detail in the following sections.

Developed

The majority of the Project site consists of developed habitat composed of the paved portion of North Main Street which transitions into a remnant of the old Highway 101. This habitat provides no value to wildlife, instead posing a risk to any species which disperse across the road. A mule deer (*Odocoileus hemionus californicus*) carcass was observed on the side of the paved road, appearing to have been struck by a vehicle. Other species expected to disperse across the developed habitat include striped skunk (M*ephitis mephitis*) and Virginia opossum (*Didelphis virginiana*).

Non-Native Grassland

Non-native grassland habitat surrounds the majority of the developed habitat on either side of the road. The grassland is moderately disturbed throughout the Project site and serves primarily as a transitional habitat. To the east, the non-native grasslands slope down into large depressional wetlands north of the City. To the west, the grasslands lead to coniferous and oak woodland forests as well as some residential parcels and the LLMHP. Culverts and shallow drainage ditches were frequently observed in these habitats, allowing for water moving off of the steep slopes to the west and to drain into the wetlands to the east. Herbaceous plants observed in this habitat include orchard grass (*Dactylis glomerata*), field marigold (*Calendula arvensis*), big heron bill (*Erodium botrys*), California poppy (*Eschscholzia californica*), poison oak (*Toxicodendron diversilobum*), common yarrow (*Achillea millefolium),* and bull thistle (*Cirsium vulgare*). There were also several large stands of Scotch broom (*Cytisus scoparius*) and Himalayan blackberry (*Rubus armeniacus*) on the east side of the road in areas that sloped down into wetlands. Woody vegetation was scattered throughout the grassland habitat, becoming denser in areas of habitat transition. Woody species observed included valley oak (*Quercus lobata*), California black oak (*Quercus kelloggii*), Pacific madrone (*Arbutus menziesii*), Douglas fir (*Pseudotsuga menziesii*), coyote brush (*Baccharis pilularis*), and common manzanita (*Arctostaphylos manzanita)*. Numerous birds were observed passing through the non-native grassland habitat, including common raven (*Corvus corax*), song sparrow (*Melospiza melodia*), American kestrel (*Falco sparverius*), Steller's jay (*Cyanocitta stelleri*), northern harrier (*Circus hudsonius*), red-tailed hawk (*Buteo jamaicensis*), and turkey vulture *(Cathartes aura*). Wildlife would be expected to pass through this habitat while dispersing to higher quality habitat to the east and west. Scattered trees may provide nesting habitat for songbirds and raptors; however, most species would be expected to occupy the forested areas and wetlands adjacent to the Project site.

Creek

Upp Creek bisects the Project site, flowing west to east from the higher elevation coniferous forest into the depressional wetland adjacent to Highway 101. A bridge crosses over this portion of Upp Creek to accommodate the crossing of old Highway 101. The creek was flowing at the time of the survey following several winter storm events. The creek bed was composed of a mix of cobbles, gravel, and sandy substrate. The banks of the creek showed frequent use by terrestrial wildlife, including northern raccoon (*Procyon lotor*) tracks and mule deer tracks. Aquatic vegetation was absent from the creek; however, wildlife species were observed foraging nearby, including black phoebe (*Sayornis nigricans*) and ruby-crowned kinglet (*Corthylio calendula*). Additionally, numerous Sierran tree frogs (*Pseudacris sierra)* were detected calling

from the wetland area to the east. Herpetofauna, including foothill yellow-legged frog (*Rana boylii*) and northwestern pond turtle (*Actinemys marmorata*) would be expected to inhabit the creek habitat.

Riparian

A narrow portion of riparian habitat was present along the north and south banks of Upp Creek that transitioned into grassland, oak woodland, and coniferous forest. The riparian habitat observed was moderate quality but not abundant. Some herbaceous vegetation was present, including wild teasel (*Dipsacus fullonum*), however, the area was largely dominated by riprap. Woody vegetation observed included moderate clumps of arroyo willow (*Salix lasiolepis*). Bushtits (*Psaltriparus minimus)* and a ruby-crowned kinglet were observed in this habitat. Species expected to utilize this habitat include northern racoon, belted kingfisher (*Megaceryle alcyon*), and ensatina (*Ensatina eschscholtzii)*.

Ruderal

Ruderal habitat within the Project site was concentrated around the residential parcels and the LLMHP. These habitats had little vegetation and were comprised primarily of compact bare soils. Several domestic dogs (*Canis lupus familiaris)* were observed in the ruderal habitat. These areas are under frequent anthropogenic disturbance and provide less than marginal habitat to wildlife species.

4.4.1.6 NATURAL COMMUNITIES OF SPECIAL CONCERN AND RIPARIAN HABITAT

Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, or home to special status species. CDFW has classified and mapped all natural communities in California. Just as the special status plant and animal species (see Section 4.4.1.9), these natural communities of special concern can be found within the CNDDB. There are no recorded observations of a natural community of special concern mapped within the Project site, and no natural communities of special concern were observed during the field survey.

Riparian habitat is composed of plant communities that occur along the banks, and sometimes over the banks, of most waterways and is an important habitat for numerous wildlife species. CDFW has jurisdiction over most riparian habitat in California. Upp Creek crosses under a bridge through the site and had minimal riparian habitat in the areas adjacent to the bridge. The new pipeline would cross Upp Creek by connecting to the existing roadway bridge, and minimal to no impacts are expected to riparian habitat.

4.4.1.7 DESIGNATED CRITICAL HABITAT

The USFWS often designates areas of “critical habitat” when it lists species as threatened or endangered. Critical habitat is a specific geographic area that contains features essential for the conservation of a threatened or endangered species, which may require special management and protection. According to the IPaC, designated critical habitat is absent from the site and vicinity.

4.4.1.8 WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation.

The majority of the Project site consists of developed habitat composed of the paved portion of North Main Street which transitions into a remnant of old Highway 101. This habitat poses a risk to any species which disperse across the road and species can disperse through the coniferous forest in the area surrounding the site. While Upp Creek may act as a corridor for aquatic wildlife, no impacts would occur within the creek.

Native wildlife nursery sites are areas where a species or group of similar species raise their young in a concentrated place, such as maternity bat roosts. No native wildlife nursery sites for bats were found within the Project site. While Upp Creek may be used as a wildlife nursery site for fish and amphibian species, no impacts will occur within the creek.

4.4.1.9 SPECIAL STATUS PLANTS AND ANIMALS

California contains several rare plant and animal species. In this context, "rare" is defined as a species known to have low populations or limited distributions. Conversion of habitats to accommodate human population growth in turn reduces the already-limited suitable habitat for rare species. This results in rare and sensitive species becoming increasingly more vulnerable to extirpation. State and federal regulations have provided the CDFW and USFWS with mechanisms for conserving and protecting the diversity of plant and animal species native to California. Numerous native plants and animals have been formally designated as "threatened" or "endangered" under State and federal endangered species legislation. Other formal designations include "candidate" for listing or "species of special concern" by CDFW. The CNPS has its list of native plants considered rare, threatened, or endangered. Collectively these animals and plants are referred to as "special status species."

A query of the CNDDB for occurrences of special status plant and animal species was conducted for the *Willits* USGS 7.5-minute quadrangle that contains the site and for the eight surrounding USGS quadrangles: *Brushy Mountain*, *Burbeck*, *Foster Mountain*, *Greenough Ridge*, *Laughlin Range*, *Longvale*, *Redwood Valley*, and *Willis Ridge*. A query of the IPaC was also completed for the Project site. These species, and their potential to occur within the site, are listed in Table 4-9 and Table 4-10, below. Other special status species that did not show up in the CNDDB query, but have the potential to occur in the vicinity, are also included in Table 4-10. Species lists obtained from CNDDB and IPaC are available in Appendix B. As mentioned, a reconnaissance-level field survey of the site was also conducted on January 29, 2026. Representative photographs of the site were taken and are presented in Appendix B. All relevant sources of information, as discussed in Appendix B, as well as field observations, were used to determine if any special status species have the potential to occur within the site.

Table 4-9: List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
Angel's hair lichen (*Ramalina thrausta*)	CNPS 2B	Found in north coast coniferous forest. Occurs on dead twigs and other lichens at elevations between 245 and 1,410 feet.	**Unlikely.** The majority of the observations occur along the coast or more north in California. While lichen was observed during the field survey it was most likely lace lichen (*Ramalina menziesii*) which is the second most common lichen in Mendocino County. The nearest recorded observation of this species within the vicinity was at a minimum 10 miles northwest of the site, though exact location was unknown, in 1989.
Baker's meadowfoam (*Limnanthes bakeri*)	CNPS 1B	Found in marshes and swamps, valley and foothill grassland, meadows and seeps, vernal pools. Occurs in seasonally moist or saturated sites within grassland; swales, roadside ditches, and margins of freshwater marshy areas. Occurs	**Possible.** This species was recorded adjacent to the east side of the site in 2009.

Species	Status*	Habitat	Occurrence within the Site
		at elevations below 1,640 feet. Blooms April – May.	
Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*)	CNPS 1B	Found in meadows, seeps, vernal pools and swales within cismontane woodland, valley and foothill grassland, and lower montane coniferous forest with adobe or alkaline soils at elevations between 10 and 5,510 feet. Blooms April – July.	**Possible.** This species could occur adjacent to the site and potentially be impacted by Project activities. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles northeast of the site in 2017.
Bolander's catchfly (*Silene bolanderi*)	CNPS 1B	Found in cismontane woodland, lower montane coniferous forest, North Coast coniferous forest, meadows and seeps, and along the edges of chaparral. Occurs in grassy openings, dry rocky slopes, canyons, or roadsides and is sometimes found on serpentinite. Occurs at elevations below 3,280 feet. Blooms May – June.	**Possible.** This species could occur adjacent to the site and potentially be impacted by Project activities. The nearest recorded observation of this species within the vicinity was approximately 2.5 miles northeast of the site in 1962.
Burke's goldfields (*Lasthenia burkei*)	FE, CE, CNPS 1B	Found in vernal pools, meadows, seeps, and swales. Occurs at elevations below 1,640 feet. Blooms April – June.	**Unlikely.** While suitable habitat occurs adjacent to the site, this species does not occur this far north in California. There are no recorded observations of this species on the CNDDB within the regional vicinity of the proposed Project.
Contra Costa goldfields (*Lasthenia conjugens*)	FE, CNPS 1B	Found in valley and foothill grassland, vernal pools, alkaline playas, and cismontane woodland. Occurs in vernal pools, swales, and low depressions, in open grassy areas at elevations below 330 feet. Blooms March – June.	**Absent.** The site is outside of the elevational range for this species.
Deep-scarred cryptantha (*Cryptantha excavata*)	CNPS 1B	Found in cismontane woodlands in sandy, gravelly, dry streambanks at elevations between 600 and 1,200 feet. Blooms March – May.	**Unlikely.** The site did not contain suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 9 miles southeast of the site in 1892.
Glandular western flax (*Hesperolinon adenophyllum*)	CNPS 1B	Found in chaparral, cismontane woodland, valley and foothill grasslands. Occurs on serpentine soils and is generally found in serpentine chaparral at elevations between 500 to 3,280 feet. Blooms May – August.	**Unlikely.** The site lacks suitable soils and habitats required by this species. The nearest recorded observation of this species within the vicinity was approximately 2 miles southwest of the site in 1920.

Species	Status*	Habitat	Occurrence within the Site
Grass alisma (*Alisma gramineum*)	CNPS 2B	Found in marshes and swamps at elevations between 3,940 and 5,900 feet. Blooms summer – fall.	**Absent.** The site is outside of the elevational range for this species.
Hooker's catchfly (*Silene hookeri*)	CNPS 2B	Found in cismontane woodland, lower montane coniferous forest, and chaparral. Often occurs on grassy openings and sometimes occurs on rocky slopes and serpentinite at elevations below 4,600 feet. Blooms spring to early summer.	**Possible.** This species could occur along Highway 101. The nearest recorded observation of this species within the vicinity was approximately 15 miles northeast of the site in 2003.
Humboldt County milk-vetch (*Astragalus agnicidus*)	CE, CNPS 1B	Found in broad-leafed upland forest and north coast coniferous forest. Occurs in disturbed openings in partially timbered forest lands and along ridgelines with south aspects. Occurs at elevations between 985 and 2,460 feet. Blooms May – August.	**Unlikely.** The project site is not within the two known populations that occur in Mendocino County and Humboldt County. The nearest recorded observation of this species within the vicinity was approximately 3.5 miles east of the site in 2019.
Mayacamas popcornflower (*Plagiobothrys lithocaryus*)	CNPS 1A	Found in chaparral, cismontane woodland, valley, and foothill grasslands. Occurs in moist sites at elevations between 985 and 1,475 feet. Blooms April – May.	**Unlikely.** This species has not been observed within the area for over 100 years. The nearest recorded observation of this species within the vicinity was approximately 13.5 miles southeast of the site in 1899.
Milo Baker's lupine (*Lupinus milo-bakeri*)	CT, CNPS 1B	Found in cismontane woodland, and valley and foothill grasslands. Occurs in roadside ditches, dry gravelly areas along roads, and along small streams at elevations between 1,250 and 1,400 feet. Blooms June – September.	**Possible.** This species could occur along Highway 101 and Upp Creek. The nearest recorded observation of this species within the vicinity was approximately 5.5 miles northwest of the site in 2016.
North Coast semaphore grass (*Pleuropogon hooverianus*)	CT, CNPS 1B	Found in broad-leafed upland forest, meadows and seeps, and north coast coniferous forest. Occurs in wet grassy, usually shady areas. Sometimes it occurs in freshwater marsh and is associated with forest environments. Found at elevations below 4,265 feet. Blooms March – June.	**Unlikely.** The site lacks suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 5.5 miles southeast of the site in 2022.
Nuttall's ribbon-leaved pondweed (*Potamogeton epihydrus*)	CNPS 2B	Found in marshes and swamps. Occurs in shallow water, ponds, lakes, streams, and irrigation ditches at elevations between 1,310 and 6,230 feet. Blooms July – August.	**Possible.** This species could occur adjacent to the site and potentially be impacted by Project activities. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles northeast of the site in 1949.

Species	Status*	Habitat	Occurrence within the Site
Pacific gilia (*Gilia capitata* ssp. *pacifica*)	CNPS 1B	Found in coastal bluff scrub, chaparral, coastal prairie, valley and foothill grassland. Occurs at elevations below 2,500 feet. Blooms May – August.	**Unlikely.** This species occurs along the coast, and the Project site does not provide suitable habitat. The nearest recorded observation of this species within the vicinity was mapped 1.5 miles north of the site in 1980, though the exact location was unknown.
Roderick's fritillary (*Fritillaria roderickii*)	CE, CNPS 1B	Found in coastal bluff scrub, coastal prairie, valley and foothill grassland. Occurs on grassy slopes and mesas at elevations below 4,265 feet. Blooms March – May.	**Unlikely.** This species occurs along the coast, and the Project site does not provide suitable habitat. The nearest recorded observation of this species within the vicinity was approximately 10 miles southwest of the site in 1991.
Saline clover (*Trifolium hydrophilum*)	CNPS 1B	Found in marshes and swamps, valley and foothill grassland, and vernal pools. Occurs at mesic, alkaline sites at elevations below 985 feet. Blooms April – June.	**Absent.** The site is outside of the elevational range for this species.
Santa Cruz clover (*Trifolium buckwestiorum*)	CNPS 1B	Found in coastal prairie, broad-leafed upland forest, and cismontane woodland. Occurs in moist grasslands and along gravelly margins at elevations below 2,330 feet. Blooms May – June.	**Unlikely.** This species occurs along the coast, and the Project site does not provide suitable habitat. The nearest recorded observation of this species within the vicinity was approximately 10.5 miles southeast of the site in 2015.
Scabrid alpine tarplant (*Anisocarpus scabridus*)	CNPS 1B	Found in upper montane coniferous forests along open stony ridges, metamorphic scree slopes of mountain peaks, and cliffs in or near red fir forests. Occurs at elevations between 5,250 and 7,875 feet. Blooms June – September.	**Absent.** The site is outside of the elevational range for this species.
Serpentine cryptantha (*Cryptantha dissita*)	CNPS 1B	Found in chaparral on serpentine outcrops between 440 and 2,400 feet. Blooms March – June.	**Absent.** The site lacks suitable soils and habitats required by this species.
Showy Indian clover (*Trifolium amoenum*)	FE, CNPS 1B	Found in valley and foothill grassland and coastal bluff scrub. Sometimes occurs on serpentine soil, open sunny sites, and swales. Most recently cited on roadside and eroding cliff faces. Occurs at elevations below 330 feet. Blooms April – June.	**Absent.** The site is outside of the elevational range for this species.
Sonoma sunshine (*Blennosperma bakeri*)	FE, CE, CNPS 1B	Found in vernal pools, swales, and valley and foothill grasslands. Occurs at elevations between 65 and 130 feet. Blooms February – April.	**Absent.** The site is outside of the elevational range for this species.

Species	Status*	Habitat	Occurrence within the Site
Three-fingered morning-glory (*Calystegia collina* ssp. *tridactylosa*)	CNPS 1B	Found in chaparral, cismontane woodland on rocky, gravelly openings in serpentine at elevations between 1,980 and 2,300 feet. Blooms April – June.	**Absent.** The site is outside of the elevational range for this species.
Thin-lobed horkelia (*Horkelia tenuiloba*)	CNPS 1B	Found in broad-leafed upland forest, chaparral, valley and foothill grasslands. Occurs on sandy soils and in mesic openings at elevations between 165 and 1,640 feet. Blooms April – July.	**Absent.** The site lacks suitable soils and habitats required by this species.
Watershield (*Brasenia schreberi*)	CNPS 2B	Found in marshes and swamps, as well as near artificial waterbodies at elevations below 2,200 feet. Blooms April – October.	**Absent.** This species is aquatic and the site lacked perennial water sources.
White-flowered rein orchid (*Piperia candida*)	CNPS 1B	Found in North Coast coniferous forest, lower montane coniferous forest, and broad-leafed upland forest. Sometimes occurs on serpentine. Often on forest duff, mossy banks, rock outcrops, and muskeg at elevations below 4,920 feet. Blooms May – September.	**Unlikely.** The site lacked mossy banks and other suitable habitat. The nearest recorded observation of this species was within the vicinity of Willits in 2011.

Table 4-10: List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
American badger (*Taxidea taxus*)	CSSC	Prefers drier open stages of shrub, forest, and herbaceous habitats with friable soils to burrow, but can be found within numerous habitats throughout California, including the margins of agricultural lands. Needs a sufficient prey base of burrowing rodents.	Unlikely. The site is along Highway 101 which has high amounts of vehicle use which is unsuitable for this species. While an American Badger could potentially pass through the site, it is unlikely they would forage or live within the site. The nearest recorded observation of this species within the vicinity was approximately 15.5 miles northeast of the site in 1916.
American goshawk (*Accipiter atricapillus*)	CSSC	Resides within, and in the vicinity of, coniferous forest and prefers canopy cover. Usually nests on north slopes, near water and reuses old nests. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.	Possible. While this species would not nest within the site, American goshawk could nest adjacent to the site and be impacted by the proposed Project. The nearest recorded observation of this species within the vicinity was approximately 10.5 miles southwest of the site in 1990.
California condor (*Gymnogyps californianus*)	FE, CE, CFP	Typically nests in cavities in canyon or cliff faces but has also been recorded nesting in giant sequoias in Tulare County. Requires vast expanses of open savannah, grassland, and/or foothill chaparral in mountain ranges of moderate altitude. Forages for carrion up to 100 miles from their roost/nest sites.	Unlikely. While a California condor could potentially fly over the site, the site and surrounding areas lack cliffs for nesting. There are no recorded observations of this species on the CNDDB within the regional vicinity of the proposed Project.
Foothill yellow-legged frog – north coast DPS (*Rana boylii* pop. 1)	CSSC	Frequents rocky streams and rivers with rocky substrate and open, sunny banks in forests, chaparral, and woodlands. Occasionally found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools.	Possible. This species could occur within Upp Creek. The nearest recorded observation of this species within the vicinity was approximately 0.5 miles southeast of the site along a perennial stream in 2015.
Fisher (*Pekania pannanti*)	CSSC	Can be found in intermediate to large-tree stages of coniferous forests with high percent canopy closure, generally within the low-medium elevational areas of the southern Sierra Nevada.	Unlikely. The site is along Highway 101 which has high amounts of vehicle use which is unsuitable for this species. While a fisher could potentially pass through the site, it is unlikely they would forage or live within the site. The nearest recorded observation of this species within the vicinity was approximately two miles northeast of the site in 2008.
Humboldt marten (*Martes caurina humboldtensis*)	FT, CE	Occurs only in the coastal redwood zone from the Oregon border south to Sonoma County.	Unlikely. The site is adjacent to Highway 101 which has high amounts of vehicle use which is

Species	Status*	Habitat	Occurrence within the Site
		Associated with late-successional coniferous forests, prefer forests with low, overhead cover.	unsuitable for this species. While a Humboldt marten could potentially pass through the site, it is unlikely they would forage or live within the site. The nearest recorded observation of this species within the vicinity was approximately 13.5 miles northeast of the site in 1913.
Marbled murrelet (*Brachyramphus marmoratus*)	FT, CE	Nests inland along the coast from Eureka to Oregon border and from Half Moon Bay to Santa Cruz. Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir. Feeds near-shorelines.	**Absent**. The site is too far inland and is outside of the current range for this species.
Monarch butterfly (*Danaus plexippus*)	FPT	Roosts in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds. Winter roost sites extend along the Pacific Coast from northern Mendocino to Baja California, Mexico.	**Unlikely**. While a monarch could travel through the site during the breeding season, roosting habitat was absent. There are no recorded observations of this species on the CNDDB within the regional vicinity of the proposed Project.
Northern spotted owl (*Strix occidentalis caurina*)	FT, CT	Found in old-growth forests or mixed stands of old-growth and mature trees. Occurs in areas with many trees with cavities or broken tops, woody debris, and space under canopy.	**Possible**. While this species would not nest within the site, Northern spotted owl could nest adjacent to the site and could be impacted by the proposed Project. The nearest recorded observation of this species within the vicinity was approximately one mile north of the site.
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams, and irrigation ditches with riparian vegetation. Requires adequate basking sites and sandy banks or grassy open fields to deposit eggs.	**Possible**. This species could occur within Upp Creek. The nearest recorded observation of this species within the vicinity was approximately two miles northwest of the site along Lake Emily in 1993.
Red-bellied newt (*Taricha rivularis*)	CSSC	Found in coastal drainages from Humboldt County south to Sonoma County and inland to Lake County. An isolated population of uncertain origin occurs in Santa Clara County. Lives in terrestrial habitats, with juveniles generally underground, and adults are active at the surface in moist environments. Will migrate over one kilometer to breed, typically in streams	**Possible**. This species could occur in leaf litter along the site or within Upp Creek. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles southwest of the site in 1938.

Species	Status*	Habitat	Occurrence within the Site
		with moderate flow and clean, rocky substrate.	
Sonoma tree vole (*Arborimus pomo*)	CSSC	Occurs in the north coast fog belt from Oregon border to Sonoma County. Found in Douglas-fir, redwood and montane hardwood-conifer forests. Feeds almost exclusively on Douglas-fir needles. Will occasionally take needles of grand fir, hemlock, or spruce.	**Possible**. This species could occur within the trees adjacent to the west side of the Project site. The nearest recorded observation of this species within the vicinity was approximately 0.5 miles west of the site in 1996.
Steelhead - northern California DPS summer-run (*Oncorhynchus mykiss irideus* pop. 48)	FT, CE	Naturally spawning population of the stream-maturing summer-run ecotype. Occurs from Redwood Creek watershed south and includes the Gualala River watershed. Distribution within range more limited. Require cool water (<23C); holding habitat to withstand higher temps; lower flows in summer/fall; require loose gravels at pool tails for redd construction. Favor cool, clear, fast-flowing riffles, ample riparian cover, undercut banks and diverse prey.	**Absent**. The Project site is outside of the range for summer-run steelhead.
Steelhead - northern California DPS winter-run (*Oncorhynchus mykiss irideus* pop. 49)	FT, CSSC	Naturally spawning population of the ocean-maturing winter-run ecotype. Occurs from Redwood Creek watershed south and includes the Gualala River watershed. Distribution occurs throughout range. Adults require high flows of 18-20 cm for passage and loose gravels at pool tails for redd construction. Juveniles favor areas with cool (10-17 C), clear, fast-flowing riffles, ample riparian cover, undercut banks and diverse prey.	**Likely**. This species was observed in 2019 within Upp Creek, which flows through the site.
Townsend's big-eared bat (*Corynorhinus townsendii*)	CSSC	Occurs in a variety of habitats, but prefers cool, dark roost sites, and is often found in caves and mines. They roost in the open, hanging from walls and ceilings. Western populations typically forage on moths in areas of dense foliage.	**Unlikely**. While this species could forage in the site and surrounding areas, the site lacked appropriate roosting habitat. The nearest recorded observation of this species within the vicinity was approximately 3.5 miles southwest of the site in 2015.
Western bumble bee (*Bombus occidentalis*)	CCE	Once common and widespread, species has declined sharply. Historically distributed across	**Unlikely**. While this species could forage in the area the site is highly disturbed as it occurs along Highway

Species	Status*	Habitat	Occurrence within the Site
		western North America, ranging from Alaska down through the Pacific coast and into the western interior, including areas in California, New Mexico, and Arizona. The species has been found in various habitats, including forests, meadows, and developed areas, often associated with plants that have small flowers like spirea, lupine, and goldenrod. Typically nest in underground cavities, such as abandoned rodent burrows or old animal nests. They prefer locations on open west-southwest facing slopes bordered by trees, although some nests have been found in above-ground locations like logs.	101 and the site lacked nesting habitat. The nearest recorded observation occurred in the vicinity of Willits in 1958.
Western snowy plover (*Charadrius nivosus nivosus*)	FT, CSSC	Occurs on sandy coastal beaches, salt pans, dry salt ponds, gravel bars, salt pond levees, and inland lakes. Inland populations will often migrate to warmer coastal areas during winter months. Requires sandy, gravelly, or friable soils for nesting.	**Absent**. The Project site is outside of the range for this species, and no suitable habitats occur within the site.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, CE	Suitable nesting habitat in California includes dense riparian willow-cottonwood and mesquite habitats along a perennial river. Once common in the California Central Valley, as well as coastal valleys and riparian habitats east of the Sierra Nevada, habitat loss now constrains the California breeding population to small numbers of birds.	**Absent**. The Project site is outside of the range for this species, and no suitable habitats occur within the site.
Yellow warbler (*Setophaga petechia*)	CSSC	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders. Also nests in montane shrubbery in open conifer forests in the Cascades and Sierra Nevada ranges.	**Possible**. This species has been observed to the east of the site in 1977.
Yellow-breasted chat (*Icteria virens*)	CSSC	Inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian vegetation,	**Possible**. This species has been observed to the east of the site in 1977.

Species	Status*	Habitat	Occurrence within the Site
		consisting of willow, blackberry, and wild grape. Forages and nests within 10 ft of ground.	

***EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES**

Present:	Species observed on the site at time of field surveys or during recent past.
Likely:	Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible:	Species not observed on the site, but it could occur there from time to time.
Unlikely:	Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent:	Species not observed on the site and precluded from occurring there due to absence of suitable habitat.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CCE	California Endangered (Candidate)
FPT	Federally Threatened (Proposed)	CT	California Threatened
		CFP	California Fully Protected
		CSSC	California Species of Special Concern

CNPS LISTING

1A	Plants presumed extinct in California.
1B	Plants rare, threatened, or endangered in California and elsewhere.
2B	Plants rare, threatened, or endangered in California, but more common elsewhere.

4.4.2 IMPACT ANALYSIS

a) Would 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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact with Mitigation Incorporated. Of the 27 regionally occurring special status plant species, 21 are considered absent from or unlikely to occur within the Project site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include: Angel's hair lichen, Burke's goldfields, Contra Costa goldfields, deep-scarred cryptantha, glandular western flax, grass alisma, Humboldt County milk-vetch, Mayacamas popcorn flower, North Coast semaphore grass, Pacific gilia, Roderick's fritillary, saline clover, Santa Cruz clover, scabrid alpine tarplant, serpentine cryptantha, showy Indian clover, Sonoma sunshine, three-fingered morning-glory, thin-lobed horkelia, watershield, and white-flowered rein orchid. Since it is unlikely that these species would occur onsite, implementation of the proposed Project should have no impact on these 21 special status species through construction mortality, disturbance, or loss of habitat.

Of the 20 regionally occurring special status animal species, 11 are considered absent from or unlikely to occur within the Project site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include: American badger, California condor, fisher, Humboldt marten, marbled murrelet, monarch butterfly, steelhead - northern California DPS summer-run, Townsend's big-eared bat, western bumble bee, western snowy plover, and western yellow-billed cuckoo. Since it is unlikely that these species would occur onsite, implementation of the proposed Project should have no impact on these 11 special status species through construction mortality, disturbance, or loss of habitat.

The following mitigation measures are related to the rest of the special status plant and animal species not discussed above.

4.4.2.1 GENERAL PROJECT-RELATED IMPACTS

The proposed Project has the potential to impact a number of sensitive resources, as described in more detail in the following sections. Impacts to these resources would be a violation of State and federal laws or considered a potentially significant impact under CEQA. In addition to specific mitigation discussed in the following paragraphs, implementation of Mitigation Measures **BIO-1** and **BIO-2** will help reduce potential impacts to these resources to a less than significant level under CEQA and will help with complying with State and federal laws protecting these resources. These mitigation measures are identified in the subsequent Section 4.4.3.

4.4.2.2 PROJECT-RELATED IMPACTS TO SPECIAL STATUS PLANT SPECIES

The following special status plant species were identified to potentially occur within or adjacent to the Project site: Baker's meadowfoam, Baker's navarretia, Bolander's catchfly, Hooker's catchfly, Milo Baker's lupine, and Nuttall's ribbon-leaved pondweed. Projects that adversely affect special status plants or result in the mortality of special status plants would be considered a significant impact under CEQA and may be a violation of State and/or federal laws. Implementation of Mitigation Measures **BIO-3**, **BIO-4**, and **BIO-5** will reduce potential impacts to special status plants to a less than significant level under CEQA. These mitigation measures are identified in the subsequent Section 4.4.3.

4.4.2.3 PROJECT-RELATED MORTALITY AND/OR NEST ABANDONMENT OF MIGRATORY BIRDS, RAPTORS, AND SPECIAL STATUS BIRDS

The site and adjacent areas could contain suitable nesting and foraging habitat for a variety of protected bird species, such as migratory birds, raptors, and special status birds including American goshawk, northern spotted owl, yellow warbler, and yellow-breasted chat. It is anticipated that during the nesting bird season, protected birds could nest on the ground or in shrubs and trees within, and adjacent to, the site and forage within the site. Protected birds located within or adjacent to the site during construction have the potential to be injured or killed by project-related activities. In addition to the direct "take" of protected birds within the site and adjacent areas, these birds nesting in these areas could be disturbed by project-related activities resulting in nest abandonment. Projects that adversely affect the nesting success of protected birds or result in the mortality of these birds would be a violation of State and federal laws and considered a potentially significant impact under CEQA.

While foraging habitat for protected birds, such as American goshawk, California condor, northern spotted owl, yellow warbler, and yellow-breasted chat, is present on the site, suitable foraging habitat is located adjacent to the site and within the vicinity of the site. Loss of the foraging habitat from implementation of the proposed Project is not considered a significant impact.

Implementation of Mitigation Measures **BIO-6**, **BIO-7**, **BIO-8**, and **BIO-9** will reduce potential impacts to migratory birds, raptors, and special status birds to a less than significant level under CEQA. These mitigation measures are identified in the subsequent Section 4.4.2.

4.4.2.4 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO FOOTHILL YELLOW-LEGGED FROG

The site contained Upp Creek and grassland habitat that can be used as upland habitat. Creek habitat is not expected to be impacted by the proposed Project, and upland areas would be temporarily impacted. Foothill yellow-legged frogs (FYLF) present within these habitats during construction have the potential to be injured or killed by project-related activities. Projects that result in the mortality of individuals would be considered a potentially significant impact under CEQA and violate federal and State laws protecting this species. Implementation of Mitigation Measures **BIO-10**, **BIO-11**, and **BIO-12** will reduce potential

impacts to FYLF to a less than significant level under CEQA. These mitigation measures are identified in the subsequent Section 4.4.2.

4.4.2.5 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO NORTHWESTERN POND TURTLE

The site contained Upp Creek which could be used by northwestern pond turtle for dispersal, foraging, and basking. The annual grassland habitat of the site could be used by northwestern pond turtle for dispersal and nesting. Creek habitat is not expected to be impacted by the proposed Project, and upland areas would be temporarily impacted. Noise, vegetation removal, movement of workers, construction, and ground disturbance as a result of project activities have the potential to significantly impact northwestern pond turtle. Potentially significant impacts associated with project activities could include inadvertent entrapment or direct mortality. Project activities that impact northwestern pond turtles would be considered a potentially significant impact under CEQA. Implementation of Mitigation Measures BIO-13, BIO-14, and BIO-15 will reduce potential impacts to northwestern pond turtle to a less than significant level under CEQA. These mitigation measures are identified in the subsequent Section 4.4.3.

4.4.2.6 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO RED-BELLIED NEWT

The site contained suitable aquatic and upland habitats for red-bellied newt. This species may breed in the creek and disperse and feed within the grassland habitat on the site and in the surrounding forested areas. Red-bellied newt occurring within the site during construction have the potential to be injured or killed by project-related activities. Projects that adversely affect red-bellied newt or result in the mortality of individuals would be considered a potentially significant impact under CEQA. Implementation of Mitigation Measures BIO-16, BIO-17, and BIO-18 will reduce potential impacts to red-bellied newt to a less than significant level under CEQA. These mitigation measures are identified in the subsequent Section 4.4.3.

4.4.2.7 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO SONOMA TREE VOLE

The site and adjacent areas contain forests with Douglas fir which Sonoma tree voles are known to utilize as a food source and home. Projects that adversely affect Sonoma tree vole or result in the mortality of individuals would be considered a potentially significant impact under CEQA. Implementation of Mitigation Measures BIO-19, BIO-20, and BIO-21 will reduce potential impacts to Sonoma tree vole to a less than significant level under CEQA. These mitigation measures are identified in the subsequent Section 4.4.3.

4.4.2.8 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO STEELHEAD-NORTHERN CALIFORNIA DPS WINTER-RUN

The site contained Upp Creek which could be used by steelhead – northern California DPS winter-run for spawning. Creek habitat is not expected to be impacted by the proposed Project, and upland areas would be temporarily impacted. Vegetation removal, movement of workers, construction, and ground disturbance as a result of project activities have the potential to impact steelhead. Potentially significant impacts associated with project activities could include impacts to water quality. Project activities that impact steelhead would be considered a potentially significant impact under CEQA. Implementation of Mitigation Measures BIO-22, BIO-23, and BIO-24 will reduce potential impacts to steelhead – northern California DPS winter-run to a less than significant level under CEQA. These mitigation measures are identified in the subsequent Section 4.4.3.

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

Less than Significant Impact with Mitigation Incorporated. Minimal riparian habitat is present along Upp Creek, and minimal to no impacts are expected to riparian habitat. There are no CNDDB-designated "natural communities of special concern" recorded within the site, and no natural communities of special concern were observed during the field survey. Impacts to riparian habitat would be less than significant after incorporation of Mitigation Measure BIO-25.

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

Less than Significant Impact with Mitigation Incorporated. The project involves connecting a new pipeline to the existing roadway bridge over Upp Creek. The USFWS National Wetlands Inventory Map was consulted for known waterways in the area and Upp Creek is classified as riverine. Additionally, work may occur in potential depressional wetlands located south of Upp Creek. Project-related impacts to Upp Creek or wetlands would be considered a potentially significant impact under CEQA. Impacts to waters of the U.S. are also subject to the permit requirements of Sections 401 and 404 of the Clean Water Act and impacts to waters of the state are subject to the permit requirements of Section 401 of the Clean Water Act and California Fish and Game Code. The placement of fill within any wetlands or other jurisdictional features will require a 401 Water Quality Certification from the RWQCB, 404 permit from the USACE, and a Lake or Streambed Alteration Agreement from CDFW.

There are no designated wild and scenic rivers within the Project site; therefore, the proposed Project would not result in direct impacts to wild and scenic rivers.

If construction involves ground disturbance over an area greater than one acre, the proposed Project would need to obtain a Construction General Permit (GCP) under the Construction Storm Water Program administered by the RWQCB. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) to ensure construction activities do not adversely affect water quality. This plan would need to be prepared in support of the GCP application.

Implementation of the Mitigation Measure BIO-25 would reduce potential impacts to waters to a less than significant level under CEQA and would ensure compliance with State and federal laws protecting these waters.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact with Mitigation Incorporated. The majority of the Project site consists of developed habitat composed of the paved portion of North Main Street which transitions into a remnant of old Highway 101. This habitat poses a risk to any species which disperse across the road and species can disperse through the coniferous forest in the area surrounding the site. While Upp Creek may act as a corridor for aquatic wildlife, no impacts would occur within the creek, and wildlife would be able to continue using this feature while construction is occurring and would be able to continue utilizing it after construction activities are completed.

Upp Creek may act as a native wildlife nursery site for steelhead and other aquatic species. While Upp Creek may act as a native wildlife nursery site, no impacts would occur within the creek, and wildlife would be able to continue using this feature while construction is occurring and would be able to continue utilizing it after construction activities are completed.

The potential impacts to species that could use Upp Creek as a wildlife movement corridor and wildlife nursery site have been addressed in the previously mentioned species-specific mitigation. In addition to these measures, implementation of the Mitigation Measures BIO-26 and BIO-27 would reduce potential impacts to wildlife movement corridors and native wildlife nursery sites to a less than significant level under CEQA.

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

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

e) and f) Less than Significant Impact. The proposed Project appears to be consistent with the goals and policies of the Mendocino County General Plan. There are no known Habitat Conservation Plans or Natural Community Conservation Plans in the Project vicinity. As such, impacts would be less than significant.

4.4.3 MITIGATION

4.4.3.1 GENERAL PROJECT-RELATED IMPACTS

BIO-1 (WEAP Training): Prior to initiating construction activities (including staging and mobilization), all personnel associated with project construction will attend a mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist (someone familiar with the identification and habitats of these species), to aid workers in identifying special status resources that may occur in the site. The specifics of this program will include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. This training will discuss special status species, describe the laws and regulations in place to provide protection of these species, identify the penalties for violation of applicable environmental laws and regulations, and include a list of required protective measures to avoid "take." A fact sheet summarizing this information, along with photographs or illustrations of sensitive species with potential to occur on the site, will also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the project. All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them. (This can be done in-person, via video, or provided to construction personnel in written documentation format.)

BIO-2 (BMPs): The Project proponent will require that all workers employ the following best management practices (BMPs) in order to avoid and minimize potential impacts to special status species:

- Vehicles will observe a 15-mph speed limit while on unpaved access routes.

- All open trenches, holes, sumps, and other excavations greater than six inches with sidewalls steeper than 1:1 (45 degree) slope will have an escape ramp of earth or a non-slip material with a less than 1:1 slope or these will be covered with barrier material such that animals are unable to dig or squeeze under the barrier and become trapped.

- Workers will inspect areas beneath parked vehicles, equipment, and materials prior to mobilization. If special status species are detected, the individual will either be allowed to leave of its own volition or will be captured by the qualified biologist (must possess appropriate collecting/handling permits or relevant experience) and relocated out of harm's way to the nearest suitable habitat beyond the influence of the Project work area. "Take" of a State or federal special status (rare, California Species of Special Concern, threatened, or endangered) species is prohibited without the necessary federal or State take permit(s).

- The presence of any special status species will be reported to the Project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS.

4.4.3.2 PROJECT-RELATED IMPACTS TO SPECIAL STATUS PLANT SPECIES

BIO-3 (Focused Botanical Survey): Prior to Project activities occurring a qualified botanist/biologist (someone who can identify these species) will conduct focused botanical surveys during the appropriate blooming seasons for the Baker's meadowfoam (April – May), Baker's navarretia (April – July), Bolander's catchfly (May – June), Hooker's catchfly (spring to early summer), Milo Baker's lupine (June – September), and Nuttall's ribbon-leaved pondweed (July – August) according to CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (2018) for all appropriate habitats for these species within the site.

BIO-4 (Avoidance): If special status plants are identified during a survey, an avoidance buffer and, if necessary, use of exclusion fencing, will be placed around the area as not to disturb the plants or its root system.

BIO-5 (Formal Consultation): If rare plant individuals or populations are detected within Project works areas during the focused botanical surveys, and the plants cannot be avoided, the Project proponent will initiate consultation with CNPS (for CNPS-ranked species), CDFW (for California proposed, threatened, or endangered species), and/or USFWS (for threatened or endangered species) to determine next steps for salvage and relocation.

4.4.3.3 PROJECT-RELATED MORTALITY AND/OR NEST ABANDONMENT OF MIGRATORY BIRDS, RAPTORS, AND SPECIAL STATUS BIRDS

BIO-6 (Avoidance): The Project's construction activities will occur, if feasible, between August 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.

BIO-7 (Pre-Construction Surveys): If activities occur within the nesting bird season (February 1 to August 15), a qualified biologist (someone able to identify these species) will conduct a pre-construction survey for active nests within ten (10) calendar days prior to the start of construction. It will be completed within the site, and up to 100 feet outside of the

site for nesting migratory birds and up to 500 feet outside of the site for nesting raptors. Raptor nests are considered "active" upon the nest-building stage. If construction is delayed or halted for more than ten (10) days, another pre-construction survey for nesting birds will be conducted.

BIO-8 (Northern Spotted Owl Surveys): If large diameter conifer trees are planned to be removed as a result of the Project, a qualified biologist (someone familiar with northern spotted owls and the survey requirements) will conduct northern spotted owl surveys prior to the start of the Project.

BIO-9 (Avoidance Buffers): On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of Project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.

4.4.3.4 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO FOOTHILL YELLOW-LEGGED FROG

BIO-10 (Pre-Construction Take Avoidance Survey): A qualified biologist (someone familiar with the identification and habitat of this species) will conduct surveys for FYLF in accordance with CDFW's *Considerations for Conserving the Foothill Yellow-Legged Frog* (California Department of Fish and Wildlife 2018), or current guidance for FYLF to determine if FYLF are within or adjacent to Upp Creek and the surrounding grassland habitat within the Project site. If no FYLFs are found during the pre-construction survey and no surface water is present in the Project site, work may commence without further surveys.

BIO-11 (FYLF Consultation and Avoidance): If any FYLF are found during preconstruction surveys or at any time during construction, consultation with CDFW and USFWS is warranted to determine if the Project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when FYLF are most likely to be moving through upland areas (i.e., November 1 to March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist monitor construction activity daily for FYLF.

BIO-12 (Monitor): If ground-disturbing activities must take place between November 1 and March 31, surface water is present during the preconstruction surveys, or if surface water becomes present at any time during the work period, the qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee initial vegetation clearing and ground disturbing activities within FYLF habitat.

4.4.3.5 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO NORTHWESTERN POND TURTLE

BIO-13 (Pre-Construction Survey and Avoidance Buffers): Within seven (7) days prior to the start of construction, a qualified biologist (someone familiar with the identification and habitat of this species) will conduct a pre-construction survey for northwestern pond turtle within Upp Creek and surrounding areas up to 330 feet. Pre-construction surveys will be conducted in accordance with the draft Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion (United States Geological Survey 2006), or current guidance. If no northwestern pond turtles are observed during the pre-

construction survey, then construction activities may begin. If construction is delayed or halted for more than seven (7) days, another pre-construction survey for northwestern pond turtle will be conducted. If the surveys result in the identification of a northwestern pond turtle or an individual is found on the site during construction activities, it will be allowed to leave the site on its own and the qualified biologist will determine appropriate buffers to be implemented to avoid impacts to the individual(s).

BIO-14 (Monitor): If northwestern pond turtles are observed on the site, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all initial vegetation clearing and ground disturbing activities in this species habitats and until the individual(s) have left the site.

BIO-15 (Formal Consultation): Should northwestern pond turtles get listed in this area and the Project/qualified biologist needs to move an individual, consultation for protection plans and/or relocation plans with the appropriate agencies will be completed to avoid take.

4.4.3.6 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO RED-BELLIED NEWT

BIO-16 (Rainfall Avoidance): The National Weather Service 72-hour forecast will be monitored for the site. During rainfall events and/or when a 50 percent or greater chance of rainfall is predicted within 72 hours, all work will be stopped in the site where initial ground disturbance (vegetation removal, grading, grubbing, and excavation) has yet to occur until the rainfall ceases and a zero percent chance of rain is forecast. Work may continue during rainfall events and/or when a 50 percent or greater chance of rain is forecast within portions of the site that have already been cleared of vegetation.

BIO-17 (Pre-Construction Take Avoidance Survey): A qualified biologist (someone familiar with the identification and habitat of this species) will conduct visual surveys for red-bellied newt within Upp Creek during the breeding season (late February to May, peaking in March). Additionally, a qualified biologist will check under vegetation and stones within the site within seven (7) days of construction to check for terrestrial adults. If no red-bellied newt are found during the pre-construction survey and no surface water is present in the Project stie, work may commence without further surveys.

BIO-18 (Monitor): If red-bellied newt are observed on the site, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all initial vegetation clearing and ground disturbing activities in this species habitats and until the individual(s) have left the site.

4.4.3.7 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO SONOMA TREE VOLE

BIO-19 (Tree Avoidance): Douglas fir trees on the Project site will be avoided.

BIO-20 (Take-Avoidance Survey): If Douglas fir trees will be removed, a specialist for Sonoma tree voles will complete a survey to determine presence or absence of the species in the tree(s). If it is determined no Sonoma tree voles are utilizing the tree(s), the tree(s) will be removed within two days of the survey.

BIO-21 (Sonoma Tree Vole Take Authorization): If it is determined Sonoma tree voles are utilizing the tree(s), and avoidance is not feasible the Project will consult with CDFW to acquire an Incidental Take Permit for Sonoma tree vole prior to beginning any Project activities.

4.4.3.8 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO STEELHEAD-NORTHERN CALIFORNIA DPS WINTER-RUN

BIO-22 (Water Quality): Erosion control measures will be utilized to prevent any sediment or hazardous fluids from entering Upp Creek.

BIO-23 (Avoidance): No impacts will occur to Upp Creek during Project activities.

BIO-24 (Formal Consultation): If impacts will occur within Upp Creek, consultation for steelhead protection plans and/or relocation plans with the appropriate agencies will be completed to avoid take.

4.4.3.9 PROJECT-RELATED IMPACTS TO REGULATED WATERS, WETLANDS, AND WATER QUALITY

BIO-25 (Permits): If the proposed Project intends to impact jurisdictional waters, permits with USACE, RWQCB, and/or CDFW will be obtained to comply with State and federal regulations, if necessary. These permits, certifications, and agreements would ensure impacts to waters are minimized to the extent possible and permanent impacts would be offset by compensatory mitigation.

4.4.3.10 PROJECT-RELATED IMPACTS TO WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

BIO-26 (Operational Hours): When possible, construction activities surrounding Upp Creek should be limited to a half hour after sunrise through a half hour before sunset to reduce potential impacts to wildlife movement corridors and wildlife nursery sites.

BIO-27 (Wildlife Access): Access within these areas should not be blocked outside of construction hours or during overnight hours or weekends. If construction must block both sides of a wildlife access route, an alternative route through the construction area should be identified by a qualified biologist and maintained throughout the construction schedule timeframe.

4.5 CULTURAL RESOURCES

Table 4-11: Cultural Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

4.5.1 BASELINE CONDITIONS

ECORP Consulting Inc. (ECORP) conducted an archaeological resources inventory and built environment report for the proposed Project. The following subsections describe the cultural resources survey, records search, and Native American outreach conducted by ECORP.

4.5.1.1 CULTURAL RESOURCES SURVEY

ECORP subjected the Project area to an intensive pedestrian survey on April 22, 2026, under the guidance of the Secretary of the Interior's Standards for the Identification of Historic Properties, using 15-meter transects of the 11.83 acre area of potential effect (APE). At the time, ECORP archaeologists examined the ground surface for indications of surface or subsurface cultural resources and inspected the general morphological characteristics of the ground surface for indications of subsurface deposits that may be manifested on the surface, such as circular depressions or ditches. Whenever possible, the archaeologists examined the locations of subsurface exposures caused by such factors as rodent activity, water or soil erosion, or vegetation disturbances for artifacts or for indications of buried deposits. ECORP did not conduct any subsurface investigations or artifact collections during the pedestrian survey.

The ground surface of the Project area ranged between paved in asphalt, covered in dense vegetation, and clear ground surface. The pedestrian survey occurred along the roadside, and ECORP noted an abundance of modern debris along the road shoulder. Ground surface visibility ranged between 60 to 100 percent in areas not paved or covered in dense brush.

4.5.1.2 RECORDS SEARCH

A records search from the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS), located at California State University, Sonoma was conducted on March 6, 2026. The NWIC records search includes a review of all recorded archaeological and built-environment resources as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest, the California Historical Landmarks, the California Register of Historical Resources, the National Register of Historic Places, and the California State Built Environment Resources Directory listings were reviewed for the above referenced APE and an additional 0.5-mile radius. Due to the sensitive nature of cultural resources, archaeological site locations are not released.

In addition to the official records and maps for archaeological sites and surveys in Mendocino County, ECORP reviewed the following historical references: Built Environment Resource Directory for Mendocino County (Office of Historic Preservation (OHP) 2026a); Archaeological Resource Directory (OHP 2026b), the National Register Information System (National Park Service 2022); California Historical Landmarks (CHL; OHP 1996, 2022); California Points of Historical Interest (OHP 1992 and updates); Directory of Properties in the Historical Resources Inventory (OHP 1999); Caltrans Local Bridge Survey (Caltrans 2019); Caltrans State Bridge Survey (Caltrans 2018); and Historic Spots in California (Kyle 2002). ECORP also reviewed other references, including a RealQuest Property Search and historic General Land Office land patent records (Bureau of Land Management 2022).

ECORP also reviewed historical aerial photographs from 1931, 1941, 1985, 1993, 2003, 2011, 2013, 2017, and 2023 for any indications of Project area usage and built environment.

4.5.1.2.1 RECORDS SEARCH RESULTS

The records search results indicated that 29 previous cultural resources investigations have been conducted within 0.5 miles of the Project area, covering approximately 85 percent of the total records search area. These studies revealed the presence of pre-contact sites, including lithic scatters and habitation sites, and historical sites, including railroads and historic-period structures. The previous studies were conducted between 1980 and 2023 and range in size from 0.25 to 125 acres. Of the 29 studies conducted within the 0.5-mile search radius, 10 included portions of the Project area. The records search results indicate that the entire Project area has been previously surveyed for cultural resources; however, these studies were conducted in smaller segments, at different times, by different consultants, or as many as 34 years ago, under obsolete standards. ECORP, therefore, conducted a pedestrian survey of the entire Project area for the proposed Project under current protocols.

The records search also determined that 26 previously recorded pre-contact and historic-period cultural resources are located within 0.5 miles of the Project area. Three previously recorded cultural resources are located within the Project area, and five previously recorded cultural resources are located adjacent to the Project area. Of the resources located within the Project area, one is believed to be associated with Native American occupation of the vicinity, and two are historic-period sites associated with early European-American ranching and mining activities. Of the five resources located adjacent to the Project area, two are multicomponent resources with historic-period and pre-contact artifacts, and three are historic-period structures.

ECORP's records search identified three previously recorded resources within the Project area: P-23-5465 (Lithic Scatter and Habitation Site), P-23-5513 (Ranch), and P-23-5514 (Former Farm). ECORP verified the location of pre-contact resource P-23-5465 (Lithic Scatter and Habitation Site) and identified an unrecorded component to the site: a bedrock milling feature with a milling slick. ECORP revisited resources P-23-5513 (Ranch) and P-23-5514 (Former farm) and noted that both are demolished and appear in similar conditions from recent recordings in 2022. ECORP also verified that the five resources located adjacent to the Project area are outside the Project area. ECORP also identified one previously unrecorded resource located within the Project area: LL-01, which is a segment of North Main Street/Redwood Highway.

A previous evaluation of P-23-5465 (Lithic Scatter and Habitation Site) recommended the site eligible for the National Register of Historic Places (NRHP) under Criteria A and D (Jurich and Rogers 2014). Both P-23-5513 and P-23-5514 were recommended as not eligible for either the NRHP or CRHR under any criteria; additionally, neither resource maintains integrity after they were demolished. ECORP concurred with the previous evaluations. ECORP evaluated previously unrecorded resource LL-01 (North Main Street/Redwood

Highway) using NRHP and CRHR eligibility criteria and recommends it as not eligible for either register under all criteria.

4.5.1.3 NATIVE AMERICAN OUTREACH

ECORP requested a Sacred Lands File (SLF) search from the NAHC on March 6, 2026. They were provided with a brief description of the proposed Project and a map showing its location and requested a search of the SLF to determine if any Native American resources have been recorded in the immediate APE. The NAHC identifies, catalogs, and protects Native American cultural resources -- ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California. The NAHC is also charged with ensuring California Native American tribes' accessibility to ancient Native American cultural resources on public lands, overseeing the treatment and disposition of inadvertently discovered Native American human remains and burial items, and administering the California Native American Graves Protection and Repatriation Act, among many other powers and duties. NAHC provided a current list of Native American Tribal contacts to notify of the proposed Project. The 35 tribal representatives identified by NAHC were contacted in writing via United States Postal Service (USPS) in a letter dated April 15, 2026, informing each tribal contact of the proposed Project.

Two responses were received to the notification letters. The Noyo River Indian Community responded on May 7, 2026, that they have no further cultural input, as the Willits area is outside of their tribal territory. The Sherwood Valley Band of Pomo Indians responded on April 22, 2026, requesting that no supply stockpiles, employee parking, or port-a-potts be placed on top of records sites, but that no cultural monitoring during construction was requested at this time. Tribal Cultural Resources are further discussed in Section 4.18. Mitigation measures for potential archaeological resources and human remains have also been incorporated into the document.

4.5.2 IMPACT ANALYSIS

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

a and b) Less than Significant Impact with Mitigation Incorporated. As mentioned, ECORP's records search identified three previously recorded resources within the Project area: P-23-5465 (Lithic Scatter and Habitation Site), P-23-5513 (Ranch), and P-23-5514 (Former Farm). ECORP verified the location of pre-contact resource P-23-5465 (Lithic Scatter and Habitation Site) and identified an unrecorded component to the site: a bedrock milling feature with a milling slick. ECORP revisited resources P-23-5513 (Ranch) and P-23-5514 (Former farm) and noted that both are demolished and appear in similar conditions from recent recordings in 2022. ECORP also identified one previously unrecorded resource located within the Project area: LL-01, which is a segment of North Main Street/Redwood Highway.

A previous evaluation of P-23-5465 (Lithic Scatter and Habitation Site) recommended the site eligible for the NRHP under Criteria A and D (Jurich and Rogers 2014). Both P-23-5513 and P-23-5514 were recommended as not eligible for either the NRHP or CRHR under any criteria; additionally, neither resource maintains integrity after they were demolished. ECORP concurs with the previous evaluations. ECORP evaluated previously unrecorded resource LL-01 (North Main Street/Redwood Highway) using NRHP and CRHR eligibility criteria and recommends it as not eligible for either register under all criteria.

Due to the presence of alluvium along Upp Creek, seasonal runoff streams from Wild Oak Canyon, and the presence of pre-contact archaeological sites located along these perennial waterways, it would suggest that there exists a high potential for buried pre-contact archaeological sites within the Project area. However, the area has been heavily disturbed due to construction of Highway 101 (North Main Street/Redwood Highway), and, subsequently, the modifications of the roadway and bridge over Upp Creek in support of the US 101 Bypass around the City. This disturbance reduces the overall likelihood for encountering surface artifacts to low and the likelihood for encountering intact buried pre-contact deposits to moderate. However, the potential remains high for buried pre-contact resources near Upp Creek due to presence of the previously recorded resource P-23-5465 within the Project area on the northern bank of Upp Creek. In the event that cultural resources are encountered during Project construction, implementation of mitigation measure CUL-1, CUL-2, and CUL-3, outlined below, would reduce impacts to less than significant.

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

Less than Significant Impact with Mitigation Incorporated. There is no evidence or record that the proposed Project has the potential to be an unknown burial site, or the site of buried human remains. In the unlikely event of such a discovery, mitigation shall be implemented. With incorporation of mitigation measure CUL-4 outlined below, impacts resulting from the discovery of remains interred on the Project site would be less than significant.

4.5.3 MITIGATION

CUL-1 (Contractor Awareness Training). The City or Contractor shall ensure that a Contractor Awareness Training Program is delivered to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and State regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the Lead Agency of any occurrences; Project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program. The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting, as determined appropriate by the qualified professional archaeologist.

The training shall be provided to all construction supervisors, forepersons, and operators of ground-disturbing equipment. All personnel shall be required to sign a training roster. The Construction Manager is responsible for ensuring that all required personnel receive the training. The Construction Manager shall provide a copy of the signed training roster to the lead agency as proof of compliance.

CUL-2 (Archaeological Monitoring). Prior to the start of construction that is within 100 feet of an identified cultural resource, such as P-23-5465, the proposed Project proponent shall retain a qualified professional archaeologist (Monitoring Archaeologist) to monitor all ground-disturbing activities associated with Project construction within 100 feet of the identified resource. The Monitoring Archaeologist shall meet or work under the direct supervision of someone meeting the Secretary of the Interior's professional qualifications standards for prehistoric and historic archaeology. The Monitoring Archaeologist shall have the authority to temporarily halt ground-disturbing or

construction-related work within 100 feet of any discovery of potential historical or archaeological resources in order to address unanticipated discoveries.

CUL-3 (Archaeological Remains). Should archeological remains or artifacts be unearthed during any stage of project activities, work in the area of the discovery shall cease until the area is evaluated by a qualified archaeologist. If mitigation is warranted, the Project proponent shall abide by recommendations of the archaeologist.

CUL-4 (Human Remains). In the event that human remains are discovered on the Project site, the Mendocino County Coroner must be notified of that discovery (Health and Safety Code Section 7050.5) and all activities in the immediate area if the find or in any nearby area reasonably suspected of overlie adjacent human remains must cease until appropriate and lawful measures have been implemented. If the Coroner determines that the remains are not recent, but rather of Native American origin, the Coroner shall notify the NAHC in Sacramento within 24 hours to permit the NAHC to determine the most likely descendent of the deceased Native American.

4.6 ENERGY

Table 4-12: Energy Impacts

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

4.6.1 BASELINE CONDITIONS

Pacific Gas & Electric supplies both electricity and natural gas to the Project area. New construction would be subject to Titles 20 and 24 of the CCR which each serve to reduce demand for electrical energy by implementing energy-efficient standards for residential, as well as non-residential buildings.

4.6.2 IMPACT ANALYSIS

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?

Less than Significant Impact. The proposed Project would result in the consumption of fuels and the use of energy for construction. The contractor would be in charge of managing energy usage during construction periods. While it is possible that inefficiencies in energy use may occur as a result of the proposed Project, compliance with federal and State statutes regarding energy efficiency would limit any potential for such inefficiencies to occur. During operations, the pipeline itself would not require additional energy use; however, energy use from general operations and maintenance activity would occur, albeit at a negligible level. As such, impacts would be less than significant.

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

No Impact. State and local authorities regulate energy use and consumption. These regulations at the State level are intended to reduce energy use and GHG emissions. These include, among others, AB 1493 – Light-Duty Vehicle Standards; CCR Title 24, Part 6 – Energy Efficiency Standards; and CCR Title 24, Parts 6 and 11 – California Energy Code and Green Building Standards. The proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, there would be no impact.

4.7 GEOLOGY AND SOILS

Table 4-13: Geology and Soils Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☒	☐

4.7.1 BASELINE CONDITIONS

4.7.1.1 GEOLOGY AND SOILS

The Project site is located in Mendocino County, which lies entirely within the Coast Range Geomorphic Province of California with a western limit marked by the Pacific Ocean. This geomorphic province is seismically active and geologically complex due to historic and ongoing tectonic deformation that is characterized by northwest-trending faults and topographic and geologic features. The California Coast Range province extends west to the Pacific Ocean, east to the Great Valley, north to Oregon, and south to the Transverse Ranges. The complex structure of the Coast Ranges Geomorphic Province began with a period of plate convergence during late Jurassic which involved eastward thrusting of oceanic crust beneath

the coastal crust and was characterized by the accretion of material to the continent and the formation of east-dipping thrust and reverse faults.

The soils present on the Project site are included in the table below.

Table 4-14: List of Soils Located on the Site and their Basic Properties

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Cole	Silty clay loam, 0 to 1 percent slopes, MLRA 14	23.2%	Predominantly Nonhydric	Somewhat poorly drained	Slow	High
Gielow	Sandy loam, 0 to 5 percent slopes	70.8%	Predominantly Hydric	Somewhat poorly drained	Moderate	Low
Hopland-Sanhedrin-Kekawaka complex	30 to 50 percent slopes	0.7%	Nonhydric	Well drained	Moderately slow	Very high
Yorktree-Hopland-Woodin complex	30 to 50 percent slopes	2.1%	Nonhydric	Well drained	Slow	Very high
Xerochrepts-Haploxeralfs-Argixerolls complex	9 to 30 percent slopes, low	3.2%	Predominantly Nonhydric	Somewhat poorly drained	Moderate	Low

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions, hydrophytic vegetation can be supported. Hydric soil ratings are derived from specific soil properties as well as climate, parent material, vegetation, landform type, and biological activity of a certain location. One of the major soil mapping units is predominately hydric and makes up 70.8% of the site. Four of the major soil mapping units are nonhydric or predominantly nonhydric and make up 29.2% of the site.

4.7.1.2 FAULTS AND SEISMICITY

Seismic and geologic hazards in and around the Project area include surface fault rupture, seismic shaking, seismically induced landslides, liquefaction, and landslides.[10] The Project area is located within a seismically active region and in close proximity to numerous active faults, including the Maacama fault, which runs through the center of the City, and the San Andreas Fault Zone and the Bartlett Springs Fault, which run through the surrounding Mendocino County region to the east of the City.[11] The seismicity of the area is dominated by the presence of the San Andreas Fault system. However, the Project site is not mapped as a special study zone per the Alquist-Priolo Earthquake Fault Zoning Act, and the likelihood of surface rupture at the Project site from a potentially active fault is considered to be low.[12]

[10] (City of Willits, 2024)
[11] Ibid.
[12] Ibid.

4.7.1.3 LIQUEFACTION

The potential for liquefaction, which is the loss of soil strength due to seismic forces, is dependent on soil types and density, the groundwater table, and the duration and intensity of ground shaking. There are several alluvial basins within the County where conditions can lead to liquefaction, including in the Project area.[13] However, according to the DOC's California Geological Survey, the Project area is not within designated Landslide or Liquefaction zones.[14]

4.7.1.4 SOIL SUBSIDENCE

There are two types of subsidence: land subsidence and hydrocompaction subsidence. Hydrocompaction subsidence occurs when a large land area settles due to over-saturation. These areas are typically composed of open-textured soils that become saturated, high in silt or clay content. Land subsidence occurs when an extensive amount of ground water, oil, or natural gas is withdrawn from below the ground surface. According to the USGS, areas of subsidence are not an issue in the County like that of other parts of the State like the Central Valley.[15]

4.7.1.5 DAM AND LEVEE FAILURE

According to the Federal Emergency Management Agency (FEMA), portions of the Project site are within a 100-year flood zone (see Figure 4-2). The proposed Project is immediately adjacent to the Lake Ada Rose and Brooktrails 3 North Dam inundation zones.[16]

4.7.2 IMPACT ANALYSIS

a) Would the project 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.

ii. Strong seismic ground shaking?

Less than Significant Impact. Ground shaking intensity is largely a function of distance from the earthquake epicenter and underlying geology. Given the proximity of the proposed Project to active seismic sources (the Maacama Fault Zone and San Andreas Fault), the Project site could experience strong ground shaking during the lifespan of the pipeline. However, as the Project site is not mapped as a special studies zone per the Alquist-Priolo Earthquake Fault Zoning Act and based on the distance between the proposed pipeline and the closest active fault, the Maacama fault zone, the potential for surface rupture at the site is considered low. Moreover, the most common impact associated with strong ground shaking is damage to structures, and no habitable structures are associated with the proposed Project. Therefore, the proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death due to the rupture of a known earthquake fault, and impacts would be less than significant.

[13] (County of Mendocino, 2008)
[14] (California Department of Conservation, 2024)
[15] (United States Geological Survey)
[16] (California Department of Water Resources, 2015)

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction occurs when loose, water-saturated sediments lose strength and fail during strong ground shaking. Generally, liquefiable areas covered by Quaternary-age alluvial deposits, Holocene soil deposits, current river channels, and active wash deposits and their historic floodplains, marshes, and dry lakes. The Project site is not located in a Liquefaction zone according to the California Geological Survey.[17] As such, impacts would be less than significant.

iv. Landslides?

Less than Significant Impact. Landslides present some risk to the City, mainly along the southern and western portion of the City.[18] However, the Project site is situated north of the City and is relatively flat. Elevations do increase west of the site. Given the relatively low slopes, both on and adjacent to the Project site, the proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death due to landslides. As such, impacts would be less than significant.

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

Less than Significant Impact. Surface soil erosion and loss of topsoil could occur from soil disturbances associated with construction activities at the Project site. Future development and creation of new impervious surfaces also have the potential to contribute to increased stormwater runoff, which could make soil erosion more severe if stormwater is not handled properly. Implementation of a SWPPP, as required by the California SWRCB's Construction Storm Water General Permit 2009-0009-DWQ, would ensure that stormwater is appropriately addressed. Therefore, impacts would be less than significant.

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?

Less than Significant Impact. Excavation, grading, and fill operations associated with construction could alter existing slope profiles making them unstable because of over-excavation of slope material, steepening of the slope, or increased loading. BMP's provided in the SWPPP would be implemented to maintain stable slopes and excavations during construction. Therefore, impacts would be less than significant.

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

Less than Significant Impact. Expansive soils generally consist of cohesive fine-grained clay soils and represent a significant structural hazard to buildings founded on them as they have a tendency to undergo volume changes (shrink or swell) with changes in moisture content. The proposed Project does not involve the construction of any habitable structures but would include the construction of a 1.1-mile pipeline. The proposed Project does not require the presence of permanent on-site staff and would therefore not create substantial direct or indirect risks to life or property. Therefore, impacts would be less than significant.

[17] (California Department of Conservation, 2024)
[18] (City of Willits, 2024)

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

No Impact. The proposed Project would not include the construction or use of septic tanks or alternative wastewater disposal systems. As such, there would be no impact.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Less than Significant Impact. Paleontological resources are fossilized remains of flora and fauna and associated deposits. Most fossils are found in sedimentary rock. Sedimentary rock is formed by dirt (sand, silt, or clay) and debris that settles to the bottom of an ocean or lake and compresses for such a long time that it becomes hard as a rock. CEQA requires that a determination be made as to whether a project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature (CEQA Appendix G(v)(c)). If an impact is significant, CEQA requires feasible measures to minimize the impact (CCR Title 14(3) Section 15126.4(a)(1)). PRC Section 5097.5 (see above) also applies to paleontological resources.

The proposed Project would require grading and excavation activities on a previously disturbed site. The proposed Project would comply with California Public Resources Code Section 5097.5 which pertains to the protection of paleontological resources. With compliance with said regulation, impacts would be less than significant.

4.8 GREENHOUSE GAS EMISSIONS

Table 4-15: Greenhouse Gas Emissions Impacts

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

4.8.1 BASELINE CONDITIONS

Commonly identified GHG emissions and sources include the following:

Carbon dioxide (CO_2) is an odorless, colorless natural greenhouse gas. CO_2 is emitted from natural and anthropogenic sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources include the burning of coal, oil, natural gas, and wood.

Methane (CH_4) is a flammable greenhouse gas. A natural source of methane is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and ruminants such as cattle.

Nitrous oxide (N_2O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load.

Water vapor is the most abundant, and variable greenhouse gas. It is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life.

Ozone (O_3) is known as a photochemical pollutant and is a greenhouse gas; however, unlike other greenhouse gases, ozone in the troposphere is relatively short-lived and, therefore, is not global in nature. Ozone is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds, nitrogen oxides, and sunlight.

Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as

refrigerants, aerosol propellants, and cleaning solvents. CFCs destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol in 1987.

Hydrofluorocarbons (HFCs) are synthetic chemicals that are used as a substitute for CFCs. Of all the greenhouse gases, HFCs are one of three groups (the other two are perfluorocarbons and sulfur hexafluoride) with the highest global warming potential. HFCs are human-made for applications such as air conditioners and refrigerants.

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere; therefore, PFCs have long atmospheric lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It has the highest global warming potential of any gas evaluated. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth, and what the effects of clouds will be in determining the rate at which the mean temperature will increase. There are also uncertainties associated with the magnitude and timing of other consequences of a warmer planet: sea level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, air pollution episodes, and the consequence of these effects on the economy.

Emissions of GHGs contributing to global climate change are largely attributable to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. About three-quarters of human emissions of CO_2 to the global atmosphere during the past 20 years are due to fossil fuel burning. Atmospheric concentrations of CO_2, CH_4, and N_2O have increased 31 percent, 151 percent, and 17 percent respectively since the year 1750 (CEC 2008). GHG emissions are typically expressed in carbon dioxide-equivalents (CO_2e), based on the GHG's Global Warming Potential (GWP). The GWP is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, one ton of CH_4 has the same contribution to the greenhouse effect as approximately 21 tons of CO_2. Therefore, CH_4 is a much more potent GHG than CO_2.

4.8.2 IMPACT ANALYSIS

4.8.2.1 PROJECT-RELATED EMISSIONS

Short-term construction emissions associated with the proposed Project were calculated using CalEEMod, Version 2022.1.1.37. The emissions modeling includes emissions generated by off-road equipment, haul trucks, and worker commute trips. GHGs impact the environment over time as they increase and contribute to climate change. Emissions were quantified based on an anticipated construction schedule of approximately six months. Remaining assumptions were based on the default parameters contained in the model. Modeling assumptions and output files are included in Appendix A. Estimated construction-generated emissions are summarized in Table 4-16.

Table 4-16: Short-Term Construction-Related GHG Emissions

	Emissions (MT CO2e) in Tons per Year
Maximum Annual Construction CO_2e Emissions	28.873
AB 32 Consistency Threshold for Land-Use Development Projects*	1,100
AB 32 Consistency Threshold for Stationary Source Projects*	10,000
Threshold Exceeded?	No

* As published in the Bay Area Air Quality Management District's CEQA Air Quality Guidelines. Available online at http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en Accessed 02/11/2026.

Construction related generation of GHGs would be a maximum of 28.873 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year. While some operational emissions could result from the proposed Project, this quantity would be negligible. The proposed Project would not exceed the AB 32 consistency threshold for land use projects for both short term construction emissions and long-term operational emissions, as they would be negligible, as a result.

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

Less than Significant Impact. As depicted in Table 4-16, construction of the proposed Project would emit approximately 29 $MTCO_2e$. The proposed Project is not expected to result in the generation of GHG emissions that would exceed the AB 32 consistency threshold of 1,100 $MTCO_2e$ annually during construction activities. Therefore, impacts would be less than significant.

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

No Impact. The proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The proposed Project would comply with all applicable policies and regulations and would not exceed an applicable threshold for GHG emissions. Therefore, impacts would be less than significant.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Table 4-17: Hazards and Hazardous Materials Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

4.9.1 BASELINE CONDITIONS

4.9.1.1 HAZARDOUS MATERIALS

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop an updated Cortese List at least annually. The Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. DTSC's EnviroStor database provides DTSC's component of Cortese

List data (DTSC, 2010). In addition to the EnviroStor database, the SWRCB Geotracker database provides information on regulated hazardous waste facilities in California, including underground storage tank (UST) cases and non-UST cleanup programs, including Spills-Leaks-Investigations-Cleanups sites, Department of Defense sites, and Land Disposal program.

A search of the DTSC EnviroStor database and the SWRCB GeoTracker performed on February 13, 2026, determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project area or immediate surrounding vicinity.[19] [20]

4.9.1.2 AIRPORTS

The proposed Project is approximately 1.2 miles from the Willits Municipal Airport. The airport is northwest of the LLMHP at its closest point to the proposed Project.

4.9.1.3 EMERGENCY RESPONSE PLAN

The City of Willits adopted an Emergency Operations Plan (EOP) in September 2024.[21] The EOP lays out operational strategies and plans for managing complex and potentially catastrophic events. The City's Emergency Operations Center (EOC) serves as a centralized location for supporting emergency management coordination and decision making during a critical incident, major emergency, or disaster. The County is in the process of updating its existing Multi-Jurisdictional Local Hazard Mitigation Plan (MJLHMP), last approved in 2021. This plan is designed to help communities develop strategies to reduce natural hazard risk.

4.9.1.4 SENSITIVE RECEPTORS

Potential sensitive receptors, such as residences, are located immediately adjacent to the proposed Project at several points. The closest school to the Project site is Willits High School, which is approximately 700 feet or 0.13 miles to the south of the southernmost portion of the proposed pipeline.

4.9.2 IMPACT ANALYSIS

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

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

a) and b) Less than Significant Impact. Project construction would involve the storage, use, and transport of hazardous materials (e.g., asphalt, fuel, lubricants, and other substances) on roadways. Regulations governing hazardous materials transport are provided in Title 22 of the CCR and the California Vehicle Code (Title 13 CCR). Any potential accidental hazardous materials spills during construction are the responsibility of the contractor to remediate in accordance with industry BMPs and State and County regulations. As such, any impacts would be less than significant

[19] (California Department of Toxic Substances Control, 2020)
[20] (California State Water Resources Control Board, 2020)
[21] (City of Willits, 2024)

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact. The proposed Project would utilize hazardous materials (e.g., asphalt, fuel, lubricants, and other substances) on roadways within one-quarter mile of Willits High School. While the school would be within one-quarter mile of the southernmost portion of the Project site, construction is temporary and would be subject to regulations regarding regular maintenance and inspection of equipment, spill prevention, and spill remediation for potential spills on-site. In addition, the contractor would be required to follow industry BMPs and State and local regulations governing accidental spills or releases of hazardous materials. As such, impacts would be less than significant.

d) Would the project 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. Both the SWQCB's GeoTracker and DTSC's EnviroStor websites were queried on February 13, 2026, for hazardous material sites in the vicinity of the proposed Project. The Project site does not involve land that is listed as an active hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by DTSC; moreover, there are no such open sites within one mile of the Project site. As such, there would be 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?

Less than Significant Impact. The proposed Project would be approximately 1.2 miles to southeast of the Willits Municipal Airport. As such, the proposed Project would be within two miles of a public airport. As Project implementation would be temporary in nature and any ongoing maintenance of the proposed Project would be infrequent, workers in the Project area would not be exposed to a safety hazard or excessive noise levels. Therefore, impacts would be less than significant.

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

Less than Significant Impact. As mentioned, the City has adopted an EOP and the County has adopted the MJLHMP. In the event of a large-scale emergency or disaster, these plans would dictate City or County actions. Construction would not impair or physically interfere with any adopted emergency response or emergency evacuation plan. Minimal traffic would be added during construction. After construction is completed, no roadways or emergency response and/or evacuation paths would be impeded. The proposed Project would comply with all applicable guidelines in the MJLHMP and EOP throughout construction and operations of the proposed Project and in the event of an emergency, disaster, or evacuation event. As such, impacts would be less than significant.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less than Significant Impact. The proposed Project includes lands within a State Responsibility Area, including lands designated as Very High and Moderate in terms of Fire Hazard Severity Zones.[22] However, the proposed Project pipeline components would not cause increased exposure of people or structures

[22] (CAL FIRE, 2024)

to a significant risk of loss, injury or death involving wildland fires. The proposed Project would provide LLMHP with a safe water supply via an approximately 1.1-mile pipeline. Impacts would be less than significant.

4.10 HYDROLOGY AND WATER QUALITY

Table 4-18: Hydrology and Water Quality Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

4.10.1 BASELINE CONDITIONS

The Project site is within the Mill Creek-Outlet Creek watershed, Hydrologic Unit Code 180101030403.[23] The proposed Project lies within the Little Lake Valley Groundwater Basin.[24] FEMA Flood Insurance Rate Map Panel No. 06045C1111F (effective 6/02/2011) indicates that portions of the Project site are located within the 100 Year Flood Zone (see Figure 4-2). Upp Creek flows through the Project site; however, the proposed pipeline would daylight prior to the creek and return underground after crossing the creek.

[23] (United States Environmental Protection Agency)
[24] (California Department of Water Resources, 2018)

4.10.2 IMPACT ANALYSIS

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

Less than Significant Impact. During construction, there may be exposure of pollutants which may degrade water quality. The proposed Project is required to prepare a SWPPP and implement effective erosion control BMPs. The SWPPP would describe stormwater and non-stormwater control measures that would be used to minimize the discharge of pollutants to the maximum extent practicable. This would ensure less than significant impacts during construction.

Groundwater and surface water statistics are expected to remain more or less the same after construction of the proposed Project. LLMHP has historically relied on a groundwater well for its water supply; however, due to well failure, it needs a more reliable and safe-to-drink water supply. The approximately 1.1-mile pipeline would provide City water to the existing MHP; there would be no increase in water use in the groundwater basin from existing use as no new connections would be added to the LLMHP. As such, impacts would be less than significant.

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?

Less than Significant Impact. Construction and operation of the proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The proposed Project would not adversely affect groundwater supplies during construction or operational activities beyond the existing use. Implementation of the proposed Project would replace the LLMHP's historic reliance on a groundwater well with water from the City via the 1.1-mile pipeline. Therefore, impacts to groundwater supplies or groundwater recharge would be less than significant.

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:

i. result in substantial erosion or siltation on- or off-site;

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

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv. impede or redirect flood flows?

Less than Significant Impact. Any potential impacts from infiltration of erosion or siltation during construction would be minimized by following California GCP 2009-0009-DWQ guidelines and implementing a SWPPP in accordance with the SWRCB prior to construction activities beginning. Because the Project site is located on flat land, with low potential for soil erosion, the proposed Project would comply with SWRCB requirements. By following GCP and SWRCB standards and through the implementation of a SWPPP, impacts related to soil and erosion pollution would be less than significant.

Subsequent to completion of construction, roads, grade, drainage flow patterns, and storm drain runoff areas that are disturbed by the proposed Project would be repaired to pre-construction quality. These areas existed for these uses before the proposed Project and would continue being utilized for their respective uses after the proposed Project is completed. Therefore, impacts would be less than significant.

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

Less than Significant Impact. As shown in Figure 4-2, portions of the Project site are within a 100-year flood zone. However, the Project site is not located in a tsunami or seiche zone, as it is not located near any large inland bodies of water and is more than 25 miles east of the Pacific Ocean, and does not risk the release of pollutants due to Project inundation. The proposed Project includes the installation of an approximately 1.1-mile water pipeline connecting the City to the LLMHP to provide clean drinking water. After construction, operations would only be on an as-needed basis. Any impacts would be less than significant.

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

Less than Significant Impact. The proposed Project would be required to comply with all applicable federal, State, and local water quality standards. The proposed Project would be constructed within existing road ROW, and groundwater would not be extracted as a part of the proposed Project. There is currently no sustainable groundwater management plan for the Little Lake Valley groundwater basin; however, the Little Lake Valley Groundwater Management Plan (GWMP) was adopted by the City of Willits on August 26, 2020. The proposed Project would not conflict with the goals of the GWMP. As such, impacts would be less than significant.

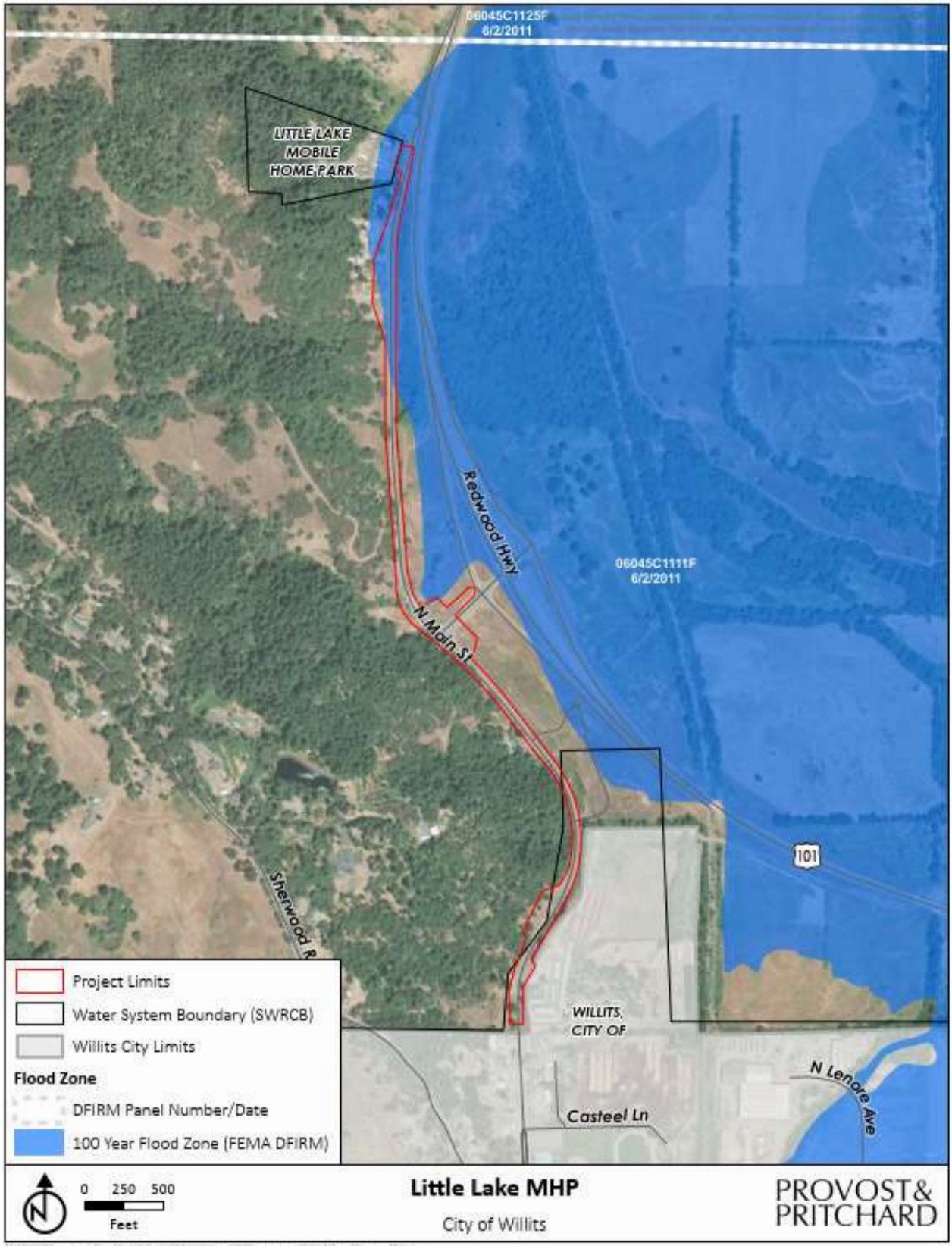


Figure 4-2: FEMA Flood Map

4.11 LAND USE AND PLANNING

Table 4-19: Land Use and Planning Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

4.11.1 BASELINE CONDITIONS

The proposed Project is located in Mendocino County immediately north of the City of Willits. The Project site consists of road ROW that connects the City to LLMHP. General Plan Land Use Designations and Zone Districts are illustrated in Figure 2-4 and Figure 2-5, respectively.

4.11.2 IMPACT ANALYSIS

a) Would the project physically divide an established community?

No Impact. The proposed Project would not physically divide an established community. The proposed Project would result in the construction of a new water pipeline to connect the City water system with the existing LLMHP. Construction would be completed primarily within existing road ROW and would not result in a physical barrier within a community. Completion of the proposed Project would result in a safe drinking water supply for the LLMHP. As such, there would be no impact.

b) Would the project cause a significant environmental conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed Project would not result in a conflict with any adopted land use plan, policy, or regulation which has been adopted for the purpose of avoiding or mitigating an environmental effect. No change in land use designation or zoning has been proposed as a result of the proposed Project. As mentioned, completion of the proposed Project would result in a safe drinking water supply for the LLMHP. There would be no impact.

4.12 MINERAL RESOURCES

Table 4-20: Mineral Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

4.12.1 BASELINE CONDITIONS

A variety of mineral resources are known to exist in Mendocino County. However, the most predominant of the mineral found in the County are aggregate resource minerals, primarily sand and gravel, found along many rivers and streams. Aggregate hard rock quarry mines are also found throughout the County. Three sources of aggregate materials are present in the County: quarries, instream gravel, and terrace gravel deposits. The viability of different sources for any use depends primarily on the properties of the rock itself and the processing required to prepare the rock.

4.12.2 IMPACT ANALYSIS

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

No Impact. Neither construction nor operation of the proposed Project would impede access to or result in the loss of mineral resources. Implementation of the proposed Project would not 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. There would be no impact.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The proposed Project would not traverse any existing mining claims or lands that are known to contain a known mineral resource. Implementation of the proposed Project would not impact mineral resources. Therefore, the proposed Project would not 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. There would be no impact.

4.13 NOISE

Table 4-21: Noise Impacts

Would the project result in:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

4.13.1 BASELINE CONDITIONS

The Project area consists of lands just north of the City and extending northerly into vacant lands and more rural residences. Highway 101 runs mostly parallel to the east of the Project site, and noise from the highway can be heard from the Project site.

State and federal standards have been established as guidelines for determining the compatibility of a particular use with its noise environment. The City relies principally on standards in its Noise Element of the General Plan, its Zoning Ordinance, the County of Mendocino Noise Element of the County of Mendocino General Plan, the County of Mendocino Zoning Ordinance, and other County ordinances to evaluate noise-related impacts of development, depending on the location of proposed development.

4.13.2 IMPACT ANALYSIS

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?

b) Would the project result in generation of excessive ground borne vibration or ground borne noise levels?

a) and b) Less than Significant Impact. Construction of the proposed Project would involve temporary noise sources, predominantly from off-road equipment, such as excavators, backhoe/loader, and graders. Implementation of the proposed Project would not be expected to generate noise in excess of what is common for such improvements, nor would the proposed Project result in excessive ground borne vibration or ground borne noise levels. Throughout all phases of construction, work would be limited to normal business hours, typically 7:00 am to 5:00 pm, Monday through Saturday, or as approved

by the City and/or County. The pipeline would be installed within the road ROW, which is near the existing Highway 101. After construction is finished, operation of the proposed improvements would not require any additional equipment that would increase permanent noise levels at the Project site. As such, impacts would be less than significant.

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?

Less than Significant Impact. As previously discussed, the Project site is not located within an airport land use plan, and the nearest airport is located approximately 1.2 miles northwest of the Project site at its closest point. As Project implementation would be temporary in nature and any ongoing maintenance of the proposed Project would be infrequent, workers in the Project area would not be exposed to excessive noise levels. Impacts would be less than significant.

4.14 POPULATION AND HOUSING

Table 4-22: Population and Housing Impacts

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

4.14.1 BASELINE CONDITIONS

The proposed Project would be located outside of the City, and the pipeline would extend along the County road to the existing MHP. The LLMHP has 19 residential connections, serving approximately 38 individuals. According to the United States Census Bureau, Willits has a population of approximately 5,000.[25]

4.14.2 IMPACT ANALYSIS

a) Would the project 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)?

No Impact. The proposed Project would result in the construction of a 1.1-mile pipeline that would allow the LLMHP to receive clean drinking water from the City. The pipeline would be directly from the City to the existing MHP, and there would not be any additional connections beyond what the LLMHP already serves. There would be no unplanned population growth as a result of the proposed Project. As such, there would be no impact.

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

No Impact. The proposed Project does not propose either the construction of new housing or the demolition of existing housing. The proposed Project would construct a 1.1-mile segment of pipeline connecting the LLMHP to the City's water system. Construction would be completed within the existing road ROW. As such, there would be no impact.

[25] (United States Census Bureau, 2020)

4.15 PUBLIC SERVICES

Table 4-23: Public Services

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

4.15.1 BASELINE CONDITIONS

Fire Protection: The Project site is served by the California Department of Forestry and Fire Protection (CALFIRE) Mendocino Unit as well as the Little Lake Fire District. The Little Lake Fire District station in the City is the closest fire station located approximately 0.6 miles south of the proposed Project.

Police Protection: The Project area is served by the Mendocino County Sheriff's Department and the Willits Police Department. The closest County Sheriff station is 0.9 miles south-southwest of the proposed Project; the Willits Police Department is located approximately 0.6 miles south of the proposed Project.

Schools: The closest school to the Project site is Willits High School, which is approximately 700 feet or 0.13 miles to the south of the southernmost portion of the pipeline.

Parks: The closest park to the proposed Project is the Bud Snider Park, situated approximately 0.5 miles south of the Project site.

Landfills: The closest landfill to the Project site is the Willits Transfer Station and Recycling Center approximately 1.2 miles south-southwest of the Project site.

4.15.2 IMPACT ANALYSIS

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:

i. Fire Protection:

ii. Police Protection:

iii. Schools:

iv. Parks:

v. Other public facilities:

No Impact. The proposed Project would not induce the appreciable use of public services or facilities. The need for such primarily stems from an increase in population to an area, and, as mentioned earlier, the proposed Project would only serve existing connections in the LLMHP. The proposed Project would not construct any habitable structures, nor would it require new or altered public facilities in order to maintain acceptable service ratios, response times, or other performance objectives for public services. There would be no impact.

4.16 RECREATION

Table 4-24: Recreation Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) 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?	☐	☐	☐	☒

4.16.1 BASELINE CONDITIONS

The Project site involves land immediately to the north of the City within existing road ROW. The nearest park to the Project site is the Bud Snider Park, situated approximately 0.5 miles south of the Project site.

4.16.2 IMPACT ANALYSIS

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

No Impact. The proposed Project would not result in the increase of use of an existing neighborhood or regional park or other recreational facilities, which could potentially cause increased deterioration of such facilities. The proposed Project would result in the construction of a water pipeline that would be installed within existing road ROW. There are no parks immediately adjacent to the Project site. Therefore, there would be 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. The proposed Project would result in the construction of a water pipeline from the City to LLMHP. The proposed Project does not propose the construction or expansion of any recreational facilities. As such, there would be no impact.

4.17 TRANSPORTATION

Table 4-25: Transportation Impacts

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

4.17.1 BASELINE CONDITIONS

The proposed Project would be situated immediately to the north of the City, extending approximately 1.1 miles north to the LLMHP. The Project site is within the existing road ROW, which was the former Highway 101. The current Highway 101 runs more or less parallel to the proposed Project pipeline to the east.

4.17.2 IMPACT ANALYSIS

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

Less than Significant Impact. Construction associated with the proposed Project would be restricted to the Project site, which is located within public ROW. Any construction-related impacts would be temporary, such as an increase in vehicles and traffic congestion in the surrounding transportation network during times of active construction. Impacts to the existing roadway would be temporary; single-lane traffic control would be required and coordinated with the County during construction. The proposed Project would thus not conflict with plans, policies, or ordinances addressing the circulation system. Therefore, impacts would be less than significant.

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

No Impact. CEQA Guidelines Section 15064.3(b) applies to land use and transportation projects that would be expected to increase vehicle miles driven during their operations. For construction activities, CEQA Guidelines Section 15064.3(b)(3) allows a qualitative analysis to be conducted. The proposed Project would result in a temporary increase in vehicle miles traveled during construction due to worker trips to the site, the delivery of materials, and trips generated by construction vehicles on the site. The temporary increase in vehicle mileage travelled during construction would not be expected to increase vehicle miles traveled over the long term and would not conflict or be inconsistent with CEQA Guidelines

Section 15064.3(b). During operations, any additional vehicle miles traveled would be negligible and only associated with as necessary maintenance activities. Therefore, impacts would be less than significant.

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)?

No Impact. The proposed Project would not alter the roadway geometrics of existing roads or introduce incompatible uses to the existing community. There would be temporary construction along roadways to install the pipeline, but this construction would not substantially increase hazards due to a geometric design feature or incompatible use. Impacts would be less than significant

d) Would the project result in inadequate emergency access?

Less than Significant Impact. Construction activities associated with the proposed Project would require single-lane traffic control, which would be coordinated with the County during construction. Since the proposed Project would require work in the public road ROW, it would require a Road Encroachment Permit to be obtained from the Mendocino County Department of Transportation. Permit conditions would require that adequate noticing and signage be placed in and near the Project site. Due to this, impacts would be less than significant.

4.18 TRIBAL CULTURAL RESOURCES

Table 4-26: Tribal Cultural Resources Impacts

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

4.18.1 BASELINE CONDITIONS

As noted in Section 4.5 Cultural Resources, an Archaeological Resources Inventory and Built Environment Evaluation Report was prepared for the proposed Project. The following ethnographic history of the Project area derives wholly from the Archaeological Resources Inventory and Built Environment Evaluation Report and the research that took place to prepare the report (see Appendix C).

Ethnographically, the Project area is the tribal territory of the Northern Pomo, one of seven linguistic divisions of the Pomo language. The Northern Pomo territory includes 22 miles of coastline and extends 50 miles inland to the northwestern shores of Clear Lake. The Northern Pomo territory includes land surrounding the present-day towns of Fort Bragg, Noyo, Mendocino, Ukiah, Willits, and Calpella. This large territory includes oak-pine and hardwood forests, chaparral and coastal prairie vegetation communities, and contains the north coast redwood and coastal cypress and pine forests (Kroeber 1925).

4.18.1.1 RECORDS SEARCH

ECORP requested an SLF search from the NAHC on March 6, 2026. They were provided with a brief description of the proposed Project and a map showing its location and requested a search of the SLF to

determine if any Native American resources have been recorded in the immediate APE. The NAHC identifies, catalogs, and protects Native American cultural resources -- ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California. The NAHC is also charged with ensuring California Native American tribes' accessibility to ancient Native American cultural resources on public lands, overseeing the treatment and disposition of inadvertently discovered Native American human remains and burial items, and administering the California Native American Graves Protection and Repatriation Act, among many other powers and duties.

4.18.1.2 NATIVE AMERICAN OUTREACH

The City, as a public lead agency, has received written correspondence from a Tribe pursuant to Public Resources Code Section 21080.3.1 requesting notification of a proposed project, and NAHC provides a current list of Native American Tribal contacts to notify of the proposed Project. The 35 tribal representatives requesting notification and identified by NAHC were contacted in writing via USPS in a letter dated April 15, 2026, informing each Tribal contact of the proposed Project.

The following is a list of the tribal representatives that were notified of the proposed Project:

1. Big Valley Band of Pomo Indians of the Big Valley Rancheria; Flaman McCloud, Jr., Chairperson
2. Cahto Tribe; Misty Davidson, Chairwoman
3. Cahto Tribe; Tasheena Sloan, Vice Chairperson
4. Cahto Tribe; Rachael Phillips, Member-at-Large
5. Cahto Tribe; Kendra Campbell, Secretary-Treasurer
6. Cloverdale Rancheria of Pomo Indians of California; Vickey Macias, Tribal Treasurer/Administrator
7. Coyote Valley Band of Pomo Indians; Richard Campbell, Acting Chairperson
8. Dry Creek Rancheria of Pomo Indians; Sherrie Smith-Ferri, THPO
9. Elem Indian Colony Pomo Tribe; Kim Cole, Tribal Administrator
10. Elem Indian Colony Pomo Tribe; Thomas Brown, Cultural Resources Director
11. Elem Indian Colony Pomo Tribe; Agustin Garcia, Chairperson
12. Estom Yumeka Maidu Tribe of the Enterprise Rancheria; Glenda Nelson, Chairperson
13. Estom Yumeka Maidu Tribe of the Enterprise Rancheria; Nelson Smith, THPO
14. Guidiville Rancheria of California; Bunny Tarin, Tribal Administrator
15. Hopland Band of Pomo Indians; Sonny Elliot, Chairperson
16. Hopland Band of Pomo Indians; Ramon Billy, THPO
17. Koi Nation of Northern California; Dino Beltran, Vice Person
18. Koi Nation of Northern California; Robert Morgan, THPO
19. Koi Nation of Northern California; Darin Beltran, Chairperson
20. Manchester Band of Pomo Indians of the Manchester Rancheria; Jaime Cobarrubia, Chairperson
21. Middletown Rancheria of Pomo Indians of California; Jose Simon III, Tribal Chairman
22. Middletown Rancheria of Pomo Indians of California; THPO
23. Middletown Rancheria of Pomo Indians of California; Michael Rivera, THPO
24. Noyo River Indian Community
25. Pinoleville Pomo Nation; Erica Caron, THPO
26. Pinoleville Pomo Nation; Leona Williams, Chairperson
27. Potter Valley Tribe; Salvador Rosales, Chairperson
28. Redwood Valley or Little River Band of Pomo Indians; Debra Ramirez, Chairperson
29. Robinson Rancheria of Pomo Indians; Stephanie Nix, Environmental Coordinator/Action THPO

30. Robinson Rancheria of Pomo Indians; Goerge Brenard, Environmental Director
31. Robinson Rancheria of Pomo Indians; Beniakem Cromwell, Chairperson
32. Round Valley Reservation/Covelo Indian Community; James Russ, President
33. Scotts Valley Band of Pomo; Shawn Davis, Chairperson
34. Sherwood Valley Band of Pomo Indians; Valerie Stanley, THPO
35. Yokayo Tribe; Chairperson

Two responses were received to the notification letters. The Noyo River Indian Community responded on May 7, 2026, that they have no further cultural input, as the Willits area is outside of their tribal territory. The Sherwood Valley Band of Pomo Indians responded on April 22, 2026, requesting that no supply stockpiles, employee parking, or port-a-ports be placed on top of records sites, but that no cultural monitoring during construction was requested at this time.

4.18.2 IMPACT ANALYSIS

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

i. Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or

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

a-i – a-ii) Less than Significant Impact with Mitigation Incorporated. The City, as a public lead agency, received written correspondence from several tribes pursuant to Public Resources Code Section 21080.3.1 requesting notification of a proposed project. As such, outreach letters were sent to these tribal organizations to further identify Native American interests and concerns in the Project area.

As discussed in Section 4.5, ECORP verified the location of pre-contact resource P-23-5465 (Lithic Scatter and Habitation Site) and identified an unrecorded component to the site: a bedrock milling feature with a milling slick. ECORP also identified one previously unrecorded resource located within the Project area: LL-01, which is a segment of North Main Street/Redwood Highway. It is not considered a tribal cultural resource as it does not hold any cultural value to a California Native American tribe

Due to the presence of alluvium along Upp Creek, seasonal runoff streams from Wild Oak Canyon, and the presence of pre-contact archaeological sites located along these perennial waterways, it would suggest that there exists a high potential for buried pre-contact archaeological sites within the Project area. However, the area has been heavily disturbed due to construction of roadways and the bridge over Upp Creek. This disturbance reduces the overall likelihood for encountering surface artifacts to low and the likelihood for encountering intact buried pre-contact deposits to moderate. The mitigation measures CUL-1, CUL-2, CUL-3, and CUL-4 would be implemented to reduce impacts to less than significant.

4.18.3 MITIGATION

See CUL-1, CUL-2, CUL-3, and CUL-4 outlined above in Section 4.5.3.

4.19 UTILITIES AND SERVICE SYSTEMS

Table 4-27: Utilities and Service Systems Impacts

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

4.19.1 BASELINE CONDITIONS

Wastewater Services/Facilities: The Willits Wastewater Treatment Facility is situated approximately 0.7 miles east of the southernmost portion of the proposed Project pipeline.

Water: The proposed Project is near or lies within the Little Lake Valley Groundwater Basin, as defined by the California Department of Water Resources Groundwater Bulletin 118.[26] No significant long-term trends in groundwater levels have been identified in the Little Lake Valley Groundwater Basin, and trends have been observed to be relatively flat to slowly recovering from heavy well pumpage and drought.[27] The City Water Department provides water to the City and is the only water purveyor within the Little Lake Valley.

Solid Waste: The closest landfill to the Project site is the Willits Transfer Station and Recycling Center approximately 1.2 miles south-southwest of the Project site.

Storm Water Drainage: Storm water within the site currently percolates into the ground. There are no storm water retention basins on site.

[26] (California Department of Water Resources, 2018)
[27] (City of Willits, 2020)

4.19.2 IMPACT ANALYSIS

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 construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. There would not be any relocation or construction of new or expanded storm water drainage, electric power, natural gas, or telecommunications as a result of the proposed Project. The proposed Project involved constructing approximately 1.1 miles of pipeline to serve the LLMHP water demand from the City. As such, the City would expand water service to the existing residents of LLHMP; however, the existing residents have been historically dependent on a groundwater well, and no new connections would be added to the LLMHP as a result of the proposed Project. There would be no permanent employees onsite during operations, apart from as needed maintenance trips, and environmental effects from the proposed Project would be temporary or the same as existing conditions. As such, impacts would be less than significant.

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?

Less than Significant Impact. Neither construction nor operations of the proposed Project would itself cause a substantial increase in water use or demand. Water would be used on-site during construction for dust suppression and similar activities. The negligible amount of water that would be used would not change the existing water entitlements. Additionally, it would not be anticipated that water usage would increase for operations of the proposed Project as the proposed Project involves connecting the LLMHP to the City's water system to replace its failed well as the MHP's sole water source. The proposed Project would not involve the construction of additional housing, nor would it spur population growth in the area as it would only serve the existing MHP's connections. As such, impacts would be less than significant.

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

No Impact. The proposed Project includes construction of a 1.1-mile water pipeline connecting LLMHP to the City water system. No new wastewater treatment would be needed, and no addition in households or population growth would result from the proposed Project. There would be no impact.

d) 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?

No Impact. The proposed Project would result in the construction of a new water pipeline, the operation of which would not result in an increase in solid waste generation. Any waste generated during construction would be the responsibility of the contractor and disposed of in compliance with current regulations but would be minimal as a result of temporary construction for a pipeline project. Construction would result in solid waste disposal needs but would not be in excess of landfill capacity. As such, there would be no impact.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. The proposed Project would create a temporary increase in the amount of solid waste generated. The proposed Project would comply with all federal, State, and local rules, regulations, and status related to the reduction of solid waste. Therefore, there would be no impact.

4.20 WILDFIRE

Table 4-28: Wildfire Impacts

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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 uncontrollable spread of wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

4.20.1 BASELINE CONDITIONS

The Project site is served by the CALFIRE Mendocino Unit as well as the Little Lake Fire District. The proposed Project includes lands within a State Responsibility Area, including lands designated as Very High and Moderate in terms of Fire Hazard Severity Zones.[28]

4.20.2 IMPACT ANALYSIS

a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads,

[28] (CAL FIRE, 2024)

fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?

a-d) Less than Significant Impact. Construction or implementation of the proposed Project would not impede any existing or future emergency response plans, such as the County's MJLHMP and City's EOP. Additionally, the proposed Project does not include the construction of any residential components or habitable structures of any kind, nor would it require any employees to be stationed permanently at the site on a daily basis. The proposed Project would be required to comply with all local, State, and federal requirements regarding the prevention of wildfire, including the California Fire Code, and the use of industry BMPs. As such, impacts would be less than significant.

4.21 CEQA MANDATORY FINDINGS OF SIGNIFICANCE

Table 4-29: CEQA Mandatory Findings of Significance

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

4.21.1 STATEMENT OF FINDINGS

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 with Mitigation Incorporated. The analysis conducted in this IS/MND results in a determination that the proposed Project, with incorporation of mitigation measures, will have a less than significant effect on the environment. The potential for impacts to biological resources, cultural resources, and tribal cultural resources from the construction and operation of the Project will be less than significant with the incorporation of the mitigation measures discussed in Chapter 5 Mitigation, Monitoring, and Reporting Program. Accordingly, the proposed Project will involve no potential for significant impacts through the degradation of the quality of the environment, the reduction in the habitat or population of fish or wildlife, including endangered plants or animals, the elimination of a plant or animal community, or example of a major period of California history or prehistory.

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

Less than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. The proposed Project would include the construction of an approximately 1.1-mile water pipeline in existing road ROW supplying residents of an existing MHP.

No additional roads would be constructed as a result of the proposed Project, nor would any additional public services be required. The proposed Project is not expected to result in direct or indirect population growth. Therefore, implementation of the proposed Project would not result in significant cumulative impacts, and all potential impacts would be reduced to less than significant through the implementation of mitigation measures and basic regulatory requirements incorporated into future proposed Project design.

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

Less than Significant Impact. The proposed Project would install an approximately 1.1-mile water pipeline connecting the City's water system with LLMHP's. The proposed Project in and of itself would not create a significant hazard to the public or the environment. Construction-related air quality/dust exposure impacts could occur temporarily as a result of proposed Project construction. However, implementation of basic regulatory requirements identified in this IS/MND would ensure that impacts are less than significant. Therefore, the proposed Project would not have any direct or indirect adverse impacts on humans. The impacts would be less than significant.

CHAPTER 5 MITIGATION, MONITORING, AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the IS/MND for the proposed Project in Mendocino County. The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements.

Table 5-1: Mitigation, Monitoring, and Reporting Program presents the mitigation measures identified for the proposed Project. Each mitigation measure is numbered with a symbol indicating the topical section to which it pertains, a hyphen, and the impact number. For example, AIR-2 would be the second mitigation measure identified in the Air Quality analysis of the IS/MND.

The first column of Table 5-1: Mitigation, Monitoring, and Reporting Program identifies the mitigation measure. The second column, entitled "When Monitoring is to Occur," identifies the time the mitigation measure should be initiated. The third column, "Frequency of Monitoring," identifies the frequency of the monitoring of the mitigation measure. The fourth column, "Agency Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last columns will be used by the Lead and Responsible Agencies to ensure that individual mitigation measures have been complied with and monitored.

Table 5-1: Mitigation, Monitoring, and Reporting Program

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
Biological Resources						
General Project-Related Impacts						
BIO-1	**(WEAP Training)**: Prior to initiating construction activities (including staging and mobilization), all personnel associated with project construction will attend a mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist (someone familiar with the identification and habitats of these species), to aid workers in identifying special status resources that may occur in the site. The specifics of this program will include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. This training will discuss special status species, describe the laws and regulations in place to provide protection of these species, identify the penalties for violation of applicable environmental laws and regulations, and include a list of required protective measures to avoid "take." A fact sheet summarizing this information, along with photographs or illustrations of sensitive species with potential to occur on the site, will also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the project. All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them. (This can be done in-person, via video, or in provided to construction personnel in written documentation format.)	Prior to initiating construction activities	Once, prior to initiating construction activities	City and Contractor with assistance of a qualified biologist	All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them	
BIO-2	**(BMPs)**: The Project proponent will require that all workers employ the following best management	Prior to the start of and during any construction activities	Throughout Project construction duration	City and Contractor	Written reporting/photos if required by biologist in	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	practices (BMPs) in order to avoid and minimize potential impacts to special status species: • Vehicles will observe a 15-mph speed limit while on unpaved access routes. • All open trenches, holes, sumps, and other excavations greater than six inches with sidewalls steeper than 1:1 (45 degree) slope will have an escape ramp of earth or a non-slip material with a less than 1:1 slope or these will be covered with barrier material such that animals are unable to dig or squeeze under the barrier and become trapped. • Workers will inspect areas beneath parked vehicles, equipment, and materials prior to mobilization. If special status species are detected, the individual will either be allowed to leave of its own volition or will be captured by the qualified biologist (must possess appropriate collecting/handling permits or relevant experience) and relocated out of harm's way to the nearest suitable habitat beyond the influence of the Project work area. "Take" of a State or federal special status (rare, California Species of Special Concern, threatened, or endangered) species is prohibited without the necessary federal or State take permit(s). • The presence of any special status species will be reported to the Project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS.				accordance with requirements	
Project-Related Impacts to Special Status Plant Species						

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
BIO-3	**(Focused Botanical Survey)**: Prior to Project activities occurring a qualified botanist/biologist (someone who can identify these species) will conduct focused botanical surveys during the appropriate blooming seasons for the Baker's meadowfoam (April – May), Baker's navarretia (April – July), Bolander's catchfly (May – June), Hooker's catchfly (spring to early summer), Milo Baker's lupine (June – September), and Nuttall's ribbon-leaved pondweed (July – August) according to CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (2018) for all appropriate habitats for these species within the site.	Prior to Project activities and during appropriate blooming seasons	Once	City with assistance of a qualified biologist	Biological Memo	
BIO-4	**(Avoidance)**: If special status plants are identified during a survey, an avoidance buffer and, if necessary, use of exclusion fencing, will be placed around the area as not to disturb the plants or its root system.	Upon discovery of any special status plants	During construction activities	City with assistance of a qualified biologist	Biological Memo	
BIO-5	**(Formal Consultation)**: If rare plant individuals or populations are detected within Project works areas during the focused botanical surveys, and the plants cannot be avoided, the Project proponent will initiate consultation with CNPS (for CNPS-ranked species), CDFW (for California proposed, threatened, or endangered species), and/or USFWS (for threatened or endangered species) to determine next steps for salvage and relocation.	Upon discovery of any special status plants	During construction activities	City with assistance of a qualified biologist; consultation with CNPS, CDFW, and/or USFWS	Biological Memo	
Project-Related Mortality and/or Nest Abandonment of Migratory Birds, Raptors, and Special Status Birds						
BIO-6	**(Avoidance)**: The Project's construction activities will occur, if feasible, between August 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.	August 16 to January 31	Once, as determined by qualified biologist during construction activities	City with assistance of a qualified biologist	Biological Memo	
BIO-7	**(Pre-Construction Surveys)**: If activities occur within the nesting bird season (February 1 to August 15), a qualified biologist (someone able to identify these	Ten days prior to the start of construction activities	Once, as determined by qualified biologist	City with assistance of a qualified biologist	Biological Memo	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	species) will conduct a pre-construction survey for active nests within ten (10) calendar days prior to the start of construction. It will be completed within the site, and up to 100 feet outside of the site for nesting migratory birds and up to 500 feet outside of the site for nesting raptors. Raptor nests are considered "active" upon the nest-building stage. If construction is delayed or halted for more than ten (10) days, another pre-construction survey for nesting birds will be conducted.		during construction activities; whenever construction is delayed or halted for more than 10 days, it will need to occur again			
BIO-8	**(Northern Spotted Owl Surveys)**: If large diameter conifer trees are planned to be removed as a result of the Project, a qualified biologist (someone familiar with northern spotted owls and the survey requirements) will conduct northern spotted owl surveys prior to the start of the Project.	Prior to Project activities if large diameter conifer trees are to be removed	Whenever such trees are planned to be removed	City with assistance of a qualified biologist	Biological Memo	
BIO-9	**(Avoidance Buffers)**: On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of Project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.	Upon discovery of any active nests or breeding colonies	During construction activities	City with assistance of a qualified biologist	Biological Memo	
Project-Related Mortality and/or Disturbance to Foothill Yellow-Legged Frog						
BIO-10	**(Pre-Construction Take Avoidance Survey)**: A qualified biologist (someone familiar with the identification and habitat of this species) will conduct surveys for FYLF in accordance with CDFW's *Considerations for Conserving the Foothill Yellow-Legged Frog* (California Department of Fish and Wildlife 2018), or current guidance for FYLF to determine if FYLF are within or adjacent to Upp Creek and the surrounding grassland habitat within the Project site. If no FYLFs are found during the pre-construction survey and no surface water is present in the Project site, work may commence without further surveys.	Prior to Project activities	Once, before construction	City with assistance of a qualified biologist	Biological Memo	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
BIO-11	**(FYLF Consultation and Avoidance)**: If any FYLF are found during preconstruction surveys or at any time during construction, consultation with CDFW and USFWS is warranted to determine if the Project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when FYLF are most likely to be moving through upland areas (i.e., November 1 to March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist monitor construction activity daily for FYLF.	During preconstruction surveys	Once, before construction; during ground-disturbing activities that take place between November 1 and March 31	City with assistance of a qualified biologist with consultation with CDFW and USFWS	Biological Memo	
BIO-12	**(Monitor)**: If ground-disturbing activities must take place between November 1 and March 31, surface water is present during the preconstruction surveys, or if surface water becomes present at any time during the work period, the qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee initial vegetation clearing and ground disturbing activities within FYLF habitat.	Prior to any Project activities each day if between November 1 and March 31	Each day of Project activities	City with assistance of a qualified biologist	Biological Memo	
Project-Related Mortality and/or Disturbance to Northwestern Pond Turtle						
BIO-13	**(Pre-Construction Survey and Avoidance Buffers)**: Within seven (7) days prior to the start of construction, a qualified biologist (someone familiar with the identification and habitat of this species) will conduct a pre-construction survey for northwestern pond turtle within Upp Creek and surrounding areas up to 330 feet. Pre-construction surveys will be conducted in accordance with the draft Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion (United States Geological Survey 2006), or current guidance. If no northwestern pond turtles are observed during the pre-construction survey, then construction activities may begin. If construction is delayed or halted for more than seven (7) days, another pre-construction survey for northwestern pond turtle will be conducted. If the surveys result in the identification of a northwestern pond turtle or an	Seven days prior to the start of construction activities	Once, as determined by qualified biologist during construction activities; whenever construction is delayed or halted for more than seven days, it will need to occur again	City with assistance of a qualified biologist	Biological Memo	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	individual is found on the site during construction activities, it will be allowed to leave the site on its own and the qualified biologist will determine appropriate buffers to be implemented to avoid impacts to the individual(s).					
BIO-14	**(Monitor)**: If northwestern pond turtles are observed on the site, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all initial vegetation clearing and ground disturbing activities in this species habitats and until the individual(s) have left the site.	Upon observance of NPT	During construction	City with assistance of a qualified biologist	Biological Memo	
BIO-15	**(Formal Consultation)**: Should northwestern pond turtles get listed in this area and the Project/qualified biologist needs to move an individual, consultation for protection plans and/or relocation plans with the appropriate agencies will be completed to avoid take.	If NPT get listed in the area and an NPT is observed	During construction	City with assistance of a qualified biologist	Consultation for protection plans and/or relocation plans with the appropriate agencies	
Project-Related Mortality and/or Disturbance to Red-Bellied Newt						
BIO-16	**(Rainfall Avoidance)**: The National Weather Service 72-hour forecast will be monitored for the site. During rainfall events and/or when a 50 percent or greater chance of rainfall is predicted within 72 hours, all work will be stopped in the site where initial ground disturbance (vegetation removal, grading, grubbing, and excavation) has yet to occur until the rainfall ceases and a zero percent chance of rain is forecast. Work may continue during rainfall events and/or when a 50 percent or greater chance of rain is forecast within portions of the site that have already been cleared of vegetation.	Daily weather forecast viewing when parts of the site are still to be initially disturbed	During Project activities until all initial ground disturbance is completed	Contractor and City	Documentation of 72-hour weather forecast	
BIO-17	**(Pre-Construction Take Avoidance Survey)**: A qualified biologist (someone familiar with the identification and habitat of this species) will conduct visual surveys for red-bellied newt within Upp Creek during the breeding season (late February to May, peaking in March). Additionally, a qualified biologist will check under vegetation and stones within the site within seven (7)	Prior to construction	Visual surveys during breeding season and also within seven days of construction	City with assistance of a qualified biologist	Biological Memo	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	days of construction to check for terrestrial adults. If no red-bellied newt are found during the pre-construction survey and no surface water is present in the Project stie, work may commence without further surveys.					
BIO-18	**(Monitor)**: If red-bellied newt are observed on the site, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all initial vegetation clearing and ground disturbing activities in this species habitats and until the individual(s) have left the site.	Prior to each day's construction activities	Prior to each day's construction activities	City with assistance of a qualified biologist	Biological Memo	
Project-Related Mortality and/or Disturbance to Sonoma Tree Vole						
BIO-19	**(Tree Avoidance)**: Douglas fir trees on the Project site will be avoided.	Prior to Project activities	Throughout construction	Contractor and City	Contractor to account for pre-Project and post-Project construction Douglas fir trees	
BIO-20	**(Take-Avoidance Survey)**: If Douglas fir trees will be removed, a specialist for Sonoma tree voles will complete a survey to determine presence or absence of the species in the tree(s). If it is determined no Sonoma tree voles are utilizing the tree(s), the tree(s) will be removed within two days of the survey.	If Douglas fir trees are to be removed	Two days before Douglas fir tree(s) removed	City, Contractor, and Sonoma tree vole specialist	Report from specialist	
BOI-21	**(Sonoma Tree Vole Take Authorization)**: If it is determined Sonoma tree voles are utilizing the tree(s), and avoidance is not feasible the Project will consult with CDFW to acquire an Incidental Take Permit for Sonoma tree vole prior to beginning any Project activities.	If Douglas fir trees are to be removed and Sonoma tree voles are using the trees	Any Douglas fir trees to be removed	City and qualified biologist with consultation with CDFW	Acquisition of ITP	
Project-Related Mortality and/or Disturbance to Steelhead-Northern California DPS Winter-Run						
BIO-22	**(Water Quality)**: Erosion control measures will be utilized to prevent any sediment or hazardous fluids from entering Upp Creek.	Prior to Project activities	Throughout ground disturbance activities	Contractor and City	Completion of erosion control measures	
BIO-23	**(Avoidance)**: No impacts will occur to Upp Creek during Project activities.	Throughout Project activities	Throughout Project activities	Contractor and City	Documented no impacts to Upp Creek	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
BIO-24	**(Formal Consultation)**: If impacts will occur within Upp Creek, consultation for steelhead protection plans and/or relocation plans with the appropriate agencies will be completed to avoid take.	If impacts are to occur to Upp Creek	Before impacts to Upp Creek if to occur	City with assistance of qualified biologist	Consultation with steelhead protection plans and/or relocation plans	
Project-Related Impacts to Regulated Waters, Wetlands, and Water Quality						
BIO-25	**(Permits)**: If the proposed Project intends to impact jurisdictional waters, permits with USACE, RWQCB, and/or CDFW will be obtained to comply with State and federal regulations, if necessary. These permits, certifications, and agreements would ensure impacts to waters are minimized to the extent possible and permanent impacts would be offset by compensatory mitigation.	If impacts to occur to jurisdictional waters, monitoring to occur beforehand	Prior to any identified impacts to jurisdictional waters	Contractor and City	Acquisition of necessary permits, certifications, and/or agreements	
Project-Related Impacts to Wildlife Movement Corridors and Native Wildlife Nursery Sites						
BIO-26	**(Operational Hours)**: When possible, construction activities surrounding Upp Creek should be limited to a half hour after sunrise through a half hour before sunset to reduce potential impacts to wildlife movement corridors and wildlife nursery sites.	During construction activities surrounding Upp Creek	Each day construction around Upp Creek is to occur	Contractor and City	Contractor construction hours documentation	
BIO-27	**(Wildlife Access)**: Access within these areas should not be blocked outside of construction hours or during overnight hours or weekends. If construction must block both sides of a wildlife access route, an alternative route through the construction area should be identified by a qualified biologist and maintained throughout the construction schedule timeframe.	After construction concludes each day	Any time a movement corridor could be blocked during construction	Contractor, City, and qualified biologist	Contractor documentation and/or biologist report	
Cultural Resources						
CUL-1	**(Contractor Awareness Training)**: The City or Contractor shall ensure that a Contractor Awareness Training Program is delivered to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and State regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the Lead Agency of any	Prior to construction	Once	City and Construction Manager with assistance from a qualified archaeologist	Sign in sheet	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	occurrences; Project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program. The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting, as determined appropriate by the qualified professional archaeologist. The training shall be provided to all construction supervisors, forepersons, and operators of ground-disturbing equipment. All personnel shall be required to sign a training roster. The Construction Manager is responsible for ensuring that all required personnel receive the training. The Construction Manager shall provide a copy of the signed training roster to the lead agency as proof of compliance.					
CUL-2	**(Archaeological Monitoring)**: Prior to the start of construction that is within 100 feet of an identified cultural resource, such as P-23-5465, the proposed Project proponent shall retain a qualified professional archaeologist (Monitoring Archaeologist) to monitor all ground-disturbing activities associated with Project construction within 100 feet of the identified resource. The Monitoring Archaeologist shall meet or work under the direct supervision of someone meeting the Secretary of the Interior's professional qualifications standards for prehistoric and historic archaeology. The Monitoring Archaeologist shall have the authority to temporarily halt ground-disturbing or construction-related work within 100 feet of any discovery of potential historical or archaeological resources in order to address unanticipated discoveries.	Prior to the start of construction if within 100 feet of an identified cultural resource and by the existing bridge over Upp Creek	Daily when construction occurs, if within 100 feet of an identified cultural resource and by the existing bridge over Upp Creek	City with qualified monitoring archaeologist	Cultural Memo	
CUL-3	**(Archaeological Remains)**: Should archeological remains or artifacts be unearthed during any stage of project activities, work in the area of the discovery shall cease until the area is evaluated by a qualified archaeologist.	Daily during construction activities	Continuously	City		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	If mitigation is warranted, the Project proponent shall abide by recommendations of the archaeologist.					
CUL-4	**(Human Remains)**: In the event that human remains are discovered on the Project site, the Mendocino County Coroner must be notified of that discovery (Health and Safety Code Section 7050.5) and all activities in the immediate area if the find or in any nearby area reasonably suspected of overlie adjacent human remains must cease until appropriate and lawful measures have been implemented. If the Coroner determines that the remains are not recent, but rather of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours to permit the NAHC to determine the most likely descendent of the deceased Native American.	Daily during construction activities	Continuously	City		
Tribal Cultural Resources						
See **CUL-1**, **CUL-2**, **CUL-3**, and **CUL-4**.						

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Willits Pipeline
Construction Start Date	1/1/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.70000
Precipitation (days)	16.2000
Location	39.42988261165317, -123.3578835198866
County	Mendocino
City	Unincorporated
Air District	Mendocino County AQMD
Air Basin	North Coast
TAZ	251
EDFZ	2
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.38

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Linear	1.10000	Mile	11.8300	0.00000	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.26273	2.44788	3.73466	0.00584	0.07741	0.00000	0.07741	0.07122	0.00000	0.07122	—	535.252	535.252	0.02171	0.00434	537.089
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.26273	2.44788	3.73466	0.00584	0.05986	0.00000	0.05986	0.05507	0.00000	0.05507	—	534.333	534.333	0.02167	0.00433	536.167
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.07552	0.72385	1.17079	0.00173	0.02080	0.00000	0.02080	0.01914	0.00000	0.01914	—	173.796	173.796	0.00705	0.00141	174.393
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01378	0.13210	0.21367	0.00032	0.00380	0.00000	0.00380	0.00349	0.00000	0.00349	—	28.7739	28.7739	0.00117	0.00023	28.8727

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.26273	2.44788	3.73466	0.00584	0.07741	0.00000	0.07741	0.07122	0.00000	0.07122	—	535.252	535.252	0.02171	0.00434	537.089
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.26273	2.44788	3.73466	0.00584	0.05986	0.00000	0.05986	0.05507	0.00000	0.05507	—	534.333	534.333	0.02167	0.00433	536.167
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.07552	0.72385	1.17079	0.00173	0.02080	0.00000	0.02080	0.01914	0.00000	0.01914	—	173.796	173.796	0.00705	0.00141	174.393
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.01378	0.13210	0.21367	0.00032	0.00380	0.00000	0.00380	0.00349	0.00000	0.00349	—	28.7739	28.7739	0.00117	0.00023	28.8727

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.26273	2.44788	3.73466	0.00584	0.07741	0.00000	0.07741	0.07122	0.00000	0.07122	—	535.252	535.252	0.02171	0.00434	537.089
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.26273	2.44788	3.73466	0.00584	0.05986	0.00000	0.05986	0.05507	0.00000	0.05507	—	534.333	534.333	0.02167	0.00433	536.167
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.07552	0.72385	1.17079	0.00173	0.02080	0.00000	0.02080	0.01914	0.00000	0.01914	—	173.796	173.796	0.00705	0.00141	174.393
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.01378	0.13210	0.21367	0.00032	0.00380	0.00000	0.00380	0.00349	0.00000	0.00349	—	28.7739	28.7739	0.00117	0.00023	28.8727

2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2027)

3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15789	1.07228	1.36981	0.00158	0.04357	—	0.04357	0.04009	—	0.04009	—	171.337	171.337	0.00695	0.00139	171.925

Dust From Material Movement	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00562	0.03819	0.04879	0.00006	0.00155	—	0.00155	0.00143	—	0.00143	—	6.10240	6.10240	0.00025	0.00005	6.12334
Dust From Material Movement	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00103	0.00697	0.00890	0.00001	0.00028	—	0.00028	0.00026	—	0.00026	—	1.01032	1.01032	0.00004	0.00001	1.01379
Dust From Material Movement	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.2. Linear, Grading & Excavation (2027)

3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26273	2.44788	3.73466	0.00584	0.05986	—	0.05986	0.05507	—	0.05507	—	534.333	534.333	0.02167	0.00433	536.167
Dust From Material Movement	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.26273	2.44788	3.73466	0.00584	0.05986	—	0.05986	0.05507	—	0.05507	—	534.333	534.333	0.02167	0.00433	536.167
Dust From Material Movement	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03743	0.34874	0.53206	0.00083	0.00853	—	0.00853	0.00785	—	0.00785	—	76.1242	76.1242	0.00309	0.00062	76.3855
Dust From Material Movement	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00683	0.06364	0.09710	0.00015	0.00156	—	0.00156	0.00143	—	0.00143	—	12.6032	12.6032	0.00051	0.00010	12.6465
Dust From Material Movement	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Linear, Drainage, Utilities, & Sub-Grade (2027)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15710	1.80295	3.41423	0.00494	0.05143	—	0.05143	0.04732	—	0.04732	—	535.252	535.252	0.02171	0.00434	537.089
Dust From Material Movement	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01980	0.22722	0.43029	0.00062	0.00648	—	0.00648	0.00596	—	0.00596	—	67.4565	67.4565	0.00274	0.00055	67.6880
Dust From Material Movement	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00361	0.04147	0.07853	0.00011	0.00118	—	0.00118	0.00109	—	0.00109	—	11.1682	11.1682	0.00045	0.00009	11.2065
Dust From Material Movement	—	—	—	—	—	0.00000	0.00000	—	0.00000	0.00000	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. Linear, Paving (2027)

3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23119	2.00209	2.91361	0.00406	0.07741	—	0.07741	0.07122	—	0.07122	—	440.063	440.063	0.01785	0.00357	441.573
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01267	0.10970	0.15965	0.00022	0.00424	—	0.00424	0.00390	—	0.00390	—	24.1130	24.1130	0.00098	0.00020	24.1958

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00231	0.02002	0.02914	0.00004	0.00077	—	0.00077	0.00071	—	0.00071	—	3.99218	3.99218	0.00016	0.00003	4.00589
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/1/2027	1/19/2027	5.00000	13.0000	—
Linear, Grading & Excavation	Linear, Grading & Excavation	1/20/2027	4/2/2027	5.00000	52.0000	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	4/3/2027	6/6/2027	5.00000	46.0000	—
Linear, Paving	Linear, Paving	6/7/2027	7/5/2027	5.00000	20.0000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Sweepers/Scrubbers	Diesel	Average	1.000000	8.00000	36.0000	0.46000
Linear, Grading & Excavation	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Linear, Drainage, Utilities, & Sub-Grade	Skid Steer Loaders	Diesel	Average	1.000000	8.00000	71.0000	0.37000
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Linear, Paving	Rollers	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Linear, Paving	Paving Equipment	Diesel	Average	1.000000	8.00000	89.0000	0.36000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	Worker	0.00000	10.2500	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00000	7.10000	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00000	20.0000	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	Worker	0.00000	10.2500	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00000	7.10000	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00000	20.0000	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Worker	0.00000	10.2500	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00000	7.10000	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00000	20.0000	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	Worker	0.00000	10.2500	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00000	7.10000	HHDT,MHDT
Linear, Paving	Hauling	0.00000	20.0000	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	0.00000	0.00000	11.8300	0.00000	0.00000
Linear, Grading & Excavation	0.00000	0.00000	11.8300	0.00000	0.00000
Linear, Drainage, Utilities, & Sub-Grade	0.00000	0.00000	11.8300	0.00000	0.00000

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00000	203.983	0.03300	0.00400

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Construction: Off-Road Equipment	pipeline construction

Appendix B – Biological Evaluation

CITY OF WILLITS

NORTH MAIN STREET PIPELINE EXTENSION PROJECT BIOLOGICAL EVALUATION

MENDOCINO COUNTY
OCTOBER 2026

PREPARED FOR:
City of Willits
Mendocino County

PREPARED BY:
PROVOST & PRITCHARD CONSULTING GROUP
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ACRONYMS AND ABBREVIATIONS

AB ..... Assembly Bill
BMP ..... Best Management Practices
CDFW ..... California Department of Fish and Wildlife
CEQA ..... California Environmental Quality Act
CESA ..... California Endangered Species Act
City ..... City of Willits
CNDDB ..... California Natural Diversity Database
CNPS ..... California Native Plant Society
CWA ..... Clean Water Act
County ..... Mendocino County
DPS ..... Distinct Population Segment
ECOS ..... United States Fish and Wildlife Service's Environmental Conservation Online System
ESA ..... Endangered Species Act
°F..... ..... degrees Fahrenheit
FYLF ..... Foothill Yellow-legged Frog
HCP ..... Habitat Conservation Plan
IPaC ..... United States Fish and Wildlife Service's Information for Planning and Consultation system
MBTA ..... Migratory Bird Treaty Act
NCCP ..... Natural Community Conservation Plan
NEPA ..... National Environmental Policy Act
NMFS ..... National Marine Fisheries Service
NPDES ..... National Pollutant Discharge Elimination System
NRCS ..... Natural Resources Conservation Service
NWI ..... National Wetlands Inventory
Project ..... City of Willits North Main Street Pipeline Extension Project
Provost & Pritchard ..... Provost & Pritchard Consulting Group
RWQCB ..... Regional Water Quality Control Board
SWPPP ..... Storm Water Pollution Prevention Plan
SWRCB ..... State Water Resources Control Board
USACE ..... United States Army Corps of Engineers
USC ..... United States Code
USDA ..... United States Department of Agriculture
USEPA ..... United States Environmental Protection Agency
USFWS ..... United States Fish and Wildlife Service

USGS ..... United States Geological Survey

WDR ..... waste discharge requirements

WEAP ..... Worker Environmental Awareness Program (training)

WOTUS ..... Waters of the United States

1 INTRODUCTION

This Biological Evaluation, prepared by Provost & Pritchard Consulting Group (Provost & Pritchard) in compliance with the California Environmental Quality Act (CEQA), includes descriptions of the biological resources present or with potential to occur within the City of Willits (City) North Main Street Pipeline Extension Project area (or "Project") and potential project-related impacts to those resources, and mitigation measures to reduce these impacts to a less-than-significant level under CEQA.

1.1 PROJECT DESCRIPTION

The Project site (or "site") is located in the Little Lake Valley and extends directly from the City of Willits to the Little Lake Mobile Home Park (LLMHP) approximately 1.1 miles north of the City, in the middle portion of Mendocino County, California (see Figure 1). The Project site includes approximately 12 acres (see Figure 2).

The LLMHP water system (Public Water System Identification No. CA 2300705) serves the existing LLMHP community in unincorporated Mendocino County, situated approximately 1.1 miles north of the City. LLMHP is just west of Highway 101 in a forested and rural residential area. The system currently serves a population of approximately 38 residents. In addition, LLMHP is considered a severely disadvantaged community with a household income less than approximately 60 percent of the State of California's (State) median household income.

The sole water supply for LLMHP was previously a groundwater well before the well completely failed in 2025. Additionally, the groundwater well had manganese levels which consistently exceeded the maximum contaminant level. The existing LLMHP well will be cut, capped, and abandoned according to Mendocino County standards. Due to these issues, the City is proposing the North Main Street Pipeline Extension Project to complete a master meter consolidation Project with the City.

A pipeline extension to serve the LLMHP would require the installation of approximately 1.1 miles of up to eight-inch pipeline along North Main Street. The new pipeline would need to cross Upp Creek by connecting to the existing roadway bridge, which is located between the City limits and the LLMHP. It is anticipated that the majority of the pipeline would be located right off the shoulder of the County maintained roadway. Either open-cut or trenchless installation methods would be used for pipe installation. For segments of the pipeline that would require open-cut installation, this would require the cutting and rehabilitation of the pavement.

In order to connect the LLMHP system to the City, the proposed Project is anticipated to involve the following Project components:

- Approximately 6,000 feet of up to eight-inch polyvinyl chloride (PVC) pipe installed along/within N Main Street;
- Connection to existing 10-inch City water main;
- Up to eight-inch gate valve assemblies;
- Up to four-inch City meter and backflow prevention device at LLMHP property entrance;
- Attachment of pipeline to existing Upp Creek bridge;
- Three fire hydrants; and
- Minor onsite LLMHP distribution system modifications to connect system to new City meter.

Excavation during construction would generate spoils that would be used as backfill ideally or, if necessary, hauled off-site to approved City locations. For all excavation in roadway areas, once filled and compacted, the roadways would be resurfaced to County standards. Excavations in bare ground areas would be resurfaced with hardscape (pavement or concrete) or revegetated with native grasses indigenous to the

disturbed area or landscaped in accordance with County-approved building permit plans. The pipe installation would be within the road right-of-way (ROW) and accessibility and staging would be on the roadway; single-lane traffic control would be required and coordinated with the County during construction.

Construction of the proposed Project could require various equipment including, but not limited to, excavators, backhoes, front-end loaders, skid loader, compactors, double transfer trucks for soil hauling, concrete trucks, concrete/industrial saws, rollers, and paving equipment. Equipment and staging areas for the construction activities would be stationed along the stretch of pipeline within County ROW or, for the sake of the on-site distribution improvements, within LLMHP-owned property. Construction activities would generally be limited to weekdays from 7 a.m. to 5 p.m. and it is expected to take approximately six months to be constructed. Nighttime construction is not expected to be necessary.

The City would operate and maintain the new pipeline. Operations of the pipeline would be similar to existing operations and maintenance for City existing mains, consisting of standard, routine maintenance and inspections. These would be expected to be on as-needed basis.

1.2 REPORT OBJECTIVES

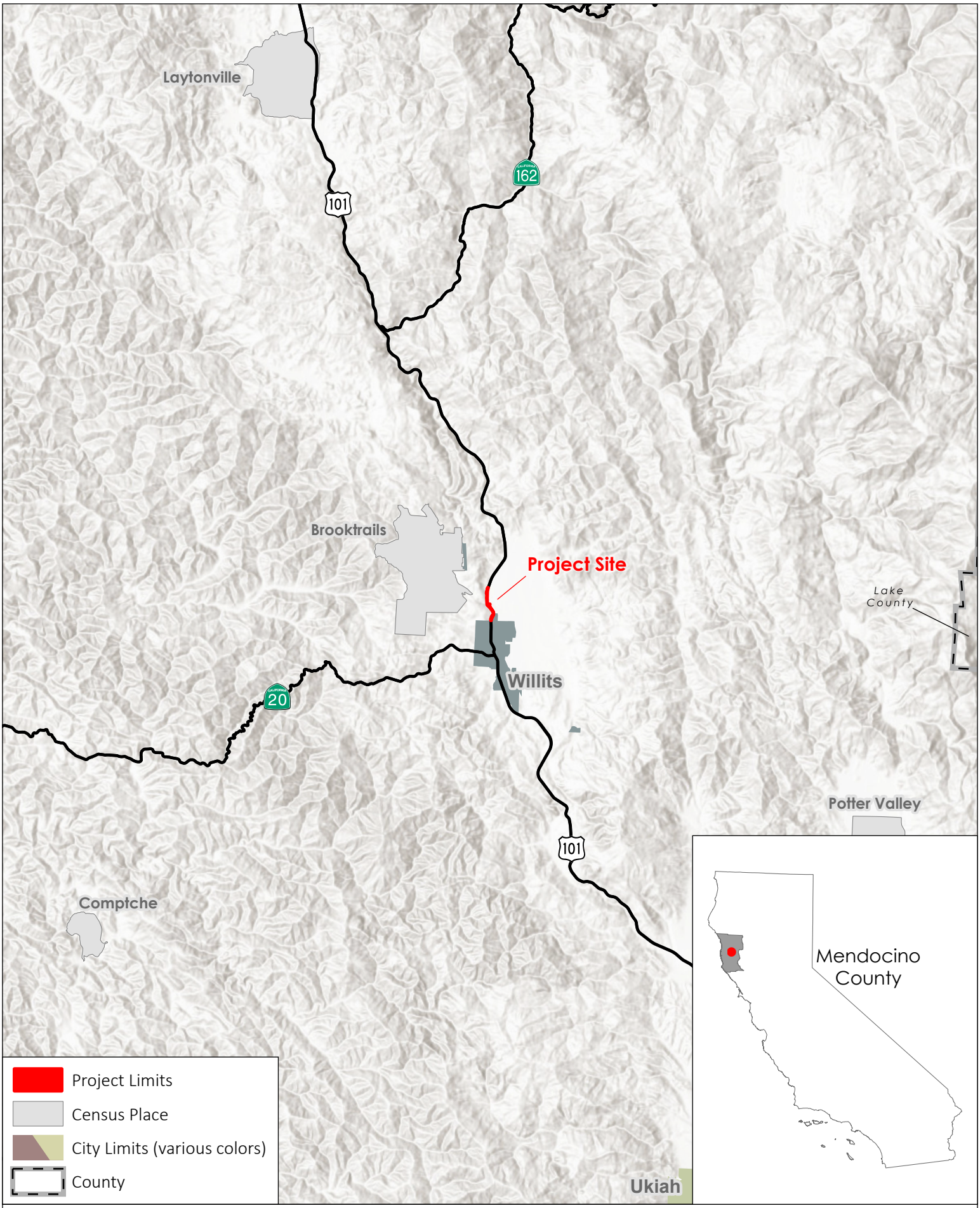
Construction activities such as those proposed by the Project could potentially change biological resources or habitats that are critical for sensitive plant and wildlife species. In cases such as these, development may be regulated by State or federal agencies, and/or addressed by local regulatory agencies.

This report addresses issues related to the following:

- The presence of sensitive biological resources within the site, or those with the potential to occur within the site.
- The federal, State, and local regulations regarding these resources.
- Mitigation measures that may be required to reduce the magnitude of anticipated impacts and/or comply with permit requirements of State and federal resource agencies.

Therefore, the objectives of this report are to:

- Summarize all site-specific information related to existing biological resources.
- Make reasonable inferences about the biological resources that could occur on the site based on habitat suitability and the proximity of the site to a species' known range.
- Summarize all State and federal natural resource protection laws that may be relevant to implementation of the Project.

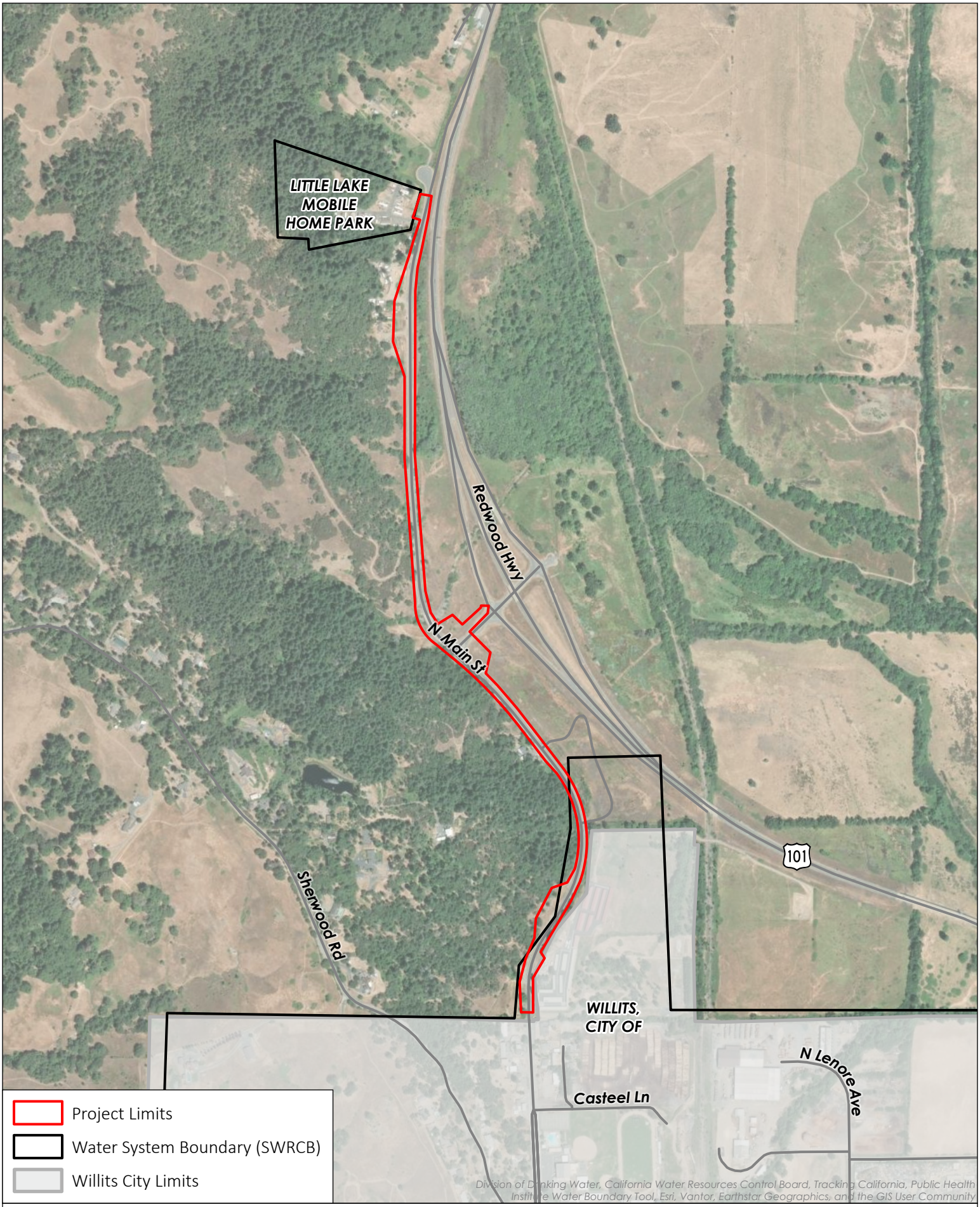


Regional Vicinity Map

Little Lake MHP

PROVOST& PRITCHARD

Fig. 1 Page 1-3



Aerial Map

Little Lake MHP

PROVOST& PRITCHARD

Fig. 2 Page 1-4

1.3 STUDY METHODOLOGY

A reconnaissance-level field survey of the site was conducted on January 29, 2026, by Provost & Pritchard biologist, Mary Beth Bourne. The survey consisted of walking throughout the Project site while identifying and noting land uses, biological habitats and communities, and plant and animal species encountered. Habitats were also assessed to help with determining if they could be suitable for various rare or protected plant and animal species. An additional site visit was completed on September 15, 2026, of the Project areas which were added after the reconnaissance-level field survey. Representative photographs of the site were taken and are presented in Appendix A.

Provost & Pritchard biologist Shaylea Stark then utilized the results of the field survey to analyze potential Project-related impacts to biological resources based on the resources known to occur or with the potential to occur within the site. Sources of information used in preparation of this analysis included: California Department of Fish and Wildlife's California Natural Diversity Database (CNDDB; see Appendix B for the species list) and California Wildlife Habitat Relationships (CWHR) database; California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California; CalFlora's online database of California native plants; Jepson Herbarium's online database (i.e., Jepson eFlora); United States Fish and Wildlife Service's (USFWS) Environmental Conservation Online System (ECOS), Information for Planning and Consultation (IPaC; see Appendix C for the species list) system, and National Wetlands Inventory (NWI); iNaturalist; NatureServe Explorer's online database; United States Department of Agriculture (USDA) Natural Resources Conservation Service's (NRCS) Web Soil Survey (see Appendix D for the Web Soil Survey Report); California Herps website; and various manuals, reports, and references related to plants and animals of the Little Lake Valley region.

The field survey did not include focused surveys for special status species. The field survey conducted included the appropriate level of detail to assess the significance of potential impacts to sensitive biological resources resulting from implementing the Project. Furthermore, the field survey was sufficient to generally describe aquatic features of the Project site that could be claimed as jurisdictional by federal and/or State agencies, such as the United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), and the State Water Resources Control Board (SWRCB). If Project activities resulted in impacts to aquatic resources and aquatic habitats, this report would be sufficient to support required permit applications, if needed, for the Project.

2 EXISTING CONDITIONS

2.1 REGIONAL SETTINGS

2.1.1 TOPOGRAPHY

The site is located within the *Willits* U.S. Geological Survey (USGS) 7.5-minute quadrangle within the southwest corner of Section 07 and Section 01, and the northeast corner of Section 12, Township 18 North, Range 14 West. The topography of the site is relatively flat along the roadway with slopes generally down to the surrounding areas to the east and up towards forested areas to the west. Elevations within the site range from approximately 1,310 to 1,640 feet above mean sea level (see Figure 2).

2.1.2 CLIMATE

The site experiences a temperate climate with wet, mild winters and warm, dry summers. In the summer, average high temperatures range between 75- and 85-degrees Fahrenheit (°F), but do not often exceed 90 °F, and the humidity is generally low. Winter temperatures are often below 55 °F during the day and rarely exceed 60 °F. On average, the City of Willits receives approximately 48 inches of precipitation in the form of rain yearly, most of which occurs between October and April (myPerfectWeather 2026), and the site would be expected to receive similar amounts of precipitation.

2.1.3 HYDROLOGY

The nearest surface water to the Project is Upp Creek which flows under a bridge halfway along the Project site, bisecting the alignment. Upp Creek begins in the mountains to the west and flows down through the site and joins other streams until it exits the valley to the north and flows into Outlet Creek. Outlet Creek flows into the Eel River which eventually flows into the Pacific Ocean.

2.1.4 SOILS

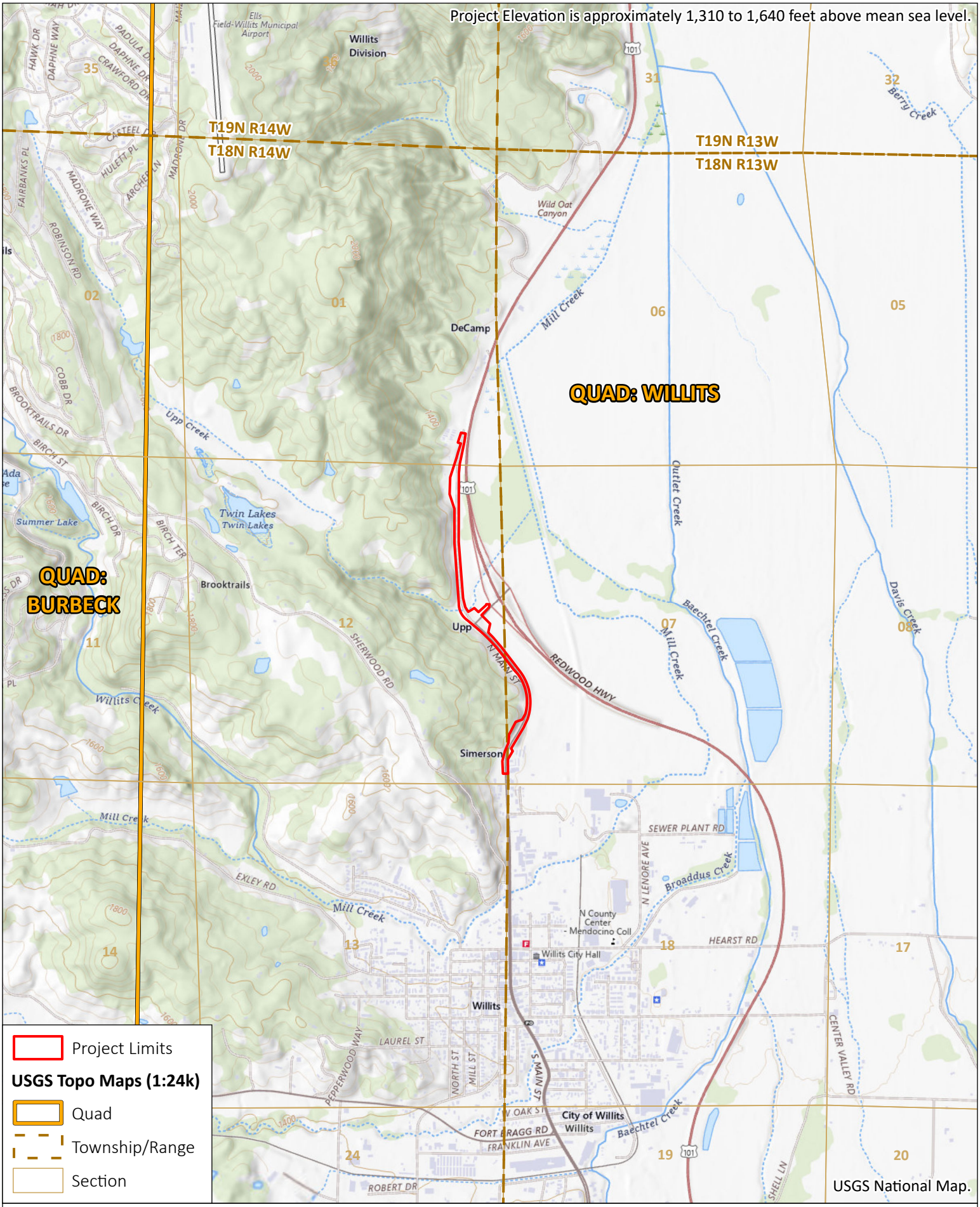
Five soil mapping units representing five soil types were identified within the site and are listed in Table 1 (see Appendix D for the Web Soil Survey Report). The soils are displayed with their core properties in the table below, according to the Major Land Resource Area of California. These soils are primarily used for production of orchards, vineyards, truck crops, and irrigated pasture, or watershed, wildlife habitat, recreation, and limited firewood production.

Table 1: List of Soils Located on the Site and Their Basic Properties

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Cole	Silty clay loam, 0 to 1 percent slopes, MLRA 14	20.6%	Predominantly Nonhydric	Somewhat poorly drained	Slow	High
Gielow	Sandy loam, 0 to 5 percent slopes	74.1%	Predominantly Hydric	Somewhat poorly drained	Moderate	Low
Hopland-Sanhedrin-Kekawaka complex	30 to 50 percent slopes	0.6%	Nonhydric	Well drained	Moderately slow	Very high
Yorktree-Hopland-Woodin complex	30 to 50 percent slopes	1.9%	Nonhydric	Well drained	Slow	Very high

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Xerochrepts-Haploxeralfs-Argixerolls complex	9 to 30 percent slopes, low ffd	2.8%	Predominantly Nonhydric	Somewhat poorly drained	Moderate	Low

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions, hydrophytic vegetation can be supported. Hydric soil ratings are derived from specific soil properties as well as climate, parent material, vegetation, landform type, and biological activity of a certain location. One of the major soil mapping units is predominately hydric and makes up 74.1% of the site.



Topographic Map

Little Lake MHP

PROVOST& PRITCHARD

Fig. 3 Page 2-3

2.2 BIOTIC HABITATS

Five biotic habitats were observed within the site and included developed, non-native grassland, creek, riparian, and ruderal. These habitats and their constituent plant and animal species are described in more detail in the following sections.

2.2.1 DEVELOPED

The majority of the Project site consists of developed habitat composed of the paved portion of North Main Street which transitions into a remnant of the old United States Route 101 (Highway 101). This habitat provides no value to wildlife, instead posing a risk to any species which disperse across the road. A mule deer (*Odocoileus hemionus californicus*) carcass was observed on the side of the paved road, appearing to have been struck by a vehicle. Other species expected to disperse across the developed habitat include striped skunk (M*ephitis mephitis*) and Virginia opossum (*Didelphis virginiana*).

2.2.2 NON-NATIVE GRASSLAND

Non-native grassland habitat surrounds the majority of the developed habitat on either side of the road. The grassland is moderately disturbed throughout the Project site and serves primarily as a transitional habitat. To the east, the non-native grasslands slope down into large depressional wetlands north of Willits. To the west, the grasslands lead to coniferous and oak woodland forests as well as some residential parcels and the Little Lake Mobile Home Park. Culverts and shallow drainage ditches were frequently observed in these habitats, allowing for water moving off of the steep slopes to the west and to drain into the wetlands to the east. Herbaceous plants observed in this habitat include orchard grass (*Dactylis glomerata*), field marigold (*Calendula arvensis*), big heron bill (*Erodium botrys*), California poppy (*Eschscholzia californica*), poison oak (*Toxicodendron diversilobum*), common yarrow (*Achillea millefolium),* and bull thistle (*Cirsium vulgare*). There were also several large stands of Scotch broom (*Cytisus scoparius*) and Himalayan blackberry (*Rubus armeniacus*) on the east side of the road in areas that sloped down into wetlands. Woody vegetation was scattered throughout the grassland habitat, becoming denser in areas of habitat transition. Woody species observed included valley oak (*Quercus lobata*), California black oak (*Quercus kelloggii*), Pacific madrone (*Arbutus menziesii*), Douglas fir (*Pseudotsuga menziesii*), coyote brush (*Baccharis pilularis*), and common manzanita (*Arctostaphylos manzanita)*. Numerous birds were observed passing through the non-native grassland habitat, including common raven (*Corvus corax*), song sparrow (*Melospiza melodia*), American kestrel (*Falco sparverius*), Steller's jay (*Cyanocitta stelleri*), northern harrier (*Circus hudsonius*), red-tailed hawk (*Buteo jamaicensis*), and turkey vulture *(Cathartes aura*). Wildlife would be expected to pass through this habitat while dispersing to higher quality habitat to the east and west. Scattered trees may provide nesting habitat for songbirds and raptors; however, most species would be expected to occupy the forested areas and wetlands adjacent to the Project site.

2.2.3 CREEK

Upp Creek bisects the Project site, flowing west to east from the higher elevation coniferous forest into the depressional wetland adjacent to Highway 101. A bridge crosses over this portion of Upp Creek to accommodate the crossing of old Highway 101. The creek was flowing at the time of the survey following several winter storm events. The creek bed was composed of a mix of cobbles, gravel, and sandy substrate. The banks of the creek showed frequent use by terrestrial wildlife, including northern raccoon (*Procyon lotor*) tracks and mule deer tracks. Aquatic vegetation was absent from the creek; however, wildlife species were observed foraging nearby, including black phoebe (*Sayornis nigricans*) and ruby-crowned kinglet (*Corthylio calendula*). Additionally, numerous Sierran tree frogs (*Pseudacris sierra)* were detected calling from the wetland area to the east. Herpetofauna, including foothill yellow-legged frog (*Rana boylii*) and northwestern pond turtle (*Actinemys marmorata*) would be expected to inhabit the creek habitat.

2.2.4 RIPARIAN

A narrow portion of riparian habitat was present along the north and south banks of Upp Creek that transitioned into grassland, oak woodland, and coniferous forest. The riparian habitat observed was

moderate quality but not abundant. Some herbaceous vegetation was present, including wild teasel (*Dipsacus fullonum*), however, the area was largely dominated by riprap. Woody vegetation observed included moderate clumps of arroyo willow (*Salix lasiolepis*). Bushtits (*Psaltriparus minimus)* and a ruby-crowned kinglet were observed in this habitat. Species expected to utilize this habitat include northern racoon, belted kingfisher (*Megaceryle alcyon*), and ensatina (*Ensatina eschscholtzii)*.

2.2.5 RUDERAL

Ruderal habitat within the Project site was concentrated around the residential parcels and the Little Lake MHP. These habitats had little vegetation and were comprised primarily of compact bare soils. Several domestic dogs (*Canis lupus familiaris)* were observed in the ruderal habitat. These areas are under frequent anthropogenic disturbance and provide less than marginal habitat to wildlife species.

2.2.6 DEPRESSIOANL WETLAND

Portions of the Project site overlap with potential depressional wetlands located south of Upp Creek. These areas appears to have only recently begun accumulating water in the wet season following the construction of the updated Highway 101 overpass, which created large, basin-like features adjacent to Upp Creek. This area was covered by an additional site visit on September 15th, 2026, which resulted in the observation of several plant species, including wild teasel (*Dipsacus fullonum*), California poppy, common yarrow (*Achillea millefolium)*, wild carrot (*Daucus carota*), yellow star thistle (*Centaurea solstitialis*), and chicory (*Cichorium intybus*). Sedges (*Carex sp.*) and rushes (*Juncus sp.*) were also observed in this area during the reconnaissance-level field survey.

Sierran tree frogs (*Pseudacris sierra)* were detected calling from this habitat and the area would be expected to provide habitat to other herpetofauna during wet years. This habitat would also likely attract insects, which in turn would attract songbirds. Common raccoons (*Procyon lotor)* and striped skunks (*Mephitis mephitis)* would also be expected to forage within this habitat. Overall, this habitat is expected to be utilized by a wide variety of species especially during wet years.

2.3 NATURAL COMMUNITIES OF SPECIAL CONCERN AND RIPARIAN HABITAT

Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, or home to special status species. CDFW has classified and mapped all natural communities in California. Just as the special status plant and animal species (see Section 2.6), these natural communities of special concern can be found within the CNDDB. There are no recorded observations of a natural community of special concern mapped within the site and no natural communities of special concern were observed during the field survey.

Riparian habitat is composed of plant communities that occur along the banks, and sometimes over the banks, of most waterways and is an important habitat for numerous wildlife species. CDFW has jurisdiction over most riparian habitat in California. Upp Creek crosses under a bridge through the site and had minimal riparian habitat in the areas adjacent to the bridge. The new pipeline would cross Upp Creek by connecting to the existing roadway bridge and minimal to no impacts are expected to riparian habitat.

2.4 DESIGNATED CRITICAL HABITAT

The USFWS often designates areas of “critical habitat” when it lists species as threatened or endangered. Critical habitat is a specific geographic area that contains features essential for the conservation of a threatened or endangered species, which may require special management and protection. According to the IPaC, designated critical habitat is absent from the site and vicinity.

2.5 WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements.

Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation.

The majority of the Project site consists of developed habitat composed of the paved portion of North Main Street which transitions into a remnant of old Highway 101. This habitat poses a risk to any species which disperse across the road and species can disperse through the coniferous forest in the area surrounding the site. While Upp Creek may act as a corridor for aquatic wildlife, no impacts will occur within the Creek.

Native wildlife nursery sites are areas where a species or group of similar species raise their young in a concentrated place, such as maternity bat roosts. No native wildlife nursery sites for bats were found within the site. While Upp Creek may be used as a wildlife nursery site for fish and amphibian species, no impacts will occur within the Creek.

2.6 SPECIAL STATUS PLANTS AND ANIMALS

California contains several rare plant and animal species. In this context, "rare" is defined as a species known to have low populations or limited distributions. Conversion of habitats to accommodate human population growth in turn reduces the already-limited suitable habitat for rare species. This results in rare and sensitive species becoming increasingly more vulnerable to extirpation. State and federal regulations have provided the CDFW and USFWS with mechanisms for conserving and protecting the diversity of plant and animal species native to California. Numerous native plants and animals have been formally designated as "threatened" or "endangered" under State and federal endangered species legislation. Other formal designations include "candidate" for listing or "species of special concern" by CDFW. The CNPS has its list of native plants considered rare, threatened, or endangered. Collectively these animals and plants are referred to as "special status species."

A query of the CNDDB for occurrences of special status plant and animal species was conducted for the *Willits* USGS 7.5-minute quadrangle that contains the site, and for the eight surrounding USGS quadrangles: *Brushy Mountain*, *Burbeck*, *Foster Mountain*, *Greenough Ridge*, *Laughlin Range*, *Longvale*, *Redwood Valley*, and *Willis Ridge*. A query of the IPaC was also completed for the site. These species, and their potential to occur within the site, are listed in Table 2 and Table 3, below. Other special status species that did not show up in the CNDDB query, but have the potential to occur in the vicinity, are also included in Table 3. Species lists obtained from CNDDB and IPaC are available in Appendix B and Appendix C, respectively. All relevant sources of information, as discussed in the Study Methodology section of this report, as well as field observations, were used to determine if any special status species have the potential to occur within the site.

Table 2: List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
Angel's hair lichen (*Ramalina thrausta*)	CNPS 2B	Found in north coast coniferous forest. Occurs on dead twigs and other lichens at elevations between 245 and 1,410 feet.	**Unlikely.** The majority of the observations occur along the coast or more north in California. While lichen was observed during the field survey it was most likely lace lichen (*Ramalina menziesii*) which is the second most common lichen in Mendocino County. The nearest recorded observation of this species within the vicinity was at a minimum 10 miles northwest of the site, though exact location was unknown, in 1989.

Species	Status*	Habitat	Occurrence within the Site
Baker's meadowfoam (*Limnanthes bakeri*)	CNPS 1B	Found in marshes and swamps, valley and foothill grassland, meadows and seeps, vernal pools. Occurs in seasonally moist or saturated sites within grassland; swales, roadside ditches, and margins of freshwater marshy areas. Occurs at elevations below 1,640 feet. Blooms April – May.	**Possible.** This species was recorded adjacent to the east side of the site in 2009.
Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*)	CNPS 1B	Found in meadows, seeps, vernal pools and swales within cismontane woodland, valley and foothill grassland, and lower montane coniferous forest with adobe or alkaline soils at elevations between 10 and 5,510 feet. Blooms April – July.	**Possible.** This species could occur adjacent to the site and potentially be impacted by Project activities. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles northeast of the site in 2017.
Bolander's catchfly (*Silene bolanderi*)	CNPS 1B	Found in cismontane woodland, lower montane coniferous forest, North Coast coniferous forest, meadows and seeps, and along the edges of chaparral. Occurs in grassy openings, dry rocky slopes, canyons, or roadsides and is sometimes found on serpentinite. Occurs at elevations below 3,280 feet. Blooms May – June.	**Possible.** This species could occur adjacent to the site and potentially be impacted by Project activities. The nearest recorded observation of this species within the vicinity was approximately 2.5 miles northeast of the site in 1962.
Burke's goldfields (*Lasthenia burkei*)	FE, CE, CNPS 1B	Found in vernal pools, meadows, seeps, and swales. Occurs at elevations below 1,640 feet. Blooms April – June.	**Unlikely.** While suitable habitat occurs adjacent to the site, this species does not occur this far north in California. There are no recorded observations of this species on the CNDDB within the regional vicinity of the Project.
Contra Costa goldfields (*Lasthenia conjugens*)	FE, CNPS 1B	Found in valley and foothill grassland, vernal pools, alkaline playas, and cismontane woodland. Occurs in vernal pools, swales, and low depressions, in open grassy areas at elevations below 330 feet. Blooms March – June.	**Absent.** The site is outside of the elevational range for this species.
Deep-scarred cryptantha (*Cryptantha excavata*)	CNPS 1B	Found in cismontane woodlands in sandy, gravelly, dry streambanks at elevations between 600 and 1,200 feet. Blooms March – May.	**Unlikely.** The site did not contain suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 9 miles southeast of the site in 1892.

Species	Status*	Habitat	Occurrence within the Site
Glandular western flax (*Hesperolinon adenophyllum*)	CNPS 1B	Found in chaparral, cismontane woodland, valley and foothill grasslands. Occurs on serpentine soils and is generally found in serpentine chaparral at elevations between 500 to 3,280 feet. Blooms May – August.	**Unlikely.** The site lacks suitable soils and habitats required by this species. The nearest recorded observation of this species within the vicinity was approximately 2 miles southwest of the site in 1920.
Grass alisma (*Alisma gramineum*)	CNPS 2B	Found in marshes and swamps at elevations between 3,940 and 5,900 feet. Blooms summer – fall.	**Absent.** The site is outside of the elevational range for this species.
Hooker's catchfly (*Silene hookeri*)	CNPS 2B	Found in cismontane woodland, lower montane coniferous forest, and chaparral. Often occurs on grassy openings and sometimes occurs on rocky slopes and serpentinite at elevations below 4,600 feet. Blooms spring to early summer.	**Possible.** This species could occur along Highway 101. The nearest recorded observation of this species within the vicinity was approximately 15 miles northeast of the site in 2003.
Humboldt County milk-vetch (*Astragalus agnicidus*)	CE, CNPS 1B	Found in broad-leafed upland forest and north coast coniferous forest. Occurs in disturbed openings in partially timbered forest lands and along ridgelines with south aspects. Occurs at elevations between 985 and 2,460 feet. Blooms May – August.	**Unlikely.** The Project site is not within the two known populations that occur in Mendocino County and Humboldt County. The nearest recorded observation of this species within the vicinity was approximately 3.5 miles east of the site in 2019.
Mayacamas popcornflower (*Plagiobothrys lithocaryus*)	CNPS 1A	Found in chaparral, cismontane woodland, valley, and foothill grasslands. Occurs in moist sites at elevations between 985 and 1,475 feet. Blooms April – May.	**Unlikely.** This species has not been observed within the area for over 100 years. The nearest recorded observation of this species within the vicinity was approximately 13.5 miles southeast of the site in 1899.
Milo Baker's lupine (*Lupinus milo-bakeri*)	CT, CNPS 1B	Found in cismontane woodland, and valley and foothill grasslands. Occurs in roadside ditches, dry gravelly areas along roads, and along small streams at elevations between 1,250 and 1,400 feet. Blooms June – September.	**Possible.** This species could occur along Highway 101 and Upp Creek. The nearest recorded observation of this species within the vicinity was approximately 5.5 miles northwest of the site in 2016.
North Coast semaphore grass (*Pleuropogon hooverianus*)	CT, CNPS 1B	Found in broad-leafed upland forest, meadows and seeps, and north coast coniferous forest. Occurs in wet grassy, usually shady areas. Sometimes it occurs in freshwater marsh and is associated with forest environments. Found at elevations below 4,265 feet. Blooms March – June.	**Unlikely.** The site lacks suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 5.5 miles southeast of the site in 2022.

Species	Status*	Habitat	Occurrence within the Site
Nuttall's ribbon-leaved pondweed (*Potamogeton epihydrus*)	CNPS 2B	Found in marshes and swamps. Occurs in shallow water, ponds, lakes, streams, and irrigation ditches at elevations between 1,310 and 6,230 feet. Blooms July – August.	**Possible.** This species could occur adjacent to the site and potentially be impacted by Project activities. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles northeast of the site in 1949.
Pacific gilia (*Gilia capitata* ssp. *pacifica*)	CNPS 1B	Found in coastal bluff scrub, chaparral, coastal prairie, valley and foothill grassland. Occurs at elevations below 2,500 feet. Blooms May – August.	**Unlikely.** This species occurs along the coast, and the Project site does not provide suitable habitat. The nearest recorded observation of this species within the vicinity was mapped 1.5 miles north of the site in 1980, though the exact location was unknown.
Roderick's fritillary (*Fritillaria roderickii*)	CE, CNPS 1B	Found in coastal bluff scrub, coastal prairie, valley and foothill grassland. Occurs on grassy slopes and mesas at elevations below 4,265 feet. Blooms March – May.	**Unlikely.** This species occurs along the coast, and the Project site does not provide suitable habitat. The nearest recorded observation of this species within the vicinity was approximately 10 miles southwest of the site in 1991.
Saline clover (*Trifolium hydrophilum*)	CNPS 1B	Found in marshes and swamps, valley and foothill grassland, and vernal pools. Occurs at mesic, alkaline sites at elevations below 985 feet. Blooms April – June.	**Absent.** The site is outside of the elevational range for this species.
Santa Cruz clover (*Trifolium buckwestiorum*)	CNPS 1B	Found in coastal prairie, broad-leafed upland forest, and cismontane woodland. Occurs in moist grasslands and along gravelly margins at elevations below 2,330 feet. Blooms May – June.	**Unlikely.** This species occurs along the coast, and the Project site does not provide suitable habitat. The nearest recorded observation of this species within the vicinity was approximately 10.5 miles southeast of the site in 2015.
Scabrid alpine tarplant (*Anisocarpus scabridus*)	CNPS 1B	Found in upper montane coniferous forests along open stony ridges, metamorphic scree slopes of mountain peaks, and cliffs in or near red fir forests. Occurs at elevations between 5,250 and 7,875 feet. Blooms June – September.	**Absent.** The site is outside of the elevational range for this species.
Serpentine cryptantha (*Cryptantha dissita*)	CNPS 1B	Found in chaparral on serpentine outcrops between 440 and 2,400 feet. Blooms March – June.	**Absent.** The site lacks suitable soils and habitats required by this species.
Showy Indian clover (*Trifolium amoenum*)	FE, CNPS 1B	Found in valley and foothill grassland and coastal bluff scrub. Sometimes occurs on serpentine soil, open sunny sites, and swales. Most recently cited on roadside and eroding cliff faces. Occurs at elevations	**Absent.** The site is outside of the elevational range for this species.

Species	Status*	Habitat	Occurrence within the Site
		below 330 feet. Blooms April – June.	
Sonoma sunshine (*Blennosperma bakeri*)	FE, CE, CNPS 1B	Found in vernal pools, swales, and valley and foothill grasslands. Occurs at elevations between 65 and 130 feet. Blooms February – April.	**Absent.** The site is outside of the elevational range for this species.
Three-fingered morning-glory (*Calystegia collina* ssp. *tridactylosa*)	CNPS 1B	Found in chaparral, cismontane woodland on rocky, gravelly openings in serpentine at elevations between 1,980 and 2,300 feet. Blooms April – June.	**Absent.** The site is outside of the elevational range for this species.
Thin-lobed horkelia (*Horkelia tenuiloba*)	CNPS 1B	Found in broad-leafed upland forest, chaparral, valley and foothill grasslands. Occurs on sandy soils and in mesic openings at elevations between 165 and 1,640 feet. Blooms April – July.	**Absent.** The site lacks suitable soils and habitats required by this species.
Watershield (*Brasenia schreberi*)	CNPS 2B	Found in marshes and swamps, as well as near artificial waterbodies at elevations below 2,200 feet. Blooms April – October.	**Absent.** This species is aquatic and the site lacked perennial water sources.
White-flowered rein orchid (*Piperia candida*)	CNPS 1B	Found in North Coast coniferous forest, lower montane coniferous forest, and broad-leafed upland forest. Sometimes occurs on serpentine. Often on forest duff, mossy banks, rock outcrops, and muskeg at elevations below 4,920 feet. Blooms May – September.	**Unlikely.** The site lacked mossy banks and other suitable habitat. The nearest recorded observation of this species was within the vicinity of Willits in 2011.

Table 3: List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
American badger (*Taxidea taxus*)	CSSC	Prefers drier open stages of shrub, forest, and herbaceous habitats with friable soils to burrow, but can be found within numerous habitats throughout California, including the margins of agricultural lands. Needs a sufficient prey base of burrowing rodents.	**Unlikely.** The site is along Highway 101 which has high amounts of vehicle use which is unsuitable for this species. While an American Badger could potentially pass through the site, it is unlikely they would forage or live within the site. The nearest recorded observation of this species within the vicinity was approximately 15.5 miles northeast of the site in 1916.
American goshawk (*Accipiter atricapillus*)	CSSC	Resides within, and in the vicinity of, coniferous forest and prefers canopy cover. Usually nests on north slopes, near water and reuses old nests. Red fir, lodgepole pine, Jeffrey pine,	**Possible.** While this species would not nest within the site, American goshawk could nest adjacent to the site and be impacted by the Project. The nearest recorded observation of this species within the vicinity

Species	Status*	Habitat	Occurrence within the Site
		and aspens are typical nest trees.	was approximately 10.5 miles southwest of the site in 1990.
California condor (*Gymnogyps californianus*)	FE, CE, CFP	Typically nests in cavities in canyon or cliff faces but has also been recorded nesting in giant sequoias in Tulare County. Requires vast expanses of open savannah, grassland, and/or foothill chaparral in mountain ranges of moderate altitude. Forages for carrion up to 100 miles from their roost/nest sites.	**Unlikely.** While a California condor could potentially fly over the site, the site and surrounding areas lack cliffs for nesting. There are no recorded observations of this species on the CNDDB within the regional vicinity of the Project.
Foothill yellow-legged frog – north coast DPS (*Rana boylii* pop. 1)	CSSC	Frequents rocky streams and rivers with rocky substrate and open, sunny banks in forests, chaparral, and woodlands. Occasionally found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools.	**Possible.** This species could occur within Upp Creek. The nearest recorded observation of this species within the vicinity was approximately 0.5 mile southeast of the site along a perennial stream in 2015.
Fisher (*Pekania pannanti*)	CSSC	Can be found in intermediate to large-tree stages of coniferous forests with high percent canopy closure, generally within the low-medium elevational areas of the southern Sierra Nevada.	**Unlikely.** The site is along Highway 101 which has high amounts of vehicle use which is unsuitable for this species. While a fisher could potentially pass through the site, it is unlikely they would forage or live within the site. The nearest recorded observation of this species within the vicinity was approximately 2 miles northeast of the site in 2008.
Humboldt marten (*Martes caurina humboldtensis*)	FT, CE	Occurs only in the coastal redwood zone from the Oregon border south to Sonoma County. Associated with late-successional coniferous forests, prefer forests with low, overhead cover.	**Unlikely.** The site is adjacent to Highway 101 which has high amounts of vehicle use which is unsuitable for this species. While a Humboldt marten could potentially pass through the site, it is unlikely they would forage or live within the site. The nearest recorded observation of this species within the vicinity was approximately 13.5 miles northeast of the site in 1913.
Marbled murrelet (*Brachyramphus marmoratus*)	FT, CE	Nests inland along the coast from Eureka to Oregon border and from Half Moon Bay to Santa Cruz. Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir. Feeds near-shorelines.	**Absent.** The site is too far inland and is outside of the current range for this species.
Monarch butterfly (*Danaus plexippus*)	FPT	Roosts in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval	**Unlikely.** While a monarch could travel through the site during the breeding season, roosting habitat was absent. There are no recorded

Species	Status*	Habitat	Occurrence within the Site
		host plants consist of milkweeds. Winter roost sites extend along the Pacific Coast from northern Mendocino to Baja California, Mexico.	observations of this species on the CNDDB within the regional vicinity of the Project.
Northern spotted owl (*Strix occidentalis caurina*)	FT, CT	Found in old-growth forests or mixed stands of old-growth and mature trees. Occurs in areas with many trees with cavities or broken tops, woody debris, and space under canopy.	**Possible.** While this species would not nest within the site, Northern spotted owl could nest adjacent to the site and could be impacted by the Project. The nearest recorded observation of this species within the vicinity was approximately 1 mile north of the site.
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams, and irrigation ditches with riparian vegetation. Requires adequate basking sites and sandy banks or grassy open fields to deposit eggs.	**Possible.** This species could occur within Upp Creek. The nearest recorded observation of this species within the vicinity was approximately 2 miles northwest of the site along Lake Emily in 1993.
Red-bellied newt (*Taricha rivularis*)	CSSC	Found in coastal drainages from Humboldt County south to Sonoma County and inland to Lake County. An isolated population of uncertain origin occurs in Santa Clara County. Lives in terrestrial habitats, with juveniles generally underground, and adults are active at the surface in moist environments. Will migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.	**Possible.** This species could occur in leaf litter along the site or within Upp Creek. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles southwest of the site in 1938.
Sonoma tree vole (*Arborimus pomo*)	CSSC	Occurs in the north coast fog belt from Oregon border to Sonoma County. Found in Douglas-fir, redwood and montane hardwood-conifer forests. Feeds almost exclusively on Douglas-fir needles. Will occasionally take needles of grand fir, hemlock, or spruce.	**Possible.** This species could occur within the trees adjacent to the west side of the Project site. The nearest recorded observation of this species within the vicinity was approximately 0.5 miles west of the site in 1996.
Steelhead - northern California DPS summer-run (*Oncorhynchus mykiss irideus* pop. 48)	FT, CE	Naturally spawning population of the stream-maturing summer-run ecotype. Occurs from Redwood Creek watershed south and includes the Gualala River watershed. Distribution within range more limited. Require cool water (<23C); holding habitat to withstand higher temps; lower flows in summer/fall; require loose	**Absent.** The Project site is outside of the range for summer-run steelhead.

Species	Status*	Habitat	Occurrence within the Site
		gravels at pool tails for redd construction. Favor cool, clear, fast-flowing riffles, ample riparian cover, undercut banks and diverse prey.	
Steelhead - northern California DPS winter-run (*Oncorhynchus mykiss irideus* pop. 49)	FT, CSSC	Naturally spawning population of the ocean-maturing winter-run ecotype. Occurs from Redwood Creek watershed south and includes the Gualala River watershed. Distribution occurs throughout range. Adults require high flows of 18-20 cm for passage and loose gravels at pool tails for redd construction. Juveniles favor areas with cool (10-17 C), clear, fast-flowing riffles, ample riparian cover, undercut banks and diverse prey.	**Likely.** This species was observed in 2019 within Upp Creek, which flows through the site.
Townsend's big-eared bat (*Corynorhinus townsendii*)	CSSC	Occurs in a variety of habitats, but prefers cool, dark roost sites, and is often found in caves and mines. They roost in the open, hanging from walls and ceilings. Western populations typically forage on moths in areas of dense foliage.	**Unlikely.** While this species could forage in the site and surrounding areas, the site lacked appropriate roosting habitat. The nearest recorded observation of this species within the vicinity was approximately 3.5 miles southwest of the site in 2015.
Western bumble bee (*Bombus occidentalis*)	CCE	Once common and widespread, species has declined sharply. Historically distributed across western North America, ranging from Alaska down through the Pacific coast and into the western interior, including areas in California, New Mexico, and Arizona. The species has been found in various habitats, including forests, meadows, and developed areas, often associated with plants that have small flowers like spirea, lupine, and goldenrod. Typically nest in underground cavities, such as abandoned rodent burrows or old animal nests. They prefer locations on open west-southwest facing slopes bordered by trees, although some nests have been found in above-ground locations like logs.	**Unlikely.** While this species could forage in the area the site is highly disturbed as it occurs along Highway 101 and the site lacked nesting habitat. The nearest recorded observation occurred in the vicinity of Willits in 1958.
Western snowy plover	FT, CSSC	Occurs on sandy coastal beaches, salt pans, dry salt ponds, gravel bars, salt pond	**Absent.** The Project site is outside of the range for this species, and no

Species	Status*	Habitat	Occurrence within the Site
(*Charadrius nivosus nivosus*)		levees, and inland lakes. Inland populations will often migrate to warmer coastal areas during winter months. Requires sandy, gravelly, or friable soils for nesting.	suitable habitats occur within the site.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, CE	Suitable nesting habitat in California includes dense riparian willow-cottonwood and mesquite habitats along a perennial river. Once common in the California Central Valley, as well as coastal valleys and riparian habitats east of the Sierra Nevada, habitat loss now constrains the California breeding population to small numbers of birds.	**Absent.** The Project site is outside of the range for this species, and no suitable habitats occur within the site.
Yellow warbler (*Setophaga petechia*)	CSSC	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders. Also nests in montane shrubbery in open conifer forests in the Cascades and Sierra Nevada ranges.	**Possible.** This species has been observed to the east of the site in 1977.
Yellow-breasted chat (*Icteria virens*)	CSSC	Inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian vegetation, consisting of willow, blackberry, and wild grape. Forages and nests within 10 ft of ground.	**Possible.** This species has been observed to the east of the site in 1977.

***EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES**

Present:	Species observed on the site at time of field surveys or during recent past.
Likely:	Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible:	Species not observed on the site, but it could occur there from time to time.
Unlikely:	Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent:	Species not observed on the site and precluded from occurring there due to absence of suitable habitat.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CCE	California Endangered (Candidate)
FPT	Federally Threatened (Proposed)	CT	California Threatened
		CFP	California Fully Protected
		CSSC	California Species of Special Concern

CNPS LISTING

1A	Plants presumed extinct in California.
1B	Plants rare, threatened, or endangered in California and elsewhere.
2B	Plants rare, threatened, or endangered in California, but more common elsewhere.

3 IMPACTS AND MITIGATION

3.1 SIGNIFICANCE CRITERIA

3.1.1 CEQA

General plans, area plans, and specific projects are subject to the provisions of CEQA. The purpose of CEQA is to assess the impacts of proposed projects on the environment prior to project implementation. Impacts to biological resources are just one type of environmental impact assessed under CEQA and vary from project to project in terms of scope and magnitude. Projects that require removal of vegetation may result in the mortality or displacement of animals associated with this vegetation. Animals adapted to humans, roads, buildings, and pets may replace those species formerly occurring on a site. Plants and animals that are rare may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed. Such impacts may be considered either "significant" or "less than significant" under CEQA. According to *CEQA Statute and Guidelines* (Association of Environmental Professionals 2026), "significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest. Specific project impacts to biological resources may be considered "significant" if they would:

- 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;
- 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 CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (CWA) (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State HCP.

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make a "mandatory finding of significance" if the project has 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, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory."

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 MENDOCINO COUNTY GENERAL PLAN

The Mendocino County General Plan (PMC 2009) contains the following goals and policies related to the Project:

3.2.1.1.1 BIOLOGICAL RESOURCES

Oak Woodland- Maintain and improve oak woodland habitat to provide for slope stabilization, soil protection, species diversity and wildlife habitat through the following measures:

- Preserve, to the maximum extent possible, oak trees and other significant vegetation that occur near the heads of drainages or depressions on north-facing slopes to maintain diversity of vegetation type and wildlife habitat as part of agricultural projects.
- Comply with the Oak Woodlands Preservation Act (Public Resource Code Section 21083.4) regarding oak woodland preservation to conserve the integrity and diversity of oak woodlands and retain to the maximum extent feasible existing oak woodland and chaparral communities and other significant vegetation as part of residential, commercial, and industrial approvals.
- Provide appropriate replacement of lost oak woodlands or preservation at a 2:1 ratio for habitat loss.

Policy RM-19 recognizes the economic and ecological values and benefits provided by natural landscapes including wildlands and forests. The County's goal is to prevent fragmentation and loss of oak woodlands, forests, and wildlands and preserve the economic and ecological values and benefits.

Policy RM-20 protects the county's natural landscapes by restricting conversion and fragmentation of timberlands, oak woodlands, stream corridors, and other natural environments.

Policy RM-21 prevents fragmentation and loss of oak woodlands, forests, and wildlands and preserves the economic and ecological values and benefits.

Policy RM-23 states that natural resources, sensitive environments, and ecological integrity will be conserved, restored, and enhanced. Action Item RM-23.1 requires that resource corridors that support biodiversity and healthy natural processes be identified and maintained.

Policy RM-64 promotes land uses and management practices that protect biological diversity and productivity.

Policy RM-65 states that new development shall protect sensitive environments and resource corridors.

Policy RM-67 states that discretionary development shall be designed or conditioned to achieve no net loss of sensitive resources.

Policy RM-68 requires that protection of existing sensitive resources be the highest priority. Onsite replacement or offsite replacement, protection, or enhancement is less desirable.

Policy RM-69 limits land use density and intensity within and adjacent to critical wildlife habitats, such as wetlands, deer wintering range, old growth forests and riparian corridors.

Policy RM-70 maintains resource diversity and integrity by protecting and enhancing continuous resource corridors through project design.

Policy RM-71 requires that native vegetation, critical habitats and soil resources be conserved through education, technical and financial assistance, cooperative endeavors, best management practices, and soils and vegetation management plans for development and resource uses.

Policy RM-73 requires a permit for vegetation removal involving five or more acres, assessing Grading and landform modifications including effects on site stability, soil erosion and hydrology, the effects on the natural vegetative cover and ecology in the county, degradation to sensitive resources, habitat and fisheries resources, compatibility with surrounding uses, visual impacts from public vantage points, and cumulative and growth-inducing impacts. Action Item RM-73.1 suggests consideration of adopting an ordinance for the regulation of vegetation removal that includes an exemption for removal of exotic species.

Policy RM-78 states that oak woodlands and stands of native oaks in community areas and developments will be conserved and replanted. Oak woodlands in other areas will be protected through limitations on density and clustering.

Policy RM-82 conserves and enhances watercourses to protect habitat, fisheries, soils, and water quality.

Policy RM-83 conserves and enhances streamside (riparian) vegetation through development design and standards.

Policy RM-86 encourages public agencies and private property owners to protect fishery habitat and participate in fishery enhancement projects for coastal and inland waterways of Mendocino County. Action Item RM-86.1 states that the County will work with organizations and agencies at all levels to formulate strategies and implement actions to improve watershed conditions, and fisheries habitat.

Policy RM-87 supports instream flows adequate to maintain and protect fisheries and beneficial uses.

Policy RM-88 supports implementation of fisheries and watershed management plans adopted by public agencies, such as the Summer Steelhead Management Plan for the Middle Fork Eel River and Mendocino County Salmon and Steelhead Management Plan.

3.2.2 THREATENED AND ENDANGERED SPECIES

Permits may be required from CDFW and/or USFWS if activities associated with a project have the potential to result in the "take" of a species listed as threatened or endangered under the California Endangered Species Act (CESA) and/or Endangered Species Act (ESA), respectively. Take is defined by CESA as, "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). Take is more broadly defined by the ESA to include "harm" (16 United States Code (USC), Section 1532(19), 50 Code of Federal Regulations (CFR), Section 17.3). CDFW and USFWS are responsible agencies under CEQA and the National Environmental Policy Act (NEPA). Both agencies review CEQA and NEPA documents in order to determine the adequacy of the treatment of endangered species issues and to make project-specific recommendations for their conservation.

CDFW has been granted temporary authority to list federal species under CESA if the existing federal protections have either been removed or reduced through "federal action: (California Assembly Bill (AB) 1319). "Federal actions" include, but are not limited to, actions relying in whole or in part on amendments to the ESA regulations. The California Fish and Game Commission would list new species through adoption of an emergency regulation.

3.2.3 DESIGNATED CRITICAL HABITAT

When species are listed as threatened or endangered, the USFWS often designates areas of "critical habitat" as defined by section 3(5)(A) of the ESA. Critical habitat is a term defined in the ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat is a tool that supports

the continued conservation of imperiled species by guiding cooperation with the federal government. Designations only affect federal agency actions or federally funded or permitted activities. Critical habitat does not prevent activities that occur within the designated area. Only activities that involve a federal permit, license, or funding and are likely to destroy or adversely modify critical habitat will be affected.

3.2.4 MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA: 16 USC 703-712) prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it covers almost all bird's native to the United States, even those that are non-migratory. The MBTA encompasses whole birds, parts of birds, and bird nests and eggs. Additionally, California Fish and Game Code makes it unlawful to take or possess any non-game birds covered by the MBTA (Section 3513), as well as any other native non-game birds (Section 3800).

The California Migratory Bird Protection Act (AB 454) is a State law signed in October 2025 that permanently prohibits the unlawful taking or possession of any migratory bird covered by the federal Migratory Bird Treaty Act, including both intentional and incidental take.

3.2.5 BIRDS OF PREY

Birds of prey are protected in California under provisions of California Fish and Game Code (Section 3503.5), which states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks and eagles) or Strigiformes (owls), as well as their nests and eggs. The bald eagle and golden eagle are afforded additional protection under the Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs, or take feathers or nests, without a permit issued by the U.S. Secretary of the Interior.

3.2.6 NESTING BIRDS

In California, protection is afforded to the nests and eggs of all birds. California Fish and Game Code (Section 3503) states that it is "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Breeding-season disturbance that causes nest abandonment and/or loss of reproductive effort is considered a form of "take" by the CDFW.

3.2.7 WETLANDS AND OTHER "JURISDICTIONAL WATERS"

Aquatic resources, including wetlands, streams, rivers, and lakes, are among the important biological resources that are protected by local, State, and federal laws and regulations. Activities that impact these "jurisdictional waters" may be regulated and require permits which aim to avoid or minimize adverse impacts to "jurisdictional waters" to the greatest extent possible. The definition of a jurisdictional water may vary depending on the regulatory agency, and the limits of jurisdiction for each agency are described below.

The USACE, pursuant to Section 404 of the Clean Water Act (CWA), upholds a set of guidelines to regulate activities that could result in the discharge of pollutants into "waters of the United States" ("WOTUS"). The legal definition of WOTUS has significantly evolved since the passage of the CWA in 1972 as a result of administrative rulings and litigation involving federal jurisdiction over water resources. Thus, the reach and extent of USACE and United States Environmental Protection Agency (USEPA) jurisdiction over aquatic features has continually been subject to revision.

The current administrative definition of WOTUS is described in the Biden Administration's 2023 "Conforming Rule." The extent of jurisdiction has been defined in the CFR but is also subject to interpretation by the federal courts. Jurisdictional waters generally include the following categories defined by section 328.3, subdivision (a) of title 33 of the CFR:

1) *Traditional Navigable Waters, the territorial seas, or interstate waters (not including interstate wetlands);*
2) *Impoundments of waters of the United States;*
3) *Tributaries of:*
    a. *Traditional Navigable Waters, territorial seas, or interstate waters (not including interstate wetlands); or*
    b. *Impoundments of water of the United States when the tributaries meet the relatively permanent standard.*
4) *Wetlands:*
    a. *Adjacent to Traditional Navigable Waters, the territorial seas, or interstate waters;*
    b. *Adjacent to and with a continuous surface connection to relatively permanent impoundments of waters of the United States*
    c. *Adjacent to and with a continuous surface connection to relatively permanent jurisdictional tributaries.*
5) *Intrastate lakes and ponds not identified in items 1 through 4 of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in items 1 or 3 above.*

Exclusions under the new definition include the following:

1) *Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the CWA;*
2) *Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with USEPA;*
3) *Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;*
4) *Artificially irrigated areas that would revert to dry land if the irrigation ceased;*
5) *Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;*
6) *Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;*
7) *Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and*
8) *Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.*

The Department of the Army, acting through the USACE, regulates the filling or excavation of jurisdictional waters and is authorized to issue permits for activities within WOTUS under the authority of Section 404 of the CWA. The extent of jurisdiction is defined by an “ordinary high-water mark” on opposing channel banks.

The State of California also asserts jurisdiction over drainages, wetlands, and other aquatic features. The limits of State jurisdiction differ from those of the USEPA and USACE, often being more inclusive of water resources. The California Department of Fish and Wildlife has jurisdiction over the bed and bank of rivers, natural drainages, streams, and lakes and regulates alteration to these features pursuant to the provisions of Section 1601 and 1602 of the California Fish and Game Code. Activities to alter these features would

require a Lake or Streambed Alteration Agreement from CDFW, which could include mitigation measures for aquatic and biological resources that could be affected by project activities.

The State Water Resources Control Board, under the Porter-Cologne Water Quality Control Act of 1969, holds regulatory authority over activities affecting water quality of all surface water and groundwater in California, collectively known as "waters of the State." Discharges into waters of the State that are also WOTUS require a CWA Section 401 Water Quality Certification from the appropriate regional office as a prerequisite to obtaining certain federal permits, such as a CWA Section 404 permit. Discharges into all Waters of the State, even those that are not also WOTUS, require waste discharge requirements (WDRs), or waivers of WDRs, from the RWQCB. The RWQCB also administers the Construction Storm Water Program and the federal National Pollution Discharge Elimination System (NPDES) program. Projects that disturb one acre or more of soil must obtain a Construction General Permit under the Construction Storm Water Program. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, storm water, or other pollutants into a WOTUS may require an NPDES permit.

3.3 POTENTIALLY SIGNIFICANT PROJECT-RELATED IMPACTS AND MITIGATION

Species protected by California Fish and Game Code, CDFW, USFWS, or CEQA that have the potential to be impacted by project activities include: Baker's meadowfoam, Baker's navarretia, Bolander's catchfly, Hooker's catchfly, Milo Baker's lupine, Nuttall's ribbon-leaved pondweed, American goshawk, foothill yellow-legged frog, northern spotted owl, northwestern pond turtle, red-bellied newt, Sonoma tree vole, steelhead - northern California DPS winter-run, yellow warbler, and yellow-breasted chat. Other sensitive resources that have the potential to be impacted by the project include jurisdictional waters, wildlife movement corridors, and native wildlife nursery sites. Corresponding mitigation measures can be found below.

3.3.1 GENERAL PROJECT-RELATED IMPACTS

The Project has the potential to impact a number of sensitive resources, as described in more detail in the following sections. Impacts to these resources would be a violation of State and federal laws or considered a potentially significant impact under CEQA. Implementation of the following measures will help reduce potential impacts to these resources to a less than significant level under CEQA and will help with complying with State and federal laws protecting these resources:

> Mitigation Measure BIO-1a (*WEAP Training*): Prior to initiating construction activities (including staging and mobilization), all personnel associated with Project construction will attend a mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist (someone familiar with the identification and habitats of these species), to aid workers in identifying special status resources that may occur in the site. The specifics of this program will include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. This training will discuss special status species, describe the laws and regulations in place to provide protection of these species, identify the penalties for violation of applicable environmental laws and regulations, and include a list of required protective measures to avoid "take." A fact sheet summarizing this information, along with photographs or illustrations of sensitive species with potential to occur on the site, will also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the Project. All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them. (This can be done in-person, via video, or in provided to construction personnel in written documentation format.)

Mitigation Measure BIO-1b (*BMPs*): The Project Proponent will require that all workers employ the following best management practices (BMPs) in order to avoid and minimize potential impacts to special status species:

- Vehicles will observe a 15-mph speed limit while on unpaved access routes.
- All open trenches, holes, sumps, and other excavations greater than 6-inches with sidewalls steeper than a 1:1 (45 degree) slope will have an escape ramp of earth or a non-slip material with a less than 1:1 slope or these will be covered with barrier material such that animals are unable to dig or squeeze under the barrier and become entrapped.
- Workers will inspect areas beneath parked vehicles, equipment, and materials prior to mobilization. If special status species are detected, the individual will either be allowed to leave of its own volition or will be captured by the qualified biologist (must possess appropriate collecting/handling permits or relevant experience) and relocated out of harm's way to the nearest suitable habitat beyond the influence of the Project work area. "Take" of a State or federal special status (rare, California Species of Special Concern, threatened, or endangered) species is prohibited without the necessary federal or State take permit(s).
- The presence of any special status species will be reported to the Project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS.

3.3.2 PROJECT-RELATED IMPACTS TO SPECIAL STATUS PLANT SPECIES

The following special status plant species were identified to potentially occur within or adjacent to the site: Baker's meadowfoam, Baker's navarretia, Bolander's catchfly, Hooker's catchfly, Milo Baker's lupine, and Nuttall's ribbon-leaved pondweed. Projects that adversely affect special status plants or result in the mortality of special status plants would be considered a significant impact under CEQA and may be a violation of State and/or federal laws.

Implementation of the following measures will reduce potential impacts to special status plants to a less than significant level under CEQA will help the Project comply with State and federal laws protecting these plant species.

Mitigation Measure BIO-2a (*Focused Botanical Survey*): Prior to Project activities occurring a qualified botanist/biologist (someone who can identify these species) will conduct focused botanical surveys during the appropriate blooming seasons for Baker's meadowfoam (April – May), Baker's navarretia (April – July), Bolander's catchfly (May – June), Hooker's catchfly (spring to early summer), Milo Baker's lupine (June – September), and Nuttall's ribbon-leaved pondweed (July – August) according to CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (2018) for all appropriate habitats for these species within the site.

Mitigation Measure BIO-2b (*Avoidance*): If special status plants are identified during a survey, an avoidance buffer and, if necessary, use of exclusion fencing, will be placed around the area as not to disturb the plants or its root system.

Mitigation Measure BIO-2c (*Formal Consultation*): If rare plant individuals or populations are detected within Project work areas during the focused botanical surveys, and the plants cannot be avoided, the project proponent will initiate consultation with CNPS (for CNPS-ranked species), CDFW (for California proposed, threatened, or endangered species), and/or USFWS (for threatened or endangered species) to determine next steps for salvage and relocation.

3.3.3 PROJECT-RELATED MORTALITY AND/OR NEST ABANDONMENT OF MIGRATORY BIRDS, RAPTORS, AND SPECIAL STATUS BIRDS

The site and adjacent areas contain suitable nesting and foraging habitat for a variety of protected bird species, such as migratory birds, raptors, and special status birds including American goshawk, northern spotted owl, yellow warbler, and yellow-breasted chat. It is anticipated that during the nesting bird season, protected birds could nest on the ground or in shrubs and trees within, and adjacent to, the site and forage within the site. Protected birds located within or adjacent to the site during construction have the potential to be injured or killed by project-related activities. In addition to the direct "take" of protected birds within the site and adjacent areas, these birds nesting in these areas could be disturbed by project-related activities resulting in nest abandonment. Projects that adversely affect the nesting success of protected birds or result in the mortality of these birds would be a violation of State and federal laws and considered a potentially significant impact under CEQA.

While foraging habitat for protected birds, such as American goshawk, California condor, northern spotted owl, yellow warbler, and yellow-breasted chat, is present on the site, suitable foraging habitat is located adjacent to the site and within the vicinity of the site. Loss of the foraging habitat from implementation of the Project is not considered a significant impact.

Implementation of the following measures will reduce potential impacts to protected nesting birds to a less than significant level under CEQA and will help the Project comply with State and federal laws protecting these bird species.

> Mitigation Measure BIO-3a (*Avoidance*): The Project's construction activities will occur, if feasible, between August 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.
>
> Mitigation Measure BIO-3b (*Pre-construction Surveys*): If activities must occur within the nesting bird season (February 1 to August 15), a qualified biologist (someone able to identify these species) will conduct a pre-construction survey for active nests within ten (10) calendar days prior to the start of construction. It will be completed within the site, and up to 100 feet outside of the site for nesting migratory birds and up to 500 feet outside of the site for nesting raptors. Raptor nests are considered "active" upon the nest-building stage. If construction is delayed or halted for more than ten (10) days, another pre-construction survey for nesting birds will be conducted.
>
> Mitigation Measure BIO-3c (*Northern Spotted Owl Surveys*): If large diameter conifer trees are planned to be removed as a result of the Project, a qualified biologist (someone familiar with northern spotted owls and the survey requirements) will conduct protocol northern spotted owl surveys prior to the start of the Project.
>
> Mitigation Measure BIO-3d (*Avoidance Buffers*): On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of Project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.

3.3.4 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO FOOTHILL YELLOW-LEGGED FROG

The site contained Upp Creek and grassland habitat that can be used as upland habitat. Creek habitat is not expected to be impacted by this Project, and upland areas would be temporarily impacted. Foothill yellow-

legged frogs (FYLF) present within these habitats during construction have the potential to be injured or killed by Project-related activities. Projects that result in the mortality of individuals would be considered a potentially significant impact under CEQA and violate federal and State laws protecting this species.

Implementation of the following measures will reduce potential impacts to FYLF to a less than significant level and help the Project comply with federal and State laws that protect this species.

> Mitigation Measure BIO-4a (*Pre-construction Take Avoidance Survey*): A qualified biologist (someone familiar with the identification and habitat of this species) will conduct surveys for FYLF in accordance with CDFW's *Considerations for Conserving the Foothill Yellow-Legged Frog* (California Department of Fish and Wildlife 2018), or current guidance for FYLF to determine if FYLF are within or adjacent to Upp Creek and the surrounding grassland habitat within the Project site. If no FYLFs are found during the pre-construction survey and no surface water is present in the project site, work may commence without further surveys.

> Mitigation Measure BIO-4b (*FYLF Consultation and Avoidance*): If any FYLF are found during preconstruction surveys or at any time during construction, consultation with CDFW and USFWS is warranted to determine if the Project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when FYLF are most likely to be moving through upland areas (i.e., November 1 to March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist monitor construction activity daily for FYLF.

> Mitigation Measure BIO-4c (*Monitor*): If ground-disturbing activities must take place between November 1 and March 31, surface water is present during the preconstruction surveys, or if surface water becomes present at any time during the work period, the qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee initial vegetation clearing and ground disturbing activities within FYLF habitat.

3.3.5 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO NORTHWESTERN POND TURTLE

The site contained Upp Creek which could be used by northwestern pond turtle for dispersal, foraging, and basking. The annual grassland habitat of the site could be used by northwestern pond turtle for dispersal and nesting. Creek habitat is not expected to be impacted by this Project, and upland areas would be temporarily impacted. Noise, vegetation removal, movement of workers, construction, and ground disturbance as a result of Project activities have the potential to significantly impact northwestern pond turtle. Potentially significant impacts associated with Project activities could include inadvertent entrapment or direct mortality. Project activities that impact northwestern pond turtles would be considered a potentially significant impact under CEQA.

The following measures will be implemented prior to the start of construction and will reduce impacts to northwestern pond turtle to a less than significant level under CEQA:

> Mitigation Measure BIO-5a (*Pre-construction Survey and Avoidance Buffers*): Within seven (7) days prior to the start of construction, a qualified biologist (someone familiar with the identification and habitat of this species) will conduct a pre-construction survey for northwestern pond turtle within Upp Creek and surrounding areas up to 330 feet. Pre-construction surveys will be conducted in accordance with the draft *Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion* (United States Geological Survey 2006), or current guidance. If no northwestern pond turtles are observed during the pre-construction survey, then construction

activities may begin. If construction is delayed or halted for more than seven (7) days, another pre-construction survey for northwestern pond turtle will be conducted. If the surveys result in the identification of a northwestern pond turtle or an individual is found on the site during construction activities, it will be allowed to leave the site on its own and the qualified biologist will determine appropriate buffers to be implemented to avoid impacts to the individual(s).

Mitigation Measure BIO-5b (*Monitor*): If northwestern pond turtles are observed on the site, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all initial vegetation clearing and ground disturbing activities in this species habitats and until the individual(s) have left the site.

Mitigation Measure BIO-5c (*Formal Consultation*): Should northwestern pond turtles get listed in this area and the Project/qualified biologist needs to move an individual, consultation for protection plans and/or relocation plans with the appropriate agencies will be completed to avoid take.

3.3.6 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO RED-BELLIED NEWT

The site contained suitable aquatic and upland habitats for red-bellied newt. This species may breed in the creek and disperse and feed within the grassland habitat on the site and in the surrounding forested areas. Red-bellied newt occurring within the site during construction have the potential to be injured or killed by Project-related activities. Projects that adversely affect red-bellied newt or result in the mortality of individuals would be considered a potentially significant impact under CEQA.

The following measures will be implemented prior to the start of construction and will reduce impacts to red-bellied newt to a less than significant level under CEQA:

Mitigation Measure BIO-6a (*Rainfall Avoidance*): The National Weather Service 72-hour forecast will be monitored for the site. During rainfall events and/or when a 50 percent or greater chance of rainfall is predicted within 72 hours, all work will be stopped in the site where initial ground disturbance (vegetation removal, grading, grubbing, and excavation) has yet to occur until the rainfall ceases and a zero percent chance of rain is forecast. Work may continue during rainfall events and/or when a 50 percent or greater chance of rain is forecast within portions of the site that have already been cleared of vegetation.

Mitigation Measure BIO-6b (*Pre-construction Take Avoidance Survey*): A qualified biologist (someone familiar with the identification and habitat of this species) will conduct visual surveys for red-bellied newt within Upp Creek during the breeding season (late February to May, peaking in March). Additionally, a qualified biologist will check under vegetation and stones within the site within seven (7) days of construction to check for terrestrial adults. If no red-bellied newt are found during the pre-construction survey and no surface water is present in the Project site, work may commence without further surveys.

Mitigation Measure BIO-6c (*Monitor*): If red-bellied newt are observed on the site, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all initial vegetation clearing and ground disturbing activities in this species habitats and until the individual(s) have left the site.

3.3.7 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO SONOMA TREE VOLE

The site and adjacent areas contain forests with Douglas fir which Sonoma tree voles are known to utilize as a food source and home. Projects that adversely affect Sonoma tree vole or result in the mortality of individuals would be considered a potentially significant impact under CEQA.

Implementation of the following measures will reduce impacts to Sonoma tree voles to a less than significant level under CEQA:

Mitigation Measure BIO-7a (*Tree Avoidance*): Douglas fir trees on the Project site will be avoided.

Mitigation Measure BIO-7b (*Take-Avoidance Survey*): If Douglas fir trees will be removed, a specialist for Sonoma tree voles will complete a survey to determine presence or absence of the species in the tree(s). If it is determined no Sonoma tree voles are utilizing the tree(s), the tree(s) will be removed within 2 days of the survey.

Recommendation BIO-7c (*Sonoma Tree Vole Take Authorization*): If it is determined Sonoma tree voles are utilizing the tree(s), and avoidance is not feasible the Project will consult with CDFW to acquire an Incidental take permit for Sonoma tree vole prior to beginning any Project activities.

3.3.8 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO STEELHEAD- NORTHERN CALIFORNIA DPS WINTER-RUN

The site contained Upp Creek which could be used by steelhead - northern California DPS winter-run for spawning. Creek habitat is not expected to be impacted by this Project, and upland areas would be temporarily impacted. Vegetation removal, movement of workers, construction, and ground disturbance as a result of Project activities have the potential to impact steelhead. Potentially significant impacts associated with Project activities could include impacts to water quality. Project activities that impact steelhead would be considered a potentially significant impact under CEQA.

The following measures will be implemented prior to the start of construction and will reduce impacts to steelhead to a less than significant level under CEQA:

Mitigation Measure BIO-8a (*Water Quality*): Erosion control measures will be utilized to prevent any sediment, or hazardous fluids from entering Upp Creek.

Mitigation Measure BIO-8b (*Avoidance*): No impacts will occur to Upp Creek during Project activities.

Mitigation Measure BIO-8c (*Formal Consultation*): If impacts will occur within Upp Creek, consultation for steelhead protection plans and/or relocation plans with the appropriate agencies will be completed to avoid take.

3.3.9 PROJECT-RELATED IMPACTS TO REGULATED WATERS, WETLANDS, AND WATER QUALITY

The Project involves connecting a new pipeline to the existing roadway bridge over Upp Creek. The USFWS National Wetlands Inventory Map was consulted for known waterways in the area and Upp Creek is classified as riverine. Additionally, work may occur in potential depressional wetlands located south of Upp Creek. Project-related impacts to Upp Creek or wetlands would be considered a potentially significant impact under CEQA. Impacts to waters of the U.S. are also subject to the permit requirements of Sections 401 and 404 of the Clean Water Act and impacts to waters of the State are subject to the permit requirements of Section 401 of the Clean Water Act and California Fish and Game Code. The placement of fill within any wetlands or other jurisdictional features will require a 401 Water Quality Certification from the RWQCB, 404 permit from the USACE, and a Lake or Streambed Alteration Agreement from CDFW.

There are no designated wild and scenic rivers within the site; therefore, the Project would not result in direct impacts to wild and scenic rivers.

If construction involves ground disturbance over an area greater than one acre, the Project would need to obtain a Construction General Permit under the Construction Storm Water Program administered by the RWQCB. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan to ensure construction activities do not adversely affect water quality. This plan will need to be prepared in support of the Construction General Permit application.

Implementation of the following measures will reduce potential impacts to waters to a less than significant level under CEQA and will ensure compliance with State and federal laws protecting these waters.

> Mitigation Measure BIO-9a (*Permits*): If the Project intends to impact jurisdictional waters, permits with USACE, RWQCB, and/or CDFW will be obtained to comply with State and federal regulations, if necessary. These permits, certifications, and agreements would ensure impacts to waters are minimized to the extent possible and permanent impacts would be offset by compensatory mitigation.

3.3.10 PROJECT-RELATED IMPACTS TO RIPARIAN HABITAT AND NATURAL COMMUNITIES OF SPECIAL CONCERN

Minimal riparian habitat is present along Upp Creek and minimal to no impacts are expected to riparian habitat. Impacts to riparian habitat have been addressed under mitigation measure BIO-9a. There are no CNDDB-designated "natural communities of special concern" recorded within the site and no natural communities of special concern were observed during the field survey. No additional measures are required.

3.3.11 PROJECT-RELATED IMPACTS TO WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

The majority of the Project site consists of developed habitat composed of the paved portion of North Main Street which transitions into a remnant of old Highway 101. This habitat poses a risk to any species which disperse across the road and species can disperse through the coniferous forest in the area surrounding the site. While Upp Creek may act as a corridor for aquatic wildlife, no impacts will occur within the Creek, and wildlife will be able to continue using this feature while construction is occurring and would be able to continue utilizing it after construction activities are completed.

Upp Creek may act as a native wildlife nursery site for steelhead and other aquatic species. While Upp Creek may act as a native wildlife nursery site, no impacts will occur within the Creek and wildlife will be able to continue using this feature while construction is occurring and would be able to continue utilizing it after construction activities are completed.

The potential impacts to species that could use Upp Creek as a wildlife movement corridor and wildlife nursery site have been addressed in Mitigation Measures BIO-4, BIO-5, BIO-6, and BIO-8. Implementation of these will reduce potential impacts to wildlife movement corridors and native wildlife nursery sites to a less than significant level under CEQA. Implementation of the following mitigation measures would reduce potential impacts to less than significant.

> Mitigation Measure BIO-10a (*Operational Hours*): When possible, construction activities surrounding Upp Creek should be limited to a half hour after sunrise through a half hour before sunset to reduce potential impacts to wildlife movement corridors and wildlife nursery sites.

> Mitigation Measure BIO-10b (*Wildlife Access*): Access within these areas should not be blocked outside of construction hours or during overnight hours or weekends. If construction must block both sides of a wildlife access route, an alternative route through the construction area should be identified by a qualified biologist and maintained throughout the construction schedule timeframe.

3.4 LESS THAN SIGNIFICANT PROJECT-RELATED IMPACTS

3.4.1 PROJECT-RELATED IMPACTS TO SPECIAL STATUS PLANT SPECIES ABSENT FROM, OR UNLIKELY TO OCCUR ON, THE PROJECT SITE

Of the 27 regionally occurring special status plant species, 21 are considered absent from or unlikely to occur within the site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include: Angel's hair lichen, Burke's goldfields, Contra Costa goldfields, deep-scarred cryptantha, glandular western flax, grass alisma, Humboldt County milk-vetch, Mayacamas popcorn flower, North Coast semaphore grass, Pacific gilia, Roderick's fritillary, saline clover, Santa Cruz clover, scabrid alpine tarplant, serpentine cryptantha, showy Indian clover, Sonoma sunshine, three-fingered morning-glory, thin-lobed horkelia, watershield, and white-flowered rein orchid. Since it is unlikely that these species would occur onsite, implementation of the Project should have no impact on these 21 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

3.4.2 PROJECT-RELATED IMPACTS TO SPECIAL STATUS ANIMAL SPECIES ABSENT FROM, OR UNLIKELY TO OCCUR ON, THE PROJECT SITE

Of the 20 regionally occurring special status animal species, 11 are considered absent from or unlikely to occur within the site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include: American badger, California condor, fisher, Humboldt marten, marbled murrelet, monarch butterfly, steelhead - northern California DPS summer-run, Townsend’s big-eared bat, western bumble bee, western snowy plover, and western yellow-billed cuckoo.

Since it is unlikely that these species would occur onsite, implementation of the Project should have no impact on these 11 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

3.4.3 PROJECT-RELATED IMPACTS TO CRITICAL HABITAT

Designated critical habitat is absent from the site and surrounding lands. Therefore, there would be no impact to critical habitat, and mitigation measures are not warranted.

3.4.4 LOCAL POLICIES OR HABITAT CONSERVATION PLANS

The Project appears to be consistent with the goals and policies of the Mendocino County General Plan. There are no known HCPs or NCCPs in the Project vicinity. Mitigation measures are not warranted.

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APPENDIX A: REPRESENTATIVE PHOTOS OF THE PROJECT SITE



Photograph 1

Overview of the Project site looking towards to City of Willits.



Photograph 2

Overview of the Project site heading north.



Photograph 3

Another overview of the Project site heading north.



Photograph 4

Another overview of the Project site heading north.



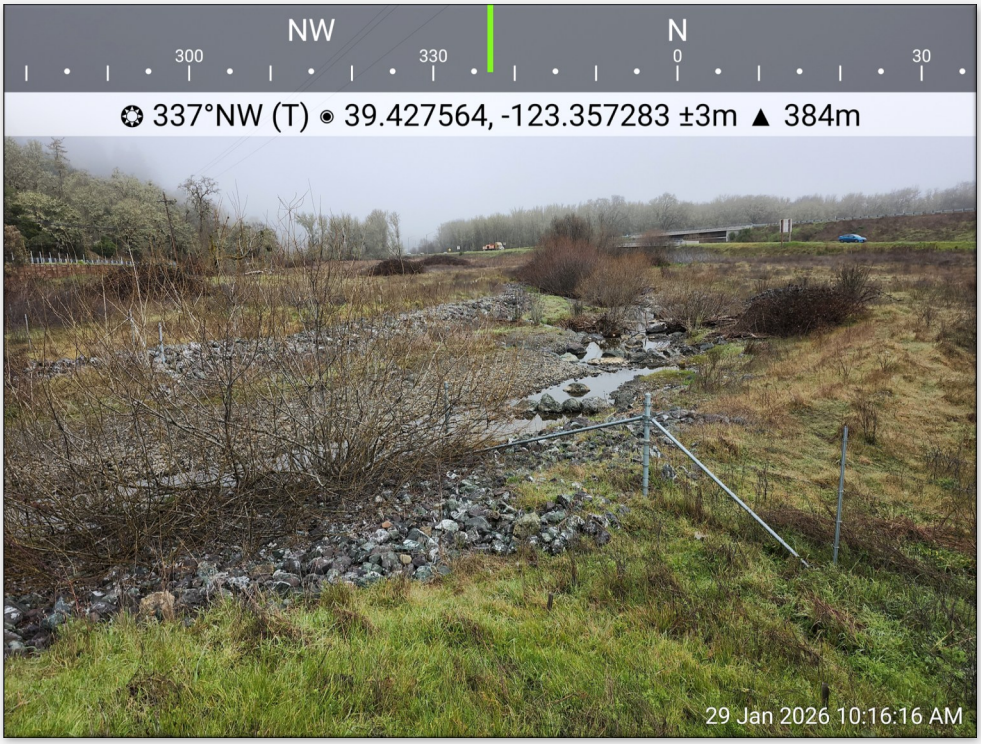
Photograph 5

Overview of the bridge over Upp Creek where the pipeline will be attached.



Photograph 6

Overview of the upstream portion of Upp Creek from the bridge.



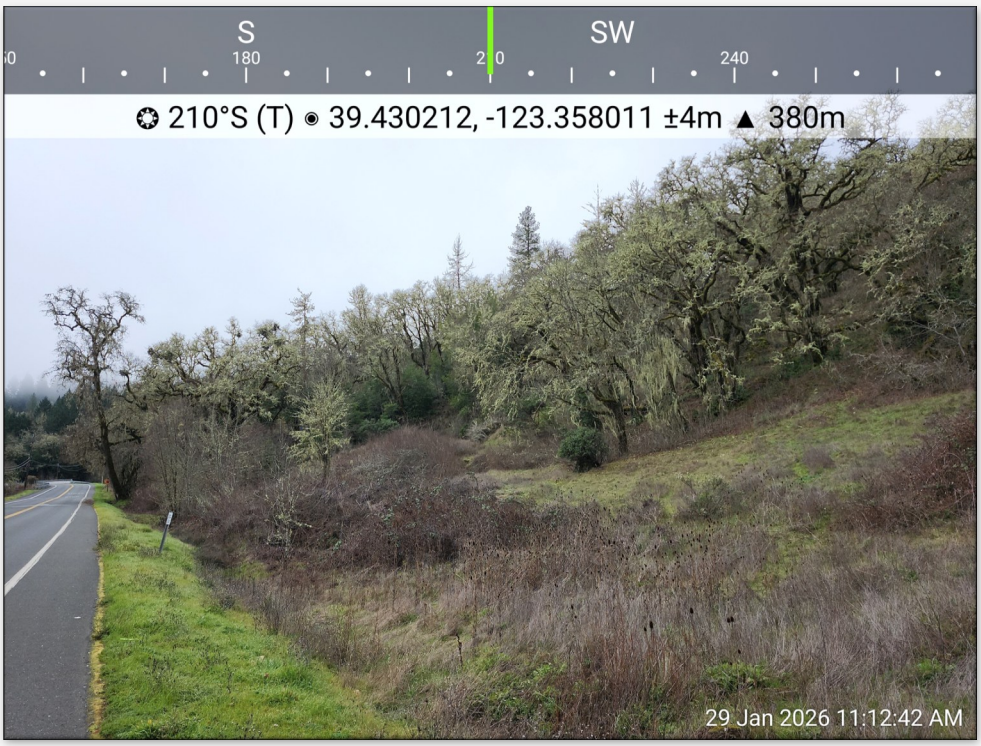
Photograph 7

Overview of the down-stream portion of Upp Creek from the bridge.



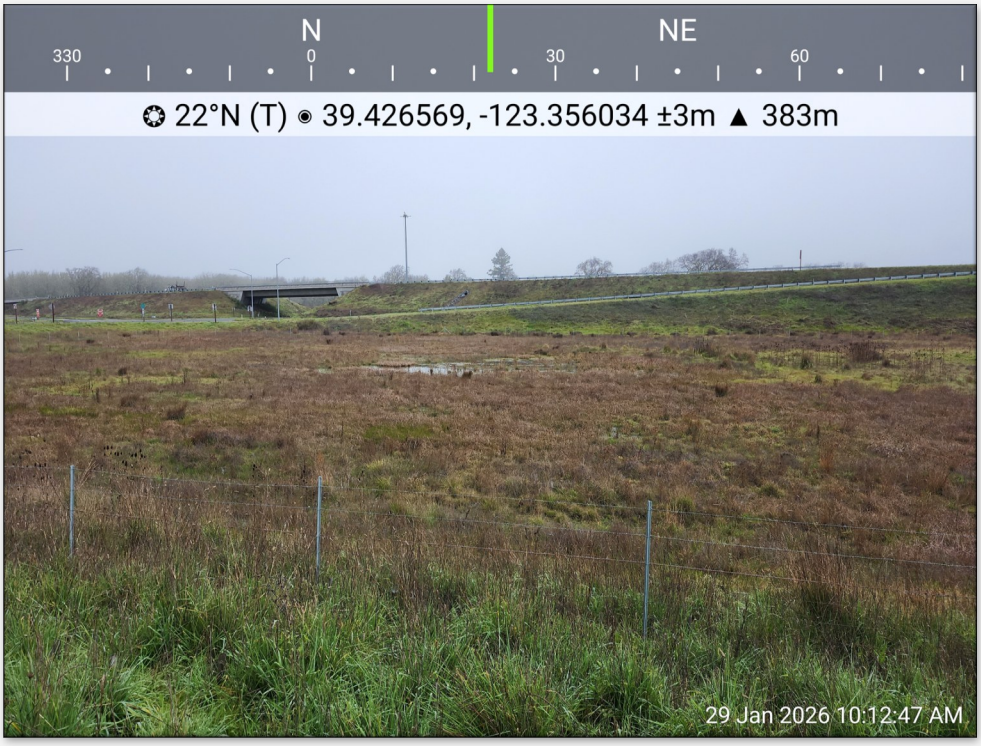
Photograph 8

Overview of the northern-most portion of the Project site.



Photograph 9

Surrounding land to the west of the site consisted of coniferous and oak woodland forests.



Photograph 10

Surrounding land to the east consisted of non-native grasslands that sloped down into large depressional wetlands north of Willits.



Photograph 11

Overview of the Project area east of North Main St. and west of Highway 101.

Photograph taken on September 15, 2026.



Photograph 12

Overview of the Project area south of Upp Creek and west of Highway 101.

Photograph taken on September 15, 2026.

APPENDIX B: CNDDB 9-QUAD SPECIES LIST

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Longvale (3912354) OR Willis Ridge (3912353) OR Brushy Mtn. (3912352) OR Foster Mtn. (3912342) OR Willits (3912343) OR Burbeck (3912344) OR Greenough Ridge (3912334) OR Laughlin Range (3912333) OR Redwood Valley (3912332))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
American goshawk *Astur atricapillus*	ABNKC12061	None	None	G5	S3	SSC
angel's hair lichen *Ramalina thrausta*	NLLEC3S340	None	None	G5?	S2S3	2B.1
Baker's meadowfoam *Limnanthes bakeri*	PDLIM02020	None	Rare	G1	S1	1B.1
Baker's navarretia *Navarretia leucocephala ssp. bakeri*	PDPLM0C0E1	None	None	G4T2	S2	1B.1
Bolander's catchfly *Silene bolanderi*	PDCAR0U2L0	None	None	G2	S2	1B.2
deep-scarred cryptantha *Cryptantha excavata*	PDBOR0A0W0	None	None	G1	S1	1B.1
Fisher *Pekania pennanti*	AMAJF01020	None	None	G5	S2S3	SSC
foothill yellow-legged frog - north coast DPS *Rana boylii pop. 1*	AAABH01051	None	None	G3T4	S4	SSC
glandular western flax *Hesperolinon adenophyllum*	PDLIN01010	None	None	G2G3	S2S3	1B.2
grass alisma *Alisma gramineum*	PMALI01010	None	None	G5	S3	2B.2
Hooker's catchfly *Silene hookeri*	PDCAR0U2M0	None	None	G4	S2	2B.2
Humboldt County milk-vetch *Astragalus agnicidus*	PDFAB0F080	None	Endangered	G2	S2	1B.1
Humboldt marten *Martes caurina humboldtensis*	AMAJF01017	Threatened	Endangered	G4G5T1	S1	SSC
Mayacamas popcornflower *Plagiobothrys lithocaryus*	PDBOR0V0P0	None	None	GX	SX	1A
Milo Baker's lupine *Lupinus milobakeri*	PDFAB2B4E0	None	Endangered	G1Q	S1	1B.1
North Coast semaphore grass *Pleuropogon hooverianus*	PMPOA4Y070	None	Threatened	G2	S2	1B.1
northwestern pond turtle *Actinemys marmorata*	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Nuttall's ribbon-leaved pondweed *Potamogeton epihydrus*	PMPOT03080	None	None	G5	S2S3	2B.2
obscure bumble bee *Bombus caliginosus*	IIHYM24380	None	None	G2G3	S1S2	
Pacific gilia *Gilia capitata ssp. pacifica*	PDPLM040B6	None	None	G5T3	S3	1B.2
red-bellied newt *Taricha rivularis*	AAAAF02020	None	None	G2	S2	SSC
Roderick's fritillary *Fritillaria roderickii*	PMLIL0V0M0	None	Endangered	G1Q	S1	1B.1
saline clover *Trifolium hydrophilum*	PDFAB400R5	None	None	G2	S2	1B.2
Santa Cruz clover *Trifolium buckwestiorum*	PDFAB402W0	None	None	G2	S2	1B.1
scabrid alpine tarplant *Anisocarpus scabridus*	PDASTDU020	None	None	G3	S3	1B.3
serpentine cryptantha *Cryptantha dissita*	PDBOR0A0H2	None	None	G3	S3	1B.2
sharp-shinned hawk *Accipiter striatus*	ABNKC12020	None	None	G5	S4	WL
Sonoma sunshine *Blennosperma bakeri*	PDAST1A010	Endangered	Endangered	G1	S1	1B.1
Sonoma tree vole *Arborimus pomo*	AMAFF23030	None	None	G3	S3	SSC
steelhead - northern California DPS summer-run *Oncorhynchus mykiss irideus pop. 48*	AFCHA0213P	Threatened	Endangered	G5T2Q	S2	
steelhead - northern California DPS winter-run *Oncorhynchus mykiss irideus pop. 49*	AFCHA0213Q	Threatened	None	G5T3Q	S3	SSC
thin-lobed horkelia *Horkelia tenuiloba*	PDROS0W0E0	None	None	G2	S2	1B.2
three-fingered morning-glory *Calystegia collina ssp. tridactylosa*	PDCON04036	None	None	G4T1T2	S1S2	1B.2
Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010	None	None	G4	S2	SSC
Valley Oak Woodland *Valley Oak Woodland*	CTT71130CA	None	None	G3	S2.1	
watershield *Brasenia schreberi*	PDCAB01010	None	None	G5	S3	2B.3
western bumble bee *Bombus occidentalis*	IIHYM24252	None	Candidate Endangered	G3	S1	
white-flowered rein orchid *Piperia candida*	PMORC1X050	None	None	G3?	S3	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
yellow warbler *Setophaga petechia*	ABPBX03010	None	None	G5	S3	SSC
yellow-breasted chat *Icteria virens*	ABPBX24010	None	None	G5	S4	SSC

Record Count: 41

APPENDIX C: IPAC SPECIES LIST

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arcata Fish And Wildlife Office
1655 Heindon Road
Arcata, CA 95521-4573
Phone: (707) 822-7201 Fax: (707) 822-8411

In Reply Refer To: 10/07/2026 15:33:26 UTC
Project Code: 2026-0048774
Project Name: City of Willits North Main Street Pipeline Extension Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arcata Fish And Wildlife Office
1655 Heindon Road
Arcata, CA 95521-4573
(707) 822-7201

PROJECT SUMMARY

Project Code: 2026-0048774
Project Name: City of Willits North Main Street Pipeline Extension Project
Project Type: Water Supply Pipeline - New Constr - Below Ground
Project Description: A pipeline extension to serve the Little Lake Mobile Home Park (LLMHP) would require the installation of approximately 1.1 miles of up to eight-inch pipeline along North Main Street. The new pipeline would need to cross Upp Creek by connecting to the existing roadway bridge, which is located between the City limits and the LLMHP. It is anticipated that the majority of the pipeline would be right off the shoulder of the County maintained roadway. Either open-cut or trenchless installation methods would be used for pipe installation. For segments of the pipeline that would require open-cut installation, this would require the cutting and rehabilitation of the pavement

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.427992149999994,-123.35765011858996,14z



Counties: Mendocino County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 10 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
California condor *Gymnogyps californianus* Population: Pacific Northwest NEP No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8193 General project design guidelines: https://ipac.ecosphere.fws.gov/project/YQPTLZ6ACZDDTL6JLBESHZBOZY/documents/generated/11172.pdf	Experimental Population, Non-Essential
Marbled Murrelet *Brachyramphus marmoratus* Population: U.S.A. (CA, OR, WA) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467 General project design guidelines: https://ipac.ecosphere.fws.gov/project/YQPTLZ6ACZDDTL6JLBESHZBOZY/documents/generated/11172.pdf	Threatened
Northern spotted owl *Strix occidentalis caurina* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123 General project design guidelines: https://ipac.ecosphere.fws.gov/project/YQPTLZ6ACZDDTL6JLBESHZBOZY/documents/generated/11172.pdf	Threatened
western snowy plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035 General project design guidelines: https://ipac.ecosphere.fws.gov/project/YQPTLZ6ACZDDTL6JLBESHZBOZY/documents/generated/11172.pdf	Threatened
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911 General project design guidelines: https://ipac.ecosphere.fws.gov/project/YQPTLZ6ACZDDTL6JLBESHZBOZY/documents/generated/11172.pdf	Threatened

REPTILES

NAME	STATUS
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111 General project design guidelines:	Proposed Threatened

NAME	STATUS
https://ipac.ecosphere.fws.gov/project/YQPTLZ6ACZDDTL6JLBESHZBOZY/documents/generated/11172.pdf	

INSECTS

NAME	STATUS
Monarch butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743 General project design guidelines: https://ipac.ecosphere.fws.gov/project/YQPTLZ6ACZDDTL6JLBESHZBOZY/documents/generated/11172.pdf	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Burke's goldfields *Lasthenia burkei* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4338	Endangered
Contra Costa goldfields *Lasthenia conjugens* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7058	Endangered
showy Indian clover *Trifolium amoenum* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6459	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Mar 1 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Mar 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

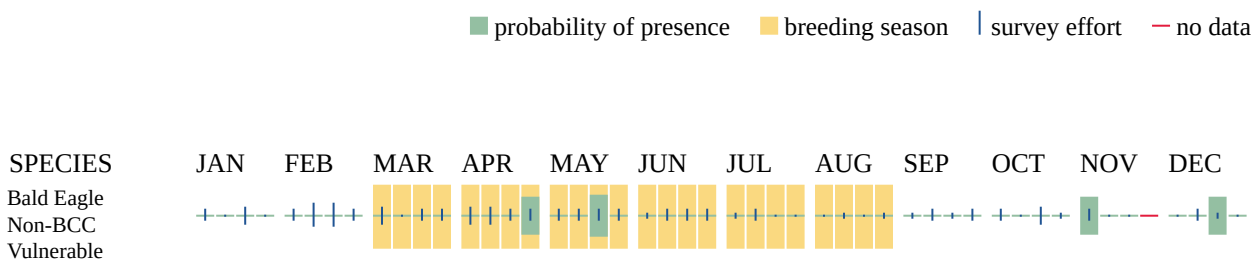
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

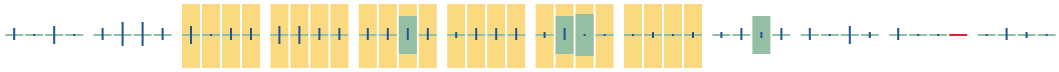
Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Golden Eagle
Non-BCC
Vulnerable



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird *Selasphorus sasin* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Mar 1 to Aug 31

NAME	BREEDING SEASON
Chestnut-backed Chickadee *Poecile rufescens rufescens* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11913	Breeds Mar 1 to Jul 31
Evening Grosbeak *Coccothraustes vespertinus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9465	Breeds May 15 to Aug 10
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Mar 1 to Aug 31
Oak Titmouse *Baeolophus inornatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Rufous Hummingbird *Selasphorus rufus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds Apr 15 to Jul 15
Western Screech-Owl *Megascops kennicottii cardonensis* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11923	Breeds Mar 1 to Jun 30
Wrentit *Chamaea fasciata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10668	Breeds Mar 15 to Aug 10

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

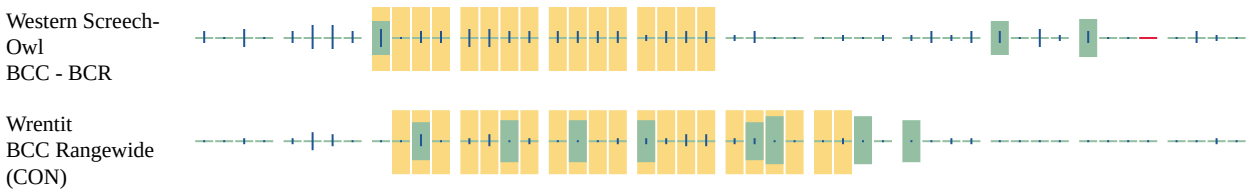
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- 32401575

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Shaylea Stark
Address: 455 W Fir Ave
City: Clovis
State: CA
Zip: 93612
Email sstark@ppeng.com
Phone: 5594492700

APPENDIX D: NRCS WEB SOIL SURVEY REPORT

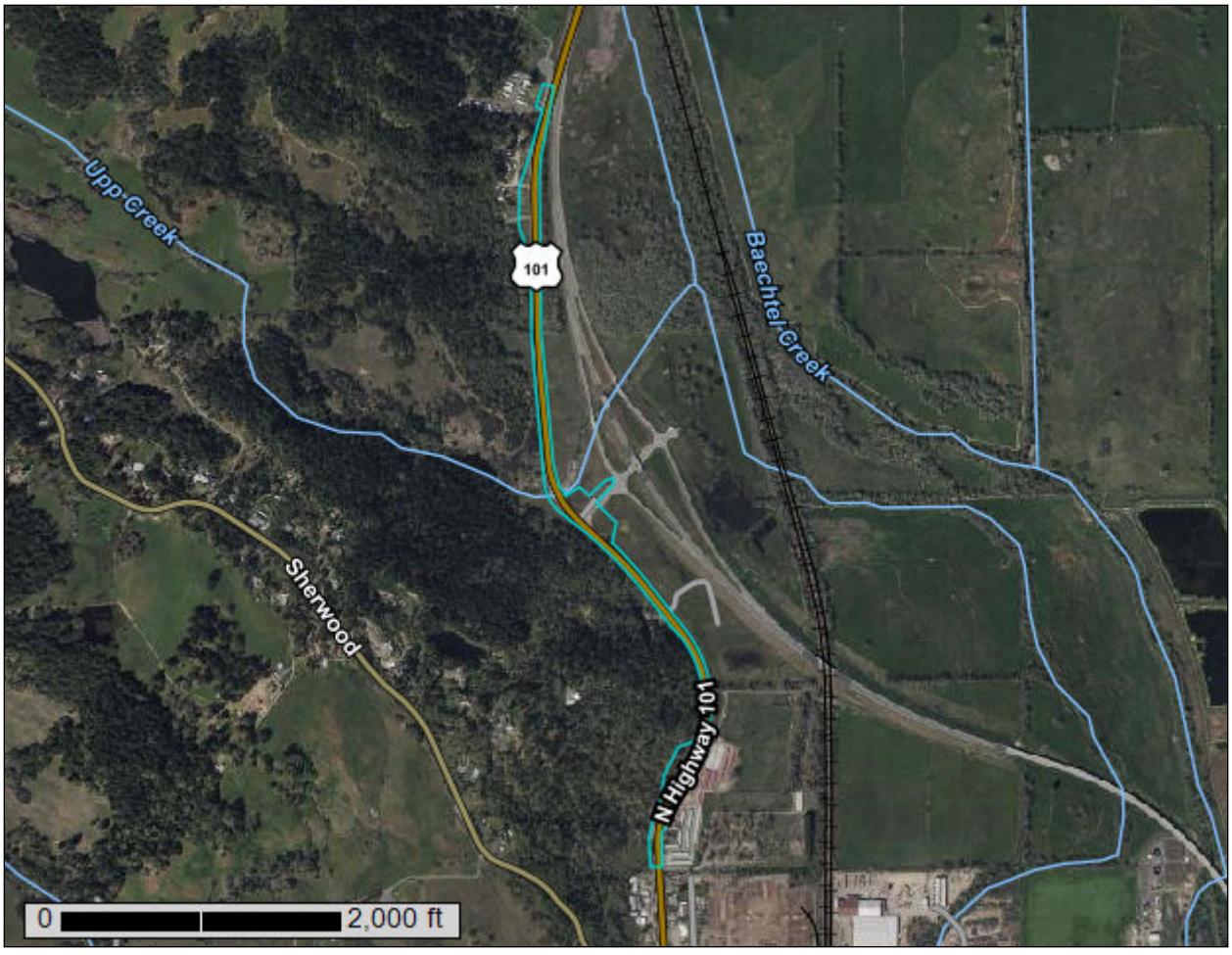
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Mendocino County, Eastern Part and Southwestern Part of Trinity County, California



October 6, 2026

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

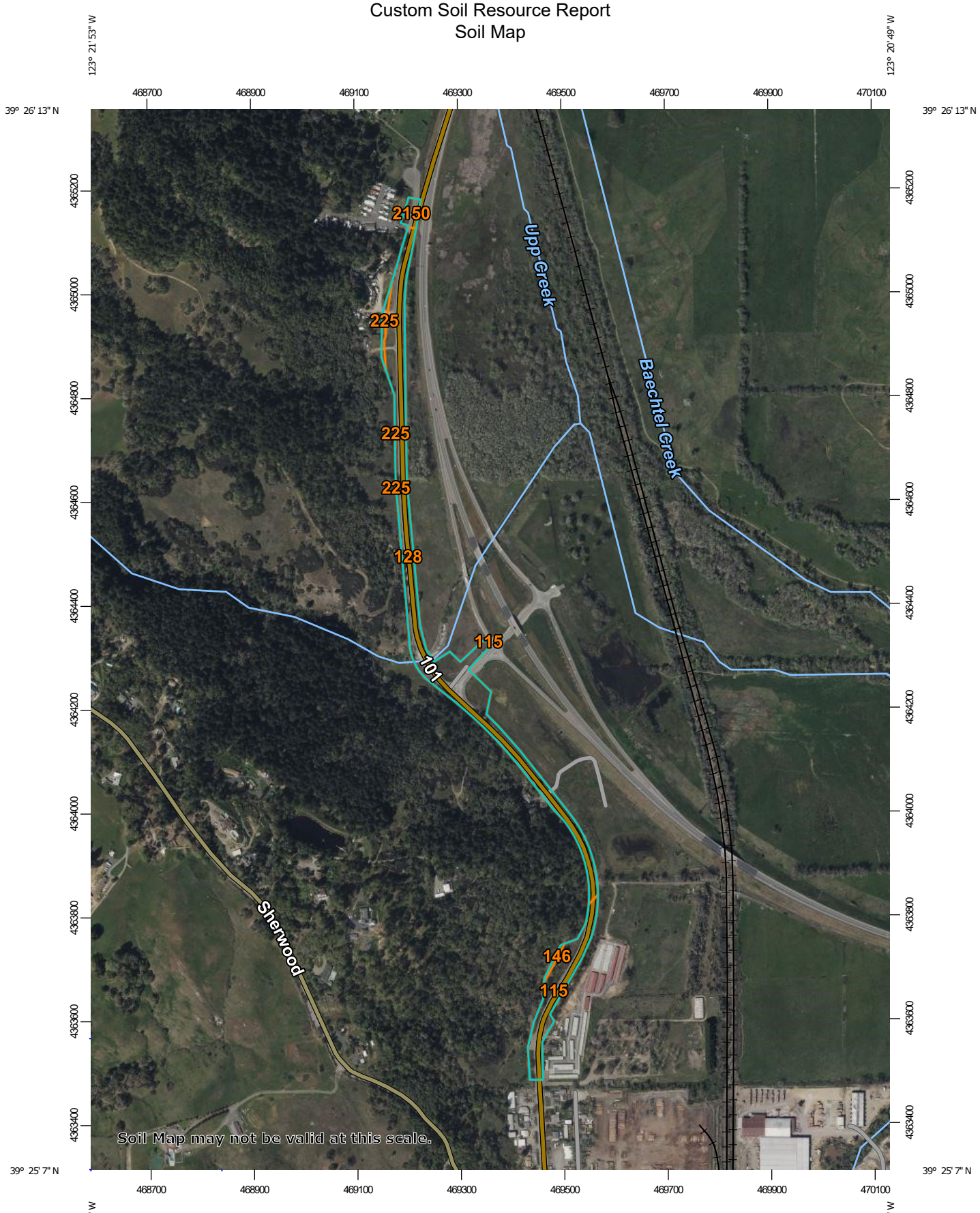
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:9,960 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 100 200 400 600

Feet
0 450 900 1800 2700

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Mendocino County, Eastern Part and Southwestern Part of Trinity County, California
Survey Area Data: Version 22, Sep 10, 2026

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 7, 2022—May 31, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
115	Cole silty clay loam, 0 to 1 percent slopes, MLRA 14	2.7	20.6%
128	Gielow sandy loam, 0 to 5 percent slopes	9.9	74.1%
146	Hopland-Sanhedrin-Kekawaka complex, 30 to 50 percent slopes	0.1	0.6%
225	Yorktree-Hopland-Woodin complex, 30 to 50 percent slopes	0.3	1.9%
2150	Xerochrepts-Haploxeralfs-Argixerolls complex, 9 to 30 percent slopes, low ffd	0.4	2.8%
Totals for Area of Interest		**13.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not

mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Mendocino County, Eastern Part and Southwestern Part of Trinity County, California

115—Cole silty clay loam, 0 to 1 percent slopes, MLRA 14

Map Unit Setting

National map unit symbol: 2xc90
Landscape: Valleys
Elevation: 120 to 1,730 feet
Mean annual precipitation: 37 to 58 inches
Mean annual air temperature: 55 to 60 degrees F
Frost-free period: 203 to 313 days
Farmland classification: Prime farmland if irrigated and drained

Map Unit Composition

Cole and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cole

Setting

Landscape: Valleys
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 8 inches: silty clay loam
Bt1 - 8 to 15 inches: silty clay loam
Bt2 - 15 to 27 inches: clay loam
Bt3 - 27 to 41 inches: loam
C - 41 to 60 inches: loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 12 to 48 inches
Frequency of flooding: Rare
Frequency of ponding: Occasional
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C
Ecological site: R014XD100CA - Loamy Wet Bottomland

Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Clear lake

Percent of map unit: 5 percent
Landform: Basin floors
Hydric soil rating: Yes

Cole

Percent of map unit: 5 percent
Hydric soil rating: No

128—Gielow sandy loam, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: hgqd
Landscape: Alluvial plains
Elevation: 500 to 1,750 feet
Mean annual precipitation: 44 inches
Mean annual air temperature: 54 to 57 degrees F
Frost-free period: 175 to 250 days
Farmland classification: Prime farmland if irrigated and drained

Map Unit Composition

Gielow and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gielow

Setting

Landscape: Alluvial plains
Landform: Flood plains, Alluvial flats
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread, flat
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 4 inches: sandy loam
H2 - 4 to 11 inches: loam
H3 - 11 to 60 inches: stratified sandy loam to sandy clay loam

Properties and qualities

Slope: 0 to 5 percent

Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Ecological site: R014XG907CA - Loamy Bottom
Hydric soil rating: Yes

Minor Components

Clear lake

Percent of map unit: 3 percent
Landform: Basin floors
Hydric soil rating: Yes

Cole

Percent of map unit: 3 percent
Hydric soil rating: No

Feliz

Percent of map unit: 3 percent
Hydric soil rating: No

Russian

Percent of map unit: 2 percent
Hydric soil rating: No

Talmage

Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 2 percent
Hydric soil rating: No

146—Hopland-Sanhedrin-Kekawaka complex, 30 to 50 percent slopes

Map Unit Setting

National map unit symbol: hgqz
Landscape: Mountains, hills
Elevation: 400 to 5,000 feet
Mean annual precipitation: 30 to 65 inches
Mean annual air temperature: 48 to 59 degrees F

Frost-free period: 120 to 250 days
Farmland classification: Not prime farmland

Map Unit Composition

Hopland and similar soils: 45 percent
Sanhedrin and similar soils: 20 percent
Kekawaka and similar soils: 15 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hopland

Setting

Landscape: Mountains, hills
Landform: Mountains, Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from sandstone and shale

Typical profile

H1 - 0 to 12 inches: loam
H2 - 12 to 31 inches: clay loam
H3 - 31 to 35 inches: weathered bedrock

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 31 to 35 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F005XZ009CA - Very Deep Mesic Hills 40-60"ppt
Hydric soil rating: No

Description of Sanhedrin

Setting

Landscape: Mountains, hills
Landform: Mountains, Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from sandstone and siltstone

Typical profile

H1 - 0 to 13 inches: gravelly loam
H2 - 13 to 43 inches: gravelly clay loam
H3 - 43 to 47 inches: unweathered bedrock

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 43 to 47 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F005XZ021CA - Very Deep Gravelly Mesic Mountains 40-60"ppt
Hydric soil rating: No

Description of Kekawaka

Setting

Landscape: Mountains, hills
Landform: Mountains, Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Residuum weathered from sandstone and siltstone

Typical profile

H1 - 0 to 4 inches: loam
H2 - 4 to 35 inches: clay loam
H3 - 35 to 61 inches: clay

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F005XZ009CA - Very Deep Mesic Hills 40-60"ppt

Hydric soil rating: No

Minor Components

Bearwallow
Percent of map unit: 2 percent
Hydric soil rating: No

Casabonne
Percent of map unit: 2 percent
Hydric soil rating: No

Cummiskey
Percent of map unit: 2 percent
Hydric soil rating: No

Speaker
Percent of map unit: 2 percent
Hydric soil rating: No

Witherell
Percent of map unit: 2 percent
Hydric soil rating: No

Wohly
Percent of map unit: 2 percent
Hydric soil rating: No

Woodin
Percent of map unit: 2 percent
Hydric soil rating: No

Yorkville
Percent of map unit: 2 percent
Hydric soil rating: No

Rock outcrop
Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed
Percent of map unit: 2 percent
Hydric soil rating: No

225—Yorktree-Hopland-Woodin complex, 30 to 50 percent slopes

Map Unit Setting
National map unit symbol: hgtj
Landscape: Mountains, hills
Elevation: 500 to 2,500 feet
Mean annual precipitation: 35 to 55 inches

Mean annual air temperature: 54 to 59 degrees F
Frost-free period: 175 to 250 days
Farmland classification: Not prime farmland

Map Unit Composition

Yorktree and similar soils: 32 percent
Hopland and similar soils: 28 percent
Woodin and similar soils: 15 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Yorktree

Setting

Landscape: Mountains, hills
Landform: Mountains, Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Colluvium derived from shale and/or colluvium derived from graywacke and/or colluvium derived from sandstone and siltstone and/or residuum weathered from shale and/or residuum weathered from graywacke and/or residuum weathered from sandstone and siltst

Typical profile

H1 - 0 to 12 inches: loam
H2 - 12 to 24 inches: gravelly clay loam
H3 - 24 to 42 inches: clay
H4 - 42 to 51 inches: gravelly clay
H5 - 51 to 55 inches: bedrock

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 51 to 55 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F005XZ009CA - Very Deep Mesic Hills 40-60"ppt
Hydric soil rating: No

Description of Hopland

Setting

Landscape: Mountains, hills
Landform: Mountains, Hills
Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Colluvium derived from sandstone and shale and/or residuum weathered from sandstone and shale

Typical profile

H1 - 0 to 12 inches: loam
H2 - 12 to 31 inches: clay loam
H3 - 31 to 35 inches: bedrock

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 31 to 35 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F005XZ009CA - Very Deep Mesic Hills 40-60"ppt
Hydric soil rating: No

Description of Woodin

Setting

Landscape: Mountains, hills
Landform: Mountains, Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Colluvium derived from sandstone and/or residuum weathered from sandstone

Typical profile

H1 - 0 to 7 inches: gravelly sandy clay loam
H2 - 7 to 15 inches: very gravelly sandy clay loam
H3 - 15 to 23 inches: very cobbly sandy clay loam
H4 - 23 to 27 inches: bedrock

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 23 to 27 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None

Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F005XZ007CA - Moderately Deep Mesic Hills 40-60"ppt
Hydric soil rating: No

Minor Components

Kekawaka

Percent of map unit: 3 percent
Hydric soil rating: No

Bearwallow

Percent of map unit: 3 percent
Hydric soil rating: No

Etsel

Percent of map unit: 3 percent
Hydric soil rating: No

Maymen

Percent of map unit: 3 percent
Hydric soil rating: No

Casabonne

Percent of map unit: 3 percent
Hydric soil rating: No

Yorkville

Percent of map unit: 2 percent
Hydric soil rating: No

Witherell

Percent of map unit: 2 percent
Hydric soil rating: No

Wohly

Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 2 percent
Hydric soil rating: No

Ashokawna

Percent of map unit: 2 percent
Hydric soil rating: No

2150—Xerochrepts-Haploxeralfs-Argixerolls complex, 9 to 30 percent slopes, low ffd

Map Unit Setting

National map unit symbol: 2y4jp
Landscape: River valleys
Elevation: 1,480 to 2,490 feet
Mean annual precipitation: 43 to 67 inches
Mean annual air temperature: 55 to 57 degrees F
Frost-free period: 180 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Xerochrepts and similar soils: 35 percent
Haploxeralfs and similar soils: 30 percent
Argixerolls and similar soils: 25 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Xerochrepts

Setting

Landscape: River valleys
Landform: Dissected terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

A - 0 to 12 inches: gravelly loam
Bw - 12 to 36 inches: very gravelly loam
C - 36 to 72 inches: stratified very gravelly gravelly loam to sandy clay loam

Properties and qualities

Slope: 9 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.40 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Hydric soil rating: No

Description of Haploxeralfs

Setting

Landscape: River valleys
Landform: Dissected terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

A - 0 to 3 inches: sandy loam
Bt - 3 to 30 inches: loam
C1 - 30 to 37 inches: gravelly sandy loam
C2 - 37 to 60 inches: very gravelly sandy loam

Properties and qualities

Slope: 9 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Hydric soil rating: No

Description of Argixerolls

Setting

Landscape: River valleys
Landform: Dissected terraces
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

A - 0 to 11 inches: gravelly loam
Bt1 - 11 to 22 inches: gravelly clay loam

Bt2 - 22 to 37 inches: gravelly clay loam
2Bt1 - 37 to 60 inches: clay

Properties and qualities

Slope: 9 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Talmage

Percent of map unit: 4 percent
Landscape: River valleys
Landform: Alluvial fans
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R014XD083CA - Very Gravelly Loamy Bottomland
Hydric soil rating: No

Gielow

Percent of map unit: 3 percent
Landscape: River valleys
Landform: Flood plains, Alluvial flats
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread, flat
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Redvine

Percent of map unit: 3 percent
Landscape: River valleys
Landform: Dissected terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

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Appendix C – Archaeological Resources Inventory and Built Environment Evaluation Report

CONFIDENTIAL

Archaeological Resources Inventory and Built Environment Evaluation Report for the Little Lake Mobile Home Park Water System Improvements (North Main Street Pipeline Extension) Project

Mendocino County, California

Prepared For:

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Prepared By:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS
Rocklin ♦ Redlands ♦ Irvine ♦ San Diego ♦ Chico ♦ Santa Fe ♦ Fresno

September 2026

MANAGEMENT SUMMARY

The City of Willits through Provost & Pritchard Consulting Group retained ECORP Consulting, Inc. (ECORP) in 2026 to conduct an archaeological resources inventory and built environment evaluation for the Little Lake Mobile Home Park Water System Improvements (North Main Street Extension) Project (Project) in Mendocino County, California. The City of Willits proposes completing a master meter consolidation project for Little Lake Mobile Home Park (LLMHP), which would include constructing approximately 1.1 miles of pipeline to connect with the City of Willits water system to LLMHP.

The inventory included a records search, literature review, and field survey. The records search results indicated that 10 previous cultural resources studies have been conducted within the Project Area. As a result of those studies, three sites were recorded within the Project Area: P-23-5465 (Lithic Scatter and Habitation Site), P-23-5513 (Ranch), and P-23-5514 (Former Farm). No isolates have been previously recorded within the Project Area.

As a result of the inventory, ECORP revisited three previously recorded resources—P-23-5465, P-23-5513, and P-23-5514—and recorded one new resource—LL-01 (North Main Street/Redwood Highway). ECORP verified the location of pre-contact resource P-23-5465 and identified an unrecorded component to the site: a bedrock milling feature with a milling slick. ECORP revisited resources P-23-5513 and P-23-5514 and noted that both appear to be in similar conditions as in 2022 recordings, in which they had already been demolished.

An evaluation from November 2014 of P-23-5465 recommended that the site is eligible for the National Register of Historic Places (NRHP) under Criteria A and D (Jurich and Rogers 2014).

Both P-23-5513 and P-23-5514 were recommended as not eligible for either the NRHP or California Register of Historical Resources (CRHR) under any criteria. Additionally, neither resource maintains integrity after they were demolished.

ECORP evaluated resource LL-01 using NRHP and CRHR eligibility criteria and recommends it as not eligible for either register.

ECORP recommends that archaeological and Native American monitors be present for all initial ground-disturbing activities within 100 feet of pre-contact archaeological resource P-23-5465. This report also provides recommendations for the management of unanticipated discoveries.

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LIST OF ACRONYMS AND ABBREVIATIONS

Term/Acronym	Definition
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
BERD	Built Environment Resource Directory
BLM	Bureau of Land Management
BP	years before present
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHL	California Historical Landmark
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
CWA	Clean Water Act
DPR	California Department of Parks and Recreation
ECORP	ECORP Consulting, Inc.
GLO	General Land Office
LLMHP	Little Lake Mobile Home Park

Term/Acronym	Definition
LRN	Legislative Route Number
MLD	Most Likely Descendant
MLRA	Major Land Resource Area
N	North
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NW	Northwest
OHP	California Office of Historic Preservation
PRC	Public Resources Code
Project	Little Lake Mobile Home Park Waterline Project
RPA	Registered Professional Archaeologist
SHPO	State Historic Preservation Officer
SLF	Sacred Lands File
SW	Southwest
TCR	tribal cultural resource
US	U.S. Highway
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey

1.0 INTRODUCTION

The City of Willits through Provost & Pritchard Consulting Group retained ECORP Consulting, Inc. in 2026 to conduct an archaeological resources inventory and built environment evaluation for the Little Lake Mobile Home Park Water System Improvements (North Main Street Pipeline Extension) Project (Project) in Mendocino County, California. A survey of the Project Area was required to identify potentially eligible cultural resources (i.e., archaeological sites and historic buildings, structures, and objects) that could be affected by the Project.

1.1 Project Location

The Project Area consists of approximately 1.1 linear miles of North Main Street/Redwood Highway (13.32 acres of land) and is located in Sections 1 and 12 of Township 18 North, Range 14 West; and Sections 6 and 7 of Township 18 North, Range 13 West, Mount Diablo Base and Meridian, as depicted on the 1991 U.S. Geological Survey (USGS) Willits, California 7.5-minute quadrangle (Figure 1). The Project Area consists of the right-of-way along North Main Street/Redwood Highway (Figure 2). The northern end of the Project Area begins to the south of a cul-de-sac outside Little Lake Mobile Home Park (LLMHP) and continues south to the intersection of North Main Street and Commercial Street to the east.

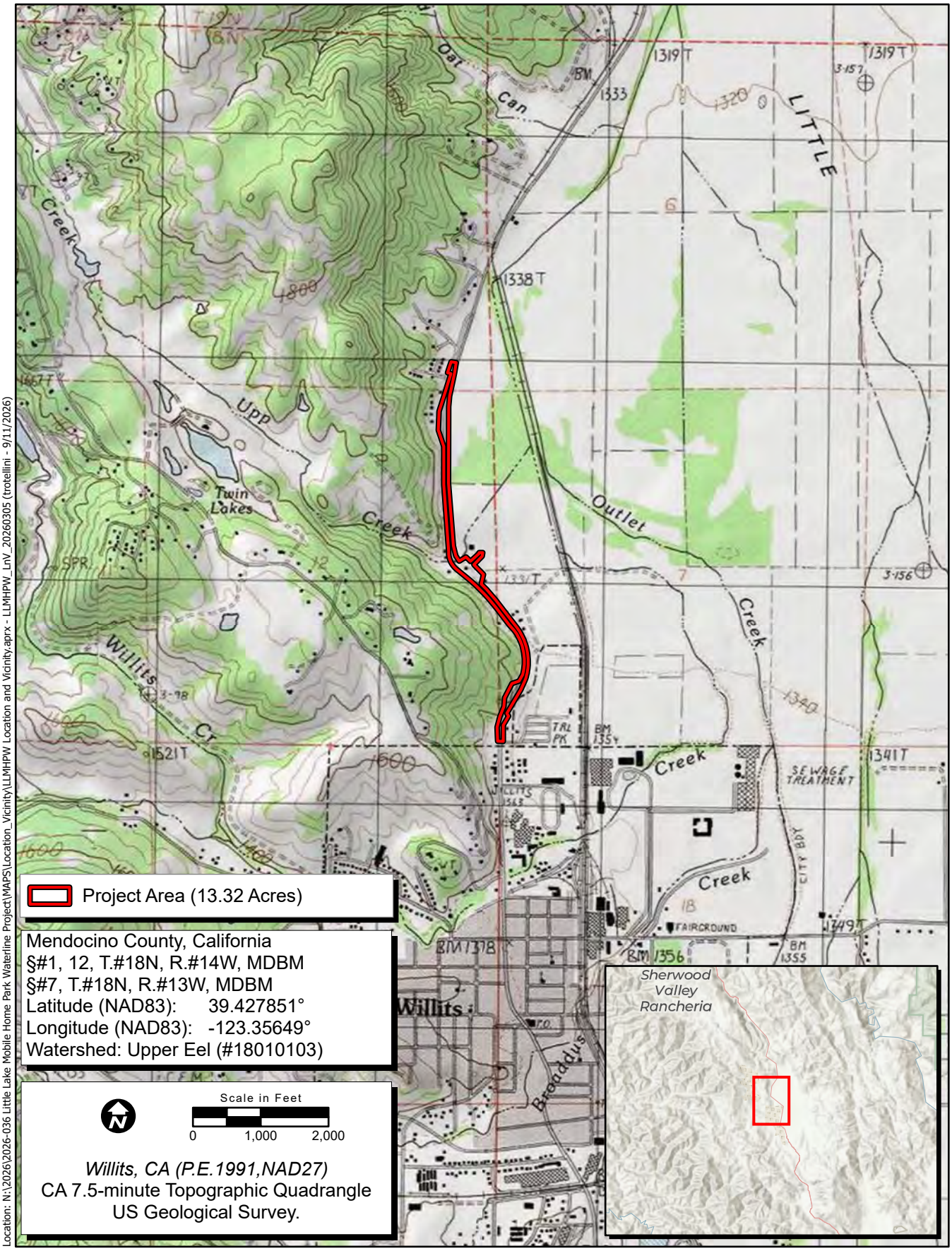
1.2 Project Description

The City of Willits proposes the Project, which involves a pipeline extension to serve the existing LLMHP would require the installation of approximately 1.1 miles of up to eight-inch pipeline along N Main Street. N Main Street used to be the main route of Highway 101 before a Highway 101 bypass was constructed around the City. Since the completion of the Highway 101 bypass, the N Main Street right-of-way (ROW) has been transferred to the County, and N Main Street is now a County maintained roadway. The new pipeline would need to cross Upp Creek by connecting to the existing roadway bridge, which is located between the City limits and the LLMHP. It is anticipated that the majority of the pipeline would be right off the shoulder of the roadway. Either open-cut or trenchless installation methods would be used for pipe installation. For segments of the pipeline that would require open-cut installation, this would require the cutting and rehabilitation of the pavement.

1.3 Area of Potential Effects

The Area of Potential Effects (APE) consists of the horizontal and vertical limits of a project and includes the area within which significant impacts or adverse effects to Historical Resources or Historic Properties could occur as a result of the project. The APE is defined for projects subject to regulations implementing Section 106 (federal law and regulations). For projects subject to the California Environmental Quality Act (CEQA) review, the term *Project Area* is used rather than *APE*. The terms *Project Area* and *APE* are, therefore, interchangeable for the purpose of this document.

The horizontal APE consists of all areas where activities associated with a project are proposed and, in the case of this Project, equals the Project Area subject to environmental review under the National Environmental Policy Act (NEPA) and CEQA. This includes areas proposed for construction, vegetation removal, grading, trenching, stockpiling, staging, paving, and other elements in the official Project description. The horizontal APE is illustrated in Figure 1 and represents the survey coverage area.



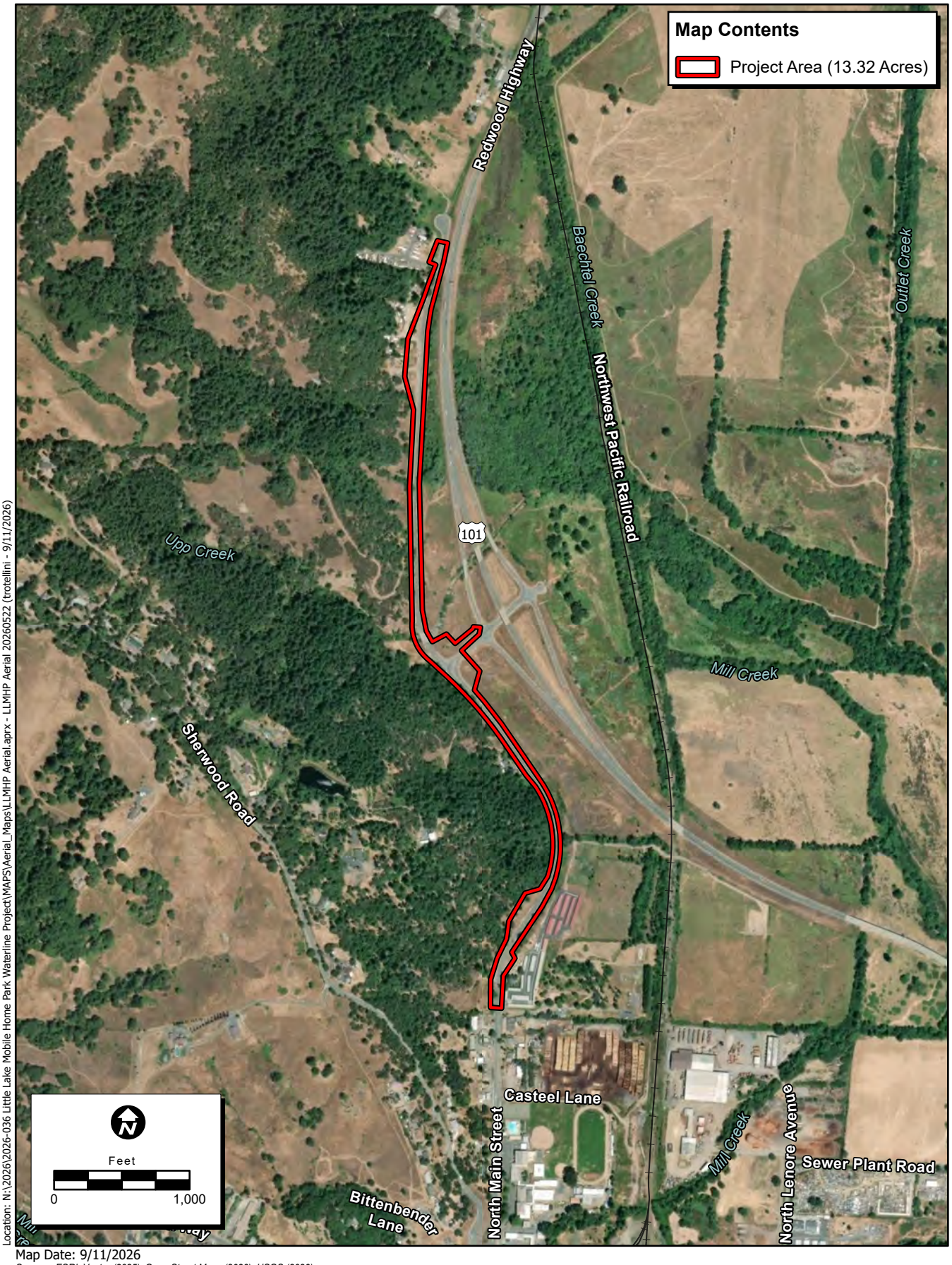
Location: N:\2026\2026-036 Little Lake Mobile Home Park Waterline Project\MAPS\Location_Vicinity\LLMHPW Location and Vicinity.aprx - LLMHPW_LnV_20260305 (trotellini - 9/11/2026)

Map Date: 9/11/2026
Sources: ESRI, USGS

Figure 1. Project Location and Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2026-036 Little Lake Mobile Home Park Waterline Project



Location: N:\2026\2026-036 Little Lake Mobile Home Park Waterline Project\MAPS\Aerial_Maps\LLMHP Aerial.aprx - LLMHP Aerial 20260522 (trotellini - 9/11/2026)

Map Date: 9/11/2026

Sources: ESRI, Vantor (2025), Open Street Maps (2026), USGS (2026)

Figure 2. Project Aerial Overview

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2026-036 Little Lake MHP Waterline

The vertical APE is described as the maximum depth below the surface to which excavations for project foundations and facilities will extend. Therefore, the vertical APE for this Project includes all subsurface areas where archaeological deposits could be affected. The subsurface vertical APE varies across the Project Area but could extend as deep as 50 feet below the current surface; therefore, a review of geologic and soils maps was necessary to determine the potential for buried archaeological sites that cannot be seen on the surface.

The vertical APE also is described as the maximum height of structures that could affect the physical integrity and integrity of setting of cultural resources, including districts and traditional cultural properties. As this Project is entirely underground, there will be no above-surface vertical APE.

1.4 Regulatory Context

The CEQA Lead Agency for this Project is the City of Willits. At this time, there is no NEPA or Section 106 Lead Agency for this Project, the report was prepared co-compliant to the U.S. Army Corps of Engineering (USACE) standards.

A review of the regulatory context is provided below; however, the inclusion of any of these laws and regulations in this report does not make a law or regulation apply when it otherwise would not. Similarly, the omission of any other laws and regulations from this section does not mean that they do not apply. Rather, the purpose of this section is to provide context in explaining why the study was carried out in the manner documented herein.

1.4.1 National Environmental Policy Act

NEPA establishes national policy for the protection and enhancement of the environment. Part of the function of the federal government in protecting the environment is to "preserve important historic, cultural, and natural aspects of our national heritage" (42 U.S. Code § 4331). Cultural resources do not need to be determined eligible for the National Register of Historic Places (NRHP) through the National Historic Preservation Act (NHPA) of 1966 (as amended) to receive consideration under NEPA. NEPA is implemented by regulations of the Council on Environmental Quality (40 Code of Federal Regulations [CFR] 1500–1508).

The definition of *effects* in the NEPA regulations includes both adverse and beneficial effects on historic and cultural resources (40 CFR 1508.1[i]). When determining the level of NEPA review, federal agencies must determine if potential effects on historic or cultural resources that could result from the proposed action and each alternative would be significant (40 CFR 1501.3[d]). In considering whether an alternative may *significantly affect the quality of the human environment*, a federal agency must consider, among other things:

- unique characteristics of the geographic area, such as proximity to historic or cultural resources (40 CFR1501.3(d)(1) and 40 CFR 1501.3[2][ii]); and
- the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP (40 CFR1501.3[2][v]).

Therefore, because Historic Properties are a subset of cultural resources, they are one aspect of the human environment defined by NEPA regulations.

1.4.2 National Historic Preservation Act

The federal law that covers cultural resources that could be affected by federal undertakings is the NHPA of 1966, as amended. Section 106 of the NHPA requires that federal agencies consider the effects of a federal undertaking on properties listed in or eligible for the NRHP. The agencies must afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on the undertaking. A federal undertaking is defined in 36 CFR 800.16(y):

> A federal undertaking means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license, or approval.

The regulations that stipulate the procedures for complying with NHPA Section 106 are in 36 CFR 800. The NHPA Section 106 regulations require:

- definition of the APE;
- identification of cultural resources within the APE;
- evaluation of the identified resources within the APE using NRHP eligibility criteria;
- determination of whether the effects of the undertaking or project on eligible resources will be adverse; and
- agreement on and implementation of efforts to resolve adverse effects, if necessary.

The federal agency must seek comment from the State Historic Preservation Officer (SHPO) and, in some cases, the ACHP, for its determinations of eligibility, effects, and proposed mitigation measures. NHPA Section 106 procedures for a specific project can be modified by negotiation of a Memorandum of Agreement or Programmatic Agreement between the federal agency, the SHPO, and, in some cases, the project proponent.

Effects to a cultural resource are potentially adverse if the lead federal agency, with the SHPO's concurrence, determines that the resource is eligible for the NRHP, making it a Historic Property, and if application of the Criteria of Adverse Effects (36 CFR 800.5[a][2] et seq.) results in the conclusion that the effects will be adverse. The NRHP eligibility criteria, contained in 36 CFR 60.4, are as follows:

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess aspects of integrity of location, design, setting, materials, workmanship, feeling, association, and:
>
> A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B. that are associated with the lives of persons significant in our past; or

C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. that have yielded, or may be likely to yield, information important in prehistory.

In addition, the resource must be at least 50 years old, barring exceptional circumstances (36 CFR 60.4). Resources that are eligible for or listed on the NRHP are *Historic Properties*.

Regulations implementing Section 106 of the NHPA (36 CFR 800.5) require that the federal agency, in consultation with the SHPO, apply the Criteria of Adverse Effect to Historic Properties within the APE. According to 36 CFR 800.5(a)(1), an adverse effect is defined as when an undertaking may:

> … alter, directly or indirectly, any of the characteristics of a Historic Property that qualify the property for inclusion in the [NRHP] in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

1.4.3 California Environmental Quality Act

CEQA is the state law that applies to a project's impacts on cultural resources. A *project* is an activity that may cause a direct or indirect physical change in the environment and that is undertaken or funded by a state or local agency, or that requires a permit, license, or lease from a state or local agency. CEQA requires that impacts to Historical Resources be identified and, if the impacts would be significant, then apply mitigation measures to reduce the impacts.

Per CEQA, a Historical Resource is a resource that:

1. is listed in or is eligible for the California Register of Historical Resources (CRHR) by the State Historical Resources Commission, or has been determined historically significant by the CEQA lead agency because it meets the eligibility criteria for the CRHR;
2. is included in a local register of historical resources, as defined in Public Resources Code (PRC) 5020.1(k); or
3. has been identified as significant in a historical resources survey, as defined in PRC 5024.1(g) (California Code of Regulations [CCR] Title 14, Section 15064.5[a]).

The eligibility criteria for the CRHR are as follows (CCR Title 14, Section 4852[b]):

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

In addition, the resource must retain integrity, which is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association (CCR Title 14, Section 4852[c]). Resources that have been determined eligible for the NRHP are automatically eligible for the CRHR.

Impacts to a Historical Resource, as defined by CEQA (listed in an official historic inventory or survey or eligible for the CRHR), are significant if the resource is demolished or destroyed, or if the characteristics that made the resource eligible are materially impaired (CCR Title 14, Section 15064.5[b]). Demolition or alteration of eligible buildings, structures, and features such that they would no longer be eligible would result in a significant impact. Whole or partial destruction of eligible archaeological sites would also result in a significant impact. In addition to impacts from construction resulting in destruction or physical alteration of an eligible resource, impacts to the integrity of setting (sometimes termed *visual impacts*) of physical features within a project area could also result in significant impacts.

Tribal cultural resources (TCRs) are defined in Section 21074 of the California PRC as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either listed in or eligible for the CRHR, or are included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or are 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 Section 5024.1. Section 1(b)(4) of Assembly Bill (AB) 52 established that only California Native American tribes, as defined in Section 21073 of the California PRC, are experts in the identification of TCRs and impacts thereto. Because ECORP does not meet the definition of a California Native American tribe, it only addresses information in this report for which it is qualified to identify and evaluate, and that which is needed to inform the cultural resources section of CEQA documents. This report, therefore, does not identify or evaluate TCRs. If any California Native American tribe ascribes additional importance or interpretation to archaeological resources described herein, or if the tribe provides information about non-archeological TCRs, such information would be documented separately in the AB 52 tribal consultation record between the tribe and lead agency and summarized in the TCRs section of the CEQA document, if applicable.

1.4.4 U.S. Army Corps of Engineers Regulations

If a project would affect Waters of the United States, the project proponent must meet requirements of Section 404 of the Clean Water Act (CWA), Section 10 of the Rivers and Harbors Act of 1899, and/or Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972, in addition to seeking authorization from the USACE. Apart from the requirements of the NHPA, all Historic Properties are subject to consideration under the USACE's NEPA processes (Appendix C of 33 CFR Part 325), and the USACE's public interest review requirements contained in 33 CFR 320.4. Historic Properties, therefore, are included as a factor in the district engineer's decision on each CWA 404 permit application.

1.5 Report Organization

This report documents the study and its findings and was prepared in conformance with the California Office of Historic Preservation's (OHP) *Archaeological Resource Management Reports: Recommended Contents and Format*. Appendix A includes a confirmation of the records search with the California

Historical Resources Information System (CHRIS) and historical society coordination. Appendix B contains documentation of a search of the Sacred Lands File (SLF). Appendix C presents photographs of the Project Area. Appendix D contains confidential cultural resource site locations and site records.

Sections 6253, 6254, and 6254.10 of the California Code authorize state agencies to exclude archaeological site information from public disclosure under the Public Records Act. In addition, the California Public Records Act (Government Code § 6250 et seq.) and California's open meeting laws (The Brown Act, Government Code § 54950 et seq.) protect the confidentiality of Native American cultural place information. Because the disclosure of information about the location of cultural resources is prohibited by the Archaeological Resources Protection Act of 1979 (16 U.S. Code 552 470hh) and Section 307103 of the NHPA, it is exempted from disclosure under Exemption 3 of the federal Freedom of Information Act (5 U.S. Code 552). Likewise, the Information Centers of the CHRIS maintained by the OHP prohibit public dissemination of records search information. In compliance with these requirements, the results of this archaeological resources investigation were prepared as a confidential document, which is not intended for public distribution.

2.0 SETTING

2.1 Environmental Setting

The Project Area is located along the western edge of Little Lake Valley. The Project Area follows a segment of North Main Street/Redwood Highway within the northern limits of the City of Willits. The northern segment of the Project Area is situated in an area labeled as the northern Little Lake Valley wetlands, where there is a confluence of streams. Upp Creek flows through the Project Area, under North Main Street/Redwood Highway to the northeast under the Upp Creek bridge. To the west of the Project Area, the landscape becomes a forested hillside, and to the east, grazing land. The southern segment of the Project Area is located in an urban area and within the northern limits of the City of Willits. Elevations within the Project Area range from 1,300 to 1,400 feet above mean sea level.

2.2 Geology and Soils

The Project Area is located in the geologic province of the North Coast Range, which is geologically made up of the Franciscan Formation. The Franciscan Formation is a late Mesozoic heterogeneous terrane composed of serpentine, sandstone, and other sedimentary rocks (Bailey et al. 1964).

To assess the potential for buried archaeological sites, ECORP reviewed reasonably available information regarding natural waters and soils. ECORP used geological data from the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) to characterize the geology of the local area in reference to archaeological history. Certain geological characteristics and formations are more likely to be of concern for archaeological materials. The underlying geomorphology of the Project Area consists of Quaternary alluvium and marine deposits (California Department of Conservation 2015).

According to the NRCS Web Soil Survey, five soil types make up the Project Area (NRCS 2019; Table 1).

Table 1. Soil Types within the Project Area

Map Unit Symbol	Map Unit Name	Soil Description	Drainage Classification	Depth to Restrictive Feature	Area (acres)	Portion of Project Area (percent)
115	Cole silty clay loam, 0 to 1 percent slopes, MLRA 14	Alluvium derived from sedimentary rock	Somewhat poorly drained	More than 80 inches	2.7	23.2
128	Gielow sandy loam, 0 to 5 percent slopes	Alluvium derived from sedimentary rock	Somewhat poorly drained	More than 80 inches	9.8	70.8
146	Hopland-Sanhedrin-Kekawaka complex, 30 to 50 percent slopes	Residuum weathered from sandstone and shale	Well drained	31 to 35 inches to paralithic bedrock	0.1	0.7
225	Yorktree-Hopland-Woodin complex, 30 to 50 percent slopes	Colluvium derived from shale and/or colluvium derived from graywacke and/or colluvium derived from sandstone and siltstone and/or residuum weathered from shale and/or residuum weathered from graywacke and/or residuum weathered from sandstone and silts	Well drained	51 to 55 inches to lithic bedrock	0.3	2.1
2150	Xerochrepts-Haploxeralfs-Argixerolls complex, 9 to 30 percent slopes, low ffd	Alluvium derived from igneous, metamorphic and sedimentary rock	Well drained	More than 80 inches	0.4	3.2
				Total	**13.3**	**100.0**

Note: MLRA = Major Land Resource Area

Due to the presence of alluvium along Upp Creek and seasonal runoff streams from Wild Oak Canyon, and given the likelihood of pre-contact archaeological sites to be located along perennial waterways, there exists a *high* potential for buried pre-contact archaeological sites within the Project Area.

Soil composition and proximity to waterways, however, are not the only factors in determining potential for buried resources; this is discussed further in Section 7.2.

2.3 Vegetation and Wildlife

The Project Area is almost entirely vacant, with small patches of ruderal weedy vegetation. The southern and western boundary is made up of ruderal and nonnative grassland habitat adjacent to East Hill Road and the railroad. ECORP archaeologists observed wild oats, mustard, ripgut brome, and prickly lettuce, with scattered patches of Himalayan blackberry. The eastern boundary of the Project Area borders U.S. Highway 101 (US 101), which supports ruderal and nonnative grassland habitat with a few scattered Coast redwood, interior live oak, and pine trees planted as part of the landscape corridor.

Wildlife use within the Project Area is expected to be minimal due to the highly disturbed nature of the Project Area and its close proximity to developed areas to the north, east, and south. Bird species found within the Project Area during this assessment included common raven, northern mockingbird, western bluebird, European starling, white-crowned sparrow, yellow-rumped warbler, and Brewer's blackbird.

3.0 CULTURAL CONTEXT

3.1 Regional Pre-Contact History

It is generally believed that human occupation of California began at least 10,000 years before present (BP). The archaeological record indicates that between approximately 10,000 and 8,000 BP, a predominantly hunting economy existed, characterized by archaeological sites containing numerous projectile points and butchered large animal bones. Animals that were hunted probably consisted mostly of large species still alive today. Bones of extinct species have been found but cannot definitely be associated with human artifacts. Although small animal bones and plant grinding tools are rarely found within archaeological sites of this period, small game and floral foods were probably exploited on a limited basis. A lack of deep cultural deposits from this period suggests that groups included only small numbers of individuals who did not often stay in one place for extended periods (Wallace 1978).

Around 8,000 BP, there was a shift in focus from hunting towards a greater reliance on plant resources. Archaeological evidence of this trend consists of a much greater number of milling tools (e.g., metates and manos) for processing seeds and other vegetable matter. This period, which extended until around 5,000 BP, is sometimes referred to as the Millingstone Horizon (Wallace 1978). Projectile points are found in archaeological sites from this period, but they are far fewer in number than from sites dating to before 8,000 BP. An increase in the size of groups and the stability of settlements is indicated by deep, extensive middens at some sites from this period (Wallace 1978).

Archaeological evidence indicates that reliance on both plant gathering and hunting continued as in the previous period, with more specialized adaptation to particular environments in sites dating to after about 5,000 BP. Mortars and pestles were added to metates and manos for grinding seeds and other vegetable material. Flaked-stone tools became more refined and specialized, and bone tools were more common. New peoples from the Great Basin began entering Southern California during this period. These immigrants, who spoke a language of the Uto-Aztecan linguistic stock, seem to have displaced or absorbed the earlier population of Hokan-speaking peoples. During this period, known as the Late Horizon, population densities were higher than before, and settlement became concentrated in villages

and communities along the coast and interior valleys (Erlandson 1994; McCawley 1996). Regional subcultures also started to develop, each with its own geographical territory and language or dialect (Kroeber 1925; McCawley 1996; Moratto 1984). These were most likely the basis for the groups that the first Europeans encountered during the 18th century (Wallace 1978). Despite the regional differences, many material culture traits were shared among groups, indicating a great deal of interaction (Erlandson 1994). The presence of small projectile points indicates the introduction of the bow and arrow into the region sometime around 2,000 BP (Wallace 1978; Moratto 1984).

3.2 Local Pre-Contact History

This section provides a regional overview with contextual elements drawn from California's Bay Area region and slightly north and inland. Although there is great archaeological potential in the northern Bay Area, relatively little work has been accomplished. As mentioned above, around 8,000 BP, there was a shift in focus from hunting towards a greater reliance on plant resources, with a slight reduction in mobility. Archaeological evidence of this trend consists of a much greater number of milling tools (e.g., metates and manos) for processing seeds and other vegetable matter. This period, which extended until around 3,500 BC (5,500 BP), is referred to as the Early Holocene (Lower Archaic) (Milliken et al. 2007). Sites associated with this time period, such as the Metcalf Creek Site (CA-SCL-178), Duncan's Landing Site (CA-SON-348/H), and a burial at CA-CCO-637, indicate the presence of millingslabs and handstones, along with a variety of wide-stemmed and leaf-shaped projectile points, characteristic of a diverse and mobile forager economic pattern (Fredrickson 1989 cited in Milliken et al. 2007).

The Early Period (Middle Archaic), between about 3,500 and 500 BC (5,500 and 2,450 BP) showed the first signs of increased sedentism and regional trade networks (Milliken et al. 2007). *Olivella* and *Haliotis* shell beads, sometimes associated with red ochre, began to appear in burials dating to this time period, such that rectangular *Haliotis* and *Olivella* beads are the markers of the Early Period bead horizon until 2,800 years ago (Ingram 1998; Wallace and Lathrop 1975; Gerow 1968; Milliken et al. 2007). Obsidian trade, particularly that which originated from the obsidian sources of Clear Lake and Napa, was also prevalent during this time period.

The Lower Middle Period (Initial Upper Archaic) between 500 BC and AD 430 (2,450 and 1,520 BP) is signaled by the virtual disappearance of the rectangular shell beads, which had been in use for the previous three millennia. They were replaced by split-beveled and tiny saucer *Olivella* beads, which have been interpreted as decorative and religious in function. The sedentism that had begun in the Early Period continued during the Lower Middle Period, by which time thick, rich, black midden soils had accumulated at habitation sites. Bone and shell tools and ornaments began to appear as well (Milliken et al. 2007).

The Upper Middle Period (Late Upper Archaic) between AD 430 and 1050 (1,520 and 900 BP) was marked by a dramatic cultural disruption. The *Olivella* saucer bead network completely collapsed, and half of the sites abandoned. The shell bead assemblages and burial patterns of this time period reflect a new cultural tradition emerging in the Bay Area, referred to as the Megaños complex. The new cultural expressions that accompanied the Megaños complex has been suggested to have been brought by a new group of people - one that preferred sea otter pelts for cloaks or vests and dorsal extended burials (Milliken et al. 2007).

The Initial Late Period (Lower Emergent) and Terminal Late Period (Protohistoric) occurred between AD 1050 and 1550 (900 and 400 BP) and between AD 1550 and 1776, respectively. Due to the arrival of Euro-Americans in the region, cultural traditions of prehistoric humans were affected as well. It included fully shaped show mortars, new *Olivella* and *Haliotis* bead types and ornaments, effigies, arrow-sized projectile points, and social elite control of obsidian, which point towards an increase in social stratification. The Terminal Late Period was characterized by the emergence of clam shell disk beads, which abruptly replaced the signature *Olivella* bead types. Some suggest that the change in shell bead types, mortuary wealth distribution, and technology shifts was a result of populations exceeding the environment's carrying capacity, or forced migrations due to conflict, or both (Milliken et al. 2007).

3.3 Ethnohistory

Prior to the arrival of Euro-Americans in the region, indigenous groups speaking more than 100 different languages and occupying a variety of ecological settings inhabited California. Kroeber (1925, 1936), and others (i.e., Murdock 1960; Driver 1961), recognized the uniqueness of California's indigenous groups and classified them as belonging to the California culture area. Kroeber (1925) further subdivided California into four subculture areas: Northwestern, Northeastern, Southern, and Central.

Ethnographically, the Project Area is the tribal territory of the Northern Pomo, one of seven linguistic divisions of the Pomo language. The Northern Pomo territory includes 22 miles of coastline and extends 50 miles inland to the northwestern shores of Clear Lake. The Northern Pomo territory includes land surrounding the present-day towns of Fort Bragg, Noyo, Mendocino, Ukiah, Willits, and Calpella. This large territory includes oak-pine and hardwood forests, chaparral and coastal prairie vegetation communities, and contains the north coast redwood and coastal cypress and pine forests (Kroeber 1925).

The Northern Pomo did not have a word for themselves, as opposed to other native speakers of other dialects or languages, but a general term for "people" could be derived from an element incorporated into some tribelet names based on location: *Chamay* (McClendon and Oswalt 1978:280). Culturally, linguistically, and socially, the Western and Northeastern Pomo were grouped into 25 separate, politically distinct groups called tribelets. Other linguistic divisions include the Southern, Kashaya, Central, and Northern Pomo (Bean and Theodoratus 1978).

The Northern Pomo lived on the coast and inland. They seasonally exploited marine resources in the summer such as abalone, seaweed, kelp, mussels, and sea fish. Most inland villages were permanent settlements with larger populations than those on the coast but were bound closely with the smaller villages by trade and kinship ties (Bean and Theodoratus 1978). The Northern Pomo shared the Ukiah Valley with the Central Pomo. Pinoleville Rancheria, located north of the Project Area on Ackerman Creek, was inhabited mainly by Native Americans from Potter Valley. The Rancheria was originally located in the south-central part of Ukiah but was later reestablished in 1893 to its site on Ackerman Creek (Kroeber 1925). The Pinoleville Rancheria was terminated in 1966.

A Pomo tribelet was composed of one or more bilaterally related extended kinship groups, ranging in size from 100 to 2,000 people. Each had a headman or minor chief; these men together composed the ruling elite of the individual tribelets and functioned as council. The tribelets were independent political units

but sometimes did confederate. On the Russian River, a confederation of several linked tribelets combined to control 16 miles of the river plus the adjacent land and hills. The Pomo maintained regular military trade alliances among themselves and with other groups. Kin groups were the most significant social unit, united by the ghost and secret societies. However, non-kin friendships were maintained by a system of reciprocal gift exchange (Bean and Theodoratus 1978).

The Pomo ranked individuals by family, background, wealth, and individual achievement. Special offices were inherited, and other social differences were based on membership in the secret societies, such as the Kuksu cult, which had selective membership. Ritual leaders and chiefs ranked the highest, with shamans and sucking doctors right below them. Professions required a system of apprenticeship and mentorship, and included craft specialties, chieftainships, and shamanistic roles. The most dramatic social role was that of the bear doctor, which required long, specialized training and harsh ritual restrictions (Bean and Theodoratus 1978).

The Pomo had clearly defined concepts of land use rights. Some areas were commonly controlled, and some areas were the right of one family or kin group. Individuals owned all property manufactured by themselves and were free to do with it what they were inclined. The Pomo used stone mortar and pestle to grind foods and herbs, and knives and axes were made from obsidian or chert. Bone was used to make awls and fishhooks. The Pomo also made intricately woven, waterproof baskets with designed geometric patterns and adornments of feathers, shells, and beads. (Bean and Theodoratus 1978).

Acorns were a staple food, and other vegetal foods included buckeye, seeds from at least 15 different grasses, and edible greens were eaten directly or dried and stored. Grasshoppers, caterpillars, and larvae were also eaten, and these foods were gathered regularly. The taking of game was one of the most important duties of men; it required careful preparation and observance of special regulations. Group hunting was either done by a single hunter with a dear-head mask and disguise assisted by several drivers and packers, or by erecting a brush fence and through which the herd was driven. They typically used bow and arrow to hunt game. Hunters maintained a careful seasonal balance between the size of the herd and available vegetation to keep the herd from straying out of the territory (Bean and Theodoratus 1978).

Clothing was worn by men for ritual, utilitarian, or social purposes; otherwise, they were nude most of the time. When weather called for it, mantles of tule bark were worn, while men of great wealth wore animal skins. Women always wore a skirt of some kind, in the inland area made mostly of shredded redwood bark. During cold weather, both sexes wore rabbit-skin blankets. Feather robes were sometimes worn in ceremony, but usually only by wealthy men. Personal adornments such as bracelets, belts, and neckbands were made of shell beads, bone, and feathers, and were indicators of wealth and social positions (Bean and Theodoratus 1978).

The Pomo made three types of houses: temporary shelters, dwelling houses, and subterranean houses. Small family houses were built of redwood bark slabs with the ground around the house surrounded by a brush fence for drying acorns. Multi-family communal structures built along the Russian River were circular or L-shaped and constructed of brush, grass, or tule. Semi-subterranean structures served two main functions: a smaller men's sweathouse, and a larger assembly house for dancing and ceremonies. A

special earth-covered lodge, 40-60 feet in diameter, was used only for Ghost Dance ceremonies (Bean and Theodoratus 1978).

The life cycle of the Pomo began at birth, although Pomo practiced various forms of birth control, such as abortion and coitus interruptus; these practices were supported by the idea that a fetus and baby immediately after birth were not alive. Birth usually took place within a special shelter in which the new baby and mother remained for six weeks after delivery. Children were named around age one after deceased kinsmen, but only the father and mother called the child by their name; others used kinship terms or nicknames. Boys were taught certain songs during childhood until age 12, when they were presented with a net and bow and arrow. A girl's first menses was the most important event in her life, and was marked by confinement to the menstrual hut, dietary restrictions, and instruction on her new role as a woman. Marriages were arranged by the two families, but the prospective marriage individuals were always consulted. A girl was not usually forced into marriage, but she could not marry against the wishes of her family. The groom's family gave gifts to the bride's family, and after they were wed, the couple moved into the groom's house. Divorce was simple and involved little ceremony (Bean and Theodoratus 1978).

The first contact between Pomo and non-Native Americans may have occurred as early as 1579 when Sir Francis Drake visited the bay believed to be just south of their territory. By the late 1700s, European trade goods were arriving from San Francisco, and the Spanish were raiding Pomo territories for potential converts to their mission at the Presidio. By 1817, Mission San Rafael was established, extending Spanish influence into Pomo territory, and in 1823 Mission San Francisco de Solano extended influence into Wappo territory. At least 600 Pomo were baptized at these two missions (Bean and Theodoratus 1978:299). About the same time, Russians began exploiting Pomo territory on the coast and established Fort Ross in Kashaya territory in 1811. As opposed to the forced missionization of native people by the Spanish, the Russians contracted with the Pomo for use of their area and employed tribal members as agricultural workers. Many Pomo adopted Russian customs and occasionally intermarried with Russians (Bean and Theodoratus 1978).

3.4 Regional History

The first European to visit California was Spanish maritime explorer Juan Rodriguez Cabrillo in 1542. Cabrillo was sent north by the Viceroy of New Spain (Mexico) to look for the Northwest Passage. Cabrillo visited San Diego Bay, Catalina Island, San Pedro Bay, and the northern Channel Islands. The English adventurer Francis Drake visited the Miwok Native American group at Drake's Bay or Bodega Bay in 1579. Sebastian Vizcaíno explored the coast as far north as Monterey in 1602. He reported that Monterey was an excellent location for a port (Castillo 1978).

Colonization of California began with the Spanish Portolá land expedition. The expedition, led by Captain Gaspar de Portolá of the Spanish army and Father Junipero Serra, a Franciscan missionary, explored the California coast from San Diego to the Monterey Bay Area in 1769. As a result of this expedition, Spanish missions to convert the native population, presidios (forts), and pueblos (towns) were established. The Franciscan missionary friars established 21 missions in Alta California (the area north of Baja California) beginning with Mission San Diego de Alcalá in 1769 and ending with the Mission San Francisco Solano in

Sonoma established in 1823. The purpose of the missions and presidios was to establish Spanish economic, military, political, and religious control over the Alta California territory. No missions were established in the Central Valley. The nearest missions were in the vicinity of San Francisco Bay and included Mission San Francisco de Asís (Dolores) established in 1776 on the San Francisco Peninsula, Mission Santa Clara de Asís at the south end of San Francisco Bay in 1777, Mission San José in 1797, Mission San Rafael Arcángel, established as an *asistencia* in 1817 and a full mission in 1823, and Mission San Francisco Solano in Sonoma in 1823 (Castillo 1978; California Spanish Missions 2011). Presidios were established at San Francisco and Monterey. The Spanish took little interest in the area and did not establish any missions or settlements in the Central Valley.

After Mexico became independent from Spain in 1821, what is now California became the Mexican province of Alta California with its capital at Monterey. In 1827, American trapper Jedediah Smith traveled along the Sacramento River and into the San Joaquin Valley to meet other trappers of his company who were camped there, but no permanent settlements were established by the fur trappers (Thompson and West 1880).

The Mexican government closed the missions in the 1830s and former mission lands, as well as previously unoccupied areas, were granted to retired soldiers and other Mexican citizens for use as cattle ranches. Much of the land along the coast and in the interior valleys became part of Mexican land grants or "ranchos" (Robinson 1948). During the Mexican period there were small towns at San Francisco (then known as Yerba Buena) and Monterey. The rancho owners lived in one of the towns or in an adobe house on the rancho. The Mexican Period includes the years 1821 to 1848.

John Sutter, a European immigrant, built a fort at the confluence of the Sacramento and American rivers in 1839 and petitioned the Mexican governor of Alta California for a land grant, which he received in 1841. Sutter built a flour mill and grew wheat near the fort (Bidwell 1971). Gold was discovered in the flume of Sutter's lumber mill at Coloma on the South Fork of the American River in January 1848 (Marshall 1971). The discovery of gold initiated the 1849 California Gold Rush, which brought thousands of miners and settlers to the Sierra foothills east and southeast of Sacramento.

The American Period began when the Treaty of Guadalupe Hidalgo was signed between Mexico and the United States in 1848. As a result of the treaty, Alta California became part of the United States as the territory of California. Rapid population increase occasioned by the Gold Rush of 1849 allowed California to become a state in 1850. Most Mexican land grants were confirmed to the grantees by U.S. courts, but usually with more restricted boundaries, which were surveyed by the U.S. Surveyor General's office. Land outside the land grants became federal public land which was surveyed into sections, quarter-sections, and quarter-quarter sections. The federal public land could be purchased at a low fixed price per acre or could be obtained through homesteading (after 1862) (Robinson 1948).

3.5 Project Area History

Willits originated from a store that was opened in 1859 by Kirk Brier. Soon after, a blacksmith shop and a saloon opened in the town. Hiram Willits came to Mendocino County in 1857 and purchased the store in town. Willits was incorporated in 1888 and was named after Hiram Willits (Kyle 2002).

The San Francisco & North Pacific Railroad reached Ukiah from San Francisco in 1889. This railway was purchased by the Northwestern Pacific Railroad in 1907, and the rail line was extended to Eureka by 1915 (Robertson 1998). The railroad opened the area's agricultural and logging activities to the Bay Area markets.

North Main Street/Redwood Highway provides access to US 101 and the Mendocino Coast. Around 1937, US 101/Redwood Highway was greatly improved to the west of Willits. North Main Street used to be the main route of US 101 before the California Department of Transportation (Caltrans) constructed the bypass around Willits. Since the completion of the US 101 bypass, the North Main Street/Redwood Highway right-of-way has been a Mendocino County-maintained roadway.

3.6 Historic Context of California Highway Development

Following is a brief context of the theme of road development, specifically during the period that the North Main Street/Redwood Highway, previously a part US 101, was constructed. The context is included to better understand the social and economic factors associated with road and highway development and how the Project Area fits within that context.

Road development in the U.S. primarily consisted of expanding local urban streets, utilitarian in design and function, in the eastern U.S. and moving westward across the Nation. California roadways, in particular, largely consisted of dirt utilitarian roads from the period of the Gold Rush through the turn of the century. From 1890 to 1926, the groundwork was laid for the modern road network, largely due to a number of factors including the advent of the pneumatic tire and the expansion of production of the affordable personal automobile (the Ford Model T being the industry leader). These new convenient modes of transportation began the slow decline in railroad use, consisting of several hundred thousand miles of track in the U.S. and previously considered the most efficient and reliable mode of transportation and shipping. This decline led automobile and automobile accessory manufacturers to usher in the "Good Roads Movement" (Marriott 2010).

The Good Roads Movement was first advocated by bicycle organizations seeking hard-surfaced roads. Automobile industry advocates, however, quickly found the development of a better-planned road network a greater concern. Despite national efforts to develop hard-surface roads, the prohibitive cost caused a priority shift in the Good Roads Movement from hard-surface roads to a well-planned road network. In California, many of these road networks began to be constructed during the late part of the 19th and into the early part of the 20th century, particularly in rural areas. Rural road development was crucial for the expansion of agricultural lands because farmers and ranchers needed a better network of roads to transport their crops or goods from the farms and fields to train stations for transport. Prior to the Good Roads Movement, rural farmers depended on extremely underdeveloped roads, consisting mostly of known paths or routes to get to those stations while access to urban or other rural areas was limited because existing road networks often did not connect easily with each other. The agricultural industry began to flourish with use of the new road networks as a result of the Good Roads Movement. Light-duty developed roads were constructed and used by rural farmers and ranchers to transport their goods not only to local train stations but, through the new network of improved roads, to other urban areas or even other rural towns (Marriott 2010).

Eventually, by the end of the Good Roads Movement, from 1910 to 1926, large intrastate and interstate highways, even transcontinental highways such as the US 101, were constructed. These large networks of roads were primarily in response to the advent of World War I and the Nation's realization that if the war was ever fought on U.S. soil, the existing road networks could not support the necessary military mobilization for the war effort. Therefore, better connectivity in large roads and urban centers became a top priority toward the end of the Good Roads Movement. Fledgling highways began popping up throughout California and the rest of the Nation. These highways would allow quicker transportation across all-weather road surfaces from city to city. Pavement quickly became the new medium for these longer highways and was also used extensively in these larger freeways and roads. Eventually, the fledgling highways throughout the nation, including California, set the groundwork for the U.S. Highway System that was established in 1926. The objective of the new system was to fix the confusion of named roads and route markings that troubled travelers along these longer roads and highways by developing an interstate/intrastate route numbering system. Prior to the advent of the highway system, most roads were named depending on the location of the segment of road. The names would often change as roads extended in length depending on county or city, causing a great deal of confusion. The U.S. highway numbering system was designed so longer highways and routes that crossed state lines would no longer be named roads but would instead have a uniform set of numbers. Under the system, the highways were numbered so even numbered routes would run east–west, whereas odd numbered routes would run north–south. The old highway system, eventually discontinued use by 1956, but it laid the framework for the modern highway network (Hokanson 1999). The route numbering for the Interstate System is the opposite of the U.S. Highway System.

In 1964 the California Division of Highways began a major campaign to modernize the highway system in California. The first step in this process was, again, to re-label the State's highways. In addition to renumbering existing highways in California, the Division of Highways appointed additional roads to the State Highway System network. Many existing roads were upgraded to highway status, given a state route number, and improved to meet California State Highways standards.

3.7 U.S. Highway 101

The history of what would become US 101 in Willits began with the approval of the 1909 First State Highway Bond Act. The First State Highway Bond Act was approved by voters during 1910 and was the genesis point of some of the most notable highways in California. Legislative Route Number 1 ("LRN 1") as originally plotted, was a new state highway that was designated between San Francisco north to Crescent City. The route of LRN-1 would extend to the Oregon State Line during the 1919 Third State Bond Act and became known as the Redwood Highway. LRN-1 functioned as a main route for traffic through the City of Willits.

The Federal Highway System was established in November of 1926, and LRN-1 became US 101, extending from San Franisco north to Crescent City.

In 2016, Caltrans completed the realignment of US 101 to bypass Willits between Bald Mountain Road and the northern portion of the Project Area. The portion of US 101 passing through Willits was split into two portions. The southern portion became State Route 20 and connected Willits with the coast. The

northern portion was relinquished to the City of Willits, fully repaved by Caltrans in 2018, and identified as North Main Street/Redwood Highway (Tom 2021). Due to the change from city to county ownership, this segment of North Main Street/Redwood Highway is deemed as the Abandoned Highway 101.

4.0 METHODS

4.1 Personnel Qualifications

Registered Professional Archaeologist (RPA) Brian S. Marks, Ph.D., who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeology (36 CFR Part 61), directed this assessment. Dr. Marks is a Senior Archaeologist with more than 26 years of experience. Estevan Ramirez, RPA conducted the records search and data gathering. Dr. Marks supervised this archaeological resources investigation. Jeremy Adams was the lead architectural historian for the project, and with Andrew Bursan, conducted the built environment evaluation. Estevan Ramirez, RPA, conducted the fieldwork. Estevan Ramirez, RPA, prepared this technical report. Dr. Marks also provided technical report review and quality assurance.

Dr. Marks is the Principal Investigator and has been an archaeologist since 1997. He has been working in cultural resources management in California since 2010, following eight years of archaeological work in the southeast United States. Dr. Marks holds a Ph.D. and an M.S. in Anthropology. He has participated in or supervised hundreds of survey, testing, and data recovery excavations and has recorded and mapped a multitude of pre-contact and historical sites, including submerged pre-contact sites, Civil War battlefields, Gold Rush boom towns, nuclear power plants, and others. He has conducted evaluations of cultural resources for eligibility to the NRHP and CRHR and is well-versed in impact assessment and development of mitigation measures for CEQA and Section 106 (NHPA) projects. Dr. Marks is the Assistant Director for Cultural Resources at ECORP.

Jeremy Adams meets the Secretary of the Interior's Standards for Architectural History and History. He holds an M.A. in History (Public History) and a B.A. in History and has 15 years of experience specializing in historic resources of the built environment and is skilled in carrying out historical research at repositories such as city, state, and private archives, libraries, CHRIS information centers, and historical societies. He has experience conducting field reconnaissance and intensive surveys and has conducted evaluations of cultural resources for eligibility to the NRHP and CRHR.

Andrew Bursan is a Senior Architectural Historian with 16 years (started in 2023 with ECORP) of combined experience in historic preservation and land planning with experience in project management as well as historic research and report writing. Mr. Bursan has worked with Caltrans, Los Angeles County Metropolitan Transportation Authority (Metro), cities of Pasadena, Santa Monica, Los Angeles, Santa Barbara, Arroyo Grande, and other state and local municipalities. Experience includes architectural surveys, reconnaissance-level surveys, historical assessments, and extensive historical research. Prepared historic context statements, technical reports, and impact analysis for cultural resources in environmental impact reports. Breadth of work includes major transportation projects, intensive archival research, city-wide surveys, and analysis of individual properties under CEQA, Section106, Section 4(f), and NEPA.

Estevan Ramirez, RPA is an Associate Archaeologist who has been involved in archaeological research since 2018 and has worked in cultural resources management since 2020. He holds a B.A. and M.A. in Anthropology and meets the Secretary of the Interior's Professional Qualification Standards for precontact and historic archaeology. Mr. Ramirez's fieldwork experience includes archaeological surveys, testing and excavation, and artifact photography. He is proficient in the cataloging of archaeological material, utilizing geographic information systems, and photogrammetric means of documentation via aerial and terrestrial surveys. His analytical training is in precontact architecture and ceramic analysis.

4.2 Records Search Methods

ECORP conducted a records search for the Project Area at the Northwest Information Center (NWIC) of the CHRIS at Sonoma State University on March 6, 2026 (NWIC File No. 25-1332). The purpose of the records search is to determine the extent of previous surveys within a 0.5-mile (800-meter) radius of the Proposed Project Area, in addition to whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area. NWIC staff completed and returned the records search to ECORP on April 7, 2026.

In addition to the official records and maps for archaeological sites and surveys in Mendocino County, ECORP reviewed the following historical references: Built Environment Resource Directory (BERD) for Mendocino County (OHP 2026a); Archaeological Resource Directory (ARD) (OHP 2026b), the National Register Information System (National Park Service [NPS] 2022); California Historical Landmarks (CHL; OHP 1996, 2022); California Points of Historical Interest (OHP 1992 and updates); Directory of Properties in the Historical Resources Inventory (OHP 1999); Caltrans Local Bridge Survey (Caltrans 2019); Caltrans State Bridge Survey (Caltrans 2018); and *Historic Spots in California* (Kyle 2002).

ECORP also reviewed other references, including a RealQuest Property Search and historic General Land Office (GLO) land patent records (Bureau of Land Management [BLM] 2022). ECORP reviewed the following historical maps:

- 1859 BLM GLO Plat map for Township 18 North, Range 13 West;
- 1859 BLM GLO Plat map for Township 18 North, Range 14 West;
- 1867 BLM GLO Plat map for Township 18 North, Range 13 West;
- 1877 BLM GLO Plat map for Township 18 North, Range 14 West;
- 1882 BLM GLO Plat map for Township 18 North, Range 13 West;
- 1884 California Office of the State Engineer map (1:253,400 scale);
- 1922 USGS Willits, California quadrangle (1:24,000 scale);
- 1942 USGS Willits, California quadrangle (1:62,500 scale);
- 1961 USGS Willits, California quadrangle (1:62,500 scale); and
- 1991 USGS Willits, California quadrangle (1:24,000 scale).

ECORP reviewed historical aerial photographs from 1931, 1941, 1985, 1993, 2003, 2011, 2013, 2017, and 2023 for any indications of Project Area usage and built environment.

ECORP was unable to locate a local historical registry the covered the Project Area or the City of Willits.

4.3 Sacred Lands File Coordination Methods

In addition to the records search, ECORP contacted the California Native American Heritage Commission (NAHC) on March 6, 2026 to request a search of the SLF for the Project Area. This search determines whether the California Native American tribes within the Project Area have recorded sacred lands in the SLF, which is populated by members of the Native American community with knowledge about the locations of TCRs. In requesting a search of the SLF, ECORP solicited information from the Native American community regarding TCRs; however, the responsibility to formally consult with the Native American community lies exclusively with the federal and local agencies under applicable state and federal laws. The lead agencies do not delegate government-to-government authority to any private entity to conduct tribal consultation.

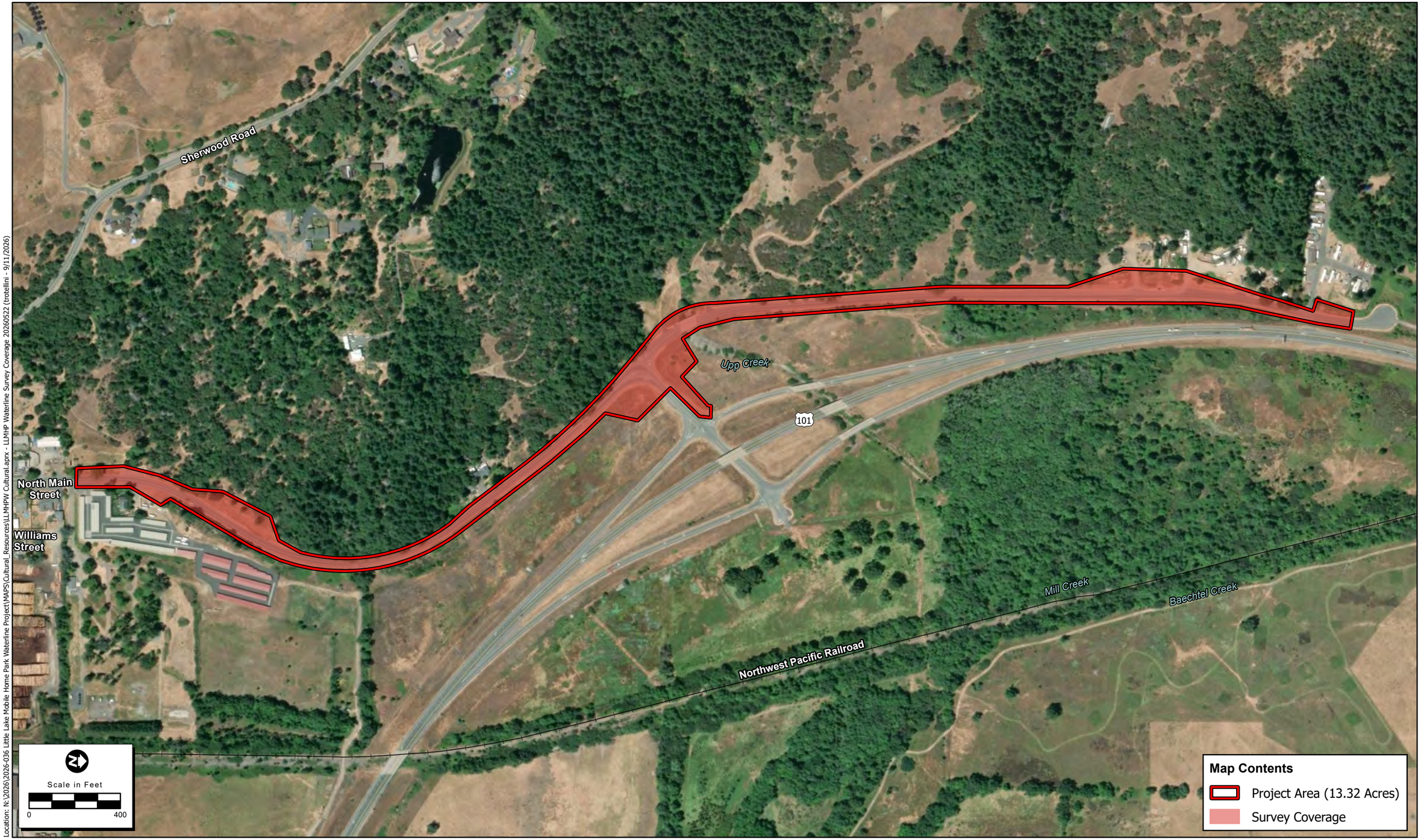
4.4 Other Interested Party Consultation Methods

ECORP mailed a letter to the Mendocino County Historical Society on March 6, 2026, to solicit comments or obtain historical information that the repository might have regarding events, people, or resources of historical significance in the area.

4.5 Field Methods

ECORP subjected the Project Area to an intensive pedestrian survey on April 22, 2026, under the guidance of the *Secretary of the Interior's Standards for the Identification of Historic Properties* (NPS 1983), using 15-meter transects (Figure 3). At the time, ECORP archaeologists examined the ground surface for indications of surface or subsurface cultural resources and inspected the general morphological characteristics of the ground surface for indications of subsurface deposits that may be manifested on the surface, such as circular depressions or ditches. Whenever possible, the archaeologists examined the locations of subsurface exposures caused by such factors as rodent activity, water or soil erosion, or vegetation disturbances for artifacts or for indications of buried deposits. ECORP did not conduct any subsurface investigations or artifact collections during the pedestrian survey.

Standard professional practice requires that all cultural resources encountered during the survey be recorded using California Department of Parks and Recreation (DPR) 523-series forms approved by the OHP. The resources are usually photographed, mapped using a handheld GPS receiver, and sketched, as necessary, to document their presence using appropriate DPR forms.



Location: N:\2026\2026-036 Little Lake Mobile Home Park Waterline Project\MAPS\Cultural_Resources\LLMHPW Cultural.aprx - LLMHP Waterline Survey Coverage 20260522 (trotellini - 9/11/2026)

Map Date: 9/11/2026

Sources: ESRI, Vantor (2025), Open Street Maps (2026), USGS (2026)

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 3. Survey Coverage

2026-036 Little Lake MHP Waterline

5.0 RESULTS

5.1 Records Search

The records search consisted of a review of previous research and literature, records on file with the NWIC for previously recorded resources, and historical aerial photographs and maps of the vicinity.

5.1.1 Previous Research

The records search results indicate that 29 previous cultural resources investigations have been conducted within 0.5 mile of the Project Area, covering approximately 85 percent of the total records search area (Appendix A). These studies revealed the presence of pre-contact sites, including lithic scatters and habitation sites, and historical sites, including railroads and historic-period structures. The previous studies were conducted between 1980 and 2023 and range in size from 0.25 to 125 acres. Of the 29 studies conducted within the 0.5-mile search radius, 10 included portions of the Project Area (Table 2).

Table 2. Previous Cultural Studies within the Project Area

Report No. (S-)	Author(s)	Report Title	Year
14121	Michael F. Rondeau	Archaeological Survey Report for the Proposed Willits Bypass on Highway 101 Near Willits, California, 1-MEN-101 P.M. 43.5/51.3, 01101-262000, Volume 1 and Volume 2	1992
23633a	Blossom Hamusek	Positive Archaeological Survey Report for the Willitts Bypass Project, Mendocino County, CA Volume 1	1999
23633b	Blossom Hamusek	Positive Archaeological Survey Report for the Willits Bypass Project, Mendocino County, California: Volume 2, Archaeological Survey Coverage Maps	1999
23633c	Blossom Hamusek	Positive Archaeological Survey Report for the Willits Bypass Project, Mendocino County, California, Volume 3: Confidential Appendices	1999
34425	Erick Wulf	Historic Property Survey Report for the Proposed Drainage System Repairs at 36 Locations on Highway 101 from Willits to Leggett, Mendocino County, California, 01-MEN-101 KP 74.4/136.0 (PM 46.2/84.5). EA 01-40280	2008
34425a	Erick Wulf	Archaeological Survey Report for the Proposed Drainage System Repairs at 36 Locations on Highway 101 from Willits to Leggett, Mendocino County, California, 01-MEN-101 KP 74.4/136.0 (PM 46.2/84.5) EA 01-40280	2008
34425b	Joan Fine	Culvert Rehabilitation Project on U.S. Highway 101 in Mendocino County, California	2008
36655	Scott A. Williams	Supplemental Historic Property Survey Report Willits Bypass Mitigation Parcels, W Line, and Possible Staging Area	2009
36655a	Scott A. Williams	Supplemental Archaeological Survey Report, Willits Bypass Mitigation Parcels, W Line, and possible Staging Area	2009

Table 2. Previous Cultural Studies within the Project Area			
Report No. (S-)	**Author(s)**	**Report Title**	**Year**
36655b	Milford Wayne Donaldson	FHWA000717A; HAD-CA File #01-Men-101 K.P. 70.0/82.6 (PM 43.5/51.3) Willits Bypass Project EA 01-262000 Document # P53417	2005
36655c	Gail St. John	Historical Resources Evaluation Report for Mitigation Parcels for the Proposed Willits Bypass Project, State Route 101, Mendocino County, California	2009
36655d	Scott A. Williams	ESA Action Plan (Finding of No Adverse Effect with Standard Conditions)	2009
46474	Tad Schwennesen	PG&E Cultural Resources Constraints Report: WILLITS 1103 - Willits Pole and Anchor Replacements, PM Number: 31096650	2015
48113	Denise Jurich and Jena Rogers	Construction/Archaeological Monitoring and Site Summary Report (CA-MEN-3635, CA-MEN-3636, CA-MEN-3637, and CA-MEN-3638), The Willits Bypass Project, 01-MEN-101 PM: R43.1/49.0, Contract Number 03A1923, EA: 01-26200, EFIS ID #0100000005	2014
48113a	Sara Thomas	Supplemental Esa Action Plan, Willits Bypass Project, 01-262004	2013
48113b	Richard E. Hughes	Geochemical Research Laboratory Letter Report 2014-13: Energy Dispersive X-ray Fluorescence Analysis of Obsidian Debitage From Four Archaeological Sites Located Within the Willits Bypass Project, Mendocino County, California (letter report)	2014
48113c	Thomas M. Origer	Obsidian Hydration Band Analysis of 20 Specimens from the Willits Bypass Project Area (letter report)	2014
48785	Seetha N. Reddy, Scott Kremkau, Justin Lev-Tov, Patrick Stanton, and Jason Windingstad	Final Report Extended Phase I and Phase II Geoarchaeological and Archaeological Investigations along U.S. Route 101 for the Willits Bypass Project, Little Lake Valley, Mendocino County, California, 01-MEN-101 (PM R43.1/49.0), Project #0100000005.1	2013
48785a	Jason Windingstad	Buried Site Model for the US Highway 101 Willits Bypass Project, Little Lake Valley, Mendocino County, California	2010
48785b	Jason Windingstad and Seetha Reddy	Extended Phase 1 Geoarchaeological & Archaeological Investigations along US Route 101, Willits Bypass Project, Little Lake Valley, Mendocino County, California	2012
52625	Robert Jackson, Lisa Shapiro, Amy Kovak, Graham Dalldorf, and William Shapiro	Phase III Data Recovery Investigation at Prehistoric Archaeological Site CA-MEN-3638, in the Willits Bypass Project Area, Mendocino County, California: 01-MEN-101, PM R43.1/49.0, EA 01-262003; E-FIS 0100000005 - Phase 3, Agreement No. 03A2156, Task Order 15	2017
55189	Robert McCann	NRCS California EQIP Conservation Assistance, Section 106 Review Summary Report, NRCS Contract Number 829104192RJ	2020

Table 2. Previous Cultural Studies within the Project Area			
Report No. (S-)	**Author(s)**	**Report Title**	**Year**
55189a	Emily Castano and Julianne Polanco	NRCS_2020_1014_003, Section 106 consultation for NRCS Environmental Quality Incentive Program (EQIP) Conservation Assistance Project No. 829104192RJ, Mendocino County, California	2020
56975	Sarah Brewer, Angela Moniz, and Ryan Brady	Archaeological Survey Report (Draft), Eureka-Manchester Fiber Optic Project, Humboldt and Mendocino Counties, California	2023

The records search results indicate that the entire Project Area has been previously surveyed for cultural resources; however, these studies were conducted in smaller segments, at different times, by different consultants, or as many as 34 years ago, under obsolete standards. ECORP, therefore, conducted a pedestrian survey of the entire Project Area for the Project under current protocols.

The records search also determined that 26 previously recorded pre-contact and historic-period cultural resources are located within 0.5 mile of the Project Area (Table 3). Three previously recorded cultural resources are located within the Project Area, and five previously recorded cultural resources are located adjacent to the Project Area. Of the resources located within the Project Area, one is believed to be associated with Native American occupation of the vicinity, and two are historic-period sites associated with early European-American ranching and mining activities. Of the five resources located adjacent to the Project Area, two are multicomponent resources with historic-period and pre-contact artifacts, and three are historic-period structures.

Table 3. Previously Recorded Cultural Resources within 0.5 Mile of the Project Area					
Site No. (CA-MEN-)	**Primary No. (P-23-)**	**Year and Recorder**	**Age/ Period**	**Site Description**	**Within Project Area?**
2629/H	2327	1991 (W. Duddles, D. Livingstone, M. Jablonowski, K. Zahniser, Caltrans); 1999 (Hamusek, Noble, Brown, Caltrans Dist. 3)	Pre-contact, Historic	Light density lithic scatter and hearths; historic refuse	No
2630	2328	1991 (R. Duddles, D. Livingstone, Caltrans); 1999 (B. Hamusek, J. Brown, Caltrans, District 3)	Pre-contact,	Light density lithic scatter	No
2644/H	2341	1991 (R. Duddles, D. Livingstone, Caltrans); 1999 (B. Hamusek, J. Brown, Caltrans Dist. 3)	Pre-contact,, Historic	Light density lithic scatter; historic well and standing structures	No, Adjacent

Table 3. Previously Recorded Cultural Resources within 0.5 Mile of the Project Area					
Site No. (CA-MEN-)	**Primary No. (P-23-)**	**Year and Recorder**	**Age/ Period**	**Site Description**	**Within Project Area?**
2645/H	2342	1991 (Bonnie W. Parks, Caltrans); 2022 (S. Brewer, Dudek)	Pre-contact,, Historic	Historic structures; Pre-contact lithic scatter and habitation	No, Adjacent
3034	3442	1999 (B. Hamusek, D. Noble, and J. Brown, Caltrans)	Pre-contact,	Lithic scatter and quarry	No
3037H	3445	1998 (B. Hamusek, S. Moran, J. Brown, Caltrans, District 3); 2003 (J. Burns, H. Ballard, T. Pitsenberger, Pacific Legacy)	Historic	Historic collapsed structure and refuse scatter	No
3038H	3446	1999 (B. Hamusek and D. Noble, Caltrans)	Historic	Mariposa Cemetery	No
3111H	3663	1995 (Jeffrey A. Hamilton, [none]); 12019 (Beatrice Cox, Garcia and Associates)	Historic	Northwestern Pacific Railroad	No
–	3762	2003 (Lorna Billat, Earth Touch, Inc.)	Historic	G&S Milling Company (Historic Lumber Mill)	No
3166/H	3878	2004 (Alex DeGeorgey, Sentinel Archaeological Research, LLC)	Pre-contact,, Historic	Sparse lithic scatter; historic structures, orchard, railroad grade	No
3571	5317	2011 (Jason Windingstad, Statistical Research, Inc.)	Pre-contact,	Precontact pit and midden	No
3595/H	5386	2013 (Patrick B. Stanton, Statistical Research, Inc)	Pre-contact,, Historic	Lithic scatter; historic refuse scatter	No
3636	5463	2013 (Caltrans Dist. 1 Willits Field Office)	Pre-contact,	Disperse lithic scatter	No
3638	5465	2013; 2015 (W. Shapiro, D. Trout, A. Kovak, L. Shapiro, Pacific Legacy, Inc.)	Pre-contact,	Lithic scatter and habitation site	Yes
–	5513	2004 (Frank Lortie, Caltrans); 2022 (S. Brewer, Dudek)	Historic	Ranch	Yes
–	5514	2004 (Frank Lortie, Caltrans); 2022 (S. Brewer, Dudek)	Historic	Former farm	Yes
3680	5625	2014 (W. Shapiro, D. Trout, Pacific Legacy, Inc.); 2015 (W. Shapiro, G. Dalldorf, Pacific Legacy, Inc.)	Pre-contact,	Sparse lithic scatter	No

Table 3. Previously Recorded Cultural Resources within 0.5 Mile of the Project Area					
Site No. (CA-MEN-)	**Primary No. (P-23-)**	**Year and Recorder**	**Age/ Period**	**Site Description**	**Within Project Area?**
3687	5632	2014 (W. Shapiro, D. Trout, Pacific Legacy, Inc.)	Pre-contact,	Sparse lithic scatter	No
–	5748	1991 (Bonnie W. Parks, Caltrans)	Historic	Corbett Ranch (Historic structure)	No, Adjacent
–	5749	1991 (Bonnie W. Parks, Caltrans)	Historic	24500 Highway 101 (Historic structure)	No, Adjacent
–	5750	1991 (Bonnie W. Parks, Caltrans)	Historic	Sunny Slope Trailer Court (Historic structure)	No, Adjacent
–	5891	1998 (Frank Lortie, Caltrans)	Historic	Historic structure	No
–	5893	1998 (Frank Lortie, Caltrans)	Historic	Historic structure	No
–	5895	1998 (Frank Lortie, Caltrans)	Historic	Historic structure	No
–	5896	1994 (Frank Lortie, Caltrans)	Historic	Historic structure	No
–	5897	1998 (Frank Lortie, Caltrans)	Historic	Historic structure	No
–	5906	1999 (Frank Lortie, Caltrans)	Historic	Tee Pee Burner (Historic sawmill)	No
3758H	5917	2003 (T. Fernandez, H. Ballard, J. Burns, T. Pitsenberger, Pacific Legacy, Inc.)	Historic	Historic structure	No
–	6325	1995 (Susie Van Kirk, [none])	Historic	Larsen Family House (Historic family property)	No

Notes: Caltrans = California Department of Transportation

5.1.2 Records

The OHP's BERD for Mendicino County (dated March 6, 2026) did not include eligible resources in the BERD, National Register System, or CHL within 2000 feet of the Project Area (OHP 2026, NPS 2022, and OHP 2026).

The ARD for Mendocino County (dated January 23, 2026) provided an evaluation status of one resource located adjacent to the Project Area: P-31-2342/CA-MEN-2645. This resource was individually determined eligible for NRHP by consensus through the NHPA Section 106 process and is listed in the CRHR (OHP 2026). *Historic Spots in California* (Kyle 2002) explains that Willits began as a single general store that opened in 1856. Kirk Brier opened the store, and soon a blacksmith, bar, and saloon were opened. 1 year later, Hiram Willits purchased the store, and in 1888 the town was incorporated and named after him.

Historic GLO land patent records from the BLM's patent information database (BLM 2026) revealed that Philip Upp received a patent for 160 acres of land including the Project Area in the southwestern quarter of Section 7 on November 1, 1865 (Table 4). A review of the maps did not reveal any structures or features

within the Project Area that would be associated with Phillip Upp. Because, while Upp owned the land, there was no direct association with him within the Project Area.

Table 4. General Land Office Land Patent Records

Patentee	Date	Serial No.	Patent Type/Authority	Location
Upp, Philip	11/1/1865	CA0910_.057	State Volume Patent	18N, 13W Section 7 (SW ¼ NW ¼)

Notes: N = North; NW = Northwest; SW = Southwest; W = West

A site record for resource P-23-2342 revealed that a property located to the north of the Project Area was purchased by Edwin F. DeCamp in 1876 from William D. Rowlinson, who owned the property in 1970. Edwin Francis DeCamp, Sr. was born in 1839 in Cincinnati, Ohio. DeCamp had opened a hardware store in Cincinnati and built it into a prosperous business. He then moved west to Willits, purchasing the property due to the health of his oldest son Edwin F., Jr. This property at the time contained barns and outbuildings that have since been demolished, as noted in the 1991 recording (Duddles et al. 1991). Within the property, the DeCamps operated a dairy and opened a creamery. DeCamp's holdings extended from the present Willits city limits to Oil Well Hill at the northern end of the valley. The property does not appear to meet the criteria of eligibility for inclusion in the NRHP because the residence has suffered a substantial loss of integrity due tothe addition at the rear, the asbestos siding, and the bungalow-era alterations to the front door and window, as well as the loss of the outbuildings during the recording. Although DeCamp was a prominent rancher and citizen of Willits at the time, his importance was not significant enough to change the level of integrity of the structure present.

The Caltrans Bridge Local and State Surveys (Caltrans 2018, 2019) did not list any historic-period bridges within 0.5 mile of the Project Area. Upp Creek bridge, constructed in 2017, is located within the Project Area; however, it does not meet the 50-year-old threshold to be considered a Historic Property.

The *Handbook of North American Indians* (Wilson and Towne 1978) lists the nearest Native American village to the Project Area as the Northern Pomo village ofs *na·bó,* located approximately 1.5 miles south of Willits.

5.1.3 Map Review and Aerial Photographs

The review of historical aerial photographs and maps of the Project Area provides information on the past land uses of the Project Area and its potential for buried archaeological sites. This review shows that the Project Area was adjacent to the railroad and was vacant land since at least 1859. A state highway that is in alignment with resource LL-01 (North Main Street and Redwood Highway) first appears within the Project Area on the 1922 USGS Willits, California quadrangle. US 101 is in the same alignment as the previous state highway route depicted on the 1942 USGS Willits, California quadrangle. A structure within the Project Area—resources P-23-5513 (Ranch) and P-23-5514 (Former Farm)—first appear on the 1922 quadrangle. Several additional structures have appeared within the Project Area surrounding P-23-5513 and P-23-5514 periodically from 1922 to 2018, until the two resources were demolished.

Following is a summary of the review of historical maps and photographs:

- The 1859, 1867, 1877, and 1882 BLM GLO Plat maps do not depict any relevant information for the Project Area.
- The 1884 California Office of the State Engineer map depicts the City of Willits located to the south of the Project Area.
- The 1922 USGS Willits, California quadrangle depicts North Main Street as a state highway. The quadrangle also depicts two large ranch complexes (recorded as P-23-5513 and P-23-5514) located adjacent to the Project Area.
- An aerial photograph from 1931 shows North Main Street and US 101. The photograph also shows the Project Area located between agricultural fields and pockets of dense vegetation, primarily along the western portion. The aerial photograph shows residential development located outside of the Project Area, as indicated by structures and driveways.
- An aerial photograph from 1941 shows dense vegetation along the western portion of the Project Area and structures located adjacent to the Project Area to the east.
- The 1942 USGS Willits, California quadrangle (1:62,500 scale) depicts US 101 as a heavy-duty highway. This route is aligned with the original North Main Street depicted on the 1922 Willits quadrangle. The quadrangle also depicts the mentioned residential developments from the aerial photograph of 1941 located adjacent to the Project Area on either side.
- The 1961 USGS Willits, California quadrangle (1:62,500 scale) depicts additional residential developments located adjacent to the Project Area on either side. The quadrangle depicts US 101 as a heavy-duty highway with the label U.S. Route 101.
- The 1991 USGS Willits, California quadrangle (1:24,000 scale) depicts residences located adjacent to the Project Area.
- An aerial photograph from 1993 shows driveways protruding along sections of the Project Area. The aerial photograph shows LLMHP located to the northeast of the northernmost region of the Project Area.
- An aerial photograph from 2003 shows additional residential driveways located along the Project Area. The aerial photograph shows progressively dense levels of vegetation along the western and eastern sides of the Project Area.
- An aerial photograph from 2009 shows the initial development of a culvert system located underneath the Project Area in alignment with the orientation of Upp Creek.
- An aerial photograph from 2011 shows the removal of both of the larger residential properties that cross into eastern side of the Project Area, south-southeast of Upp Creek, which flows northeast–southwest. Additionally, the aerial photograph shows a guard rail along North Main Street over Upp Creek.
- An aerial photograph from 2013 shows the development of the current alignment of US 101 in the general region where the large ranch complex P-23-5513 (Ranch), originally depicted on the

1922 USGS Willits quadrangle, was demolished. The photograph also shows that P-23-5514 (Former Farm) has been demolished.

- An aerial photograph from 2017 shows the construction of Upp Creek Bridge. Additionally, the aerial photograph shows U.S. Route 101 in its current route paralleling North Main Street to the east of the Project Area.
- An aerial photograph from 2023 shows the Project Area in its present condition.

In sum, the Project Area has been primarily underdeveloped and vacant since at least 1859, with some residential properties established. North Main Street is first depicted on the 1922 USGS Willits, California quadrangle. The US 101 bypass was constructed to the east of the Project Area in 2013.

5.2 Sacred Lands File Results

A search of the SLF by the NAHC returned a negative result, which indicates that there are no sacred lands recorded within the NAHC search area. Appendix B provides a record of all related correspondence to date. If any additional comments are received after the submission of this report, they will be forwarded to the Lead Agencies for further consideration and appropriate action.

5.3 Other Interested Party Consultation Results

ECORP has not received any responses to the letters sent to the Historical Society of Mendocino County as of the date of the preparation of this document.

5.4 Field Survey Results

ECORP surveyed the Project Area for cultural resources on April 22, 2026. The ground surface of the Project Area ranged between paved in asphalt, covered in dense vegetation, and clear ground surface (Figure 4). The pedestrian survey occurred along the roadside, and ECORP noted an abundance of modern debris along the road shoulder. Ground surface visibility ranged between 60 to 100 percent in areas not paved or covered in dense brush (Figure 5).



Figure 4. Project Area Overview of North Main Street (view north; April 24, 2026).



Figure 5. Project Area Overview of Vegetation within Right-of-Way (view southeast; April 24, 2026).

5.4.1 Cultural Resources

As a result of previous investigations by other firms, three resources were recorded within the Project Area: P-23-5465 (Lithic Scatter and Habitation Site), P-23-5513 (Ranch), and P-23-5514 (Former Farm). ECORP also identified one new cultural resource within the Project Area: LL-01 (North Main

Street/Redwood Highway). ECORP archaeologists confirmed that the five resources located adjacent to the Project Area were not located within the Project Area; from the Project Area, these resources appeared as documented in their previous recordings. The following sections provide descriptions of each resource within the Project Area, and Appendix D provides the corresponding confidential DPR site records.

5.4.1.1 P-23-5465/CA-MEN-3638 (Lithic Scatter and Habitation Site)

Site P-23-5465 is a previously recorded pre-contact resource (Shapiro et. al 2013). The site consists of a lithic deposit of flaked stone tools and debris, as well as a small number of ground stone pestles. This site was originally recorded as being located on historic dairy ranching lands in wetlands at the northern end of Little Lake Valley. The majority of the resource is located outside the current Project Area in a fenced-off property. A survey of the entire resource was outside the scope of this Project, and only the southwestern edge of the site was accessible.

During the Caltrans Willits Bypass Project in 2013, the resource was initially identified during cultural monitoring for the Caltrans Willits Bypass Project. Flaked stone artifacts were noted to be visible in the northern cut bank of Upp Creek, and shovel probes indicated that the cultural deposits extend throughout a 108 x 48-square-meter area. The report mentioned that the site has the potential to contain intact subsurface deposits and features. The resource was recommended as eligible to the NRHP under Criteria A and D, and protection measures were implemented (Jurich and Rogers 2014). Resolutions of adverse effect were prepared for the site, and excavation was undertaken.

During the 2026 survey, ECORP archaeologists identified a bedrock milling outcrop with a single milling slick within the Project Area and within the boundaries of site P-23-5465 that had not previously been noted in the site record (Figures6 and 7).



Figure 6. Overview of Newly Identified Bedrock Mortar within P-23-5465 (Lithic Scatter and Habitation Site) (view south; April 22, 2026).



Figure 7. Milling Surface of Bedrock Mortar in Detail within P-23-5465 (Lithic Scatter and Habitation Site) (view Plan; April 22, 2026).

5.4.1.2 P-23-5513 (Ranch)

Site P-23-5513 was a historic-period ranch consisting of six structures established in the early 1900s (Lortie 2004b). During a 2022 site visit, Dudek archaeologists visited the location of the site during an intensive-level (15-meter transects) survey for a proposed fiber optic project and found that none of the recorded structures remained standing (Brewer et al. 2022).

ECORP archaeologist revisited the site and confirmed that the structures had been demolished, as stated in the 2022 site visit (Figure 8). There were no artifacts visible on the surface within the Project Area.

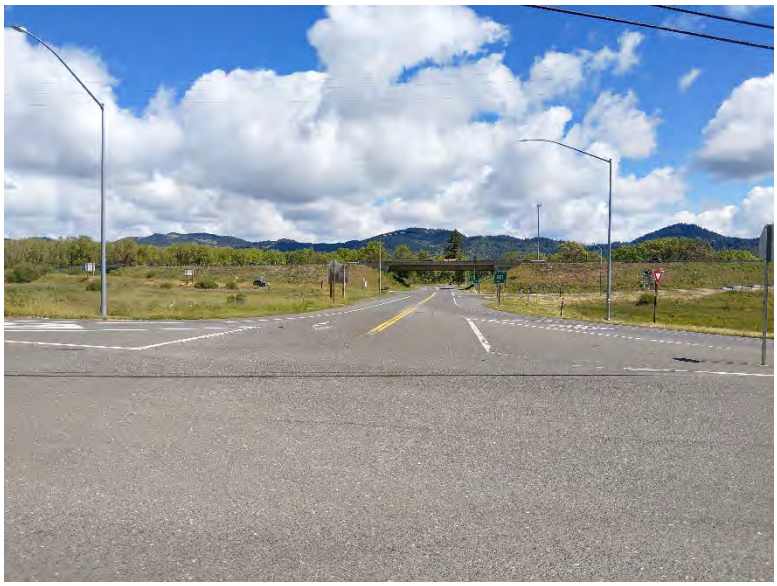


Figure 8. Overview of Former P-23-5513 Location (view east; April 22, 2026).

5.4.1.3 P-23-5514 (Former Farm)

Site P-23-5514 was a historic-period ranch and dairy consisting of five structures established in the early 1900s (Lortie 2004a). During a 2022 site visit, Dudek archaeologists visited the location of the site during an intensive-level (15-meter transects) survey for a proposed fiber optic project and found that none of the recorded structures are still standing (Brewer et al. 2022).

ECORP archaeologist visited the site and noted that the structures had been demolished, as stated in the 2022 site visit.

5.4.1.4 LL-01 (North Main Street/Redwood Highway)

North Main Street/Redwood Highway or the Abandoned Highway 101 is an asphalt-paved, two-lane roadway that forms the majority of the Project Area. The 30-foot-wide road has been upgraded over the years and features modern reflective paint, including multiple turn lanes.

North Main Street/Redwood Highway consists of a two-lane paved asphalt road oriented roughly north–south. It continues north beyond the Project Area to a cul-de-sac where it ends. It also continues south, beyond the Project Area and through Willits. The road includes the entirety of the two lanes and a 5-foot paved shoulder on either side. Grasses within the right-of-way on either side were overgrown.

The 1.15-mile segment of North Main Street/Redwood Highway located within the Project Area was first mapped along its current alignment in 1922. The segment located within the current Project Area is paved, heavily trafficked, well maintained, and in good condition (Figure 9).



Figure 9. Overview of North Main Street/Redwood Highway (view north; April 22, 2026).

6.0 EVALUATION

6.1 LL-01 (North Main Street/Redwood Highway)

Resource LL-01 consists of a segment of North Main Street/Redwood Highway. A review of historical topographic maps and documents indicated that the highway was constructed as a heavy duty county road sometime prior to its depiction on the 1922 USGS Willits, California quadrangle. Despite being originally constructed for rural transportation between small developing urban centers, LL-01 is most closely associated with the improvements to the California State Highway System and Federal Highway System because this has been its primary historical use from 1926 through the present day. The evaluation of the site, therefore, primarily considers the highway within the context of highway development and transportation from its initial use as a highway in 1926 through 2018.

6.1.1 NRHP Criterion A and CRHR Criterion 1

The highway is most closely associated with the development of the California State Highway System and Federal Highway System. Though the development of the California State Highway System and Federal Highway System are important events in the State and Nation, they are more strongly associated with the development and improvement of larger, more significant highways and freeways with genuine historical value, such as the Lincoln Highway or U.S. Route 66. US 101 was originally developed as a simple arterial transportation route with no other historical significance. As such, the site is not associated with any specific historic event or activity and is, therefore, not eligible under NRHP Criterion A or CRHR Criterion 1.

6.1.2 NRHP Criterion B and CRHR Criterion 2

Similarly, the lack of historical documentation for this site makes it clear that no specific individuals or groups of people significant in history are linked with this highway. The site does not demonstrate any association with the lives of persons significant in history and is, therefore, not eligible under NRHP Criterion B or CRHR Criterion 2.

6.1.3 NRHP Criterion C and CRHR Criterion 3

This site is currently a paved highway that follows the same historical alignment as when it was incorporated into the highway system in 1926. The original road alignment was a gravel base heavy duty road that, through decades of maintenance and repairs, was converted to the paved highway that it is today. The road, as it was originally, including its years of maintenance and changes and incorporation into the highway system, does not have any significant historical associations, and its historical use, construction, improvement, and maintenance is typical among roads. It is not uniquely artistic or designed with any distinctive engineering characteristics. It was not originally designed as a scenic highway but rather an arterial route. This site, therefore, does not embody any distinctive characteristics of a type, period, or method of road construction, nor does it possess any artistic value. In addition, no archival evidence or physical aspect of the highway indicates that the site represents the work of a master highway system engineer or designer or specific construction crew or company. As such, this resource is not eligible under NRHP Criterion C or CRHR Criterion 3.

6.1.4 NRHP Criterion D and CRHR Criterion 4

The information potential in historic roads lies in its alignment and route. This road was recorded relatively accurately in historical topographic maps; therefore, the information regarding its historical route is provided in the archival record. Furthermore, this site does not possess the potential for subsurface archaeological deposits and, accordingly, was not tested. The site does not possess the potential to yield any additional information regarding the relationship or functionality of highways or roads or provide any information that is not already represented in the archival record and, therefore, is not eligible under NRHP Criterion D or CRHR Criterion 4.

6.1.5 Integrity

NPS identifies seven aspects of integrity that indicate a road's ability to convey significance achieved during the period of significance: Location, Association, Setting, Design, Materials, Workmanship, and Feeling (NPS 1997).

Resource LL-01 (North Main Street/Redwood Highway) retains integrity of association. The resource lacks integrity of location, setting, design, materials, workmanship, and feeling; the road's rural landscapes have been modified and repaved to accommodate residential and commercial vehicle traffic and no longer conveys the aesthetic of the 20th-century highway that once served local farms and ranches. Currently, this segment of the highway allows people to travel from the Upp Creek to a mobile home park. Although it may have been part of the original US 101, the function of the road no longer serves in that capacity.

Regardless of its integrity, due to a lack of historical significance, LL-01 (North Main Street/Redwood Highway) does not meet NRHP or CRHR eligibility criteria as an individual resource or as part of any known or suspected historic district; additionally, this resource is not listed on any Certified Local Government historic property register.

7.0 MANAGEMENT CONSIDERATIONS

7.1 Conclusions

ECORP's records search identified three previously recorded resources within the Project Area: P-23-5465 (Lithic Scatter and Habitation Site), P-23-5513 (Ranch), and P-23-5514 (Former Farm). ECORP verified the location of pre-contact resource P-23-5465 (Lithic Scatter and Habitation Site) and identified an unrecorded component to the site: a bedrock milling feature with a milling slick. ECORP revisited resources P-23-5513 (Ranch) and P-23-5514 (Former farm) and noted that both are demolished and appear in similar conditions from recent recordings in 2022. ECORP also verified that the five resources located adjacent to the Project Area are outside the Project Area. ECORP also identified one previously unrecorded resource located within the Project Area: LL-01, which is a segment of North Main Street/Redwood Highway.

A previous evaluation of P-23-5465 (Lithic Scatter and Habitation Site) recommended the site eligible for the NRHP under Criteria A and D (Jurich and Rogers 2014). Both P-23-5513 and P-23-5514 were

recommended as not eligible for either the NRHP or CRHR under any criteria; additionally, neither resource maintains integrity after they were demolished. ECORP concurs with the previous evaluations.

ECORP evaluated previously unrecorded resource LL-01 (North Main Street/Redwood Highway) using NRHP and CRHR eligibility criteria and recommends it as not eligible for either register under all criteria.

In cases where ground visibility is hindered by impervious or impenetrable surfaces, such as pavement, buildings, or structures, and where such circumstances prevent archaeological survey or testing by traditional field methods, other sources of information must be utilized in assessing the potential for archaeological deposits. These sources may include, as appropriate and available, records search and literature review information, archival records, historic maps and aerial photographs, topographic maps, or geoarchaeological sensitivity modeling. As a last resort, archaeological monitoring during the removal of such impervious surfaces during Project construction may be necessary.

7.2 Likelihood for Subsurface Cultural Resources

Due to the presence of alluvium along Upp Creek, seasonal runoff streams from Wild Oak Canyon, and the presence of pre-contact archaeological sites located along these perennial waterways, it would suggest that there exists a *high* potential for buried pre-contact archaeological sites within the Project Area. However, the area has been heavily disturbed due to construction of US 101 aka North Main Street/Redwood Highway, and, subsequently, the modifications the roadway and bridge over Upp Creek in support of the US 101 Bypass around Willits. This disturbance reduces the overall likelihood for encountering surface artifacts to *low* and the likelihood for encountering intact buried pre-contact deposits to *moderate*. However, the potential remains *high* for buried pre-contact resources near Upp Creek due to presence of the previously recorded resource P-23-5465 within the Project Area on the northern bank of Upp Creek.

Given the known ranching and farming activity in the area of the Project Area at P-23-5513, located between US101 off/on ramps and North Main Street/Redwood Highway during the historic period, it is possible that there exists a *moderate* potential for buried historic archaeological resources within this portion of the Project Area. And low potential in the rest of the Project Area.

Therefore, ECORP recommends mitigation measures that include contractor awareness training, archaeological monitoring and tribal monitoring for all ground-disturbing activities. Until the Lead Agencies concur with the absence of cultural resources within the Project Area, no Project activity should occur.

7.3 Recommendations

7.3.1 Contractor Awareness Training

The Lead Agency shall ensure that a Contractor Awareness Training Program is delivered to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and TCRs; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the Lead Agency of

any occurrences; Project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program.

The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting, as determined appropriate by the qualified professional archaeologist. The training shall be provided to all construction supervisors, forepersons, and operators of ground-disturbing equipment. All personnel shall be required to sign a training roster. The Construction Manager is responsible for ensuring that all required personnel receive the training. The Construction Manager shall provide a copy of the signed training roster to the lead agency as proof of compliance.

7.3.2 Archaeological Monitoring

Prior to the start of construction, the Project proponent shall retain a qualified professional archaeologist (Monitoring Archaeologist) to monitor all ground-disturbing activities associated with Project construction. Monitoring is not required for placement of equipment or fill inside excavations that were monitored, above-ground construction activities, or redistribution of soils that were previously monitored (such as the return of stockpiles to use in backfilling).

The Monitoring Archaeologist shall meet or work under the direct supervision of someone meeting the Secretary of the Interior's professional qualifications standards for prehistoric and historic archaeology. The Monitoring Archaeologist shall have the authority to temporarily halt ground-disturbing or construction-related work within 100 feet of any discovery of potential historical or archaeological resources in order to address unanticipated discoveries.

7.3.3 Post-Review Discoveries

There always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources. Both CEQA and Section 106 of the NHPA require the Lead Agency to address any unanticipated cultural resource discoveries during Project construction. Therefore, ECORP recommends the following procedures.

- If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:
    - If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
    - If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as

defined by CEQA or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.

- If the find represents a Native American or potentially Native American resource that does not include human remains, then he or she shall further notify [tribe]. The agencies shall consult with the tribes on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Preservation in place is the preferred treatment, if feasible. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to their satisfaction.
- If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Mendocino County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the Project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

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Appendix A – Records Search Confirmation and Historical Society Coordination

Appendix B – Sacred Lands File Coordination

Appendix C – Project Area Photographs

Appendix D – ***Confidential*** Cultural Resource Site Locations and Site Records

APPENDIX A

Records Search Confirmation and Historical Society Coordination

California Historical Resources Information System

CHRIS Data Request Form

ACCESS AND USE AGREEMENT NO.: 34.00 **IC FILE NO.:**

To: Northwest Information Center Print

Name: Estevan Ramirez Date: 03/06/2026

Affiliation: ECORP Consulting, Inc.

Address: 2525 Warren Drive

City: Rocklin State: CA Zip: 95677

Phone: (916) 782-9100 Fax: Email: estevan.ramirez@ecorpconsulting.com

Billing Address (if different than above):

Billing Email: sdonnelly@ecorpconsulting.com Billing Phone: (916) 782-9100

Project Name / Reference: 2026-036 Little Lake MHP Waterline

Project Street Address:

County or Counties: Mendocino County

Township/Range/UTMs: T 18N, R 14W, Sec. 1 and 12; T 18N, R 13W, Sec. 6 and 7.

USGS 7.5' Quad(s): Willits 1991

PRIORITY RESPONSE (Additional Fee): yes ☐ / no ■

TOTAL FEE NOT TO EXCEED: $ 1,000.00
(If blank, the Information Center will contact you if the fee is expected to exceed $1,000.00)

Special Instructions:

Please contact me if search will exceed $1000.00 While we don't want copies of the ECORP reports, we do want them listed on the database printout. Please include the shapefiles in *.shp or *.gdb format.
Thank you.

For the record search, if it does not fit, please zoom out. Please don't spend extra time making the maps look "pretty".
Thank you.

Information Center Use Only

Date of CHRIS Data Provided for this Request:

Confidential Data Included in Response: yes ☐ / no ☐

Notes:

CHRIS Data Request Form

Mark the request form as needed. Attach a PDF of your project area (with the radius if applicable) mapped on a 7.5' USGS topographic quadrangle to scale 1:24000 ratio 1:1 neither enlarged nor reduced and include a shapefile of your project area, if available. Shapefiles are the current CHRIS standard for submitting digital spatial data for your project area or radius. **Check with the appropriate IC for current availability of digital data products.**

- Documents will be provided in PDF format. Paper copies will only be provided if PDFs are not available at the time of the request or under specially arranged circumstances.
- Location information will be provided as a digital map product (Custom Maps or GIS data) unless the area has not yet been digitized. In such circumstances, the IC may provide hand drawn maps.
- In addition to the $150/hr. staff time fee, client will be charged the Custom Map fee when GIS is required to complete the request [e.g., a map printout or map image/PDF is requested and no GIS Data is requested, or an electronic product is requested (derived from GIS data) but no mapping is requested].

For product fees, see the CHRIS IC Fee Structure on the OHP website.

1. Map Format Choice:

Select One: Custom GIS Maps ☐ GIS Data ☐ Custom GIS Maps **and** GIS Data ☒ No Maps ☐

Any selection below left unmarked will be considered a "no. "

Location Information:

	Within project area	Within .50 mi. radius
ARCHAEOLOGICAL Resource Locations[1]	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Locations	yes ☒ / no ☐	yes ☒ / no ☐
Report Locations[1]	yes ☒ / no ☐	yes ☒ / no ☐
"Other" Report Locations[2]	yes ☐ / no ☒	yes ☐ / no ☒

3. Database Information:
(contact the IC for product examples, or visit the SSJVIC website for examples)

	Within project area	Within .50 mi. radius
ARCHAEOLOGICAL Resource Database[1]		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Excel Spreadsheet	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Database		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Excel Spreadsheet	yes ☒ / no ☐	yes ☒ / no ☐
Report Database[1]		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Excel Spreadsheet	yes ☒ / no ☐	yes ☒ / no ☐
Include "Other" Reports [2]	yes ☐ / no ☒	yes ☐ / no ☒

4. Document PDFs (paper copy only upon request)**:**

	Within project area	Within .50 mi. radius
ARCHAEOLOGICAL Resource Records[1]	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Records	yes ☒ / no ☐	yes ☒ / no ☐
Reports[1]	yes ☒ / no ☐	yes ☐ / no ☒
"Other" Reports[2]	yes ☐ / no ☒	yes ☐ / no ☒

CHRIS Data Request Form

5. Eligibility Listings and Documentation:

	Within project area	Within .50 mi. radius
OHP Built Environment Resources Directory[3]:		
Directory listing only (Excel format)	yes ☐ / no ☒	yes ☐ / no ☒
Associated documentation[4]	yes ☐ / no ☒	yes ☐ / no ☒
OHP Archaeological Resources Directory[1,5]:		
Directory listing only (Excel format)	yes ☒ / no ☐	yes ☒ / no ☐
Associated documentation[4]	yes ☒ / no ☐	yes ☐ / no ☒
***California Inventory of Historic Resources* (1976):**		
Directory listing only (PDF format)	yes ☒ / no ☐	yes ☐ / no ☒
Associated documentation[4]	yes ☒ / no ☐	yes ☐ / no ☒

6. Additional Information:

The following sources of information may be available through the Information Center. However, several of these sources are now available on the OHP website and can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through these sources. Indicate below if the Information Center should review and provide documentation (if available) of any of the following sources as part of this request.

Caltrans Bridge Survey	yes ☐ / no ☒
Ethnographic Information	yes ☐ / no ☒
Historical Literature	yes ☐ / no ☒
Historical Maps	yes ☐ / no ☒
Local Inventories	yes ☒ / no ☐
GLO and/or Rancho Plat Maps	yes ☐ / no ☒
Shipwreck Inventory	yes ☐ / no ☒
Soil Survey Maps	yes ☐ / no ☒

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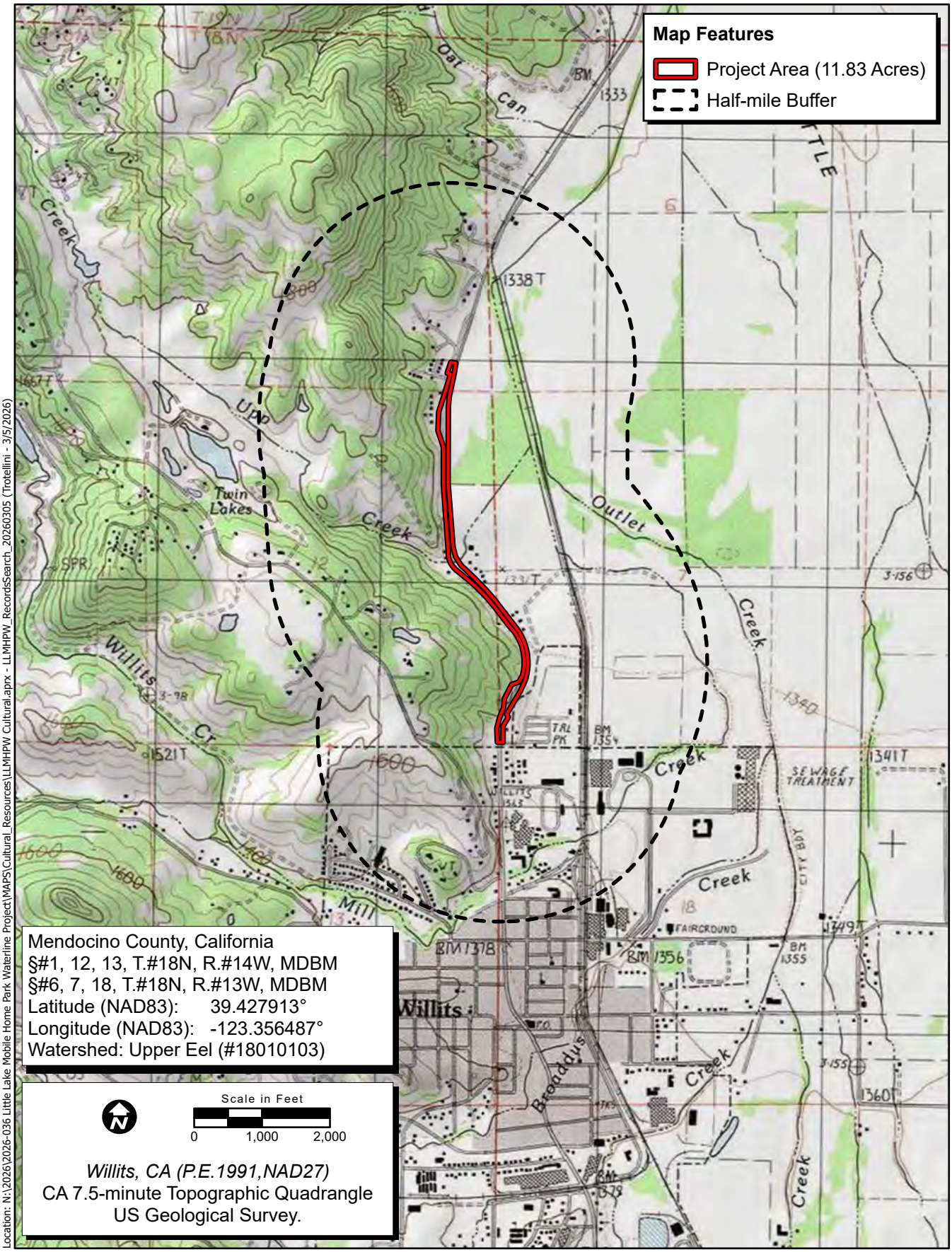
[1] In order to receive archaeological information, requestor must meet qualifications as specified in Section III of the current version of the California Historical Resources Information System Information Center Rules of Operation Manual and be identified as an Authorized User or Conditional User under an active CHRIS Access and Use Agreement.

[2] "Other" Reports GIS layer consists of report study areas for which the report content is almost entirely non-fieldwork related (e.g., local/regional history, or overview) and/or for which the presentation of the study area boundary may or may not add value to a record search.

[3] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Includes, but not limited to, information regarding National Register of Historic Places, California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys. Previously known as the HRI and then as the HPD, it is now known as the Built Environment Resources Directory (BERD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

[4] Associated documentation will vary by resource. Contact the IC for further details.

[5] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Previously known as the Archaeological Determinations of Eligibility, now it is known as the Archaeological Resources Directory (ARD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.



Location: N:\2026\2026-036 Little Lake Mobile Home Park Waterline Project\MAPS\Cultural_Resources\LLMHPW Cultural.aprx - LLMHPW_RecordsSearch_20260305 (Trotellini - 3/5/2026)

Map Date: 3/5/2026
Sources: ESRI, USGS

Records Search

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2026-036 Little Lake Mobile Home Park Waterline Project

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA, COLUSA, CONTRA COSTA, DEL NORTE, HUMBOLDT, LAKE, MARIN, MENDOCINO, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, SONOMA, YOLO

Northwest Information Center
Sonoma State University
1400 Valley House Drive, Suite 210
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
https://nwic.sonoma.edu

4/3/2026 NWIC File No.: 25-1332

ECORP Consulting, Inc.
2525 Warren Drive
Rocklin, CA 95677

Re: 2026-036 Little Lake MHP Waterline

The Northwest Information Center received your record search request for the project area referenced above, located on the Willits USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a 0.5 mi. radius:

Resources within project area:	P-23-005465, P-23-005513, P-23-005514
Resources within 0.5 mi. radius:	[26] Please see attached list, page 3
Reports within project area:	S-14121, 23633, 34425, 36655, 46474, 48113, 48785, 52625, 55189, 56975
Reports within 0.5 mi. radius:	[19] Please see attached list, page 4

Resource Database Printout (list):		☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):		☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database Records:		☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (list):		☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):		☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:		☒ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:		☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	[within; under 200 pgs]	☒ enclosed	☐ not requested	☐ nothing listed
OHP Built Environment Resources Directory:		☐ enclosed	☒ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:		☒ enclosed	☐ not requested	☐ nothing listed
CA Inventory of Historic Resources (1976):		☐ enclosed	☐ not requested	☒ nothing listed
GLO and/or Rancho Plat Maps:		☐ enclosed	☒ not requested	☐ nothing listed

Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☐ not requested	☒ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed
Shipwreck Inventory:	☐ enclosed	☒ not requested	☐ nothing listed

Notes:

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, please reference the record search number listed above. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Annette Neal

Researcher

PrimCo	PrimNo
P-23-	002327
P-23-	002328
P-23-	002341
P-23-	002342
P-23-	003442
P-23-	003445
P-23-	003446
P-23-	003663
P-23-	003762
P-23-	003878
P-23-	005317
P-23-	005386
P-23-	005463
P-23-	005625
P-23-	005632
P-23-	005748
P-23-	005749
P-23-	005750
P-23-	005891
P-23-	005893
P-23-	005895
P-23-	005896
P-23-	005897
P-23-	005906
P-23-	005917
P-23-	006325

DocCo	DocNo
S-	002044
S-	002246
S-	016879
S-	017943
S-	023005
S-	025237
S-	026710
S-	029010
S-	029933
S-	036657
S-	036789
S-	048118
S-	048119
S-	048782
S-	051012
S-	052626
S-	054439
S-	055396
S-	056310

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-23-002327	CA-MEN-002629/H	Resource Name - J-3	Site	Prehistoric, Historic	AH04; AH05; AH15; AP02; AP11	1991 (W. Duddles, D. Livingstone, M. Jablonowski, K. Zahniser, CalTrans); 1999 (Hamusek, Noble, Brown, CalTrans Dist. 3)	S-014121, S-023633
P-23-002328	CA-MEN-002630	Resource Name - J4 or EJ 8-22-3	Site	Prehistoric	AP02	1991 (R. Duddles, D. Livingstone, Caltrans); 1999 (B. Hamusek, J. Brown, California Department of Transportation, District 3)	S-014121, S-023633
P-23-002341	CA-MEN-002644/H	Resource Name - J-1/H	Site	Prehistoric, Historic	AH05; AH15; AP02	1991 (R. Duddles, D. Livingstone, Caltrans); 1999 (B. Hamusek, J. Brown, Caltrans Dist. 3)	S-014121, S-023633
P-23-002342	CA-MEN-002645/H	Resource Name - J-2/H; Other - 24850 Highway 101; OHP Property Number - 140140; OHP PRN - DOE-23-00-0016-0000; OHP PRN - FHWA000717A	Site	Prehistoric, Historic	AH03; AH04; AH07; AH10; AH11; AH15; AP02; AP11; AP15; HP02	1991 (Bonnie W. Parks, Caltrans); 1991 (Livingstone, Duddles, Zahniser, Jablonowski, Caltrans); 1999 (Hamusek, Noble, Caltrans); 2022 (S. Brewer, Dudek)	S-014121, S-023633, S-029933, S-048119, S-048782, S-056975
P-23-003442	CA-MEN-003034	Resource Name - Padula 1	Site	Prehistoric	AP02; AP12	1999 (B. Hamusek, D. Noble, and J. Brown, Caltrans)	S-023633
P-23-003445	CA-MEN-003037H	Resource Name - Wagenet 1	Site	Historic	AH02; AH04	1998 (B. Hamusek, S. Moran, J. Brown, Caltrans, District 3); 2003 (J. Burns, H. Ballard, T. Pitsenberger, Pacific Legacy)	S-023633, S-029933, S-048782
P-23-003446	CA-MEN-003038H	Resource Name - Mariposa Cemetery	Site	Historic	AH12	1999 (B. Hamusek and D. Noble, Caltrans)	S-023633, S-056513

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-23-003663	CA-MEN-003111H	Resource Name - Northwestern Pacific Railroad; Other - Longvale to Dos Rios rail line and rail grade; Other - NWPRR-1 Segments A; Other - Northwestern Pacific Railrad (NWPRR) in Willits; Other - Woodman Creek Segment of Northwestern Pacific Railroad; OTIS Resource Number - 565154; OHP Property Number - 133032 [vic. Dos Rios]; OHP PRN - DOE-23-00-0001-0000 2S2; OHP PRN - FHWA000713D 2S2; OHP Property Number - 140265 [Willits]; OTIS Resource Number - 557771; OHP PRN - DOE-23-00-0066-0000 2S2; OHP PRN - FHWA000717A 2S2; Voided - P-23-004636; Other - Northwestern Pacific Railroad (Redwood Valley section)	Structure, Object, Element of district	Historic	AH02; AH04; AH07; AH15; HP11; HP17; HP19; HP39	1995 (Jeffrey A. Hamilton, [none]); 1998 (Frank Lortie, Caltrans); 2000 (J. Nelson, Jones & Stokes); 2010 (Steven Melvin, Joseph Freeman, Flores, Heather Miller, JRP Historical Consulting, LLC); 2010 (Laura Leach-Palm, Far Western); 2015 (Mariko Falke, Nic Grosjean, [none]); 2018 (G. Dalldorf, M. Arsenault, J. Farrington, Pacific Legacy Inc.); 2018 (Karen Raskin, Humboldt State University); 2019 (Beatrice Cox, Garcia and Associates)	S-022736, S-023633, S-029933, S-033424, S-033916, S-038865, S-039592, S-046135, S-046341, S-046348, S-051012, S-052047, S-053630, S-056513, S-056975, S-059133
P-23-003762		Resource Name - G&S Milling Company	Building, Structure	Historic	HP08	2003 (Lorna Billat, Earth Touch, Inc.)	S-026710
P-23-003878	CA-MEN-003166/H	Resource Name - My Childhood Home	Building, Site	Prehistoric, Historic	AH07; AP02; AP15; HP02; HP30	2004 (Alex DeGeorgey, Sentinel Archaeological Research, LLC)	
P-23-005317	CA-MEN-003571	Resource Name - SRI-5; Other - Feature 473 (PD 473)	Site	Prehistoric	AP11; AP15	2011 (Jason Windingstad, Statistical Research, Inc.)	S-048785
P-23-005386	CA-MEN-003595/H	Resource Name - SRI-1240; Other - SRI-3	Site	Prehistoric, Historic	AH04; AP02	2013 (Patrick B. Stanton, Statistical Research, Inc)	S-048785
P-23-005463	CA-MEN-003636	Resource Name - WBP-PRD2; Other - Willits Bypass Project Post-Review Discovery 2	Site	Prehistoric	AP02	2013	S-048113
P-23-005465	CA-MEN-003638	Resource Name - WBP-PRD4; Other - Willits Bypass Project Post-Review Discovery 4; Other - CA-MEN-3638 (UPDATE)	Site	Prehistoric	AP02; AP15	2013; 2015 (W. Shapiro, D. Trout, A. Kovak, L. Shapiro, Pacific Legacy, Inc.)	S-048113, S-052625

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-23-005513		Resource Name - Ranch; Caltrans - 01-MEN-101, KP T69.4/84.2 (PM T43.1/52.3), 01-262000; Other - Map Ref. #14	Building	Historic	HP02; HP04; HP33	2004 (Frank Lortie, Caltrans); 2022 (S. Brewer, Dudek)	S-029933, S-056975
P-23-005514		Resource Name - Former Farm; Caltrans - 01-MEN-101, KP T69.4/84.2 (PM T43.1/52.3), 01-262000; Other - Map Ref. #13	Building	Historic	HP04; HP33	2004 (Frank Lortie, Caltrans); 2022 (S. Brewer, Dudek)	S-029933, S-056975
P-23-005625	CA-MEN-003680	Resource Name - Niesen 1; Other - CA-MEN-3680 (UPDATE)	Site	Prehistoric	AP02	2014 (W. Shapiro, D. Trout, Pacific Legacy, Inc.); 2015 (W. Shapiro, G. Dalldorf, Pacific Legacy, Inc.)	S-048118, S-052626
P-23-005632	CA-MEN-003687	Resource Name - Semphor 1	Site	Prehistoric	AP02	2014 (W. Shapiro, D. Trout, Pacific Legacy, Inc.)	S-048118
P-23-005748		Resource Name - Corbett Ranch; OHP Property Number - 140137; OHP PRN - DOE-23-00-0013-0000; OHP PRN - FHWA000717A	Building	Historic	HP02; HP04	1991 (Bonnie W. Parks, Caltrans)	S-023633, S-048119
P-23-005749		Resource Name - 24500 Highway 101; OHP Property Number - 140138; OHP PRN - DOE-23-00-0014-0000; OHP PRN - FHWA000717A	Building	Historic	HP02	1991 (Bonniew W. Parks, Caltrans)	S-023633, S-048119
P-23-005750		Resource Name - Sunny Slope Trailer Court; OHP Property Number - 140139; OHP PRN - DOE-23-00-0015-0000; OHP PRN - FHWA000717A	Building	Historic	HP02	1991 (Bonnie W. Parks, Caltrans)	S-023633, S-048119
P-23-005891		Resource Name - Map Reference # TSM-28; Other - Willits Bypass, 01-MEN-101, Alternative TSM; OHP PRN - FHWA000717A; OHP Property Number - 140172; OHP PRN - DOE-23-00-0049-0000	Building	Historic	HP02	1998 (Frank Lortie, Caltrans)	S-023633

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-23-005893		Resource Name - Map Reference # TSM-30; Other - Willits Bypass, 01-MEN-101, Alternative TSM; OHP PRN - FHWA000717A; OHP Property Number - 140174; OHP Z-number - DOE-23-00-0051-0000	Building	Historic	HP02	1998 (Frank Lortie, Caltrans)	S-023633
P-23-005895		Resource Name - Map Reference # TSM-32; Other - Willits Bypass, 01-MEN-101, Alternative TSM; OHP PRN - FHWA000717A; OHP Property Number - 140176; OHP PRN - DOE-23-00-0053-0000	Building	Historic	HP02	1998 (Frank Lortie, Caltrans)	S-023633
P-23-005896		Resource Name - Map Reference # TSM-33; Other - Willits Bypass, 01-MEN-101, Alternative TSM; OHP PRN - FHWA000717A; OHP Property Number - 140177; OHP PRN - DOE-23-00-0054-0000	Building	Historic	HP02	1994 (Frank Lortie, Caltrans)	S-023633
P-23-005897		Resource Name - Map Reference # TSM-34; Other - Willits Bypass, 01-MEN-101, Alternative TSM; OHP PRN - FHWA000717A; OHP Property Number - 140178; OHP PRN - DOE-23-00-0063-0000	Building	Historic	HP02	1998 (Frank Lortie, Caltrans)	S-023633
P-23-005906		Resource Name - Tee Pee Burner; Other - Willits Bypass, 01-MEN-101, Alternative TSM; Other - Map Reference # TSM-40; OHP Property Number - 140333; OHP PRN - DOE-23-00-0069-0000; OHP PRN - FHWA000717A; Other - 101 Redwood, Inc. sawmill	Structure	Historic	HP08	1999 (Frank Lortie, Caltrans)	S-023633

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-23-005917	CA-MEN-003758H	Resource Name - WBH-1; Other - Explosives magazines	Structure	Historic	HP39	2003 (T. Fernandez, H. Ballard, J. Burns, T. Pitsenberger, Pacific Legacy, Inc.)	S-048782
P-23-006325		Resource Name - Larsen Family House; Other - Kimberly's Jewelry; OTIS Resource Number - 491151; OHP Property Number - 094833; OHP PRN - NPS-95001153-0000; OHP PRN - 23-0043	Building	Historic	HP02; HP04	1995 (Susie Van Kirk, [none])	

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

March 6, 2026

The Historical Society of Mendocino County
100 South Dora Street
Ukiah, CA 95482
Sent via email: info@mendocinocountyhistory.org

RE: Cultural Resources Inventory for the Little Lake Mobile Home Park Waterline Project, Mendocino County, California (ECORP Project No. 2026-063)

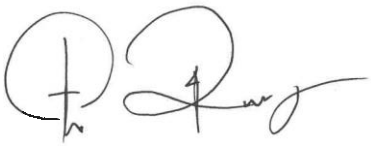
Dear Historical Society of Mendocino County,

ECORP Consulting, Inc. has been retained to assist in the planning of the development of the project listed above. As part of the identification effort, we are seeking information from all parties that may have knowledge of or concerns with historic properties or cultural resources in the area of potential effect.

Included is a map showing the project area. We would appreciate input on this undertaking from the historical society with concerns about possible cultural properties or potential impacts within or adjacent to the project areas. If you have any questions, please contact me at (916) 782-9100 ext. 5113 or estevan.ramirez@ecorpconsulting.com.

Thank you in advance for your assistance in our cultural resource management study.

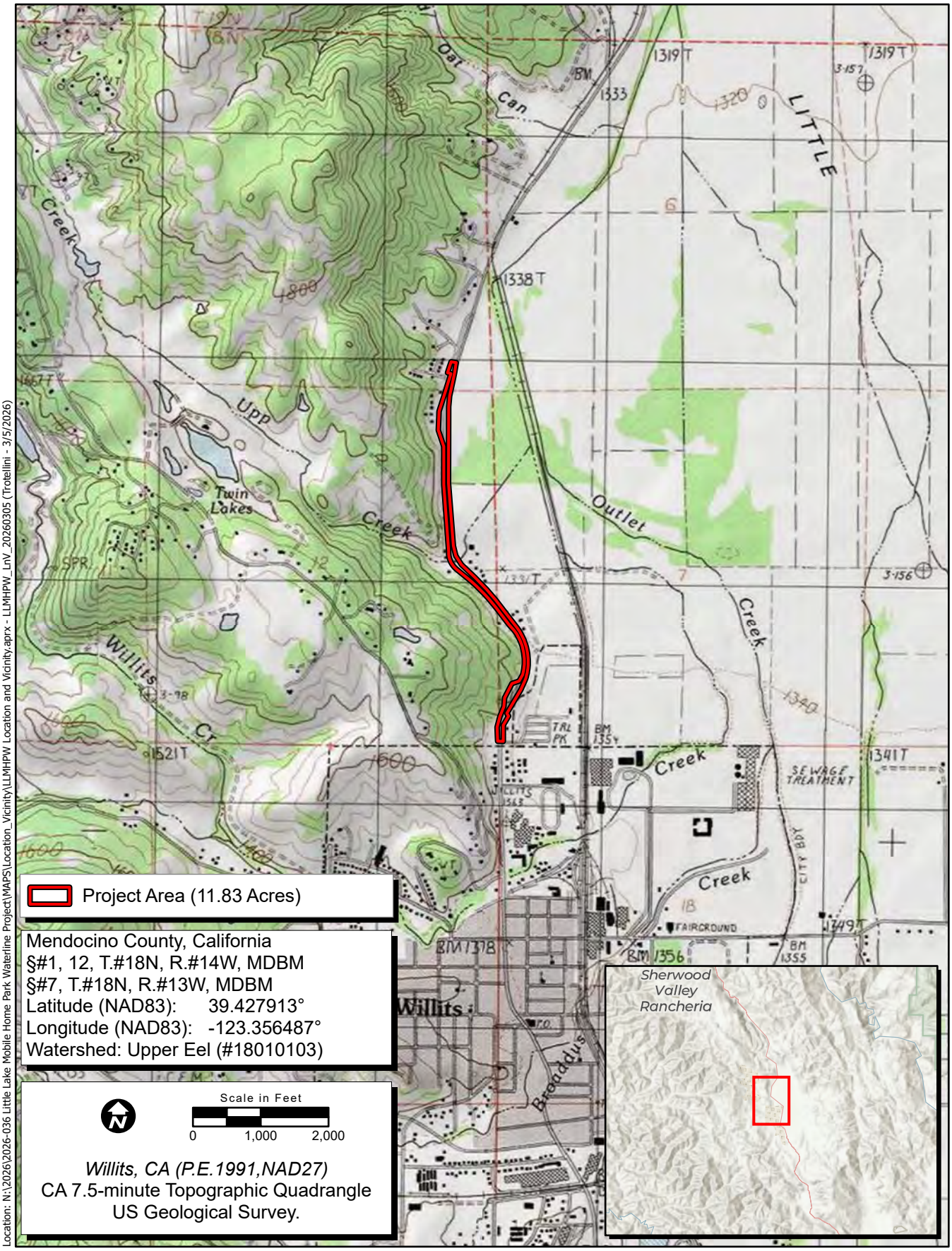
Sincerely,



Estevan Ramirez, MA, RPA
Associate Archaeologist

Attachments

Project Location and Vicinity Map



Location: N:\2026\2026-036 Little Lake Mobile Home Park Waterline Project\MAPS\Location_Vicinity\LLMHPW Location and Vicinity.aprx - LLMHPW_LnV_20260305 (Trotellini - 3/5/2026)

Map Date: 3/5/2026
Sources: ESRI, USGS

Figure 1. Project Location and Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2026-036 Little Lake Mobile Home Park Waterline Project

APPENDIX B

Sacred Lands File Coordination

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

03/06/2026

Information Below is Required for a Sacred Lands File Search

Project: Little Lake Mobile Home Park Waterline Project (2026-036)

County: Mendocino County

USGS Quadrangle: Willits 1991

Township: 18N **Range:** 14W **Section(s):** 1 and 12

Township: 18N **Range:** 13W **Section(s**): 6 and 7

Company/Firm/Agency: ECORP Consulting, Inc.

Contact Person: Estevan Ramirez

Street Address: 2525 Warren Drive

City: Rocklin **Zip:** 95677

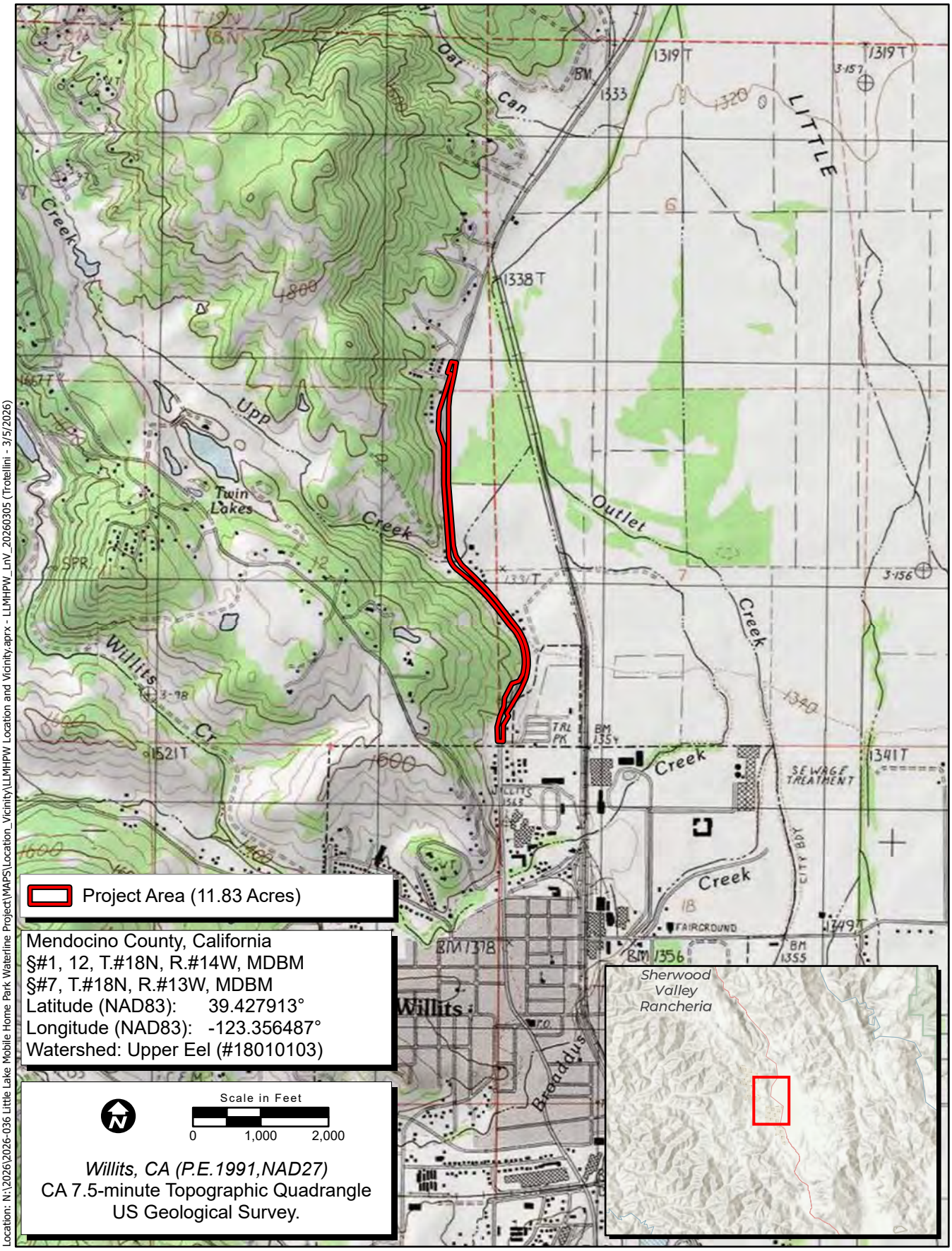
Phone: 916-782-9100

Fax: _____

Email: estevan.ramirez@ecorpconsulting.com

Project Description:

See attached map.



Location: N:\2026\2026-036 Little Lake Mobile Home Park Waterline Project\MAPS\Location_Vicinity\LLMHPW Location and Vicinity.aprx - LLMHPW_LnV_20260305 (Trotellini - 3/5/2026)

Map Date: 3/5/2026
Sources: ESRI, USGS

Figure 1. Project Location and Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2026-036 Little Lake Mobile Home Park Waterline Project

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Isaac Bojorquez
Ohlone-Costanoan

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Sara Dutschke
Miwok

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

COMMISSIONER
Vacant

COMMISSIONER
Vacant

Executive Secretary
Andrew Alejandre
Paskenta Band of Nomlaki Indians

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

March 6, 2026

Estevan Ramirez
ECORP Consulting, Inc.

Via Email to: estevan.ramirez@ecorpconsulting.com

Re: Little Lake Mobile Home Park Waterline (2026-036) Project, Mendocino County

To Whom It May Concern:

As requested, a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed based on information submitted for the above referenced project. The results were negative. Be aware that tribes do not always record their sacred sites in the SLF, nor are they required to do so. As such, an SLF search is not a substitute for consultation with all tribes that are traditionally and culturally affiliated with a project's geographic area.

Attached is a list of Native American tribes that are traditionally and culturally affiliated with the project's geographic area. Please contact all of the listed tribes as they may have information about sacred sites within the project area that is not listed with the NAHC.

If within two weeks of notification, a response has not been received, the Commission requests that you follow up with a telephone call or email to ensure that the project information was received.

If you receive notification of a change of address or phone number from a tribe, please inform the NAHC so that we can assure that our lists contain current information.

In addition to engaging in tribal consultation, you should consult the appropriate regional California Historical Research Information System (CHRIS) information center to determine whether it has information regarding the presence of recorded archaeological sites within the project area.

If you have any questions or need additional information, please contact me at my email address: melina.carlos@nahc.ca.gov

Sincerely,

Melina Carlos

Melina Carlos
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Mendocino County
3/6/2026

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Mendocino	Big Valley Band of Pomo Indians of the Big Valley Rancheria	F	Flaman McCloud, Jr., Chairperson	2726 Mission Rancheria Rd. Lakeport, CA, 95453	(707) 263-3924		Chairman@big-valley.net	Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	8/21/2024
	Cahto Tribe	F	Misty Davidson, Chairwoman	P.O Box 1239 300 Cahto Drive Laytonville, CA, 95454	(707) 984-6197		chair@cahtotribe-nsn.gov	Cahto Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	3/25/2025
	Cahto Tribe	F	Tasheena Sloan, Vice Chairperson	P.O. Box 1239 Laytonville, CA, 95454	(707) 984-6197		vicechair@cahtotribe-nsn.gov	Cahto Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	3/20/2023
	Cahto Tribe	F	Rachael Phillips, Member-at-Large	P.O Box 1239 300 Cahto Drive Laytonville, CA, 95454	(707) 984-6197		ecmember@cahtotribe-nsn.gov	Cahto Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	3/25/2025
	Cahto Tribe	F	Kendra Campbell, Secretary-Treasurer	P.O. Box 1239 Laytonville, CA, 95454	(707) 984-6197	(707) 984-6201	secretary_treasurer@cahtotribe-nsn.gov	Cahto Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	3/20/2023
	Cloverdale Rancheria of Pomo Indians of California	F	Vickey Macias, Tribal Treasurer/Administrator	555 S. Cloverdale Blvd Cloverdale, CA, 95425	(707) 894-5775		vmacias@cloverdalerancheria.com	Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	11/20/2025
	Coyote Valley Band of Pomo Indians	F	Richard Campbell, Acting Chairperson	P.O. Box 39/ 7901 Hwy 10, North Redwood Valley, CA, 95470	(707) 485-8723	(707) 485-1247	vc@coyotevalley-nsn.gov	Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	6/26/2023
	Dry Creek Rancheria of Pomo Indians	F	Sherrie Smith-Ferri, THPO	P.O. Box 607 Geyserville, CA, 95441	(707) 272-6767		sherries@drycreekrancheria.com	Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	3/20/2023
	Elem Indian Colony Pomo Tribe	F	Kim Cole, Tribal Administrator	16170 Main Street Lower Lake, CA, 95457	(707) 994-3400	(707) 994-3408		Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	7/8/2016
	Elem Indian Colony Pomo Tribe	F	Thomas Brown, Cultural Resources Director	16170 Main Street Lower Lake, CA, 95457	(707) 994-3400			Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	1/15/2019
	Elem Indian Colony Pomo Tribe	F	Agustin Garcia, Chairperson	P. O. Box 757 16170 Main Street Lower Lake, CA, 95457	(707) 994-3400	(707) 994-3408	Removed email address due to bounce back	Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	
	Estom Yumeka Maidu Tribe of the Enterprise Rancheria	F	Glenda Nelson, Chairperson	2133 Monte Vista Avenue Oroville, CA, 95966	(530) 532-9214	(530) 532-1768	info@enterpriserancheria.org	Maidu	Butte,Colusa,Del Norte,Glenn,Humboldt,Lake,Lassen,Mendocino,Plumas,Shasta,Sierra,Siskiyou,Sonoma,Te	9/10/2024
	Estom Yumeka Maidu Tribe of the Enterprise Rancheria	F	Nelson Smith, Tribal Historic Preservation Officer	2133 Monte Vista Avenue Oroville, CA, 95966	(530) 990-0063		nelsons@enterpriserancheria.org	Maidu	Butte,Colusa,Del Norte,Glenn,Humboldt,Lake,Lassen,Mendocino,Plumas,Shasta,Sierra,Siskiyou,Sonoma,Te	9/10/2024
	Guidiville Rancheria of California	F	Bunny Tarin, Tribal Administrator	PO Box 339 Talmage, CA, 95481	(707) 462-3682		tribal.admin@guidiville.net	Pomo	Alameda,Contra Costa,Lake,Marin,Mendocino,Napa,Sacramento,San Joaquin,Solano,Sonom	3/6/2026
	Hopland Band of Pomo Indians	F	Sonny Elliott, Chairperson	3000 Shanel Road Hopland, CA, 95449	(707) 472-2100	(707) 744-1506	sjelliott@hoplandtribe.com	Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	
	Hopland Band of Pomo Indians	F	Ramon Billy, Tribal Historical Preservation Officer	3000 Shanel Road Hopland, CA, 95449	(707) 472-2100		thpo@hoplandtribe.com	Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	4/30/2020
	Koi Nation of Northern California	F	Dino Beltran, Vice Chairperson	P.O. Box 3162 Santa Rosa, CA, 95402	(707) 331-9788	(707) 575-5506	dbeltran@koination.com	Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	7/7/2023
	Koi Nation of Northern California	F	Robert Morgan, Tribal Historic Preservation Officer	P.O. Box 3162 Santa Rosa, CA, 95402	(707) 236-5271	(707) 575-5506	robmorgan@koination.com	Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	7/7/2023
	Koi Nation of Northern California	F	Darin Beltran, Chairperson	P.O. Box 3162 Santa Rosa, CA, 95402	(707) 575-5586	(707) 575-5506	kn@koination.com	Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	7/7/2023
	Manchester Band of Pomo Indians of the Manchester Rancheria	F	Jaime Cobarrubia, Chairperson	P.O. Box 623 Point Arena, CA, 95468	(707) 882-2788	(707) 882-3417		Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	

Native American Heritage Commission
Native American Contact List
Mendocino County
3/6/2026

Middletown Rancheria of Pomo Indians of California	F	Jose Simon III, Tribal Chairman	PO Box 1035 Middletown, CA, 95461	(707) 987-1303		jsimon@middletownrancheria.com	Lake Miwok Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	11/17/2023
Middletown Rancheria of Pomo Indians of California	F	Tribal Historic Preservation Department,	PO Box 1035 Middletown, CA, 95461	(707) 987-1315		THPO@middletownrancheria.com	Lake Miwok Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	11/17/2023
Middletown Rancheria of Pomo Indians of California	F	Michael Rivera, Tribal Historic Preservation Officer	PO Box 1035 Middletown, CA, 95461	(707) 987-1315		mlrivera@middletownrancheria.com	Lake Miwok Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	11/17/2023
Noyo River Indian Community	N	,	P. O. Box 91 Fort Bragg, CA, 95437				Pomo Yuki	Colusa,Glenn,Lake,Mendocino,Sonoma,Tehama,Trinity	6/7/2018
Pinoleville Pomo Nation	F	Erica Carson, Tribal Historic Preservation Officer	500 B Pinoleville Drive Ukiah, CA, 95482	(707) 463-1454	(707) 463-6601		Pomo	Lake,Mendocino,Napa,Sonoma	
Pinoleville Pomo Nation	F	Leona Willams, Chairperson	500 B Pinoleville Drive Ukiah, CA, 95482	(707) 463-1454	(707) 463-6601		Pomo	Lake,Mendocino,Napa,Sonoma	
Potter Valley Tribe	F	Salvador Rosales, Chairperson	2251 South State Street Ukiah, CA, 95482	(707) 462-1213	(707) 462-1240	pottervalleytribe@pottervalleytribe.com	Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	
Redwood Valley or Little River Band of Pomo Indians	F	Debra Ramirez, Chairperson	3250 Road I Redwood Valley, CA, 95470	(707) 485-0361	(707) 485-5726	rvrsecretary@comcast.net	Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	
Robinson Rancheria of Pomo Indians	F	Stephanie Nix, Environmental Coordinator/ Acting THPO	1545 E Hwy 20 Nice, CA, 95464	(707) 530-9074		snix@rrcbc-nsn.gov	Eastern Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	3/10/2025
Robinson Rancheria of Pomo Indians	F	George Brenard, Environmental Director	1545 E Hwy 20 Nice, CA, 95464	(707) 382-1544		EPA.director@rrcbc-nsn.gov	Eastern Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	3/10/2025
Robinson Rancheria of Pomo Indians	F	Beniakem Cromwell, Chairperson	1545 E Hwy 20 Nice, CA, 95464	(707) 275-0527		Lduncan@rrcbc-nsn.gov	Eastern Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	3/10/2025
Round Valley Reservation/ Covelo Indian Community	F	James Russ, President	77826 Covelo Road Covelo, CA, 95428	(707) 983-6126	(707) 983-6128	tribalcouncil@rvit.org	ConCow Nomlaki Pit River Pomo Wailaki Wintun Yuki	Butte,Colusa,Glenn,Humboldt,Lake,Lassen,Mendocino,Modoc,Plumas,Shasta,Siskiyou,Sonoma,Sutter,Tehama,Trinity,Yuba	
Scotts Valley Band of Pomo	F	Shawn Davis, Chairperson	1005 Parallel Drive Lakeport, CA, 95453	(707) 263-4220	(707) 263-4345	shawn.davis@sv-nsn.gov	Pomo Wailaki	Colusa,Glenn,Humboldt,Lake,Mendocino,Sonoma,Trinity	
Sherwood Valley Band of Pomo Indians	F	Valerie Stanley, THPO	190 Sherwood Hill Drive Willits, CA, 95490	(707) 459-9690		svrthpo@sherwoodband.com	Pomo	Mendocino	9/23/2025
Yokayo Tribe	N	Yokayo Tribe, Chairperson	P.O. Box 362 Talmadge, CA, 95481				Pomo	Colusa,Glenn,Lake,Mendocino,Sonoma	

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Little Lake Mobile Home Park Waterline (2026-036) Project, Mendocino County.

Record: PROJ-2026-001183
Report Type: List of Tribes
Counties: Mendocino
NAHC Group: All

APPENDIX C

Project Area Photographs

State of California — The Resources Agency **Primary #**
DEPARTMENT OF PARKS AND RECREATION **HRI#**

PHOTOGRAPH RECORD

Trinomial

 Resource/Project Name: Little Lake Mobile Home Park Waterline **Year** 2026

Camera: Cell phone – Galaxy XCover7 Pro Lens Size: 35mm

Film Type and Speed: Digital Negatives Kept at: ECORP Consulting, Inc. - Rocklin

Mo.	Day	Time	Subject/Description	View Toward	Accession #
04	22	1132	Overview of LL-01 (North Main Street/Redwood Highway) northern segment with sign stating road ends at 500 Feet	N	20260422_113219
04	22	1133	Overview of Mobile Home Park entrance	NW	20260422_113322
04	22	1133	Overview of shoulder for LL-01 (North Main Street/Redwood Highway) northern segment	N	20260422_113339
04	22	1134	Overview of cul-de-sac north of the Project Area	N	20260422_113445
04	22	1136	Overview of northern extent of Project Area	N	20260422_113623
04	22	1147	Overview of Watergate sewage system near postmile 48.36	W	20260422_114700
04	22	1151	Creek stream situated along the western extent of the Project Area	Detail	20260422_115105
04	22	1158	Overview of Upp Creek Bridge	E	20260422_115857
04	22	1159	Overview of Upp Creek	W	20260422_115910
04	22	1200	Overview of Upp Creek	E	20260422_120007
04	22	1200	Overview under Upp Creek Bridge	N	20260422_120014
04	22	1201	Overview of LL-01 (North Main Street/Redwood Highway)	S	20260422_120142
04	22	1202	Overview of Highway 101 Bypass	E	20260422_120231
04	22	1208	Overview of eastern shoulder for LL-01 (North Main Street/Redwood Highway)	S	20260422_120838
04	22	1212	Overview of LL-01 (North Main Street/Redwood Highway) showing ESA area	N	20260422_121242
04	22	1213	Overview of location for P-23-5513 (Historic Ranch)	E	20260422_121345
04	22	1215	Overview of location for P-23-5514 (Historic Ranch)	E	20260422_121526
04	22	1231	Overview of LL-01 (North Main Street/Redwood Highway) showing Highway 101 sign northbound for Eureka to Ukiah	N	20260422_123125
04	22	1235	Overview of southern extent of LL-01 (North Main Street/Redwood Highway), towards the City of Willits	S	20260422_123552
04	22	1235	View from southern extent of Project Area	N	20260422_123557
04	22	1240	Willits City Limit signage	SW	20260422_124015
04	22	1244	Sloped shoulder on western side of LL-01 (North Main Street/Redwood Highway), situated in the southern region of the Project Area	NW	20260422_124455
04	22	1309	Overview of Upp Creek Bridge and associated guard rail	NW	20260422_130942
04	22	1309	Overview of P-23-5465 (pre-contact site)	NE	20260422_130944
04	22	1327	Overview of BRM found in P-23-5465 (precontact site) boundary, east of Upp Creek Bridge	S	20260422_132705
04	22	1327	Closeup image of milling slick surface of BRM	Detail	20260422_132741
04	22	1327	Additional closeup image of milling slick surface of BRM	Detail	20260422_132749
04	22	1332	Overview of LL-01 (North Main Street/Redwood Highway), from northern region	S	20260422_133259

State of California — The Resources Agency **Primary #**
DEPARTMENT OF PARKS AND RECREATION **HRI#**

PHOTOGRAPH RECORD

Trinomial

Page 2 of 2 **Resource/Project Name:** Little Lake Mobile Home Park Waterline **Year** 2026

Camera: Cell phone – Galaxy XCover7 Pro Lens Size: 35mm

Film Type and Speed: Digital Negatives Kept at: ECORP Consulting, Inc. - Rocklin

Mo.	Day	Time	Subject/Description	View Toward	Accession #
04	22	1350	Overview of cul-de-sac situated north of Project Area extent	N	20260422_135014


20260422_113219


20260422_113322


20260422_113339


20260422_113445


20260422_113623


20260422_114700


20260422_115105


20260422_115857


20260422_115910


20260422_120007


20260422_120014


20260422_120142


20260422_120231


20260422_120838


20260422_121242


20260422_121345


20260422_121526


20260422_123125


20260422_123552


20260422_123557


20260422_124015


20260422_124455


20260422_130942


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20260422_113219



20260422_113322



20260422_113339



20260422_113445



20260422_113623



20260422_114700



20260422_115105



20260422_115857



20260422_115910



20260422_120007



20260422_120014



20260422_120142



20260422_120231



20260422_120838



20260422_121242



20260422_121345



20260422_121526



20260422_123125



20260422_123552



20260422_123557



20260422_124015



20260422_124455



20260422_130942



20260422_130944



20260422_132705



20260422_132741



20260422_132749



20260422_133259



20260422_135014

APPENDIX D

Confidential Cultural Resource Site Locations and Site Records

This appendix contains information on the specific location of cultural resources. This information is not for publication or release to the general public. It is for planning, management, and research purposes only. Information on the specific location of pre-contact and historic sites is exempt from the Freedom of Information Act and California Public Records Act.