

Draft Proposed Initial Study / Proposed Mitigated Negative Declaration

Mendocino County Stormwater Trash Capture Devices

Mendocino County, California





Prepared for:

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Appendix A. Biological Resources Technical Report

LIST OF ACRONYMS AND ABBREVIATIONS

APE	area of potential effect		
BAAQMD	Bay Area Air Quality Management District		
BMPs	Best management practices		
CAL FIRE	California Department of Forestry and Fire Protection		
Caltrans	California Department of Transportation		
Cal/OSHA	California Division of Occupational Safety and Health		
CARB	California Air Resources Board		



CBC	California Building Code
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
City	City of Ukiah
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
со	carbon monoxide
CO ₂	carbon dioxide
Corps	United States Army Corps of Engineers
County	County of Mendocino
CPS	connector pipe screen
dB	decibel
dBA	A-weighted sound level
Department	Mendocino County Department of Transportation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FTA	Federal Transit Administration
GHG	greenhouse gas
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
HDS	hydrodynamic separators
Hz	hertz
IS/MND	Initial Study/Mitigated Negative Declaration
lb	pound
Ldn	day-night average noise level
Leq	energy-equivalent noise level
Lmax	maximum noise level
MCAQMD	Mendocino County Air Quality Management District
MRP	Municipal Regional Stormwater NPDES Permit
MS4s	Municipal Separate Storm Sewer Systems
МТ	metric tons
ΜΤΑ	Mendocino Transit Authority
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NMFS	National Marine Fisheries Service
NPDES	National Pollution Discharge Elimination System
OPR	Office of Planning and Research
Origer	Tom Origer & Associates
OSHA	Occupational Safety and Health Administration
PM	particulate matter
PM ₁₀	respirable particulate matter



PPV	peak particle velocity	
PRC	Public Resource Code	
Rank	California Rare Plant Rank	
RCRA	Resource Conservation and Recovery Act	
RMS	root mean square	
SPP	Sustainable Practices Policy	
SR	State Route	
SRTDP	Short Range Transit Development Plan	
SWPPP	P Stormwater Pollution Prevention Plan	
SWRCB	State Water Resources Control Board	
USEPA	United States Environmental Protection Agency	
USFWS	United States Fish and Wildlife Service	
VdB	vibration decibel	
WRA	WRA, Inc.	



1.0 INTRODUCTION AND PURPOSE

This Initial Study/Proposed Mitigated Negative Declaration (IS/MND) of environmental impacts is being prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations 15000 et. seq.), and the regulations and policies of the Mendocino County Department of Transportation. This IS/MND evaluates the potential environmental impacts which might reasonably be anticipated to result from implementation of the Mendocino County Stormwater Trash Capture Devices Project (project, proposed project).

Mendocino County Department of Transportation (Department) is the Lead Agency under CEQA and has prepared this IS/MND to address the impacts of implementing the proposed project. The purpose of the project is to install certified trash full capture systems to address trash runoff from Priority Land Uses (e.g., industrial, commercial, mixed-use, high-density residential, and transit stops) in order to comply with the Trash Amendments adopted by the State Water Resources Control Board (SWRCB) in April 2015.

2.0 PROJECT SUMMARY

2.1 Project Title

Mendocino County Stormwater Trash Capture Devices Project

2.2 Lead Agency Name and Address

Mendocino County Department of Transportation 340 Lake Mendocino Drive Ukiah, CA 95482

2.3 Contact Person and Phone Number

Jason Wise, Deputy Director of Transportation – Land Improvement 707-234-2846 wisej@mendocinocounty.org

2.4 Project Location

The proposed project is located in unincorporated areas of Mendocino County, California, in the urbanized Ukiah area and surrounding communities. The project consists of 35 individual Ukiah Municipal Separate Storm Sewer Systems (MS4) sites (project sites) located within existing catch basins in unincorporated Mendocino County, including in the communities of Calpella, The Forks, and Redwood Valley. Specifically, the project area extends from Plant Road at the border with the City of Ukiah at its southern extent (site location UK.33) to near the intersection of West Road and Ellen Lynn Street at the northern extent (site location UK.02). Figure 1 shows the locations for installation of the trash capture devices. Project sites are located along streets throughout developed areas including commercial, industrial, agricultural, and residential land uses.



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Sources: National Geographic, WRA | Prepared By: njander, 10/13/2023

Figure 1. Location

Mendocino County Stormwater Trash Capture Devices Project Mendocino County, California





2.5 Existing Land Uses

The proposed sites for trash capture devices installation are located in industrial, commercial, mixed-use, high-density residential, and transit stops land uses in Mendocino County. These sites are within existing rights-of-way.

3.0 PROJECT DESCRIPTION

3.1 Project Design

3.1.1 Trash Capture Devices and Associated Stormwater Infrastructure

The project includes installation of both small-scale and large-scale trash capture devices and associated stormwater infrastructure at the proposed 35 project sites in Mendocino County.

SMALL-SCALE DEVICES

Small-scale devices would include structures such as connector pipe screens (CPS) and hanging baskets installed at storm drain inlets.

Connector Pipe Screen (CPS)

The CPS is a metal screen assembly installed inside a catch basin, in front of the outlet pipe, preventing debris from entering the storm drain system (Figure 2). CPSs are designed to be permanently mounted to the catch basin and may have a quick disconnect feature to facilitate pipe jetting or to prevent flooding should the basin drainage system become clogged. These units are designed to retain all trash and solids larger than five millimeters inside the catch basin, and once in place, also retain large volumes of sediment.



Figure 2. Example of CPS

Hanging Basket

The hanging basket is similar to the CPS in that it is a separate unit installed into the existing storm drain system (Figure 3). Typically installed in a catch basin, the hanging basket is an insert that keeps trash and large debris from entering the stormwater system. A frame is inserted into the top of the catch basin, paired with a basket with five millimeter opening



perforations. The large screen openings allow ample flow-through and prevent clogging from sand and sediment entering the basket from streets and parking lots.



Figure 3. Example of Hanging Basket

LARGE-SCALE DEVICES

Large-scale devices would include structures such as hydrodynamic separators (HDS), netting devices, and baffle boxes.

Hydrodynamic Separators (HDS)

HDSs are widely used in stormwater treatment. They are flow-through structures with a settling or separation unit to remove sediment, floatable materials, and other pollutants (Figure 4). HDSs come in a wide range of designs, and some are as small as a standard manhole structure. These inline systems can be cleaned using a vacuum truck to pump out the trash, sediment, and water that collects in the bottom of the HDS.



Figure 4. Conceptual Design of HDS



Netting Devices

Netting devices are placed on discharge pipes to collect trash. Netting systems have one or more mesh bags and a metal frame guide system to support the nets. When netting devices become full, the nets can be removed and replaced with new nets. End-of-pipe systems can be installed at the actual discharge point to receiving waters, or at a collection point prior to discharge (Figure 5). These nets are installed above ground; therefore, they must be inspected at regular intervals to find and repair any damage that may occur during use.



Figure 5. Example of End-of-Pipe Netting System



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Baffle Boxes

Baffle boxes are concrete or fiberglass structures containing a series of sediment settling chambers separated by baffles (Figure 6). The primary function of baffle boxes is to remove sediment, suspended particles, and associated pollutants from stormwater. Trash is removed through the metal cage fitted with five-millimeter mesh located at the flow line of the storm drain system. Baffle boxes can be located either in-line or at the end of storm pipes. Cleaning of baffle boxes can be accomplished through a manhole or hatch above ground with a vacuum truck, with no confined-spaced entry required for routine maintenance. Screened systems are hinged for easy access to collected sediments in the baffle chambers below.



Figure 6. Conceptual Design of Baffle Box

Louvered Panels

Louvered panels are used in small-scale and large-scale trash devices for removing solids from stormwater. The most common louvered panel is the Rosco Moss Storm Flo® which is a linear radial design (Figure 7). The Rosco Moss Storm Flo® is certified as a Full Capture System for compliance with California's discharge and trash capture regulations.



Figure 7. Example of Rosco Moss Storm Flo®



3.2 **Project Construction**

Project construction includes two phases of work at trash capture sites. Unless otherwise noted, one device would be installed at each capture site. A summary of the specific trash device and associated stormwater infrastructure to be installed at each capture site location in Phases 1 and 2 is included in Table 1 and Table 2.

Phase 1: Installation of trash capture devices and associated stormwater infrastructure at 30 sites planned for 2024 (Table 1). Work in Phase 1 is not anticipated to have impacts to a jurisdictional stream, channel or wetland and does not require review and permitting by state and federal regulatory agencies. No alteration of a streambed or stream bank, or dredge or fill of material within jurisdictional wetlands or waters, will occur at these sites.

Phase 2: Installation of large trash capture devices and associated stormwater infrastructure at 5 sites and is planned for 2025 (Table 2). Work at some sites may result in an alteration of a streambed or stream bank, may affect a jurisdictional water or wetland, or will require more complex design. Therefore, most sites in Phase 2 will require regulatory permitting and approvals.



PF	ASE 1 – 2024 SITES WITH NO ANTIO	CIPATED IMPACTS TO JURISDICTIONAL WETLANDS AND WAT	ERS
CAPTURE SITE	LOCATION	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE
UK.01	E side of N State Street, 0.6 miles N of Hwy 101 Redwood Valley exit/West Road, Redwood Valley	15-foot long, 24-inch small-scale Louvered Panel at upland ditch, prior to culvert under N. State Street. Installation of weir headwall to upstream end.	Yes – 150 sq. ft.
UK.02	W side of West Road at Cerro Lumber entranceway, Redwood Valley	10-foot long, 24-inch Small-scale Louvered Panel at downstream end of culvert under private driveway. Installation of weir headwall to upstream end.	Yes – 150 sq. ft.
UK.03	N side of East School Way at Schoolway Road, Redwood Valley	Small-scale CPS within existing catch basin.	None
UK.04	NE corner of N State Street/Moore Street intersection, Calpella	Small-scale CPS at existing catch basin to be deepened.	Yes – 50 sq. ft.
UK.05, 05a	E (UK.05) and W (UK.05a) sides of N State Street at Lindberg True Value Hardware, Calpella	Two small-scale devices: CPS in new catch basin at north location (UK.05) and CPS in existing catch basin at south location (UK.05a)	Yes – 50 sq. ft. each
UK.06	W side of N State Street, 500 feet south of DenBeste Landscape Materials, Ukiah	Small-scale CPS within existing catch basin	None
UK.07	E side of N State Street, across from Ukiah Country Manor Mobile Home Community, Ukiah	Large-scale HDS at existing catch basin location, will require new structure	Yes – 100 sq. ft.
UK.08	N side of Lake Mendocino Drive, W of railroad line, Ukiah	Small-scale CPS within existing catch basin	None
UK.09	N side of Lake Mendocino Drive, E of County Public Works yard, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.

Table 1: Phase 1 Trash Capture Device Type, Location and Ground Disturbance



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PHASE 1 – 2024 SITES WITH NO ANTICIPATED IMPACTS TO JURISDICTIONAL WETLANDS AND WATERS

CAPTURE SITE	LOCATION	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE
UK.11	NW side of N State Street/Hensley Creek Road intersection, Ukiah	Small-scale CPS within existing catch basin to be expanded	Yes – 50 sq. ft.
UK.12	W side of N State Street at CAL FIRE/Scootrz Deli entranceway, Ukiah	Small-scale CPS within existing catch basin	None
UK.13	W side of N State Street at Taqueria Michoacan parking lot, Ukiah	Small-scale CPS within existing catch basin	None
UK.14	NW side of N State Street/Orr Springs Road intersection at auto lot, Ukiah	Small-scale CPS within existing catch basin	None
UK.16	S side of Pinoleville Road, 250 feet W of Hwy 101, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.
UK.17	N side of Orr Springs Road between Wellmar Drive and Industry Road, Ukiah	Small-scale CPS within existing catch basin	None
UK.18	S side of Lovers Lane at Ukiah Valley Fire station, Ukiah	Small-scale CPS within existing structure	None
UK.19	W side of N State Street N of Hwy 101 overpass and S of Best Western Hotel, Ukiah	Small-scale Hanging Basket within existing catch basin	None
UK.23	W side of Old River Road, 350 feet S of Foster Lane, Ukiah	Small-scale Louvered Panel at open ditch downstream of culvert	Yes – 150 sq. ft.
UK.25	W side of Dora Street, 165 feet S of Laws Avenue, Ukiah	Small-scale Hanging Basket within existing catch basin	None
UK.26	N side of Laws Avenue at Graystone Apartments, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.



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PHASE 1 – 2024 SITES WITH NO ANTICIPATED IMPACTS TO JURISDICTIONAL WETLANDS AND WATERS

CAPTURE SITE	LOCATION	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE
UK.27	W side of S State Street, adjacent to 101 Market/Deli, Ukiah	Small-scale CPS within existing catch basin	None
UK.28	NW corner of S Dora Street/Fircrest Drive intersection, Ukiah	Small-scale CPS within existing catch basin	None
UK.29	W side of N Court Road, 155 feet N of Oak Knoll Road, Ukiah	Small-scale Hanging Basket within existing catch basin	None
UK.30	SW corner of S State Street/Whitmore Lane intersection, Ukiah	Small-scale Hanging Basket within new catch basin	Yes – 50 sq. ft.
UK.32	SW corner of S State Street/Gobalet Lane intersection, Ukiah	Small-scale Louvered Panel at open ditch downstream of culvert	Yes – 150 sq. ft.
UK.33	N side of Plant Road, 130 feet E of Taylor Drive, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.
UK.34	NW corner of Calpella Road/Lake Mendocino Drive, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.
UK.35	W side of N State Street, between A-Z Construction and DenBeste Landscape Materials, Ukiah	Small-scale CPS within existing catch basin	None
UK.36	N side of Oak Knoll Road, 100 feet W of N Court Road, Ukiah	Small-scale Hanging Basket within existing catch basin	None



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	PHASE 2 – 2025 SITES WITH POTE	NTIAL IMPACTS TO JURISDICTIONAL WETLANDS AND WATER	S
CAPTURE SITE	LOCATION	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE
UK.10	W side of N State Street, across from Frontage Road A/Dodge auto dealership, Ukiah	Large-scale Louvered Panel on concrete pad at outlet of culvert, approximately 30 feet from end of wing wall to end of wing wall and 2 feet in height. Construction to remain within concrete pad.	226 sq. ft.
UK.18a	North Lovers Lane at entrance to apartment complex, 250 feet SW of fire station, Ukiah	Large-scale HDS or baffle box under N. Lovers Lane	200 sq. ft.
UK.20	Hwy 101 W side frontage road, behind Raley's groceries, Ukiah	Large-scale HDS or Baffle Box within developed parking lot and Caltrans easement areas	200 sq. ft.
UK.21	Hwy 101, Mazzoni Street overpass, W side	Large-scale Louvered Panel in concrete-lined, vegetated stream channel. Will require dual, 36-inch diameter tubes each 25 feet in length.	700 sq. ft.
UK.22	Hwy 101, Mazzoni Street overpass, E side	Large-scale Louvered Panel in vegetated stream channel. Will require concrete pad and concrete sidewalls for weir into dual 36-inch diameter tubes each approximately 15 feet in length.	1,048 sq. ft.

Table 2: Phase 2 Trash Capture Device Type, Location and Ground Disturbance



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3.2.1 Phase 1

Phase 1 site construction would occur at 30 sites listed in Table 1 during the dry season (May 15 to September 30) and is expected to commence in 2024. All project activities would occur within existing developed structures in MS4 stormwater facilities. All devices to be installed are small-scale with the exception of UK.07, which is a large-scale device. No significant ground disturbance is anticipated, as only limited ground disturbance would occur as part of device installation work at the following project sites:

UK.01, UK.02, UK.04, UK.05, UK05a, UK.07, UK.09, UK.11, UK.16, UK.23, UK.26, UK.30, UK.32, UK.33, and UK.34.

Phase 1 involves installation of trash capture devices where work will have no effect on a jurisdictional stream, channel or wetland and does not require review and permitting by state and federal regulatory agencies. No alteration of a streambed or stream bank, or dredge or fill of material within jurisdictional wetlands or waters, will occur at these sites. Area of ground disturbance for Phase 1 devices ranges from none to 200 square feet.

Equipment necessary for Phase 1 implementation would include:

- Pickup truck
- Vacuum truck
- Concrete drill
- Impact driver
- Street sweeper
- Pressure washer

No heavy machinery would be required. No road closures or vegetation removal would be required. Staging would occur on the existing sidewalk at each location and no construction materials would be staged overnight.

3.2.2 Phase 2

Phase 2 site construction will occur at 5 sites listed in Table 2, would also be implemented during the dry season (May 15 to September 30), and is expected to commence in 2025. Project activities would occur at locations that are not part of the County's MS4 stormwater facilities, and all devices to be installed are large-scale. Phase 2 work involves installation of trash capture devices within channels; however, only site UK.22 will impact an earthen channel for the development of a concrete slab and wing walls to place the device. Sites UK.10 and UK.21 will involve placement of a device in a concrete-lined channel. The device at UK.18a will be installed within an underground pipe that crosses Lovers Lane. At UK.20, the device will be installed within a parking lot above the channel's top of bank.

Equipment necessary for Phase 2 implementation would include:

- Concrete Delivery Truck
- Skip Loader
- Dump Truck
- Roller Compactor
- Flatbed Trailer
- Backhoe
- Crane



- Forklift
- Vibratory Hammer or Press
- Pile Driving Hammer or Vibratory Driver
- Diesel Engine
- Mud Handling Equipment
- 3 HP Submersible Pump
- HP Generator
- Tree Removal Equipment (Chainsaws, Chippers, Crew Trucks)
- Light Tower with Generator

A crane would be required to install and maintain netting devices. Any staging areas required would be located in developed areas, and no construction materials would be staged overnight. Lane closures and/or vegetation removal may be required at some of the sites.

3.2.3 Best Management Practices

The project will include Best Management Practices (BMPs) to avoid and minimize erosion, pollutants, and sediment deposition into the streams. BMPs shall include but are not limited to the following:

- All equipment used on site will be maintained in good working order. Any leaks will be repaired immediately, and if on-site repairs are not possible the equipment will be removed from the site immediately.
- All equipment and materials entering the site will be cleaned and disinfected prior to entry. Equipment will be cleaned with power washing methods to remove all dirt and seed. Hand and power tools will be disinfected by washing thoroughly and treating with a disinfectant solution.
- Erosion-control measures will be utilized throughout all phases of the project where sediment runoff from construction may potentially enter waters. Erosion control structures will be monitored for effectiveness and will be repaired or replaced as needed. Appropriate erosion control measures will be installed around any stockpiles of soil or other materials that could be mobilized by rainfall or runoff. No monofilament erosion control materials shall be used. Work within 100 feet of streams will be postponed for 24 hours following a significant rain event (>0.25 inch in 24 hours).
- When working within channels on the site, the contractor will ensure that all work is completed in dry conditions. Stream diversion or pump-around practices may be employed, and any turbid water that accumulates in work areas will be filtered prior to re-entry into the waterway or wetland.
- After final grading has been completed, final erosion and sediment control measures will be installed prior to the first rainfall event. Erosion control measures will include but not be limited to silt fence, straw wattles, and coir fiber erosion control matting.

3.2.4 Ongoing Operation and Maintenance

Project operation would involve activities associated with the maintenance of trash capture devices. Large-scale HCDs, louvered panels, and baffle boxes would require cleaning approximately twice per year and would require approximately four hours for a team of two maintenance workers. Small-scale CPS and hanging baskets would require cleaning



approximately three times per year and would require approximately 30 minutes for a team of two maintenance workers. Maintenance activities would generally include the following:

- Clearing trash and debris located immediately in front of a curb opening or side opening of a catch basin, and on top or between metal grates of a grated catch basin,
- Removing vegetation growing across and/or blocking the basin opening,
- Removing all trash and vegetative debris from inside the catch basin,
- Removing trash and debris in connector pipe openings, upstream or downstream,
- Replacing parts and entire devices as needed, and
- Disposing of debris, trash, organics, and sediment captured by devices at an approved facility for disposal in accordance with local and state requirements.

A vactor truck would be needed to maintain large-scale and possibly small-scale devices. A crane would also be needed to maintain netting devices.

3.3 Regulatory Review and Authorizations

The information contained in this IS/MND will be used by the Mendocino County Department of Transportation (the Lead Agency for CEQA review) to review the potential environmental impacts of the proposed project. If the project is approved, information prepared for the IS/MND would be used by the County and responsible and trustee agencies in preparing applications for local, state and federal regulatory approvals and permits. These approvals and permits include, but may not be limited to, the following:

- U.S. Army Corps of Engineers Clean Water Act Section 404 Nationwide General Permit
- California Department of Fish and Wildlife Section 1602 Lake or Streambed Alteration Agreement
- Regional Water Quality Control Board Clean Water Act Section 401 Water Quality Certification
- Mendocino County Building Permit

4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is potentially significant unless mitigation is incorporated, as indicated by the checklist on the following pages.

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

4.1 Initial Study Checklist

This section describes the existing environmental conditions in and near the project area and evaluates environmental impacts associated with the proposed project. The environmental checklist, as recommended in the Appendix G to the CEQA Guidelines, was used to identify environmental impacts that could occur if the proposed project is implemented. The right-hand column in the checklist lists the source(s) for the answer to each question. The cited sources are identified at the end of this section.

Each of the environmental categories was fully evaluated, and one of the following four determinations was made for each checklist question:

"No Impact" means that no impact to the resource would occur as a result of implementing the project.

"Less than Significant Impact" means that implementation of the project would not result in a substantial and/or adverse change to the resource, and no mitigation measures are required.

"Less than Significant with Mitigation Incorporated" means that the incorporation of one or more mitigation measures is necessary to reduce the impact from potentially significant to less than significant.

"Potentially Significant Impact" means that there is either substantial evidence that a project-related effect may be significant, or, due to a lack of existing information, could have the potential to be significant.



4.1.1 Aesthetics

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

ENVIRONMENTAL SETTING

The proposed project consists of 35 individual project sites located in unincorporated Mendocino County, including the unincorporated communities of Calpella, The Forks, and Redwood Valley. The region is situated in a deep valley alongside the Russian River approximately 100 miles north of San Francisco. Lake Mendocino is located approximately 1.5 miles east of the project area and mountainous regions lie to the west.

Specifically, the project would extend from Plant Road to the south (location of site UK.33) to near the intersection of West Road and Ellen Lynn Street to the north (location of site UK.02). Project sites are located along streets throughout developed areas including commercial, industrial, agricultural, and high-density residential land uses.

DISCUSSION OF IMPACTS

a) Have a substantial adverse effect on a scenic vista?

No Impact

A scenic vista can be defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the public. There are various scenic vistas located in the region of the project that provide views of landscapes and of Lake Mendocino. No project sites would be located immediately adjacent to scenic vistas or blocking a view of a valued landscape. Project sites may be visible in the mosaic of landscape that can be observed from scenic vistas, but due



to the small-scale of construction activities, an impact to scenic vistas would not occur. Project operation would be consistent with existing views, as trash capture devices would be either installed in existing catch basins or existing catch basins would be expanded in alreadydeveloped areas. Therefore, no impact would occur.

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

No Impact

There are no officially designated State scenic highways in Mendocino County as determined by the California Department of Transportation ([Caltrans] 2023). State Route (SR) 20, which runs east to west through the project area, is designated as an eligible State scenic highway (Caltrans 2023). The nearest project site to SR-20 is UK.04, situated approximately 0.60 miles south at the intersection of Moore Street and North State Street. The project sites are not visible from SR-20 due to vegetation and development in the area. Therefore, the project would not damage scenic resources within the vicinity of a State scenic highway. No impact would occur.

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

Less than Significant Impact

As the project sites are located along existing roads, the project is primarily located within developed and urbanized areas. The project would consist of replacement and limited expansion of existing catch basins and would not conflict with any zoning codes or other regulations governing scenic quality. Project construction would impose some form of scenic disturbance at each project site; however, these impacts would be temporary and therefore would not be considered to be substantial. Project operation would consist of similar views to existing conditions as the only new structures would be located within existing catch basins or expanded catch basins. All new or expanded infrastructure would be located adjacent to existing infrastructure and would be situated in already-developed areas. Therefore, the impact of the project regarding visual character or quality of public views would be less than significant.

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

No Impact

Project construction would occur during daytime hours in accordance with regulations and policies of the County. No project construction activities would occur during the night and therefore would not require nighttime lighting. Project operation would be similar to existing conditions; no new sources of substantial light or glare would occur. Therefore, the project would not create a new source of substantial light or glare which could adversely affect views in the area. No impact would occur.



4.1.2 Agricultural and Forestry Resources

	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?				\boxtimes
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?				

ENVIRONMENTAL SETTING

The project includes 35 project sites located in unincorporated Mendocino County. All project sites are located along existing roads and in already developed areas. Some sites are located adjacent to properties in agricultural land use.

DISCUSSION OF IMPACTS

a-e) 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? Conflict with existing zoning for agricultural use, or a Williamson Act contract? 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))? Result in a loss of forest land or conversion of forest land to non-forest use? Involve other changes in the existing environment which, due to their location or nature,



could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact

The project would involve the installation of various types of trash capture devices inside existing catch basins in the County. The project would not convert Farmland, forest land, or timber land to non-agricultural use, or conflict with an existing zoning for agricultural use or a Williamson Act contract. No impact would occur.



4.1.3 Air Quality

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

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

ENVIRONMENTAL SETTING

The project sites are within the jurisdiction of the Mendocino County Air Quality Management District (MCAQMD), which regulates stationary sources of air pollution in Mendocino County. The MCAQMD prepares and updates air quality plans to achieve State and national ambient air quality standards and comply with federal and State air quality planning requirements. MCAQMD has issued a recommendation that agencies use adopted Bay Area Air Quality Management District (BAAQMD) CEQA thresholds of significance for projects in Mendocino County, with some exceptions. The BAAQMD CEQA Air Quality Guidelines establish screening criteria and thresholds of significance for lead agencies and project applicants to determine whether a project requires a detailed air-quality assessment to estimate air pollutant emissions, and if so, whether the project's air quality impacts would be considered significant under CEQA.

Sensitive receptors are groups of people that are more affected by air pollution than others. California Air Resources Board (CARB) has identified that the following persons are considered air quality sensitive receptors: children, elderly, asthmatics, and others whose are at a heightened risk of negative health outcomes due to exposure to air pollution (CARB 2022). Locations that may contain a high concentration of these sensitive population groups include residential areas, schools, hospitals, daycare facilities, and elder care facilities. The project sites are located throughout urbanized and residential areas, and therefore there are various sensitive receptors located in the immediate vicinity of the project sites.



DISCUSSION OF IMPACTS

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact with Mitigation Incorporated

The Particulate Matter (PM) Attainment Plan (PM Plan) is the only applicable air quality plan that applies to the project area (MCAQMD 2005). At the time the PM Plan was published, the County was in attainment for all federal air quality standards and in attainment for all State air quality standards except for airborne PM less than 10 microns in size (PM₁₀). According to the PM Plan, the main sources of PM in the County are wildfires, residential wood burning, unpaved roads, and construction activities. Recommended control measures for PM contained in the PM Plan include increasing enforcement of existing air quality regulations for construction and grading activities, and developing a regulation that would require permits for projects with over one acre of disturbance. The project would temporarily generate PM₁₀ emissions due to grading and excavation activities during construction but would implement Mitigation Measure AIR-1 to reduce these emissions to a less-than-significant level. Project operation would be similar to existing conditions and would not cause an increase in PM₁₀ emissions. Therefore, the project would not conflict with any recommendations provided in the PM 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?

Less than Significant Impact with Mitigation Incorporated

The County is in attainment for all federal ambient air quality standards, and for all State air quality standards except for PM₁₀ (CARB 2020). The project would temporarily generate some fugitive dust, including PM₁₀ emissions, due to grading and excavation activities during construction. MCAQMD requires projects to include best management practices (BMPs) for construction-related fugitive dust emissions (MCAQMD 2010). The County would implement Mitigation Measure AIR-1 to reduce emissions of PM₁₀ and related construction emissions to a less-than-significant level. Emissions during project operation would be limited to emissions from vehicles and equipment used for maintenance and repairs, which would be similar to existing conditions. Therefore, the proposed project would not cause an increase of any criteria pollutant for which the region is in non-attainment. The impact would be less than significant with mitigation incorporated.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact with Mitigation Incorporated

Construction equipment and heavy-duty truck operation associated with construction activities generate toxic air contaminants (TACs) in the form as diesel particulate matter (DPM), as well as fugitive dust. The project sites are located throughout developed areas and some project sites are adjacent to sensitive receptors such as residential areas. Mitigation Measure AIR-1 requires implementation of fugitive dust control measures. The project would also implement Mitigation Measure AIR-2, which requires the use of low diesel particulate matter engines for construction equipment. Implementation of Mitigation Measures AIR-1 and AIR-2 would reduce construction emissions to sensitive receptors to a less-than-significant level. Project operation would be similar to existing conditions and would not result in an increase in DPM or fugitive dust emissions. Therefore, the impact of the proposed project related to exposing sensitive receptors



to substantial pollutant concentrations would be less than significant with mitigation incorporated.

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

Less than Significant Impact

Construction activities would involve the use of gasoline- or diesel-powered equipment that emit exhaust fumes. These activities would take place intermittently throughout the workday and the associated odors are expected to dissipate within the immediate vicinity of the work area. Persons near the construction work areas may find these odors objectionable; however, the project would not include uses that have been identified as potential sources of objectionable odors, such as restaurants, manufacturing plants, landfills, and agricultural and industrial operations. The infrequency of the emissions, rapid dissipation of the exhaust, and short-term nature of construction activities would result in a less-than-significant odor impact.

Project operation would be similar to existing conditions and would not result in an increase in other emissions that would affect a substantial number of people. The impact would be less than significant.

MITIGATION MEASURES

Mitigation Measure AIR-1: Fugitive Dust Control Measures

To limit dust, criteria pollutants, and precursor emission associated with construction, the following BAAQMD-recommended fugitive dust control measures shall be implemented and included in all contract specifications for components constructed under the project:

- All exposed surfaces (e.g., unpaved parking areas, unpaved staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxic control measure Title 13, Section 2485 of California Code of Regulation). Clear signage shall be provided for construction workers at all access points.
- Construction equipment shall be properly maintained by a certified mechanic.
- A publicly visible sign shall be posted with the telephone number and the person to contact at the County regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure AIR-2: Engine Controls for Construction Equipment

• For equipment used during the site preparation and grading activities, diesel-powered offroad equipment, greater than 25 horsepower, operating on a site for more than two days



continuously shall, at a minimum, meet the U.S. Environmental Protection Agency (USEPA) particulate matter emissions standards for Tier 4 engines. Equipment that is electrically powered or uses non-diesel fuels would meet this requirement.

- For the remaining phases, diesel-powered off-road equipment, greater than 25 horsepower, operating on a site for more than two days continuously shall, at a minimum, meet USEPA particulate matter emission standards for Tier 3 engines with CARB-certified Level 3 Diesel Particulate Filters or equivalent. The use of equipment meeting USEPA Tier 4 standards for particulate matter would also meet this requirement. Alternatively, the use of equipment that includes electric or alternatively fueled equipment (i.e., non-diesel) would meet this requirement.
- Portable equipment (i.e., air compressors, cement and mortar mixers, and concrete/industrial saws) shall be electrically powered.



4.1.4 Biological Resources

	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 Game 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, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			\boxtimes	
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?			\boxtimes	
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?				



ENVIRONMENTAL SETTING

On November 14, 2022, and April 4, 2023, WRA, Inc. (WRA) biologists conducted surveys of the project sites to map vegetation, unvegetated land cover types, document plant and wildlife species presence, and evaluate habitat for the potential to support special-status species as defined by CEQA. The research and survey methodology and results of these surveys are summarized in the following sections. Information in this section relies on the Biological Resources Technical Report ([BRTR], Appendix A) prepared by WRA biologists in December 2023 (WRA 2023).

REGULATORY BACKGROUND

Endangered and Threatened Plants, Fish, and Wildlife

Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the Federal Endangered Species Act (ESA), or the California Endangered Species Act (CESA). Specific protections and permitting mechanisms for these species differ under each of these acts, and a species' designation under one law does not automatically provide protection under the other.

The ESA (16 USC 1531 et seq.) is implemented by the USFWS and the National Marine Fisheries Service (NMFS). The USFWS and NMFS maintain lists of endangered and threatened plant and animal species (referred to as "listed species"). "Proposed" or "candidate" species are those that are being considered for listing and are not protected until they are formally listed as threatened or endangered. Under the ESA, authorization must be obtained from the USFWS or NMFS prior to take of any listed species. "Take" under the ESA is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Take under the ESA includes direct injury or mortality to individuals, disruptions in normal behavioral patterns resulting from factors such as noise and visual disturbance and impacts to habitat for listed species. Actions that may result in take of an ESA-listed species may obtain a permit under ESA Section 10, or via the interagency consultation described in ESA Section 7. Federally listed plant species are only protected when take occurs on federal land.

The ESA also provides for designation of critical habitat, which are specific geographic areas containing physical or biological features "essential to the conservation of the species." Protections afforded to designated critical habitat apply only to actions that are funded, permitted, or carried out by federal agencies. Critical habitat designations do not affect activities by private landowners if there is no other federal agency involvement.

The CESA (CFGC 2050 et seq.) prohibits the take of any plant and animal species that the CFGC determines to be an endangered or threatened species in California. CESA regulations include take protection for threatened and endangered plants on private lands, as well as extending this protection to candidate species that are proposed for listing as threatened or endangered under CESA. The definition of a "take" under CESA ("hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") only applies to direct impact to individuals, and does not extend to habitat impacts or harassment. CDFW may issue an Incidental Take Permit under CESA to authorize take if it is incidental to otherwise lawful activity and if specific criteria are met. Take of these species is also authorized if the geographic area is covered by a Natural Community Conservation Plan (NCCP), as long as the NCCP covers that activity.



Fully Protected Species and Designated Rare Plant Species

This category includes specific plant and wildlife species that are designated in the CFGC as protected even if not listed under CESA or ESA. Fully Protected Species includes specific lists of birds, mammals, reptiles, amphibians, and fish designated in CFGC. Fully protected species may not be taken or possessed at any time. No licenses or permits may be issued for take of fully protected species, except for necessary scientific research and conservation purposes. The definition of "take" is the same under the California Fish and Game Code and the CESA. By law, CDFW may not issue an Incidental Take Permit for Fully Protected Species. Under the California Native Plant Protection Act, CDFW has listed 64 "rare" or "endangered" plant species, and prevents "take", with few exceptions, of these species. CDFW may authorize take of species protected by the Native Plant Protection Act through the Incidental Take Permit process, or under a NCCP.

Special Protections for Nesting Birds and Bats

The federal Bald and Golden Eagle Protection Act provides relatively broad protections to both of North America's eagle species (bald eagle [Haliaeetus leucocephalus] and golden eagle [Aquila chrysaetos]) that in some regards are similar to those provided by the ESA. In addition to regulations for special-status species, most native birds in the United States, including non-status species, have baseline legal protections under the Migratory Bird Treaty Act of 1918 and CFGC, i.e., sections 3503, 3503.5 and 3513. Under these laws/codes, the intentional harm or collection of adult birds as well as the intentional collection or destruction of active nests, eggs, and young is illegal. For bat species, the Western Bat Working Group (WBWG 2023) designates conservation status for species of bats, and those with a high or medium-high priority are typically given special consideration under CEQA.

Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act provides for conservation and management of fishery resources in the U.S., administered by NMFS. This Act establishes a national program intended to prevent overfishing, rebuild overfished stocks, ensure conservation, and facilitate long-term protection through the establishment of Essential Fish Habitat (EFH). EFH consists of aquatic areas that contain habitat essential to the long-term survival and health of fisheries, which may include the water column, certain bottom types, vegetation (e.g., eelgrass *Zostera* spp.), or complex structures such as oyster beds. Any federal agency that authorizes, funds, or undertakes action that may adversely affect EFH is required to consult with NMFS.

Species of Special Concern, Movement Corridors, and Other Special-status Species under CEQA

To address additional species protections afforded under CEQA, CDFW has developed a list of special species as "a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status." This list includes lists developed by other organizations, including for example, the Audubon Watch List Species, the Bureau of Land Management Sensitive Species, and USFWS Birds of Special Concern. Plant species on the California Native Plant Society (CNPS) Rare Plant Inventory ([Inventory] CNPS 2023a) with California Rare Plant Ranks (Rank) of 1 and 2, as well as some with a Rank of 3 or 4, are also considered special-status plant species and must be considered under CEQA. Some Rank 3 and Rank 4 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare. Movement and migratory corridors for native wildlife



(including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

LOCAL PLANS AND POLICIES

Mendocino County General Plan

The Mendocino County General Plan contains the following relevant policies pertaining to biological resources:

Policy RM-1: Protect stream corridors and associated riparian habitat.

Policy RM-2: Promote and participate in watershed restoration and enhancement projects.

Policy RM-3: Work cooperatively with property owners, agencies, and organizations to develop and support programs that maintain the integrity of stream systems for flood control, aquatic habitat, and water supply.

Policy RM-5: Promote and encourage land-use activities that maintain or improve channel elevation and banks for rivers and streams in the county.

Policy RM-19: Promote the incorporation of project design features that will improve water quality by minimizing the impervious surface areas, maximizing on-site retention of stormwater runoff, and preserving existing vegetation to the extent possible.

Policy RM-20: Require integration of stormwater best management practices, potentially including those that mimic natural hydrology, into all aspects of development and community design, including streets and parking lots, homes and buildings, parks, and public landscaping.

Policy RM-22: Support public and private programs to reduce water contamination and improve the water quality in county rivers and streams, specifically those that do not meet federal water quality standards.

Policy RM-23: The County shall work with other responsible regulatory agencies to prevent the discharge or threatened discharge of sediment from any activity in amounts harmful to beneficial uses of the water.

Policy RM-28: All discretionary public and private projects that identify special-status species in a biological resources evaluation (where natural conditions of the site suggest the potential presence of special-status species) shall avoid impacts to special-status species and their habitat, to the maximum extent feasible. Where impacts cannot be avoided, projects shall include the implementation of site-specific or project-specific effective mitigation strategies developed by a qualified professional in consultation with state or federal resource agencies with jurisdiction (if applicable).

METHODOLOGY

On November 14, 2022, and April 4, 2023, WRA biologists visited the project sites to map vegetation, aquatic features, and other land cover types; document plant and wildlife species present; and evaluate on-site habitat for the potential to support special-status species as defined by CEQA. Prior to the site visit, WRA biologists reviewed literature resources and performed database searches to assess the potential for sensitive land cover types and special-status species, including:



- Soil Survey of Mendocino County, Eastern Part and Southwestern Part of Trinity County (USDA 1991)
- Ukiah, Elledge Peak, and Redwood Valley 7.5-minute U.S. Geological Survey (USGS) quadrangle (USGS 2018)
- Contemporary aerial photographs (Google Earth 2023)
- Historical aerial photographs (NETR 2023)
- National Wetlands Inventory (USFWS 2023a)
- California Aquatic Resources Inventory (SFEI 2017)
- California Natural Diversity Database (CNDDB) (CDFW 2023a)
- Biological Information and Observation System (BIOS) (CDFW 2023b)
- CNPS Inventory (CNPS 2023a)
- Consortium of California Herbaria (CCH1 2023, CCH2 2023)
- USFWS Information for Planning and Consultation (USFWS 2023b)
- eBird Online Database (Cornell Lab of Ornithology 2023)
- California Bird Species of Special Concern in California (Shuford and Gardali 2008)
- California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)
- A Manual of California Vegetation, Online Edition (CNPS 2023b)
- California Natural Community List (CDFW 2023c)
- Database searches (i.e., CNDDB, CNPS) for special-status species focused on the Potter Valley, Cow Mountain, Purdy's Garden, Orr Springs, Ukiah, Redwood Valley, Laughlin Range, Boonville, and Elledge Peak USGS 7.5-minute quadrangles.

Following the remote assessment, WRA biologists completed a field review to document: (1) land cover types (e.g., vegetation communities, aquatic resources), (2) existing conditions and to determine if such provide suitable habitat for any special-status plant or wildlife species, (3) if and what type of aquatic land cover types (e.g., wetlands) are present, and (4) if special-status species are present.

DISCUSSION OF IMPACTS

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 (CDFW) or United States Fish and Wildlife Service (USFWS)?

Special-status Plant Species

No Impact

Based upon a review of the resource databases listed in the Methodology section above, 38 special-status plant species have been documented in the vicinity of the project sites. None of these species were determined to have the potential to occur or are unlikely to occur within the project sites due to one or more of the following:

- The project sites do not contain the necessary hydrologic, edaphic (soil), topographic, and pH conditions necessary to support the special-status species.
- Associated natural communities necessary to support the special-status species are not present within the project sites.



- The project sites are geographically isolated from the documented range of the specialstatus plant species.
- The historical landscape and/or habitat(s) of the project sites were not suitable habitat prior to land/type conversion to support the special-status plant species.
- Land use history and contemporary management has degraded the localized habitat necessary to support the special-status plant species.

WRA biologists conducted protocol-level surveys in April 2023 and November 2022. No specialstatus plant species were observed. Due to the highly disturbed habitats of the trash capture location, no special-status plants are determined to have potential to occur. Therefore, the project would result in no impact to special-status plant species.

Special-status Wildlife Species

No Impact

Based on the literature review performed by WRA biologists, 20 special-status wildlife species have been documented in the vicinity of the project sites. The BRTR concluded that none of these species have the potential to occur at project sites due to a lack of necessary habitat features required to support these species. Features not found within the project sites that are required to support special-status wildlife species include:

- Aquatic features with dense aggregations of emergent vegetation,
- Ephemeral streams with rocky streambeds,
- Perennial rivers and tributaries,
- Old growth redwood or fir forest,
- Sandy banks, beaches, or alkaline flats,
- Riparian, coniferous, or hardwood forests, and
- Caves, mine shafts, or abandoned buildings.

Because no special-status wildlife species have the potential to occur at the project sites, the project would have no impact on special-status wildlife species.

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 CDFW or USFWS?

No Impact

WRA biologists observed 11 land cover types within the project area, including eight terrestrial types and three aquatic resource types, which consisted of:

- Urban,
- Non-native grassland,
- Developed,
- Agriculture,
- Coyote brush scrub,
- Himalayan blackberry,
- Mixed oak woodland,
- Riparian,
- Intermittent stream,
- Concrete lined stream, and

• Drainage ditch.

Of these land cover types, only two are considered to be sensitive natural communities: mixed oak woodland and riparian vegetation. No impacts to mixed oak woodland are anticipated because project-related activities are proposed along the roadside and will not remove oak trees. Understory vegetation to be impacted is dominated by invasive Himalayan blackberry. Riparian vegetation is present at the UK.03 capture site but will be fully avoided during project construction. Therefore, no impacts to riparian vegetation or other sensitive natural community would occur as a result of the proposed project.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impact

WRA biologists observed three aquatic resource types within the project areas: drainage ditch, concrete-lined stream, and intermittent stream.

Drainage ditches are linear features that are dug in uplands to convey storm flow from developed areas, such as roads and parking lots. These features do not contain an obvious bed and bank nor support hydrophytic or riparian vegetation. Several drainage ditches are present, including at UK.02, UK.08, UK.10, UK.16, UK.20, UK.21, UK.23, and UK.28.

Intermittent streams are linear features with a bed and bank formed by water that flows for at least three months of the year and is groundwater fed. Intermittent streams typically support riparian or hydrophytic vegetation due to prolonged availability of water. Intermittent stream habitat is found at UK.11, UK.21, and UK.22.

Concrete-lined streams are stream features where concrete lines the channel and bank. These features are present in a portion of the drainage ditch at UK.10 and intermittent stream at UK.21. Approximately eight feet of the channel at UK.10 is lined with concrete due to the developed wing wall structure; at UK.21, the banks and channel are cement lined for approximately 50 feet downstream of the box culvert.

Of these resources, intermittent streams are subject to consideration under CEQA as they may support riparian or hydrophytic vegetation (wetlands). Ground disturbance activities at sites where intermittent stream is present are described below.

Ground disturbance activities at UK.10 are estimated to be 0.03 acre (1,300 square feet) of temporary ground disturbance to urban and non-native grasslands for staging and <0.01 acre (226 square feet) to concrete-lined channel, developed, and non-native grasslands for installation of a louvered panel on the existing concrete pad between the existing wingwalls. Sediment has built up on the concrete-lined portion of the channel, allowing for the establishment of non-native wetland plants in a small area; these plants and sediment will be removed for installation of the device.

Ground disturbance activities at UK.11 are estimated to be 0.02 acre (750 square feet) of temporary ground disturbance to urban and non-native grasslands for staging and <0.01 acre (50 square feet) to install a small-scale CPS in an existing catch basin that will be enlarged slightly to accommodate the CPS. Hensley Creek is approximately 70 feet from the capture site, and neither the stream nor its riparian corridor will be disturbed by project activities.


Ground disturbance activities at UK.21 are estimated to be 0.19 acre (8,276 square feet) of temporary disturbance of urban and non-native grassland for staging and 0.02 acre (699 square feet; 70 linear feet) of concrete-lined stream, non-native grassland, and urban areas for installation of a netting device. Disturbance activities that will occur in the concrete-lined channel include removal of built-up sediment and vegetation and installation of the device. Sediment has built up on the concrete-lined portion of the stream, allowing for the establishment of native and non-native wetland plants along the edges of the channel; these plants and sediment will be removed for installation of the device.

Ground disturbance activities at UK.22 are estimated to be 0.09 acre of temporary disturbance to urban and non-native grassland for staging, and 0.02 acre (1,048 square feet; 37 linear feet) of permanent impact for construction of a concrete pad and wingwalls and installation and of louvered panel device. Permanent impact includes converting 0.01 acre (589 square feet) of earthen stream channel and banks to cement; this also includes conversion of <0.01 acre (489 square feet) of invasive Himalayan blackberry, urban land, and non-native grassland.

The project will include BMPs as described in Section 4.2.3, Best Management Practices, to avoid and minimize erosion, and minimize the risk of contaminant and sediment deposition into the streams.

The placement and operation of devices at UK.10 and UK.21 are modifications to existing structures and are determined to have a less than significant impact on aquatic resources. No conversion of land cover will occur and the devices are not considered fill to a stream or wetland. As the function of each device is to use the flow of water in the channel to remove trash, impacts to stream flow are considered less than significant. Removal of wetland vegetation at each of the locations would be considered a less than significant impact because the area to be removed is not substantial and can therefore be reasonably presumed to not create a substantial adverse effect on the stream. Additionally, the devices will improve the condition of the stream by reducing the amount of trash, a pollutant, that enters the stream.

Trash capture device installation at UK.22 will convert approximately 0.01 acre (589 square feet) of intermittent stream channel and banks to concrete and is considered a permanent impact. However, due to the necessary design elements of the device, the small area of impact, and the benefit to water quality and habitat values from the device, the impact would be less than significant.

The project would require temporary in-water work to install trash capture devices, but all work would be extremely localized, discrete, and would include implementation of BMPs. As the project would improve conditions of the intermittent streams through removal of trash, would include BMPs for water quality, would not have a substantial impact on sensitive natural communities, and regulatory permit conditions would be observed, the impact from the project on aquatic resources would be less than significant.

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

Wildlife movement between suitable habitat areas can occur via open space areas lacking substantial barriers. The project sites are not within a designated wildlife corridor based on the Essential Connectivity Areas geospatial dataset, which uses habitat modeling to identify areas of



land with value as wildlife corridors (Caltrans 2010; CDFW 2023c). The project sites are located within a much larger tract of agricultural/viticultural and lightly developed land within a rural portion of Napa County. While common wildlife species presumably utilize the project sites to some degree for movement at a local scale, the project sites do not provide corridor functions beyond connecting similar agricultural/viticultural land parcels in surrounding areas. For terrestrial species, all portions of the project sites are within a greater context of urban development, and for aquatic species, there is no connectivity between the project sites and freshwater habitats including the Russian River (WRA 2023).

Migratory birds use trees along the Pacific Flyway in proximity to the project sites but not within the sites. The trees adjacent to project sites offer only an incremental benefit for species along the Pacific Flyway. Additionally, the habitat that is provided for migratory birds in the project sites are heavily urbanized and regularly disturbed with high volumes of traffic. Based on these factors, the proposed project would result in a less than significant impact to migratory corridors and habitat linkages (WRA 2023).

No native wildlife nursery sites were observed within the project sites during the November 14, 2022, and April 4, 2023 site visits. Therefore, no impact to native wildlife nursery sites would occur as a result of the project. The impact of the proposed project on migratory wildlife corridors and native wildlife nursery sites would be less than significant.

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

Less than Significant Impact

Local policies and ordinances protecting biological resources include the Mendocino County General Plan. As discussed in Impact a), the project would have no impact to special-status plants or wildlife, and therefore would not conflict with any policy in the County General Plan pertaining to the protection of special-status species. The project would comply with all policies related to minimizing water contamination and sedimentation by implementing BMPs as described in Section 4.2.3, Best Management Practices, to avoid and reduce erosion, pollutants, and sediment deposition into streams. The project would support Policies RM-2 and RM-22 of the County General Plan, which promote the enhancement of water quality, by installing capture devices that will limit trash from entering waterways and allow for easy removal of solid waste from culverts. The proposed project would not conflict with any policies in the County General Plan, and therefore would not conflict with any local policies or ordinances protecting biological resources. The impact would be less than significant.

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?

No Impact

The project sites are not located within the jurisdiction of any local, regional, or State habitat conservation plan or natural community conservation plan. No impact would occur.



4.1.5 Cultural Resources

	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 Section 15064.5?			\boxtimes	
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?				

ENVIRONMENTAL SETTING

Tom Origer and Associates (Origer) completed a Cultural Resources Study for the Area of Potential Effects (APE) of the 35 project sites (Barrow 2024). This study was conducted to meet the requirements of the County of Mendocino, CEQA, and Section 106 of the National Historic Preservation Act. The study included archival research at the Northwest Information Center, Sonoma State University, examination of the library and files of Origer, Native American contact, and an intensive field survey of the APE completed on November 23, 2023. Information in this section is adapted from and relies on the Cultural Resources Study. The study is available for review at the County by qualified individuals only.

Prehistory

Native peoples have occupied the northern San Francisco Bay region for over 11,000 years (Fredrickson 1973). Early occupants appear to have had an economy based largely on hunting, with limited exchange, and social structures based on the extended family unit. Later, milling technology and an inferred acorn economy were introduced. This diversification of economy appears to be coeval with the development of sedentism and population growth and expansion. Sociopolitical complexity and status distinctions based on wealth are also observable in the archaeological record, as evidenced by an increased range and distribution of trade goods (e.g., shell beads, obsidian tool stone), which are possible indicators of both status and increasingly complex exchange systems.

Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and hand-stones, and mortars and pestles; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire-affected stones.

Ethnography

At the time of Euroamerican settlement, people inhabiting this area spoke Northern Pomo, one of seven mutually unintelligible Pomoan languages belonging to the Hokan language stock



(McLendon and Oswalt 1978). The Northern Pomo's aboriginal territory falls primarily within present-day Mendocino County with a small portion lying within Lake County. Primary village sites of the Northern Pomo were occupied continually, while temporary sites were visited to procure resources that were especially abundant or available only during certain seasons. Sites often were situated near freshwater sources and in ecotones where plant life and animal life were diverse and abundant.

History

Historically, the APE was part of the Yokaya (or Yokoya) land grant, which was granted to Cayetano Juarez in 1845 by Governor Pio Pico (Cowan 1977; Hoover et al. 2002). The first European-descent settlement of the Ukiah area is typically attributed to John Parker who was hired by Cayetano Juarez to watch grazing cattle in 1850. Not long after began the flood of settlers to both the Ukiah and Calpella areas (Palmer 1880).

Like many towns in California, Ukiah's industry was agriculture; though, its proximity to the forests of Mendocino and Humboldt Counties meant that logging was an important business as well. While it is the County seat, Ukiah has remained a relatively rural and small town.

Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

Cultural Resources Study Findings

Archival research found that 18 of the 35 sites have been previously subjected to a cultural resources study and there are no previously documented cultural resources within the APE. Eleven of the 35 sites had ethnographic sites reported within a half mile of the APE. No buildings or structures were identified in the APE. Three APE locations are located in close proximity to archaeological sites.

REGULATORY SETTING

Cultural Resources

As set forth in Section 5024.1(c) of the Public Resources Code for a cultural resource to be deemed "important" under CEQA and thus eligible for listing on the California Register of Historical Resources (California Register), it must meet at least one of the following criteria:

- 1. is associated with events that have made a significant contribution to the broad patterns of California History and cultural heritage; or
- 2. is associated with the lives of persons important to our past; or
- 3. embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possess high artistic value; or
- 4. has yielded or is likely to yield, information important to prehistory or history.

Historic-era structures older than 50 years are most commonly evaluated in reference to Criterion 1 (important events), Criterion 2 (important persons) or Criterion 3 (architectural value). To be considered eligible under these criteria the property, must retain sufficient integrity to convey its important qualities. Integrity is judged in relation to seven aspects including: location, design, setting, materials, workmanship, feeling, and association. Prehistoric and historic-era archaeological resources are commonly evaluated with regard to Criterion 4 (research potential).



Guidelines for the implementation of CEQA define procedures, types of activities, persons, and public agencies required to comply with CEQA. Section 15064.5(b) prescribes that project effects that would "cause a substantial adverse change in the significance of an historical resource" are significant effects on the environment. Substantial adverse changes include both physical changes to the historical resource, or to its immediate surroundings.

Archeological Resources

Section 21083.2 of the CEQA guidelines also defines "unique archaeological resources" as "any archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

This definition is equally applicable to recognizing "a unique paleontological resource or site." CEQA Section 15064.5 (a)(3)(D), which indicates "generally, a resource shall be considered historically significant if it has yielded, or may be likely to yield, information important in prehistory or history," provides additional guidance.

DISCUSSION OF IMPACTS

a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

Less than Significant Impact

No previously identified historical resources were documented within the APE. Ground disturbing activities may impact unknown historical resources, but likelihood is low given the lack of structures historically occurring within the APE. Impacts would be less than significant.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

Less than Significant Impact with Mitigation Incorporated

There are no previously documented cultural resources documented within the APE; however, the Cultural Resources Study indicated that three project sites are located in close proximity to an archaeological site. Although the majority of project sites have low or moderate potential for buried archaeological resource, there is potential for ground disturbing activities during construction to affect unknown archaeological resources on the project sites. The project would implement Mitigation Measure CUL-1 pertaining to the accidental discovery of archaeological resources during construction. This measure would only apply to project sites that would require ground disturbance during construction. With implementation of this mitigation measures, the project would not cause a substantial change in the significance of an archaeological resource.



The impact would be less than significant with mitigation incorporated.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant Impact with Mitigation Incorporated

No buried archaeological site indicators were observed within the APE during the field survey performed by Origer staff. The results of the Cultural Resource Study indicate that the project sites have varying degrees of potential for archaeological resources to be present, including four sites which were identified to have a high potential for buried archaeological resources. As such, the accidental discovery of human remains on project sites during construction cannot be precluded. The project would implement Mitigation Measure CUL-1 pertaining to the accidental discovery of archaeological resources or human remains on the project sites. This measure would only apply to project sites that would require ground disturbance during construction. With implementation of this measure, the project would not disturb any human remains, including those interred outside of dedicated cemeteries. The impact would be less than significant with mitigation incorporated.

MITIGATION MEASURES

Mitigation Measure CUL-1: Accidental Discovery of Archaeological Resources or Human Remains

If archaeological remains are uncovered, work at the place of discovery shall be halted immediately until a qualified archaeologist can evaluate the finds as required by the CEQA Guidelines §15064.5(f). Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools, grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles), bedrock outcrops and boulders with mortar cups, and locally darkened midden soils. Midden soils may contain a combination of any previously listed items with the possible addition of bone and shell remains, and fire-affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits.

If human remains are encountered, excavation or disturbance of the location shall be halted in the vicinity of the find, and the county coroner shall be contacted. If the coroner determines the remains are Native American, the coroner shall contact the Native American Heritage Commission (NAHC). The NAHC shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendant shall make recommendations regarding the treatment of the remains with appropriate dignity.



4.1.6 Energy

	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?				\boxtimes

ENVIRONMENTAL SETTING

According to the County's General Plan, the County primarily relies on imported electricity and natural gas for its energy needs (Mendocino County 2009). The General Plan includes multiple energy resources policies, none of which pertain to the proposed project.

The County does not have a specific plan relating to energy. In 2001, the County adopted an Energy Conservation Policy that included mandatory and discretionary energy conservation measures. Following implementation of this policy, in 2006, the County Board of Supervisors adopted the Sustainable Practices Policy (SPP), which was amended in 2009 and 2022 (Mendocino County 2022). The intent of the SPP is to:

- Institute practices that minimize waste by increasing efficiency and effectiveness,
- Purchase products that minimize environmental impacts, toxins, pollution, and hazards to worker and community health and safety to the maximum extent feasible, and purchase products that include recycled content, are durable, conserve energy and water, use agricultural fibers and residues, reduce greenhouse gas emissions, and use unbleached or chlorine free manufacturing processes, and are lead- and mercury-free, and
- Incorporate environmental considerations including recycled-content and recovered organic waste product use into purchasing practices and procurement.

The SPP calls for the use of equipment with the most up to date energy efficiency functions, including heating and cooling systems, lighting, and plumbing systems, wherever possible. The SPP also includes policies related to procurement of office and building supplies, including materials such as paper, concrete, plastic, lumber, carpet, tiles, and insulation.

DISCUSSION OF IMPACTS

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

Less than Significant Impact

During construction, the project would require the use of energy for construction equipment and



vehicles. The construction process would be designed to be efficient in order to avoid excess monetary costs. Specifically, equipment and fuel would not be used wastefully during construction due to the added expense associated with renting, maintaining, and fueling equipment. As such, energy and fuel would not be wasted or used inefficiently by construction equipment and vehicles. Construction equipment would be required to comply with relevant standards as described in Mitigation Measure AIR-2, which would reduce the impact of construction equipment energy use. The County would be required to comply with concrete procurement policies included in the SPP. Impacts during construction would be less than significant.

Project operation would be similar to existing conditions and would not result in wasteful, inefficient, or unnecessary consumption of energy resources. The impact would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact

The County's General Plan and SPP established policies related to energy conservation and energy efficiency. The project would not conflict with any strategies, goals, or policies identified in the SPP or the General Plan regarding renewable energy or energy efficiency. No impact would occur.



4.1.7 Geology and Soils

	Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Directly or indirectly cause potential substant or death involving:	ial adverse ef	fects, including	the risk of los	s, injury,
	 Rupture of a known earthquake fault, as delineated on the most recent Alquist- Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? 				
	ii) Strong seismic ground shaking?			\boxtimes	
	iii) Seismic-related ground failure, including liquefaction?			\boxtimes	
	iv) Landslides?			\square	
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, creating substantial direct or indirect risks to life or property?			\boxtimes	
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				



ENVIRONMENTAL SETTING

The project is located in the Ukiah Valley which is a flat valley floor along the Russian River. The elevation of project sites ranges from approximately 500 to 600 feet above sea level and lies within the northern Coast Ranges geomorphic province. This province is dominated by Franciscan Complex sedimentary rocks and the project area consists primarily of unconsolidated alluvial deposits (CGS 2002).

The active Maacama Fault traverses the eastern edge of the Ukiah Valley from northwest to southeast (CGS 2021). The project area does not lie within any landslide or liquefaction zones, but portions do exist within an Alquist Priolo Fault Hazard Zone for the Maacama Fault (CGS 2022).

The project area is underlain by 10 soil mapping units (NRCS 2019): Pinnobie loam 2 to 8 percent slope, Yokayo sandy loam, 0 to 8 percent slope, Russian Loam, gravelly substratum, 0 to 2 percent slope, Cole loam, drained, 0 to 2 percent slope, Xerofluvents, 0 to 2 percent slope, Pinole gravelly loam, 0 to 2 percent slope, Talmage gravelly sandy loam, 0 to 2 percent slope, Feliz clay loam, gravelly substratum, 0 to 2 percent slope, Pinole very gravelly loam, 0 to 2 percent slope, Kekawaka-Casabonne-Wohly complex, 30 to 50 percent slope, and Urban Land.

DISCUSSION OF IMPACTS

a-i) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Less than Significant Impact

The active Maacama Fault underlies the eastern edge of the Ukiah Valley from northwest to southeast, and portions of the project area are within an Alquist Priolo Fault Hazard Zone for this fault. Although unlikely, rupture of the Maacama Fault could pose potential risks to construction workers on the project sites. The County would comply with all federal Occupational Safety and Health Administration (OSHA) and California OSHA (Cal/OSHA) requirements related to construction worker safety, which would reduce risks associated with fault rupture during construction to a less-than-significant level. Operation of the proposed project would be similar to existing conditions and would not cause substantial effects associated with rupture of a known earthquake fault. Therefore, the project would not cause substantial effects including the risk of loss, injury, or death associated with rupture of a known earthquake fault. The impact would be less than significant.

a-ii) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?

Less than Significant Impact

As described in Impact a-i) above, the project sites are located in a seismically active region and are near an active fault zone. Earthquakes along the active Maacama Fault could cause strong seismic ground shaking at the project sites. As discussed above in Impact a-i), the County would adhere to all OSHA and Cal/OSHA requirements for construction worker safety, which would minimize risks associated with strong seismic ground shaking during construction. Project operation would not result in any substantial effects related to strong seismic ground shaking because the proposed trash capture devices would not be occupied by any persons or cause



post-earthquake conditions that could have a substantial adverse impact on humans. Therefore, the proposed project would not result in substantial effects associated with strong seismic ground shaking. The impact would be less than significant.

a-iii) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?

Less than Significant Impact

Liquefation is the loss of soil strength or stiffness due to a buildup of excess pore-water pressure and is often associated with strong shaking from seismic activity. Liquefaction primarily occurs within loose, granular, saturated soil materials. The project sites are not located in a liquefaction zone identified by the CGS (CGS 2019). The impact would be less than significant.

a-iv) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?

Less than Significant Impact

The project sites are located within existing catch basins, culverts, and stream channels, and are not situated on steep slopes. No sites are located within a Landslide Zone of Required Investigation (CGS 2023). Therefore, the project would not cause substantial adverse effects involving landslides. The impact would be less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact

During construction, the project would require grading and excavation of soil in order to install trash capture devices. The project would implement BMPs as described in Section 4.2.3, Best Management Practices, to minimize erosion and loss of topsoil. Once final grading has been completed, final erosion and sediment control measures will be installed prior to the first rainfall event. Erosion control measures will include but not be limited to silt fence, straw wattles, and coir fiber erosion control matting. With implementation of these BMPs, the project would not result in substantial erosion or the loss of topsoil. The impact would be less than significant.

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?

Less than Significant Impact

Project sites would be located on various soil units that are present within the project area. The project would place trash capture devices within existing catch basins, culverts, and stream channels. The placement of these structures would not result in an unstable soil or geologic unit that could cause on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Construction equipment would not be placed on any unstable soil units and would be staged in designated staging areas. The impact would be less than significant.



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

Less than Significant Impact

All project activities under Phase 1 would occur within existing developed structures in MS4 stormwater facilities and would require minimal ground disturbance. Project activities under Phase 2 would involve the installation of large-scale capture devices outside of existing MS4 stormwater facilities. Construction under Phase 2 would involve more ground disturbance and may involve development on expansive soils. All construction under the proposed project would be required to comply with the CBC, which would ensure that expansive soils are remediated or that foundations and structures are engineered to withstand the forces of expansive soil. Compliance with the requirements of the CBC would reduce this impact to a less-thansignificant level.

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

No Impact

The project would not include the construction of septic tanks or alternative wastewater disposal systems. No impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact with Mitigation Incorporated

According to the County's General Plan EIR, there are 182 identified paleontological resources in Mendocino County, the majority of which are invertebrates and are found within the Coastal Zone (Mendocino County 2009). The project sites are not within the Coastal Zone, and no paleontological resources were discovered during the course of the field survey performed by Origer staff. However unlikely, the potential for paleontological resources to occur on the project sites cannot be precluded. The project will implement Mitigation Measure CUL-1, which pertains to the accidental discovery of buried archaeological resources during construction. This mitigation measure would only apply to project sites at which ground disturbing activities are proposed. With implementation of this measure, the project would not destroy a unique paleontological resource or site or unique geological feature. The impact would be less than significant with mitigation incorporated.



4.1.8 Greenhouse Gas Emissions

	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 any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?				\boxtimes

ENVIRONMENTAL SETTING

Greenhouse gases (GHGs) are recognized by wide consensus among the scientific community to contribute to global warming/climate change and associated environmental impacts. In the United States, the major sources of GHG emissions are transportation, electricity generation, and industrial activities (USEPA 2022). These three sources are also the top contributors of GHG emissions in California (CARB 2022).

The County has not adopted a plan that specifically addresses GHGs. The County's Adopted Air Quality CEQA Thresholds of Significance do not establish a threshold for construction-related emissions. For operational emissions, the adopted threshold is 1,100 metric tons (MT) of CO₂ per year for projects other than stationary sources (MCAQMD 2010).

DISCUSSION OF IMPACTS

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

Less than Significant Impact

Project construction would temporarily generate some GHG emissions from the use of vehicles and construction equipment. Long-term operational emissions would be limited to the use of vehicles and construction equipment for occasional maintenance activities.

The County has not adopted a threshold of significance for construction related impacts and has recommended that lead agencies use BAAQMD CEQA thresholds for projects within the County. BAAQMD's approach to developing thresholds of significance for GHG impacts is to use a "fair share" approach to determine whether an individual project's GHG emissions would be cumulatively considerable. If a project would contribute its "fair share" of what is needed to achieve Statewide long-term GHG reduction goals, the impact of the project's GHG emission would be less than significant. BAAQMD has identified required design elements that development and transportation projects must incorporate into project plans in order for their impact to be considered less than significant. There are no design elements required for infrastructure projects, and therefore the project must only be consistent with the local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b) (BAAQMD, 2022). The County has not adopted a GHG reduction strategy that meets the



Statewide criteria. The General Plan discusses GHGs but does not contain specific policies pertaining to GHG emissions. As discussed in Section 5.1.3 Air Quality, the project would implement Mitigation Measure AIR-2 to reduce emissions from diesel-powered construction equipment to the maximum extent possible and utilize electric-powered equipment whenever feasible. GHG emissions from project operation would be temporary and would not constitute a significant source of GHG emissions in the region. The impact would be less than significant.

The County's threshold of significance for operational-related GHG emissions for non-stationary source projects is 1,100 MT of CO₂ per year. Project operation would be similar to existing conditions and would therefore not cause a notable increase in GHG emissions. GHG emissions during project operation would be limited to emissions from vehicles and construction equipment used for maintenance purposes. These activities would not exceed the operational threshold of 1,00 MT of CO₂ per year. The impact would be less than significant.

b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact

There is no local applicable plan that has been adopted for the purpose of reducing the emissions of greenhouse gases. The General Plan does not contain specific policies regarding GHGs. The project would not conflict with any Statewide plan, policy, or regulations adopted for the purpose of reducing the emissions of greenhouse gases. No impact would occur.



4.1.9 Hazards and Hazardous Materials

	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?			\boxtimes	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			\boxtimes	
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			\boxtimes	
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				\boxtimes
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 for people residing or working in the project area?			\boxtimes	
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			\boxtimes	
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				



DISCUSSION OF IMPACTS

a, b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact

Project construction would involve the use and transport of typical construction-related hazardous materials such as fuels, lubricants, adhesives, and solvents. Heavy equipment would be staged and refueled within the project staging areas. Construction activities would be required to comply with numerous hazardous materials regulations and implement the BMPs as described in Section 4.2.3, Best Management Practices, to ensure that hazardous materials are handled properly and do not pose a threat to worker safety or the environment. Workers handling hazardous materials are required to adhere to OSHA and Cal/OSHA health and safety requirements. Hazardous materials must be transported to and from the project area in accordance with the Resource Conservation and Recovery Act (RCRA) and U.S. Department of Transportation regulations and disposed of in accordance with RCRA at a facility that is permitted to accept the waste.

Although a spill or leak of hazardous materials is unlikely, a spill or leak that is not handled properly would have the potential to contaminate the environment. As discussed in Section 5.1.10 Hydrology and Water Quality, construction contractors would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) for construction activities in accordance with the National Pollution Discharge Elimination System (NPDES) Construction General Permit requirements. The SWPPP would list the hazardous materials (including petroleum products) proposed for use during construction and describe spill response and control measures, equipment inspections, equipment storage, and protocols for responding immediately to spills.

With implementation of the SWPPP and compliance with existing regulations and BMPs, the potential impact related to routine transport and accidental releases of hazardous materials would be less than significant.

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

Less than Significant Impact

Various schools are located within one-quarter mile of the project sites. Project construction activities would involve the use and transport of typical construction-related hazardous materials and would cause some hazardous emissions from diesel-fueled construction equipment. As discussed in Impact a) above, the construction activities would be required to comply with hazardous materials regulations and implement BMPs for the storage, handling, and transport of hazardous materials. Additionally, the project would implement Mitigation Measure AIR-2: Engine Controls for Construction Equipment, to reduce hazardous emissions from diesel-fueled construction equipment. With implementation of these measures, the impact of the use of hazardous materials at the project sites on existing schools in the area would be less than significant.



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

No Impact

A search of the GeoTracker and EnviroStor databases compiled by the SWRCB and Department of Toxic Substances Control (DTSC) indicated that no project sites are located on a parcel that is included on a list of hazardous materials sites compiled to Government Code Section 65962.5 (DTSC 2023, SWRCB 2023). There are various cleanup sites in the vicinity of the project sites. Some cleanup sites are located in close proximity to trash capture sites; however, these sites are not expected to pose an environmental risk to the project due to their case closed status. Therefore, no impact would occur.

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 for people residing or working in the project area?

Less than Significant Impact

The Ukiah Municipal Airport is located at 1475 South State Street in Ukiah, west of US Highway 101. Eleven project sites are located within two miles of this airport (UK.25 through UK.36). The closest project sites to the airport would be located within Zone B2 of the Ukiah Municipal Airport, the "Extended Approach/Departure Zone," which is associated with moderate risk (aircraft commonly below 800 feet above ground level) and significant noise (MCALUC 1996). Per the Ukiah Municipal Airport Land Use Compatibility Plan, UK.30, UK.32, and UK.33 are located in Zone 2: Inner Approach/Departure Zone, UK.26 and UK.27 are located in Zone 6: Traffic Pattern Zone, and UK.29 and UK.36 are located in Zone 3: Inner Turning Zone and Urban Overlay Zone (MCALUC 2021). The risk level and noise impact for Zone 2 is identified as high, and aircraft are commonly flying only 200 to 400 feet above the runway elevation. Approximately 8 percent to 22 percent of near-runway general aviation accidents occur in this zone. The risk level for Zone 3 is identified as moderate to high, and the noise level is moderate. Aircraft in Zone 3 are commonly turning base to final on landing approach or initiating turn to en route direction on departure, and the altitude is typically less than 500 feet above the runway elevation. Approximately four percent to eight percent of near-runway general aviation accidents occur in this zone. Risk level and noise level in Zone 6 are identified to be low. Zone 6 includes areas within the standard traffic pattern and pattern entry routes, and aircraft are typically 1,000 to 1,500 feet above the runway. Approximately 18 percent to 29 percent of near-runway general aviation accidents occur in Zone 6, however the large area encompassed means a low likelihood of accident in any given location (MCALUC 2021).

During construction, the construction crew would comply with all OSHA and Cal/OSHA requirements pertaining to worker safety. Ear protection would be worn as necessary to protect workers from significant noise on the project sites during construction activities. The Ukiah Municipal Airport is a small airport that does not experience significant air traffic. Residences and other sensitive land uses are located within the airport Zone B2, Zone 3, and Zone 6, and construction of the project within these zones would not pose a unique risk that would increase hazards associated with the airport arrival/departure zones. During operation, the project sites would be similar to existing conditions, and no workers would occupy the sites except for occasional maintenance activities. The impact would be less than significant.



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

Less than Significant Impact

The project sites are located throughout various Evacuation Zones as designated by the County. Installation of small trash capture devices would not obstruct any evacuation route. It is possible that installation of large trash capture devices would require the use of construction equipment within the public right-of-way, which could partially obstruct evacuation routes in some areas. If work must occur within the public right-of-way, the County will prepare a plan for traffic control and rerouting in any obstructed roadways. Construction equipment would be stored in areas outside of the public right-of-way. Project operation would be similar to existing conditions and would not physically interfere with any designated evacuation route or public right-of-way. Therefore, the project would not interfere with any emergency response plan or emergency evacuation plan. The impact would be less than significant.

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

Less than Significant Impact

All project sites are located within a Local Responsibility Area for wildfire management. Surrounding State Responsibility Areas are designated as Very High Fire Hazard Severity Zones (FHSZ) by the California Department of Forestry and Fire Protection ([CAL FIRE] 2023). Project sites are primarily located in developed areas along the public right-of-way. Although unlikely, it is possible for construction equipment to emit sparks which could ignite nearby vegetation. During construction, the construction crew would be required to implement and adhere to BMPs to minimize the potential for ignition to the maximum extent possible. As discussed in Impact f) above, the project would not obstruct any evacuation routes that may be used by residents to evacuate in case of wildfire. The impact would be less than significant.

4.1.10 Hydrology and Water Quality

	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 was discharge requirements or otherwise substantially degrade surface or ground water quality?	te			
b)	Substantially decrease groundwater supplie or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of th basin?				
c)	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:				es, in a
	 result in substantial erosion or siltation o or off-site; 	n- 🗆			
	substantially increase the rate or amount of surface runoff in a manner which woul result in flooding on- or off-site;				
	iii) create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems of provide substantial additional sources of polluted runoff; or	r 🗌			
	iv) impede or redirect flood flows?				
d)	In flood hazard, tsunami, or seiche zones, r release of pollutants due to project inundation?	sk			
e)	Conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan?	a 🗆			

ENVIRONMENTAL SETTING

Groundwater

The project sites are located within the Ukiah Valley groundwater basin which is managed by the Ukiah Valley Basin Groundwater Sustainability Agency (GSA). The GSA prepared the Ukiah Valley Basin Groundwater Sustainability Plan (GSP) in 2021 to guide groundwater conservation in the region (Larry Walker Associates et al. 2021). The GSP identified six indicators of groundwater



sustainability to be used when determining significant and unreasonable impacts to the beneficial users and uses of groundwater including:

- Chronic lowering of groundwater levels,
- Reduction of groundwater storage,
- Seawater intrusion,
- Degraded water quality,
- Land subsidence, and
- Depletions of interconnected surface water.

Water Quality

The project sites are located within the jurisdiction of the North Coast Regional Water Quality Control Board (RWQCB) (Region 1). The Water Quality Control Plan for the North Coast Region (Basin Plan) indicates that the project area is located within the Upper Russian River hydrologic unit and Russian River watershed which drains to the Pacific Ocean (North Coast Regional Water Quality Control Board 2018). Project sites are primarily distributed across the Ukiah hydrologic subarea and sites UK.01, 02, 03 in the Forsythe Creek hydrologic subarea. Table 3 shows the existing uses and impairments across these subareas.

Table 3. Hydrologic Subarea Beneficial Uses

	UKIAH		FORSYTHE	
BENEFICIAL USE	Existing	Impaired	Existing	Impaired
Municipal and Domestic	Х		Х	
Agricultural	Х		Х	
Industrial Service	Х		Х	
Industrial Process		Х		Х
Groundwater Recharge	Х		Х	
Freshwater Replenishment	Х			
Navigation	Х		Х	
Hydropower Generation	Х			Х
Water Contact Recreation	Х		Х	
Non-water Contact Recreation	Х		Х	
Commercial and Sport Fishing	Х		Х	
Aquaculture		Х		Х
Warm Freshwater Habitat	Х		Х	
Cold Freshwater Habitat	Х		Х	
Wildlife Habitat	Х		Х	
Rare, Threatened, or Endangered Species	Х		Х	
Migration of Aquatic Organisms	Х		Х	
Spawning, Reproduction, Early Development	Х		Х	
Shellfish Harvesting		X	Х	
Subsistence Fishing	Х		Х	

Source: North Coast Regional Water Quality Control Board Basin Plan, 2018.



Flood Hazard Zone

According to the National Flood Hazard Layer produced by the Federal Emergency Management Agency (FEMA), seven project sites (UK.03, 11, 23, 28, 29, 33, 36) are within the 1% Annual Chance Flood Hazard zone (FEMA, 2023). Two project sites are located within the 0.2% Annual Chance Flood Hazard zone (UK.21, 22). The remaining majority of project sites are outside of the 0.2% Annual Chance Floodplain according to FEMA.

DISCUSSION OF IMPACTS

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact

The Basin Plan sets narrative and numerical water quality objectives for the North Coast Region. Numerical objectives typically describe pollutant concentration, physical and chemical conditions of water, and the toxicity of water to aquatic organisms. The Basin Plan states that the primary way that the RWQCB enforces the water quality objectives is through permits, orders, and other actions for specific and general categories of discharges and potential discharges. The project sites are located throughout developed areas and are situated within existing channels and streams.

Prior to construction activities, the County would be required prepare a SWPPP which would include proactive measures to prevent any water pollution from stormwater runoff during project construction. During construction, BMPs would be implemented to reduce substantial erosion which could lead to off-site water pollution and/or sedimentation of waterways. With the implementation of a SWPPP and BMPs, the project would not violate any water quality standards or waste discharge requirements. Project operations would not include any activities that would violate water quality standards or waste discharge requirements or degrade surface or groundwater quality. The impact would be less than significant.

b) 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

The project sites are located within the Ukiah Valley Groundwater Basin, which has been designated as a medium-priority basin by the Sustainable Groundwater Management Act. Water needed for dust suppression during construction would be obtained from existing water sources. Groundwater may comprise a portion of the water used for dust suppression; however, the quantity of water required would be limited to only what is needed to suppress fugitive dust during construction. Implementation of the project would adhere to the of the goals, programs, or policies outlined in the 2021 Groundwater Sustainability Plan for the Ukiah Valley groundwater basin. Therefore, impacts related to groundwater supplies and groundwater recharge would be less than significant.

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 that



would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows?

Less than Significant Impact

Project construction work staging areas would not occur on steep slopes or on sensitive habitat areas, and therefore would not cause substantial erosion or siltation. In addition, as described in Impact a), the project would implement a SWPPP to prevent excessive runoff and erosion and siltation during project construction. Project operation would not result in a substantial increase in impervious surface area which would cause an increase in surface runoff. The impact would be less than significant.

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

Less than Significant Impact

Seven of the project sites (UK.03, 11, 23, 28, 29, 33, 36) are within the 1% Annual Chance Flood Hazard zone (FEMA, 2023). Two project sites are located within the 0.2% Annual Chance Flood Hazard zone (UK.21, 22). According to FEMA, the remaining majority of project sites are outside of the 0.2% Annual Chance Floodplain. The impact would be less than significant.

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

No Impact

The project sites are located within the Ukiah Valley Groundwater Basin, which is managed in accordance with the GSA 2021 Ukiah Valley Basin Groundwater Sustainability Plan. Groundwater may comprise a portion of the water used for dust suppression; however, the quantity of water required would be limited to only what is needed to suppress fugitive dust during construction. Implementation of the project would adhere to the of the goals, programs, or policies outlined in the 2021 Groundwater Sustainability Plan for the Ukiah Valley groundwater basin. The project would not with any goals, programs, or policies outlined in the groundwater management plan. No impact would occur.



4.1.11 Land Use and Planning

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

ENVIRONMENTAL SETTING

The project sites are located in unincorporated Mendocino County and exist throughout industrial, commercial, mixed-use, high-density residential, and transit stop land uses (Figure 1).

DISCUSSION OF IMPACTS

a) Physically divide an established community?

No Impact

The project would include the installation of small and large trash capture devices in existing catch basins in Mendocino County. Project operation would be similar to existing conditions. Therefore, the project would not physically divide an established community. No impact would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact

The project would not conflict with any land use plan, policy, or regulation adopted for the purpose of mitigating an environmental effect. The project would not conflict with any zoning acceptable uses or require a zoning or general plan amendment. No impact would occur.



4.1.12 Mineral Resources

	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?				

ENVIRONMENTAL SETTING

The Mendocino County General Plan describes mineral resources as an essential resource in the economy of the County. The most predominant minerals found in the County are aggregate minerals, primarily sand and gravel, which are found in quarries, instream gravel, and terrace gravel deposits (Mendocino County 2020). Policies included in the General Plan pertaining to mineral resources include:

Policy RM-68: Environmental protection is a high priority during mineral extraction and associated processing operations and site reclamation. Recovery of mineral resources is not allowed when the County finds that adverse environmental impacts outweigh the public benefit.

Policy RM-69: Restrict development that conflicts with the extraction of essential mineral deposits when maps become available from the State Geologist under the SMARA.

Policy RM-70: Surface mining sites, especially those in areas with cultural, scenic, or recreational values, shall be restored to harmonize with the natural environment when the mine's reclamation plan is implemented.

Policy RM-71: Surface mining permits for large-scale low-grade nickel extraction from the Red Mountains east of Leggett shall not be allowed by the County.

Policy RM-72: The County supports maintaining the Outer Continental Shelf as a petroleum reserve for use only in time of national emergency.

Policy RM-73: New onshore development directly related to offshore oil and gas development is not allowed in Mendocino County.

DISCUSSION OF IMPACTS

a, b) 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? 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?



Less than Significant Impact

There are no known mineral resources or mines located in the project vicinity (CDC 2016a, CDC 2016b). According to the General Plan, aggregate mineral resources, such as sand and gravel, are found in quarries, instream gravel, and terrace gravel deposits. Installation of large trash capture devices may include disturbance in areas with potential to contain aggregate resources such as instream gravel and terrace deposits. The project would be designed to avoid disturbance to streambeds and streambanks to the maximum extent possible, and therefore would conserve mineral resources to the maximum extent possible. The project would not result in a substantial loss of availability of a known mineral resource that would be of value to the region and residents of the State. The impact would be less than significant.



4.1.13 Noise

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

BACKGROUND INFORMATION

Noise Concepts and Terminology

Noise is commonly defined as unwanted sound that annoys or disturbs people and can have an adverse psychological or physiological effect on human health. Sound is measured in decibels (dB), which is a logarithmic scale. Decibels describe the purely physical intensity of sound based on changes in air pressure, but they cannot accurately describe sound as perceived by the human ear since the human ear is only capable of hearing sound within a limited frequency range. For this reason, a frequency-dependent weighting system is used and monitoring results are reported in A-weighted decibels (dBA). Decibels and other acoustical terms are defined in Table 4.

A typical method for determining a person's subjective reaction to a new noise is by comparing it to existing conditions. The following describes the general effects of noise on people: 1) a change of 1 dBA cannot typically be perceived except in carefully controlled laboratory experiments; 2) a 3-dBA change is considered a just-perceivable difference; 3) a minimum of 5dBA change is required before any noticeable change in community response is expected; and 4) a 10-dBA change is subjectively perceived as approximately a doubling or halving in loudness (Charles M. Salter Associates, Inc. 1998).



Table 4. Definition of Acoustical Terms

TERM	DEFINITION
Frequency (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure.
Decibel (dB)	A unit describing the amplitude of sound on a logarithmic scale. Sound described in decibels is usually referred to as sound or noise "level." This unit is not used in this analysis because it includes frequencies that the human ear cannot detect.
A-Weighted Sound Level (dBA)	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de- emphasizes the very low and very high frequency components of the sound, in a manner similar to the frequency response of the human ear, and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted.
Maximum Sound Levels (Lmax)	The maximum sound level measured during a given measurement period.
Equivalent Noise Level (Leq)	The average A-weighted noise level during the measurement period. For this CEQA evaluation, Leq refers to a 1-hour period unless otherwise stated.
Community Noise Equivalent Level (CNEL)	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels to sound levels during the evening from 7:00 to 10:00 p.m. and after addition of 10 decibels to sound levels during the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level (Ldn)	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to sound levels during the night between 10:00 p.m. and 7:00 a.m.
Ambient Noise Level	The existing level of environmental noise at a given location from all sources near and far.
Vibration Decibel (VdB)	A unit describing the amplitude of vibration on a logarithmic scale.
Peak Particle Velocity (PPV)	The maximum instantaneous peak of a vibration signal.
Root Mean Square (RMS) Velocity	The average of the squared amplitude of a vibration signal.

Sources: Charles M. Salter Associates, Inc. 1998. FTA 2018.

General Information on Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Several different methods are used to quantify vibration. Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors to vibration include structures (especially older masonry structures) and people (especially residents, the elderly, and sick). Vibration amplitudes are usually expressed as either Peak Particle Velocity



(PPV) or as Root Mean Square (RMS) velocity. PPV is appropriate for evaluating potential damage to buildings, but it is not suitable for evaluating human response to vibration because it takes the human body time to respond to vibration signals. The response of the human body to vibration is dependent on the average amplitude of a vibration event. Thus, RMS is more appropriate for evaluating human response to vibration. PPV and RMS are described in units of inches per second (in/sec), and RMS is also described in vibration decibels (VdB).

ENVIRONMENTAL SETTING

Sensitive Receptors

Sensitive receptors are defined as land uses where noise-sensitive people may be present or where noise-sensitive activities may occur. Examples of noise-sensitive land uses include residences, schools, hospitals, and retirement homes. Examples of noise-sensitive activities are those that occur in locations such as churches and libraries.

Construction of the project would occur primarily along the public right-of-way and situated near some noise-sensitive land uses.

Existing Ambient Noise Setting

Noise sources in the County include noise generated from stationary activities (e.g., commercial and industrial uses), aircraft operations, and traffic on major roadways and highways. Ambient noise levels within the County are dependent primarily on distance from major stationary source and area roadways (Mendocino County 2009). As such, ambient noise levels at the project sites is primarily dependent on their distance from stationary sources, such as the Ukiah Municipal Airport and major roadways. U.S. Route 101 (US 101) runs north to south throughout the project area, and the majority of project sites are situated within one-half mile of US 101. In addition, nine sites are situated within one-half mile of the Ukiah Municipal Airport, including UK.25, UK.26, UK.27, UK.28, UK.29. UK.30, UK.32, UK.33, and UK.36. Sites UK.29 and UK.36 are within the 60 dBA CNEL contour associated with the airport, and the remaining seven sites are situated outside of the 55 dBA CNEL contour (Mendocino County 2020).

The County's General Plan estimates the projected 2030 noise levels around US 101 in the project area to be approximately 164 feet to the 70 dBA CNEL contour, 353 feet to the 65 dBA CNEL contour, and 760 feet to the 60 dBA CNEL contour. As such, the majority of the project sites are outside of the 60 dBA CNEL contour for US 101, with the exception of UK.11, UK.12, UK.13, UK.14, UK.16, UK.18, UK.18a, UK.19, UK.20, UK.21, UK.22, UK.32, UK.33, and UK.35, (Mendocino County 2020).

REGULATORY SETTING

Mendocino County General Plan

The Mendocino County General Plan Development Element describes policies related to noise including:

Policy DE-98: The County will protect residential areas and other noise-sensitive uses from excessive noise (Mendocino County 2020).

Policy DE-100: The following are the County's standards for maximum exterior noise levels for residential land uses:



Table 5. Exterior Noise Level Standards (Levels not to be Exceeded More Than 30 Minutes in Any Hour)

LAND USE TYPE	TIME PERIOD	MAXIMUM NOISE LEVEL (DBA)
Single family home/duplex	10:00 p.m 07:00 a.m.	50
	7:00 a.m 10:00 p.m.	60
Multiple residential (3+ units	10:00 p.m 07:00 a.m.	55
per building)	7:00 a.m 10:00 p.m.	60

Source: Mendocino County 2020

The General Plan clarifies that, where existing ambient noise levels exceed these standards, the ambient noise levels shall be the highest allowable noise level measured in dBA Leq (30 minutes). The noise levels specified above shall be lowered by 5 dB for simple tonal noises (such as humming sounds), noises consisting primarily of speech or music, or for recurring impulsive noises (such as pile drivers, punch presses, and similar machinery) (Mendocino County 2020).

Policy DE-101: The following are noise compatibility guidelines for use in determining the general compatibility of planned land uses:

Table 6. Noise Compatibility Guidelines (Expressed as a 24-Hour Day-Night Average or Ldn)

LAND USE	COMPLETELY COMPATIBLE	TENTATIVELY COMPATIBLE	NORMALLY INCOMPATIBLE	COMPLETELY INCOMPATIBLE
Residential	<55	55-60	60-75	>75
Commercial	<65	65-75	75-80	>80
Industrial	<70	70-80	80-85	>85

Source: Mendocino County 2009

- "Completely Compatible" means that the specified land use is satisfactory, and both the indoor and outdoor environments are pleasant.
- "Tentatively Compatible" means that noise exposure may be of concern, but common building construction practices will make the indoor living environment acceptable, even for sleeping quarters, and the outdoor environment will be reasonably pleasant.
- "Normally Incompatible" means that noise exposure warrants special attention, and new construction or development should generally be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features are included in the design. Careful site planning or exterior barriers may be needed to make the outdoor environment tolerable.
- "Completely Incompatible" means that noise exposure is so severe that new construction or development should generally not be undertaken.

Transportation noise from motor vehicles is subject to the above classifications.

DISCUSSION OF IMPACTS

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact

Construction activities would comply with Mendocino County Code of Ordinances, which



establish noise level standards not to be exceeded for 30 minutes in any hour. Noise levels in residential and public spaces must be below 50 dBA between the hours of 7 a.m. and 10 p.m. Noise levels in commercial spaces must be below 65 dBA between the hours of 7 a.m. and 10 p.m., and noise levels in industrial spaces must be below 75 dBA at all times. The Code states that "higher noise levels may be permitted for temporary, short-term or intermittent activities when no sensitive or residential uses will be affected." During construction, the proposed project would generate noise above the allowable levels associated with the use of equipment and machinery.

Construction work at the project sites would be temporary in nature and would occur within daytime hours (between 7 a.m. and 7 p.m.). Phase 1 construction would occur at 30 sites beginning in 2024 and Phase 2 construction would occur at five sites and would begin in 2025. Noise levels at each project site would vary depending on the proposed improvements, necessary equipment, and existing catch basin type. Generally, construction work at Phase 2 sites would generate more substantial noise levels during construction due to the nature of the proposed improvements. In accordance with the Code of Ordinances, temporary, short-term, intermittent noise exceeding the allowable noise levels may be permitted. As the project would only generate noise during construction, the impact of a change in existing ambient noise levels would be temporary and short-term and would be permitted by the County's Code of Ordinances.

Policies relating to noise in the County's General Plan are applicable to new, permanent sources of noise. During operation, the noise at each project site would be limited to noise from vehicles and equipment for occasional maintenance activities and would be similar to existing conditions. As such, the project would not introduce a new, permanent source of noise that would alter the existing ambient noise level at any of the project sites. Once the project is fully implemented, improvements at all project sites would be "completely compatible" with the noise compatibility guidelines for the corresponding land use. Therefore, the project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project sites in excess of applicable standards. The impact would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact

Construction can result in varying degrees of ground vibration depending on the type of equipment and activity. Phase 1 construction work would not require the use of machinery known to cause vibration, and therefore no impact related to vibration would occur on Phase 1 project sites. Construction work for Phase 2 sites would require the use of some equipment, including a vibratory hammer or press, and a pile driving hammer or vibratory driver, which would generate groundborne vibration. All Phase 2 sites are surrounded by agricultural, commercial, and/or industrial uses and are not located adjacent to any sensitive receptors. Construction work at the Phase 2 sites would be temporary and would not result in a new permanent source of groundborne vibration or noise. Once the project is fully implemented, the ambient noise and vibration in the area would be similar to existing conditions. As such, the project would not generate excessive groundborne vibration or groundborne noise levels. The impact 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

Nine project sites are situated within one-half mile of the Ukiah Municipal Airport, including UK.25, UK.26, UK.27, UK.28, UK.29. UK.30, UK.32, UK.33, and UK.36. Sites UK.29 and UK.36 are within the 60 dBA CNEL contour associated with the airport, and the remaining seven sites are situated within or outside of the 55 dBA CNEL contour (Mendocino County 2020). All nine sites would be part of Phase 1 construction, and therefore, as described above in Impact a) and b), would not generate substantial levels of noise or groundborne vibration. Construction work on the project sites would generate temporary, short-term, intermittent noise; however, it would not be considered excessive per the County's General Plan or Code of Ordinances and would not pose a danger to people within the project site areas. The impact would be less than significant.



4.1.14 Population and Housing

	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)?				\boxtimes
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

DISCUSSION OF IMPACTS

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)?

No Impact

The proposed project would not induce substantial unplanned population growth either directly or indirectly. The project would not create new homes or expand the capacity of other infrastructure to accommodate increased population. No impact would occur.

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

No Impact

The proposed project would not displace any people or existing housing, and therefore would not necessitate the construction of replacement housing elsewhere. No impact would occur.



4.1.15 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:				
	Fire protection?				\square
	Police protection?				
	Schools?				
	Parks?				
	Other public facilities?				

ENVIRONMENTAL SETTING

Fire Protection

The project area is serviced primarily by local agencies including Redwood Valley-Calpella Fire Department, and Ukiah Valley Fire Authority (the Joint Powers Agreement between the City of Ukiah and Ukiah Valley Fire District) who cover their respective municipalities and adjacent areas of unincorporated Mendocino County (Mendocino County 2009). The surrounding hills designated as state responsibility areas and wildland fire response is the primary responsibility of CAL FIRE which maintains a station in Ukiah, in the project area (Mendocino Fire Safe Council 2015).

UK.18 is located adjacent to Ukiah Valley Fire Authority Station 643. The Ukiah Valley Fire District is adjacent to UK.26, UK.27, and CAL FIRE Ukiah Station is adjacent to UK.11, UK.12. The project area is also near the Redwood Valley-Calpella Fire Department which is 0.2 miles from site UK.03.

Police Protection

The project area is serviced by the Mendocino County Sheriff's Office which has an office in Ukiah and operates the Mendocino County Jail in Ukiah approximately one mile from site UK.20, 21 and 22. The City of Ukiah also provides police services and has a station in Ukiah approximately 1.5 miles between sites UK.22 and UK.26. The California Highway Patrol also has an office in Ukiah (also approximately 1.5 miles between sites UK.22 and UK.26 and provides traffic enforcement and emergency management on state and major roadways.

Schools

Sites UK.25, UK.26, UK.27, UK.28 are all within 0.16 miles of Grace Hudson Elementary School. Site UK.03 is within 0.1 miles of Redwood Valley Charter School. Other schools near the project area include Frank Zeek Elementary School which is less than 1 mile from sites UK.18-22.



Parks

Parks nearest the project area include Lake Mendocino which is 0.6 miles from the nearest site (UK.34), Redwood Vally Lions Club Park which is 0.4 miles from the nearest site (UK.03), and Vinewood Park which is 0.5 miles from sites UK.20, UK.21, UK.22.

Other Public Facilities

Site UK.33 is adjacent to the Mendocino Transit Authority, City of Ukiah Wastewater Treatment Plant, and Ukiah Animal Shelter at the southern end of the project area. Sites UK.08, UK.09 are adjacent to the Mendocino County Department of Transportation. Sites UK.30, UK.27, are adjacent to bus stops for Mendocino Transit.

DISCUSSION OF IMPACTS

- 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:
 - Fire Protection?
 - Police Protection?
 - Schools?
 - Parks?
 - Other Public Facilities?

No Impact

The proposed project would not provide any new governmental facilities. The project would not induce population growth or increase the use of any existing public facilities such that new facilities would be required. Therefore, the project would not result in substantial adverse impacts associated with the provision or physical alteration of governmental facilities, including fire and police protection services, schools, parks, or other public facilities. No impact would occur.



4.1.16 Recreation

	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?				\boxtimes
b)	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				\boxtimes

ENVIRONMENTAL SETTING

Lake Mendocino, which is 0.6 miles from the nearest site (UK.34), is a reservoir, dam and surrounding open space managed by the Army Corps of Engineers. Recreational facilities include a visitor center, cultural center, multi-use trails, picnic areas, campgrounds, boat ramps and a disc golf course. In addition, Lake Mendocino provides opportunities for hunting, fishing, and swimming.

Redwood Valley Lions Club Park, which is 0.4 miles from the nearest site (UK.03), is a developed park and managed by Mendocino County Parks. It provides a ball field, volleyball court, group picnic pavilion available for reservations, and a play structure.

Vinewood Park, which is 0.5 miles from sites UK.20, UK.21, UK.22, is a developed park and managed by the City of Ukiah. It offers a community garden, sport court, play structure, picnic tables and a large grass turf area.

The Alex Rorabaugh Recreation Center and Beckstoffer Gym are co-located with Grace Hudson Elementary School near sites UK.25, UK.26, UK.27, UK.28. The gym provides indoor ball courts, and a variety of community rooms offering rentals and programming managed by the City of Ukiah Recreation Department.

DISCUSSION OF IMPACTS

a-b) 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? 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 not restrict the use of any regional parks or other recreational facilities. The project would not induce population growth by creating new homes or expanding the capacity of other infrastructure, and therefore would not require the construction or expansion of recreational facilities. No impact would occur.



4.1.17 Transportation

	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)?			\square	
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?			\square	

REGULATORY SETTING

The Mendocino Transit Authority (MTA) provides public transportation services to the County. MTA is currently in the process of updating the Short Range Transit Development Plan (SRTDP) which guides the implementation of transit and mobility services across the county (MTA 2023). The previous 2012-2016 SRTDP identifies objectives and policies aimed at achieving efficiency, operational, financial, emissions, and service goals (Transit Marketing, LLC. 2012). Specifically, Objectives A and B pertain to maximizing service availability and maximizing operating efficiency.

The Mendocino County General Plan Development Element includes policies guiding the development of transportation systems within the County that aim to achieve goals such as a transportation system that is functional, safe, and pleasant to use and supports emergency services and evacuation needs (Mendocino County 2020). Applicable policies include:

Policy DE-128: Ensure that transportation infrastructure accommodates the safety and mobility of motorists, pedestrians, bicyclists, and persons in wheelchairs.

Policy DE-157: The County shall ensure that bicycle facilities are safe, attractive, and useful for both recreational and commuting cyclists.

Policy DE-165: Increase the attractiveness and use of energy-efficient forms of transportation such as public transit, walking, and bicycling through various means, including promoting transit-oriented development in existing cities and urbanized areas and the use of transit by visitors to the county.

ENVIRONMENTAL SETTING

All 35 project sites are situated in unincorporated areas of Mendocino County. The majority of sites are located adjacent to the public right-of-way, primarily along two-lane roadways.


Project sites UK.30, UK.27, are located adjacent to MTA bus stops. Access to bus stops would be maintained throughout project construction.

DISCUSSION OF IMPACTS

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

Less than Significant Impact

Construction of the project would generate off-site traffic including the delivery of construction equipment and materials to the project sites and the daily arrival and departure of construction workers. Construction-related traffic would be temporary, and therefore, would not result in any long-term degradation in operating conditions on any locally used roadways. The minor impact of construction-related traffic would temporarily decrease the capacities of street segments adjacent to the project sites because of the slower movements and larger turning radii of construction vehicles compared to passenger vehicles. Although some project sites are adjacent to MTA bus stops, access to bus stops would be maintained throughout project construction. As such, construction of the project would not conflict with any policies of the County's General Plan.

Once the project is fully implemented, transportation impacts would be limited to vehicle trips associated with occasional maintenance inspection (i.e., removal of trash from capture devices). Maintenance activities would not conflict with any policies identified in the County's General Plan. Therefore, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system. The impact would be less than significant.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less than Significant Impact

In accordance with the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, Section 21099 of the Public Resource Code (PRC) states that the criteria for determining the significance of transportation impacts must promote: (1) reduction of GHG emissions; (2) development of multimodal transportation networks; and (3) a diversity of land uses. Section 21099 subd. (b)(1) further directed the Office of Planning and Research (OPR) to prepare and develop criteria for determining significance. The OPR identifies a screening threshold for small, land use projects as a project that generates or attracts fewer than 110 trips per day. Projects that generate fewer than this threshold may be assumed to cause a less-than-significant transportation impact (OPR 2018).

The daily number of vehicle trips associated with the project would not exceed 110 trips per day, which is the OPR's screening threshold for conducting a vehicle miles traveled (VMT) analysis. Once constructed, the project would only require occasional maintenance inspection, which would be similar to existing conditions. The project would not conflict with CEQA Guidelines section 15064.3, subdivision (b). The impact would be less than significant.



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

Less than Significant Impact

The project would include the installation of trash capture devices in existing stream channels located throughout residential, agricultural, industrial, and commercial areas. The project would not result in any incompatible use that would increase hazards. During construction, project equipment would be stored along the public right-of-way, and temporary lane closure may be required at Phase 2 sites. In such areas, one lane would remain accessible and proper traffic controls would be utilized to ensure that the project would not cause or increase hazards. The impact would be less than significant.

d) Result in inadequate emergency access?

Less than Significant Impact

The 35 project sites are situated in unincorporated areas of Mendocino County. The project sites are primarily situated adjacent to the public right-of-way, and some are situated near fire stations and hospitals. For example, sites UK.26 and UK.27 are situated within 350 feet of the Ukiah Valley Fire District, and sites UK.18 and site UK.18 is situated within 200 feet of Ukiah Valley Fire Authority Station No. 643. As described above in Impact c), the project may require temporary lane closure during construction. In such cases, access would be maintained, and traffic controls would be provided as necessary. Therefore, construction of the project would not result in inadequate access for any emergency vehicles or along evacuation routes. Operational conditions of the project would be similar to existing conditions, and no impact related to emergency access would be less than significant.

4.1.18 Tribal Cultural Resources

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

ENVIRONMENTAL SETTING

A description of the environmental setting related to tribal cultural resources can be found in Section 4.1.5, Cultural Resources.

REGULATORY SETTING

Tribal Cultural Resources Assembly Bill 52 (AB 52)

AB 52 (Chapter 532, Statutes 2014) required an update of the CEQA Guidelines to include questions related to impacts to tribal cultural resources. AB 52 establishes a consultation process with all California Native American Tribes on the Native American Heritage Commission List, Federal and Non-Federal Recognized Tribes. AB 52 also establishes a new class of resources: Tribal Cultural Resources. Key components of AB 52 include consideration of Tribal Cultural Values in determination of project impacts and mitigation and required Tribal notice and meaningful consultation.

PRC Section 21080.3.2(b) states that consultation ends when either 1) parties agree to mitigation measures or avoid a significant effect on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort concludes that mutual agreement cannot be reached.



State of California Public Resources Code

Section 21074 of the PRC defines historical resources related to tribal cultural resources.

- a) "Tribal cultural resources" are either of the following:
 - 1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - A. Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - B. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
 - 2. 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. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Section 5020.1(k) defines "Local register of historical resources" as a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.

Section 5024.1 is the establishment of the California Register of Historical Resources (California Register).

ASSESSMENT METHODOLOGY

Origer sent a request to the State of California's NAHC seeking information from the Sacred Lands File and the names of Native American individuals and groups that would be appropriate to contact regarding this project. Letters were also sent to the following groups in 2022 and again in 2023 when parts of the project changed:

- Cahto Tribe,
- Coyote Valley Band of Pomo Indians,
- Guidiville Indian Rancheria,
- Habematolel Pomo of Upper Lake,
- Hopland Band of Pomo Indians,
- Lytton Rancheria,
- Manchester Band of Pomo Indians of the Manchester Rancheria,



- Noyo River Indian Community,
- Pinoleville Pomo Nation,
- Potter Valley Tribe,
- Redwood Valley or Little River Band of Pomo Indians,
- Robinson Rancheria of Pomo Indians,
- Round Valley Reservation/Covelo Indian Community,
- Sherwood Valley Rancheria of Pomo, and
- Yokayo Tribe.

The NAHC replied with a letter dated December 8, 2022, which indicated that the Sacred Lands File has information about the presence of Native American cultural resources within the township and range of the project area.

Brenda Tomaras, representative for the Lytton Rancheria, responded via email on December 12, 2023. Ms. Tomaras stated that the tribe has no specific information about the project but believes that it falls within traditional Pomo territory lands. She added that the Tribe will evaluate whether further consultation on the project with the appropriate lead agency is necessary. Ms. Tomaras requested that a copy of the Cultural Resources Study be shared with the Tribe once it is complete.

DISCUSSION OF IMPACTS

- 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 size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?
 - ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact with Mitigation Incorporated

The NAHC reported that the Sacred Lands File results showed the presence of cultural resources within the township and range of the project sites. No tribal cultural resources have been identified on the project sites by previous cultural resources study or by Native American groups or individuals to date. However, as described in Section 4.1.5, Cultural Resources, ground-disturbing activities on the project sites may lead to the discovery of buried archaeological resources on the project sites, which may include tribal cultural resources. The project will implement Mitigation Measure CUL-1 pertaining to the accidental discovery of buried



archaeological resources, which will ensure that the project will not damage any unknown cultural resources, including tribal cultural resources, that may be present on the project sites.

Origer sent letters to 15 Tribes and received three responses indicating the project was outside of their traditional territory. One response from the Lytton Rancheria indicated that the project area lies within traditional Pomo territory and the Tribe will evaluate whether further consultation is necessary. Per the request of the Tribal representative, Ms. Tomaras, a copy of the final Cultural Resources Study will be shared with the Lytton Rancheria, who may request to consult with the lead agency on the project, pursuant to AB 52.

AB 52 requires a direct consulting relationship between Tribes and the lead agency. Tribes who wish to consult on a project and the lead agency bear the responsibility for compliance with AB 52. Therefore, the Department, as the lead agency under CEQA, shall conduct formal AB 52 consultation with any Tribe that requests to consult on the proposed project. The five step process outlined by the NAHC to meet their obligation under AB 52 and CEQA to make a good faith effort to conduct tribal consultation under State guidelines can be found at: https://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf.



4.1.19 Utilities and Service Systems

	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?				\boxtimes
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d)	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				\boxtimes

ENVIRONMENTAL SETTING

Stormwater in Mendocino County is managed by the Mendocino County Water Agency (Water Agency).

Water suppliers in the project area include Redwood Valley County Water District, Calpella County Water District, Millview County Water District, City of Ukiah, Willow County Water District, Rogina Water Company, Inc., and City of 10000 Buddhas.

Wastewater is managed by the Ukiah Valley Sanitation District and the City of Ukiah Wastewater Treatment Plant.

Solid waste is managed by Mendocino County's Solid Waste Management Authority (under the moniker Mendo Recycle). Solid waste collected in Mendocino County is exported for disposal in the Potrero Hills Landfill in Solano County.



DISCUSSION OF IMPACTS

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?

Less Than Significant Impact with Mitigation Incorporated

The project would result in expanded stormwater infrastructure in the form of additions of trash capture devices at existing storm drains, expanding drainage catchment areas to install large-scale trash capture devices. The project would not result in the relocation or construction of other new infrastructure. As described throughout this IS/MND, the project would not result in any significant environmental impacts; all impacts would be mitigated to a less-than-significant level with implementation of mitigation measures described throughout this document. Therefore, the environmental effects of the proposed new water facilities included in the project would be less than significant with mitigation incorporated.

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

No Impact

The project would not affect demand or supply of water during construction or operation. No impact would occur.

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

No Impact

The project would not affect demand for wastewater treatment or provider capacity. No impact would occur.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact

The project may result in the generation of construction related waste that will need to be disposed of at an accepting facility. Project operation would not generate new solid waste but by nature would capture solid waste out of stormwater infrastructure that would otherwise be discharged into waterways or obstruct stormwater drains. Solid waste captured will be collected regularly and disposed of at appropriate facilities. Project operation would not exceed capacity of solid waste facilities or impair the implementation of waste reduction goals. The impact of the project would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact

Solid waste created by project construction as well as solid waste captured during project



operation would be disposed of at appropriate facilities in compliance with applicable statutes and regulations. No impact would occur.



4.1.20 Wildfire

If loo or lo seve	cated in or near state responsibility areas Inds classified as very high fire hazard erity 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?			\boxtimes	
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				\boxtimes
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				\boxtimes
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?				\boxtimes

ENVIRONMENTAL SETTING

The project sites are located within the developed areas of Ukiah, Talmage, The Forks, Calpella, Redwood Valley and Laughlin which are not within a state responsibility area and not within a designated fire hazard severity zone (CAL FIRE 2023).

The project sites are within Planning Area 2 under *Mendocino County Evacuation Plan* (2020) and Highways 101 and 20 are identified as the primary evacuation routes. No project sites are located on these routes. Some project sites abut or are located within predetermined evacuation zones identified including:

- Site UK.23 (Zone 2K)
- Site UK.03 (Zone 2N)
- Site UK.02 (Zone 2P)

DISCUSSION OF IMPACTS

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

Less than Significant Impact

The project sites are located throughout various Evacuation Zones as designated by the City of Ukiah and Mendocino County. Installation of small trash capture devices would not obstruct any



evacuation route. It is possible that installation of large trash capture devices would require the use of construction equipment within the public right-of-way, which could obstruct evacuation routes in some areas. If work must occur within the public right-of-way, the project contractor will prepare and submit to the City for approval a plan for traffic control and rerouting in any obstructed roadways. Construction equipment would be stored in areas outside of the public right-of-way. Project operation would be similar to existing conditions and would not physically interfere with any designated evacuation route or public right-of-way. Therefore, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No impact

The proposed sites are within developed land use areas and would not result in changes to slopes or other factors that would exacerbate wildfire risks. No impact would occur.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No impact

The project would not result in the installation of any infrastructure that may exacerbate wildfire risk or result in temporary or ongoing impacts to the environment. No impact would occur.

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

No impact

The proposed sites are located on the valley floor in developed areas and would not result in drainage changes or post-fire runoff risks. No impact would occur.



4.1.21 Mandatory Findings of Significance

a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels		Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	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)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				

DISCUSSION OF IMPACTS

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

Implementation of the project would not substantially degrade the quality of the environment, reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the range of a rare or endangered plant or animal. Because no special-status wildlife and plant species have the potential to occur at the project sites, the project would have no impact on special-status wildlife and plant species. As discussed in Section 5.2.5, Cultural Resources, and Section 5.2.18, Tribal Cultural Resources, impacts to potentially unknown resources within the project sites would be mitigated to a less than significant level by Mitigation Measure CUL-1. Therefore, impacts would be less than significant with mitigation incorporated.

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 with Mitigation Incorporated

Cumulatively considerable means that the incremental effects on an individual 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. The County identified one other project in the area, the Calpella Two Bridge Replacements Project, which is located east of the project area on Highway 20. Construction work for the proposed project could overlap with construction of the nearby Calpella Two Bridge Replacements Project and other projects. The analysis within this IS/MND demonstrates that the project would not have any individually limited, but cumulatively considerable impacts. All potentially significant impacts would be reduced to a less-than-significant level with mitigation. Compliance with the conditions of approval issued for the project would further assure that project-level impacts would not be cumulatively considerable.

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

Less than Significant Impact with Mitigation Incorporated

Potential impacts to human beings have been addressed in this IS/MND, including impacts related to air quality and noise. Project construction activities would cause potential temporary impacts to humans due to the generation of criteria air pollutants, which would be considered less than significant under CEQA with implementation of Mitigation Measure AIR-1. Mitigation Measure AIR-1 requires that the project implement fugitive dust control measures as recommended by the BAAQMD 2022 CEQA Air Quality Guidelines. Humans would be impacted by noise generated from construction activities, however as discussed in Section 4.1.13, Noise, the impact would be less than significant.



4.2 Determination

On the basis of this initial evaluation:



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

I find that the 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 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

Howard Dashiell, Director of Transportation

3/11/24

Date



5.0 **REFERENCES**

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APPENDIX A. BIOLOGICAL RESOURCES TECHNICAL REPORT



Mendocino County Stormwater Trash Capture Devices · Mendocino County Department of Transportation Draft Initial Study / Proposed Negative Declaration | March 2024



Mendocino County Stormwater Trash Capture Devices Project

Biological Resources Technical Report

Ukiah, Mendocino County, California



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DEFINITIONS

Study Area: The area where the assessment was performed, inclusive of 34 separate locations where a trash capture device is proposed and the surrounding 100-foot buffer at each location. The Study Area also encompasses the areas of impact of the Project and is the area evaluated for potential impacts to sensitive biological resources.



List of Acronyms

АММ	Avoidance and Minimization Measure
BCC	USFWS Birds of Conservation Concern
BGEPA	Bald and Golden Eagle Protection Act
BIOS	Biological Information and Observation System
BMPs	Best Management Practices
BRTR	Biological Resources Technical Report
Caltrans	California Department of Transportation
CARI	California Aquatic Resources Inventory
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEOA	California Environmental Ouality Act
CFGC	California Fish and Game Code
CFP	California Fully Protected Species
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	County of Mendocino
Corps	U.S. Army Corps of Engineers
CPRC	California Public Resources Code
CPS	connector pipe screens
CSRI	California Soils Resource Lab
CWA	Clean Water Act
FFH	Essential Fish Habitat
FPA	U.S. Environmental Protection Agency
FSA	Federal Endangered Species Act
HDS	hydrodynamic separators
Inventory	California Native Plant Society Rare Plant Inventory
IRA	Important Bird Areas
IPaC	USEWS Information for Planning and Consultation
Maanuson-Stevens Act	Magnuson-Stevens Fishery Conservation & Management Act
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
NCCP	Natural Community Conservation Plan
NFTR	National Environmental Title Research
ΝΟΑΑ	National Oceanic and Atmospheric Administration
NMES	National Marine Eisheries Service
ΝΡΡΔ	California Native Plant Protection Act
NRCS	Natural Resource Conservation Service
NWI	National Wetlands Inventory
NWPI	National Wetland Plant List
OHWM	Ordinary High Water Mark
Bank	California Rare Plant Ranks
RHA	Rivers and Harbors Act
RWOCB	Regional Water Quality Control Board
SC	State Candidate
SFEI	San Francisco Estuary Institute
SSC	Species of Special Concern
SSI	Special-status Invertebrates
SWRCB	State Water Resource Control Board
ТОВ	Top of Bank

N

USC	U.S. Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group
WRA	WRA, Inc.



1.0 INTRODUCTION

This Biological Resources Technical Report evaluates existing biological resources, potential impacts, and mitigation measures (if required) for the Mendocino County Stormwater Trash Capture Devices Project located in Mendocino County, California (Appendix A, Figure 1). The proposed project (Project) involves installation of trash capture devices at existing County stormwater drains within the greater Ukiah Valley, Mendocino County, California, at 34 separate locations. The installation of the devices is required by the State Water Resources Control Board (SWRCB).

1.1 Overview and Purpose

This report provides an assessment of biological resources at each of the proposed trash capture locations and associated 100-foot buffer distance (comprising the Study Area). The purpose of the assessment was to develop and gather information on sensitive land cover types and special-status plant and wildlife species to support an evaluation of the Project under the California Environmental Quality Act (CEQA). This report describes the results of the site visit, which assessed the Study Area for (1) the presence of sensitive land cover types, special-status plant species, and special-status wildlife species, (2) the potential for the site to support wildlife species, (3) the presence of potential wetlands, and (4) presence of special-status plants. Based on the results of the site assessment, potential impacts to sensitive land cover types and special-status species resulting from the proposed Project were evaluated. If the Project has the potential to result in significant impacts to these biological resources, measures to avoid, minimize, or mitigate for those significant impacts are described.

A biological resources assessment provides general information on the presence, or potential presence, of sensitive species and habitats. Additional focused studies (such as protocol level species surveys or a wetland delineation) may be required to support regulatory permit applications or to implement mitigation measures included in this report. This assessment is based on information available at the time of the study and on-site conditions that were observed on the dates the site was visited. Conclusions are based on currently available information used in combination with the professional judgement of the biologists completing this study.

1.2 Project Description

The purpose of the Project is to install certified trash full-capture systems to address trash runoff and comply with the April 2015 Trash Amendments adopted by the State Water Resources Control Board. The Project consists of 35 individual Ukiah Municipal Separate Storm Sewer System (MS4) sites (capture sites) located in unincorporated Mendocino County, in the communities of Calpella, The Forks, and Redwood Valley and the urbanized Ukiah area outside the Ukiah City limits (Appendix A, Figures 1 and 2). Specifically, the Project area extends from Plant Road at the border with the City of Ukiah at its southern extent (site location UK.33) to near the intersection of West Road and Ellen Lynn Street at the northern extent (site location UK.02). Capture sites are located along streets throughout developed areas including commercial, industrial, agricultural, and residential land uses.



Trash capture devices are to be located at existing storm water facilities along streets. The 34 trash capture devices are categorized as either small-scale or large-scale devices. Small-scale devices would include structures such as connector pipe screens (CPS) and hanging baskets installed at storm drain outlets. Large-scale devices would include structures such as hydrodynamic separators (HDS), netting devices and baffle boxes.

SMALL-SCALE DEVICES

Small-scale devices would include structures such as connector pipe screens (CPS) and hanging baskets installed at storm drain inlets.

Connector Pipe Screen (CPS): The CPS is a metal screen assembly installed inside a catch basin, in front of the outlet pipe, preventing debris from entering the storm drain system (Representative Image 1). CPSs are designed to be permanently mounted to the catch basin and may have a quick disconnect feature to facilitate pipe jetting or to prevent flooding should the basin drainage system become clogged. These units are designed to retain all trash and solids larger than five millimeters inside the catch basin, and once in place, also retain large volumes of sediment.



Representative Image 1. Example of CPS

Hanging Basket: The hanging basket is similar to the CPS in that it is a separate unit installed into the existing storm drain system (Representative Image 2). Typically installed in a catch basin, the hanging basket is an insert that keeps trash and large debris from entering the stormwater system. A frame is inserted into the top of the catch basin, paired with a basket with five millimeter opening perforations. The large screen openings allow ample flow-through and prevent clogging from sand and sediment entering the basket from streets and parking lots.



Representative Image 2. Example of Hanging Basket



LARGE-SCALE DEVICES

Large-scale devices would include structures such as hydrodynamic separators (HDS), netting devices, and baffle boxes.

Hydrodynamic Separators (HDS): HDSs are widely used in stormwater treatment. They are flowthrough structures with a settling or separation unit to remove sediment, floatable materials, and other pollutants (Representative Image 3). HDSs come in a wide range of designs, and some are as small as a standard manhole structure. These inline systems can be cleaned using a vacuum truck to pump out the trash, sediment, and water that collects in the bottom of the HDS.



Representative Image 3. Conceptual Design of HDS

Netting Devices: Netting devices are placed on discharge pipes to collect trash. Netting systems have one or more mesh bags and a metal frame guide system to support the nets. When netting devices become full, the nets can be removed and replaced with new nets. End-of-pipe systems can be installed at the actual discharge point to receiving waters, or at a collection point prior to discharge (Representative Image 4). These nets are installed above ground; therefore, they must be inspected at regular intervals to find and repair any damage that may occur during use.



Representative Image 4. Example of End-of-Pipe Netting System

Baffle Boxes: Baffle boxes are concrete or fiberglass structures containing a series of sediment settling chambers separated by baffles (Representative Image 5). The primary function of baffle boxes is to remove sediment, suspended particles, and associated pollutants from stormwater. Trash is removed through the metal cage fitted with five-millimeter mesh located at the flow line of the storm drain system. Baffle boxes can be located either in-line or at the end of storm pipes. Cleaning of baffle boxes can be accomplished through a manhole or hatch above ground with a vacuum truck, with no confined-spaced entry required for routine maintenance. Screened systems are hinged for easy access to collected sediments in the baffle chambers below.



Representative Image 5. Conceptual Design of Baffle Box



Louvered Panels: Louvered panels are used in small-scale and large-scale trash devices for removing solids from stormwater. The most common louvered panel is the Rosco Moss Storm Flo® which is a linear radial design. The Rosco Moss Storm Flo® is certified as a Full Capture System for compliance with California's discharge and trash capture regulations (Representative Image 6).



Representative Image 6. Example of Rosco Moss Storm Flo® Louvered Panel

Project construction includes two phases of work at trash capture sites. Tables 1 and 2 below summarize information for each of the capture sites.

1.2.1 Phase 1 Sites

Phase 1 site construction would occur at 30 sites during the dry season (May 15 to September 30) and is expected to commence in spring 2024. All project activities would occur within existing



developed structures in MS4 stormwater facilities. All devices to be installed are small-scale with the exception of UK.07, , which is a large-scale device. No significant ground disturbance is anticipated, as only limited ground disturbance would occur as part of device installation work at the following capture sites: UK.01, UK.02, UK.04, UK.05, UK05a, UK.07, UK.09, UK.11, UK.16, UK.23, UK.26, UK.30, UK.32, UK.33, UK.34.

Phase 1 involves installation of trash capture devices where work will have no effect on a jurisdictional stream, channel or wetland and does not require review and permitting by state and federal regulatory agencies. No alteration of a streambed or stream bank, or dredge or fill of material within jurisdictional wetlands or waters, will occur at these sites. Area of ground disturbance for Phase 1 devices ranges from none to 200 square feet.

Equipment necessary for Phase 1 implementation would include:

- Pickup truck
- Vacuum truck
- Concrete drill
- Impact driver
- Street sweeper
- Pressure washer

No heavy machinery would be required. No road closures or vegetation removal would be required. Staging would occur on the existing sidewalk at each location and no construction materials would be staged overnight.

Table 1. F	Phase 1 [·]	Trash Ca	oture Dev	ice Type,	Location	and	Ground	Disturbance

PHASE 1 – 2024 SITES WITH NO ANTICIPATED IMPACTS TO JURISDICTIONAL WETLANDS AND WATERS			
CAPTURE SITE	LOCATION	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE
UK.01	E side of N State Street, 0.6 miles N of Hwy 101 Redwood Valley exit/West Road, Redwood Valley	15-foot long, 24-inch small-scale Louvered Panel at upland ditch, prior to culvert under N. State Street. Installation of weir headwall to upstream end.	Yes – 150 sq. ft.
UK.02	W side of West Road at Cerro Lumber entranceway, Redwood Valley	10-foot long, 24-inch small-scale Louvered Panel at downstream end of culvert under private driveway. Installation of weir headwall to upstream end.	Yes – 150 sq. ft.
UK.03	N side of East School Way at Schoolway Road, Redwood Valley	Small-scale CPS within existing catch basin	None
UK.04	NE corner of N State Street/Moore Street intersection, Calpella	Small-scale CPS at existing catch basin to be deepened	Yes – 50 sq. ft.



PHASE 1 – 2024 SITES WITH NO ANTICIPATED IMPACTS TO JURISDICTIONAL WETLANDS AND WATERS			
CAPTURE SITE	LOCATION	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE
UK.05, 05a	E (UK.05) and W (UK.05a) sides of N State Street at Lindberg True Value Hardware, Calpella	Two small-scale devices: CPS in new catch basin at north location (UK.05) and CPS in existing catch basin at south location (UK.05a)	Yes – 50 sq. ft. each
UK.06	W side of N State Street, 500 feet south of DenBeste Landscape Materials, Ukiah	Small-scale CPS within existing catch basin	None
UK.07	E side of N State Street, across from Ukiah Country Manor Mobile Home Community, Ukiah	Large-scale HDS at existing catch basin location, will require new structure	Yes – 100 sq. ft.
UK.08	N side of Lake Mendocino Drive, W of railroad line, Ukiah	Small-scale CPS within existing catch basin	None
UK.09	N side of Lake Mendocino Drive, E of County Public Works yard, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.
UK.11	NW side of N State Street/Hensley Creek Road intersection, Ukiah	Small-scale CPS within existing catch basin to be expanded	Yes – 50 sq. ft.
UK.12	W side of N State Street at Calfire/Scootrz Deli entranceway, Ukiah	Small-scale CPS within existing catch basin	None
UK.13	W side of N State Street at Taqueria Michoacan parking lot, Ukiah	Small-scale CPS within existing catch basin	None
UK.14	NW side of N State Street/Orr Springs Road intersection at auto lot, Ukiah	Small-scale CPS within existing catch basin	None
UK.16	S side of Pinoleville Road, 250 feet W of Hwy 101, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.
UK.17	N side of Orr Springs Road between Wellmar Drive and Industry Road, Ukiah	Small-scale CPS within existing catch basin	None
UK.18	S side of Lovers Lane at Ukiah Valley Fire station, Ukiah	Small-scale CPS within existing structure	None



PHASE 1 – 2024 SITES WITH NO ANTICIPATED IMPACTS TO JURISDICTIONAL WETLANDS AND WATERS			
CAPTURE SITE	LOCATION	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE
UK.19	W side of N State Street N of Hwy 101 overpass and S of Best Western Hotel, Ukiah	Small-scale Hanging Basket within existing catch basin	None
UK.23	W side of Old River Road, 350 feet S of Foster Lane, Ukiah	Small-scale Louvered Panel at open ditch downstream of culvert	Yes – 150 sq. ft.
UK.25	W side of Dora Street, 165 feet S of Laws Avenue, Ukiah	Small-scale Hanging Basket within existing catch basin	None
UK.26	N side of Laws Avenue at Graystone Apartments, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.
UK.27	W side of S State Street, adjacent to 101 Market/Deli, Ukiah	Small-scale CPS within existing catch basin	None
UK.28	NW corner of S Dora Street/Fircrest Drive intersection, Ukiah	Small-scale CPS within existing catch basin	None
UK.29	W side of N Court Road, 155 feet N of Oak Knoll Road, Ukiah	Small-scale Hanging Basket within existing catch basin	None
UK.30	SW corner of S State Street/Whitmore Lane intersection, Ukiah	Small-scale Hanging Basket within new catch basin	Yes – 50 sq. ft.
UK.32	SW corner of S State Street/Gobalet Lane intersection, Ukiah	Small-scale Louvered Panel at open ditch downstream of culvert	Yes – 150 sq. ft.
UK.33	N side of Plant Road, 130 feet E of Taylor Drive, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.
UK.34	NW corner of Calpella Road/Lake Mendocino Drive, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.
UK.35	W side of N State Street, between A-Z Construction and DenBeste Landscape Materials, Ukiah	Small-scale CPS within existing catch basin	None
UK.36	N side of Oak Knoll Road, 100 feet W of N Court Road, Ukiah	Small-scale Hanging Basket within existing catch basin	None



1.2.2 Phase 2 Sites

Phase 2 site construction will occur at five sites and would also be implemented during the dry season (May 15 to September 30) and is expected to commence in spring 2025. Project activities would occur at locations that are not part of the County's MS4 stormwater facilities, and all devices to be installed are large-scale. None of these channels are named or natural streams; however, these features may be considered jurisdictional. Phase 2 work involves installation of trash capture devices within channels; however, only site UK.22 will impact an earthen channel for the development of a concrete slab and wing walls to place the device. Sites UK.10 and UK.21 will involve placement of a device in a concrete-lined channel. The device at UK.18a will be installed within an underground pipe that crosses Lovers Lane. At UK.20, the device will be installed within a parking lot above the channel's top of bank.

Equipment necessary for Phase 2 implementation would include:

- Concrete Delivery Truck
- Skip Loader
- Dump Truck
- Roller Compactor
- Flatbed Trailer
- Backhoe
- Crane
- Forklift
- Vibratory Hammer or Press (1)
- Pile Driving Hammer or Vibratory Driver (1)
- Diesel Engine
- Mud Handling Equipment
- 3 HP Submersible Pump
- HP Generator
- Tree Removal Equipment (Chainsaws, Chippers, Crew Trucks)
- Light Tower with Generator

A crane would be required to install and maintain netting devices. Any staging areas required would be located in developed areas, and no construction materials would be staged overnight. Lane closures and/or vegetation removal may be required at some of the sites.



PHASE 2 – 2025 SITES WITH POTENTIAL IMPACTS TO JURISDICTIONAL WETLANDS AND WATERS			
CAPTURE SITE	LOCATION	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE
UK.10	W side of N State Street, across from Frontage Road A/Dodge auto dealership, Ukiah	Large-scale Louvered Panel on concrete pad at outlet of culvert, approximately 30 feet from end of wing wall to end of wing wall and 2 feet in height. Construction to remain within concrete pad.	226 sq. ft.
UK.18a	North Lovers Lane at entrance to apartment complex, 250 feet SW of fire station, Ukiah	Large-scale HDS or baffle box under N. Lovers Lane	200 sq. ft.
UK.20	Hwy 101 W side frontage road, behind Raley's groceries, Ukiah	Large-scale HDS or Baffle Box within developed parking lot and Caltrans easement areas	200 sq. ft.
UK.21	Hwy 101, Mazzoni Street overpass, W side	Large-scale Louvered Panel in concrete-lined, vegetated stream channel. Will require dual, 36-inch diameter tubes each 25 feet in length.	700 sq. ft.
UK.22	Hwy 101, Mazzoni Street overpass, E side	Large-scale Louvered Panel in vegetated stream channel. Will require concrete pad and concrete sidewalls for weir into dual 36-inch diameter tubes each approximately 15 feet in length.	1,048 sq. ft.

Table 2. Phase 2 Trash Capture Device Type, Location and Ground Disturbance

1.2.3 Best Management Practices

The Project will include Best Management Practices (BMPs) to avoid and minimize erosion, pollutants, and sediment deposition into the streams. BMPs shall include but are not limited to the following:

- All equipment used on site will be maintained in good working order. Any leaks will be repaired immediately, and if on-site repairs are not possible the equipment will be removed from the site immediately.
- All equipment and materials entering the site will be cleaned and disinfected prior to entry. Equipment will be cleaned with power washing methods to remove all dirt and seed. Hand and power tools will be disinfected by washing thoroughly and treating with a disinfectant solution.
- Erosion-control measures will be utilized throughout all phases of the Project where sediment runoff from construction may potentially enter waters. Erosion control structures will be monitored for effectiveness and will be repaired or replaced as needed. Appropriate erosion control measures will be installed around any stockpiles of soil or other materials that could be mobilized by rainfall or runoff. No monofilament erosion control materials shall be used. Work within 100 feet of streams will be postponed for 24 hours following a significant rain event (>0.25 inch in 24 hours).



- When working within channels on the site, the contractor will ensure that all work is completed in dry conditions. Stream diversion or pump-around practices may be employed, and any turbid water that accumulates in work areas will be filtered prior to re-entry into the waterway or wetland.
- After final grading has been completed, final erosion and sediment control measures will be installed prior to the first rainfall event. Erosion control measures will include but not be limited to silt fence, straw wattles, and coir fiber erosion control matting.

1.2.4 Ongoing Operation and Maintenance

Project operation would involve activities associated with the maintenance of trash capture devices. Large-scale HCDs, louvered panels, and baffle boxes would require cleaning approximately twice per year and would require approximately four hours for a team of two maintenance workers. Small-scale CPS and hanging baskets would require cleaning approximately three times per year and would require approximately 30 minutes for a team of two maintenance workers. Maintenance activities would generally include the following:

- Clearing trash and debris located immediately in front of a curb opening or side opening of a catch basin, and on top or between metal grates of a grated catch basin,
- Removing vegetation growing across and/or blocking the basin opening,
- Removing all trash and vegetative debris from inside the catch basin,
- Removing trash and debris in connector pipe openings, upstream or downstream,
- Replacing parts and entire devices as needed, and
- Disposing of debris, trash, organics, and sediment captured by devices at an approved facility for disposal in accordance with local and state requirements.

A vactor truck would be needed to maintain large-scale and possibly small-scale devices. A crane would also be needed to maintain netting devices.

1.3 Summary of Results

The Study Area includes two sensitive natural communities: mixed oak woodland and riparian. Each of these will be fully avoided and no impacts are anticipated.

Intermittent streams are present in the Study Area, at UK.11, UK.21, and UK.22. Project related impacts will be less than significant to the stream and stream functions.

No special-status plants were determined to have a high or moderate potential to occur in the Study Area and no impacts are anticipated.

No special-status wildlife species have the potential to occur in the Study Area. Therefore, no associated mitigation measures are necessary to avoid impacts for special-status wildlife species. Best Management Practices that will be included/observed during construction activities will provide avoidance measures to protect wildlife.



Table 3. Summary of Biological Resources Evaluation

CEQA Assessment Category ¹ IV – Biological Resources	Biological Resources Considered	Relevant Laws & Regulations	Responsible Regulatory Agency	Summary of Findings & Report Section ²
Question A. Special-status Species Question B. Sensitive natural communities & riparian habitat	Special-status Plants Special-status Wildlife Designated Critical Habitat Sensitive Natural Communities Streams, Lakes & Riparian Habitat	Federal Endangered Species Act CA Endangered Species Act CA Native Plant Protection Act Migratory Bird Treaty Act Bald & Golden Eagle Protection Act CA Fish & Game Code Oak Woodland Conservation Act Porter-Cologne Act Clean Water Act	U.S. Fish & Wildlife Service National Marine Fisheries Service CA Department of Fish & Wildlife U.S. Army Corps of Engineers U.S. Environmental Protection Agency State Water Resources Control Board Regional Water Quality Control Board	No potentially significant impacts were identified, and no mitigation is required for less than significant impacts. See Section 7.1 for more information. No potentially significant impacts were identified, and no mitigation is required for less than significant impacts. See Section 7.2 for more information.
Question C. State and federally protected wetlands	Wetlands Unvegetated surface waters	Clean Water Act: Sections 404/401 Rivers & Harbors Act: Section 10 Porter-Cologne Act	U.S. Army Corps of Engineers U.S. Environmental Protection Agency State Water Resources Control Board	No potentially significant impacts were identified, and no mitigation is required for less than significant impacts. See Section 7.3 for more information

¹ CEQA Questions have been summarized here, see Section 6.2 for details.

² As given in this report, see Section 5.0 subheadings.


CEQA Assessment Category ¹ IV – Biological Resources	Biological Resources Considered	Relevant Laws & Regulations	Responsible Regulatory Agency	Summary of Findings & Report Section ²	
			Regional Water Quality Control Board		
Question D. Fish & Wildlife corridors	Essential Fish Habitat Wildlife Corridors	Magnuson-Stevens Fishery Conservation & Management Act CA Fish & Game Code	National Marine Fisheries Service CA Department of Fish and Wildlife	No potentially significant impacts were identified, and no mitigation is required for less than significant impacts. See Section 7.4 for more information	
Question E. Local policies	Protected Trees Coastal zone resources Other biological protections	Local Tree Ordinance General Plan (e.g., Stream & Wetland Setbacks) Local ordinances	Local and regional agencies CA Coastal Commission San Francisco Bay Conservation and Development Commission	No potentially significant impacts were identified, and no mitigation is required for less than significant impacts. See Section 7.5 for more information	
Question F. Local, state, federal conservation plans	Habitat Conservation Plans Natural Community Conservation Plans	Federal Endangered Species Act Natural Community Conservation Planning Act	U.S. Fish and Wildlife Service CA Department of Fish and Wildlife	No potentially significant impacts were identified, and no mitigation is required for less than significant impacts. See Section 7.6 for more information	



2.0 REGULATORY BACKGROUND

The following sections explain the regulatory context of the biological assessment, including applicable laws and regulations that were applied to the field investigations and analysis of potential project impacts. Table 3 shows the correlation between these regulations and each Biological Resources question in the Environmental Checklist Form (Appendix G) of the CEQA guidelines.

2.1 Federal and State Regulatory Setting

2.1.1 Vegetation and Aquatic Communities

CEQA provides protections for particular vegetation types defined as sensitive by the California Department of Fish and Wildlife (CDFW) and aquatic features protected by laws and regulations administered by the U.S Army Corps of Engineers (Corps), State Water Resources Control Board (SWRCB), and Regional Water Quality Control Boards (RWQCB). The laws and regulations that provide protection for these resources are summarized below.

SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened" (CDFW 2023a) and keeps records of their occurrences in its California Natural Diversity Database (CNDDB; CDFW 2023b). Natural communities are ranked 1 through 5 in the CNDDB based on NatureServe's (2023) methodology, with those communities ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or U.S. Fish and Wildlife Service (USFWS) must be considered and evaluated under CEQA (California Code of Regulations [CCR] Title 14, Div. 6, Chap. 3, Appendix G). In addition, this general class includes oak woodlands that are protected by local ordinances under the Oak Woodlands Protection Act and Section 21083.4 of California Public Resources Code (CPRC).

WATERS OF THE UNITED STATES, INCLUDING WETLANDS

The Corps regulates "Waters of the United States" under Section 404 of the Clean Water Act (CWA). Waters of the United States are defined in the Code of Federal Regulations (CFR) as including the territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, such as tributaries, lakes and ponds, impoundments of waters of the U.S., and wetlands that are hydrologically connected with these navigable features (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Corps Manual; Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Unvegetated waters including lakes, rivers, and streams may also be subject to Section 404 jurisdiction and are characterized by an ordinary high water mark (OHWM) identified based on field indicators such as the lack of vegetation, sorting of sediments, and other indicators of flowing or standing water. The placement of fill material into Waters of the United States generally requires a permit from the Corps under Section 404 of the CWA.



The Corps also regulates construction in navigable waterways of the U.S. through Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 U.S. Code [USC] 403). Section 10 of the RHA requires Corps approval and a permit for excavation or fill, or alteration or modification of the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor or refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the United States. Section 10 requirements apply only to navigable waters themselves, and are not applicable to tributaries, adjacent wetlands, and similar aquatic features not capable of supporting interstate commerce.

WATERS OF THE STATE, INCLUDING WETLANDS

The term "Waters of the State" is defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The SWRCB and nine RWQCB protect waters within this broad regulatory scope through many different regulatory programs. Waters of the State in the context of a CEQA Biological Resources evaluation include wetlands and other surface waters protected by the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2019). The SWRCB and RWQCB issue permits for the discharge of fill material into surface waters through the State Water Quality Certification Program, which fulfills requirements of Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Clean Water Act permit are also required to obtain a Water Quality Certification. If a project does not require a federal permit but does involve discharge of dredge or fill material into surface waters of the State, the SWRCB and RWQCB may issue a permit in the form of Waste Discharge Requirements.

SECTIONS 1600-1616 OF CALIFORNIA FISH AND GAME CODE

Streams and lakes, as habitat for fish and wildlife species, are regulated by CDFW under Sections 1600-1616 of California Fish and Game Code (CFGC). Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream," which includes creeks and rivers, is defined in the CCR as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). The term "stream" can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). Riparian vegetation has been defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFG 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

2.1.2 Special-status Species

ENDANGERED AND THREATENED PLANTS, FISH, AND WILDLIFE

Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the Federal Endangered Species Act (ESA), or the California Endangered Species Act (CESA). Specific protections and permitting mechanisms for these species differ under each of these acts, and a species' designation under one law does not automatically provide protection under the other.



The ESA (16 USC 1531 et seq.) is implemented by the USFWS and the National Marine Fisheries Service (NMFS). The USFWS and NMFS maintain lists of endangered and threatened plant and animal species (referred to as "listed species"). "Proposed" or "candidate" species are those that are being considered for listing and are not protected until they are formally listed as threatened or endangered. Under the ESA, authorization must be obtained from the USFWS or NMFS prior to take of any listed species. "Take" under the ESA is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Take under the ESA includes direct injury or mortality to individuals, disruptions in normal behavioral patterns resulting from factors such as noise and visual disturbance and impacts to habitat for listed species. Actions that may result in take of an ESA-listed species may obtain a permit under ESA Section 10, or via the interagency consultation described in ESA Section 7. Federally listed plant species are only protected when take occurs on federal land.

The ESA also provides for designation of critical habitat, which are specific geographic areas containing physical or biological features "essential to the conservation of the species." Protections afforded to designated critical habitat apply only to actions that are funded, permitted, or carried out by federal agencies. Critical habitat designations do not affect activities by private landowners if there is no other federal agency involvement.

The CESA (CFGC 2050 et seq.) prohibits the take of any plant and animal species that the CFGC determines to be an endangered or threatened species in California. CESA regulations include take protection for threatened and endangered plants on private lands, as well as extending this protection to candidate species that are proposed for listing as threatened or endangered under CESA. The definition of a "take" under CESA ("hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") only applies to direct impact to individuals, and does not extend to habitat impacts or harassment. CDFW may issue an Incidental Take Permit under CESA to authorize take if it is incidental to otherwise lawful activity and if specific criteria are met. Take of these species is also authorized if the geographic area is covered by a Natural Community Conservation Plan (NCCP), as long as the NCCP covers that activity.

FULLY PROTECTED SPECIES AND DESIGNATED RARE PLANT SPECIES

This category includes specific plant and wildlife species that are designated in the CFGC as protected even if not listed under CESA or ESA. Fully Protected Species includes specific lists of birds, mammals, reptiles, amphibians, and fish designated in CFGC. Fully protected species may not be taken or possessed at any time. No licenses or permits may be issued for take of fully protected species, except for necessary scientific research and conservation purposes. The definition of "take" is the same under the California Fish and Game Code and the CESA. By law, CDFW may not issue an Incidental Take Permit for Fully Protected Species. Under the California Native Plant Protection Act (NPPA), CDFW has listed 64 "rare" or "endangered" plant species, and prevents "take", with few exceptions, of these species. CDFW may authorize take of species protected by the NPPA through the Incidental Take Permit process, or under a NCCP.

SPECIAL PROTECTIONS FOR NESTING BIRDS AND BATS

The federal Bald and Golden Eagle Protection Act provides relatively broad protections to both of North America's eagle species (bald eagle [*Haliaeetus leucocephalus*] and golden eagle [*Aquila chrysaetos*]) that in some regards are similar to those provided by the ESA. In addition to regulations for special-status species, most native birds in the United States, including non-status species, have baseline legal protections under the Migratory Bird Treaty Act of 1918 and



CFGC, i.e., sections 3503, 3503.5 and 3513. Under these laws/codes, the intentional harm or collection of adult birds as well as the intentional collection or destruction of active nests, eggs, and young is illegal. For bat species, the Western Bat Working Group (WBWG 2023) designates conservation status for species of bats, and those with a high or medium-high priority are typically given special consideration under CEQA.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act provides for conservation and management of fishery resources in the U.S., administered by NMFS. This Act establishes a national program intended to prevent overfishing, rebuild overfished stocks, ensure conservation, and facilitate long-term protection through the establishment of Essential Fish Habitat (EFH). EFH consists of aquatic areas that contain habitat essential to the long-term survival and health of fisheries, which may include the water column, certain bottom types, vegetation (e.g., eelgrass (*Zostera* spp.)), or complex structures such as oyster beds. Any federal agency that authorizes, funds, or undertakes action that may adversely affect EFH is required to consult with NMFS.

SPECIES OF SPECIAL CONCERN, MOVEMENT CORRIDORS, AND OTHER SPECIAL-STATUS SPECIES UNDER CEQA

To address additional species protections afforded under CEQA, CDFW has developed a list of special species as "a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status." This list includes lists developed by other organizations, including for example, the Audubon Watch List Species, the Bureau of Land Management Sensitive Species, and USFWS Birds of Special Concern. Plant species on the California Native Plant Society (CNPS) Plant Inventory (Inventory; CNPS 2023a) with California Rare Plant Ranks (Rank) of 1 and 2, as well as some with a Rank of 3 or 4, are also considered special-status plant species and must be considered under CEQA. Some Rank 3 and Rank 4 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare. Movement and migratory corridors for native wildlife (including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

2.2 Local Plans and Policies

2.2.1 Mendocino County General Plan

The Mendocino County General Plan contains policies pertaining to the following biological resources categories:

- Watersheds Policies RM-1 through RM-5
- Water Resources Policies RM-6 through RM-18
- Water Quality Policies RM-19 through RM-23
- Ecosystem Polices RM-24 through RM-35



3.0 ASSESSMENT METHODOLOGY

On November 14, 2022, and April 4, 2023, WRA, Inc. (WRA) biologists visited the Study Area to map vegetation, aquatic features, and other land cover types; document plant and wildlife species present; and evaluate on-site habitat for the potential to support special-status species as defined by CEQA. Prior to the site visit, WRA biologists reviewed literature resources and performed database searches to assess the potential for sensitive land cover types and special-status species, including:

- Soil Survey of Mendocino County, Eastern Part and Southwestern Part of Trinity County (USDA 1991)
- Ukiah, Elledge Peak, and Redwood Valley 7.5-minute U.S. Geological Survey (USGS) quadrangle (USGS 2018)
- Contemporary aerial photographs (Google Earth 2023)
- Historical aerial photographs (NETR 2023)
- National Wetlands Inventory (USFWS 2023a)
- California Aquatic Resources Inventory (SFEI 2017)
- California Natural Diversity Database (CNDDB) (CDFW 2023a)
- Biological Information and Observation System (BIOS) (CDFW 2023b)
- CNPS Inventory (CNPS 2023a)
- Consortium of California Herbaria (CCH1 2023, CCH2 2023)
- USFWS Information for Planning and Consultation (USFWS 2023b)
- eBird Online Database (Cornell Lab of Ornithology 2023)
- California Bird Species of Special Concern in California (Shuford and Gardali 2008)
- California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)
- A Manual of California Vegetation, Online Edition (CNPS 2023b)
- California Natural Community List (CDFW 2023c)
- Database searches (i.e., CNDDB, CNPS) for special-status species focused on the Potter Valley, Cow Mountain, Purdy's Garden, Orr Springs, Ukiah, Redwood Valley, Laughlin Range, Boonville, and Elledge Peak USGS 7.5-minute quadrangles.

Following the remote assessment, WRA biologists completed a field review to document: (1) land cover types (e.g., vegetation communities, aquatic resources), (2) existing conditions and to determine if such provide suitable habitat for any special-status plant or wildlife species, (3) if and what type of aquatic land cover types (e.g., wetlands) are present, and (4) if special-status species are present³.

3.1 Vegetation Communities and Other Land Cover Types

During the site visit, WRA evaluated the species composition and area occupied by distinct vegetation communities, aquatic communities, and other land cover types. Mapping of these classifications utilized a combination of aerial imagery and ground surveys. In most instances,

³ Due to the timing of the assessment, it may or may not constitute protocol-level species survey; see Sections 3.2.3 and 3.2.3 for information on whether the site assessment would constitute a formal or protocol-level species survey.



communities are characterized and mapped based on distinct shifts in plant assemblage (vegetation) and follow the California Natural Community List (CDFW 2023c) and A Manual of California Vegetation, Online Edition (CNPS 2023b). These resources cannot anticipate every component of every potential vegetation assemblage in California, and so in some cases, it is necessary to identify other appropriate vegetative classifications based on best professional judgment of WRA biologists. When undescribed variants are used, it is noted in the description. Vegetation alliances (natural communities) with a CDFW Rank of 1 through 3 (globally critically imperiled [S1/G1], imperiled [S2/G2], or vulnerable [S3/G3]) (CDFW 2023a), were evaluated as sensitive as part of this evaluation.

The site was reviewed for the presence of wetlands and other aquatic resources according to the methods described in the Corps Manual (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West* (Corps 2008) and A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar and McColley 2008) and *A Guide to Ordinary High Water Mark Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States* (Mersel 2014). Areas meeting these indicators were mapped as aquatic resources and categorized using the vegetation community classification methods described above. Aquatic communities which are mapped in the NMFS EFH Mapper (NMFS 2023) or otherwise meet criteria for designation as EFH are indicated as such in the community description below in Section 5.1. The presence of riparian habitat was evaluated based on woody plant species meeting the definition of riparian provided in *A Field Guide to Lake and Streambed Alteration Agreements, Section 1600-1607, California Fish and Game Code* (CDFG 1994) and based on best professional judgement of biologists completing the field surveys.

3.2 Special-status Species

3.2.1 General Assessment

Potential occurrence of special-status species in the Study Area was evaluated by first determining which special-status species occur in the vicinity of the Study Area through a literature and database review as described above. The presence of suitable habitat for special-status species was evaluated during the site visit(s) based on physical and biological conditions of the site as well as the professional expertise of the investigating biologists. The potential for each special-status species to occur in the Study Area was then determined according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Unlikely.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.



• **Present.** Species is observed on the site or has been recorded (i.e., CNDDB, other reports) on the site in the recent past.

If a more thorough assessment was deemed necessary, a targeted or protocol-level assessment or survey was conducted or recommended as a future study. If a special-status species was observed during the site visit, its presence was recorded and discussed below in Section 5.2. If designated critical habitat is present for a species, the extent of critical habitat present and an evaluation of critical habitat elements is provided as part of the species discussions below.

3.2.2 Special-status Plants

To determine the presence or absence of special-status plant species, focused surveys were conducted within the Study Area on November 11, 2022, and April 4, 2023. The surveys correspond to the period sufficient to observe and identify those special-status plants determined to have the potential to occur. The field surveys were conducted by botanists familiar with the flora of Mendocino and surrounding counties. The surveys performed follow those described by resource experts and agencies (CNPS 2001, CDFW 2018b). Plants were identified using *The Jepson Manual*, 2nd Edition (Baldwin et. al. 2012) and Jepson Flora Project (eFlora 2023), to the taxonomic level necessary to determine whether they were sensitive. Plant names follow those of Jepson Flora Project (eFlora 2023), unless otherwise noted.

3.2.3 Special-status Wildlife

A general wildlife assessment was performed on April 4, 2023. This assessment consisted of traversing the entirety of the Study Area. Habitat elements required or associated with certain species (e.g., foothill yellow-legged frog) or species groups (e.g., bats, anadromous fish) were searched for and noted. Such habitat elements include, but are not limited to plant assemblages and vegetation structure; stream depth, width, hydro-period, slope, and bed-and-bank structure; rock outcrops, caves, cliffs, overhangs, and substrate texture and rock content; history of site alteration and contemporary disturbances; etc. No protocol-level surveys for special-status wildlife were conducted during the April 4, 2023 assessment.

3.3 Wildlife Corridors and Native Wildlife Nursery Sites

To account for potential impacts to wildlife movement/migratory corridors, biologists reviewed maps from the California Essential Connectivity Project (CalTrans 2010), and habitat connectivity data available through the CDFW Biogeographic Information and Observation System (CDFW 2023b). Additionally, aerial imagery (Google Earth 2023) for the local area was referenced to assess if local core habitat areas were present within, or connected to the Study Area. This assessment was refined based on observations of on-site physical and/or biological conditions, including topographic and vegetative factors that can facilitate wildlife movement, as well as on-site and off-site barriers to connectivity.

The potential presence of native wildlife nursery sites is evaluated as part of the site visit and discussion of individual wildlife species below. Examples of native wildlife nursery sites include nesting sites for native bird species (particularly colonial nesting sites), marine mammal pupping sites, and colonial roosting sites for other species (such as for monarch butterfly [*Danaus plexippus*]).



4.0 ECOLOGICAL SETTING

The proposed project is located within unincorporated areas of Mendocino County. The project consists of 34 individual capture sites located in unincorporated Mendocino County near the City of Ukiah, including the communities of Calpella, The Forks, and Redwood Valley. Specifically, the project site extends from Plant Road at the border with the City of Ukiah at its southern extent (site location UK.33) to near the intersection of West Road and Ellen Lynn Street at the northern extent (site location UK.02). Figures 1 and 2 (Appendix A) show the locations for installation of the 34 trash capture devices. Capture sites are located along streets in urban areas including commercial, industrial, agricultural, and residential land uses. The Study Area includes all areas affected by the Project, as well as the 100-foot buffer from the trash capture device location. Additional details of the local setting follow below.

4.1 Soils and Topography

The overall topography of the Study Area is flat valley floor with elevations ranging from approximately 500 to 600 feet above sea level. According to the *Soil Survey of Mendocino County, Eastern Part and Southwestern Part of Trinity County* (USDA 1991), the Study Area is underlain by 10 soil mapping units: Pinnobie loam 2 to 8 percent slope, Yokayo sandy loam, 0 to 8 percent slope, Russian Loam, gravelly substratum, 0 to 2 percent slope, Cole loam, drained, 0 to 2 percent slope, Xerofluvents, 0 to 2 percent slope, Feliz clay loam, 0 to 2 percent slope, Talmage gravelly sandy loam, 0 to 2 percent slope, Feliz clay loam, gravelly substratum, 0 to 2 percent slope, Xerofluvents, 0 to 2 percent slope, Feliz clay loam, gravelly substratum, 0 to 2 percent slope, Feliz clay loam, gravelly substratum, 0 to 2 percent slope, Xerofluvents, 0 to 2 percent slope, Feliz clay loam, gravelly substratum, 0 to 2 percent slope, Feliz clay loam, gravelly substratum, 0 to 2 percent slope, Xerofluvents, 0 to 50 percent slope, and Urban Land. Soils within the Study Area are shown in Appendix A, Figure 3. The parent soil series of all the Study Area's mapping units are summarized below.

Pinnobie Series: This series consists of deep, loamy soils formed in alluvium from sedimentary rocks and is situated on terrace and slopes at elevations ranging from 500 to 1,500 feet (CSRL 2023, USDA 1991). These soils are well drained with slow or medium runoff and moderate permeability. They range from slightly acid to neutral (USDA 1991). The Pinnobie soil mapping units are not considered hydric (USDA 2023).

Yokayo Series: This series consists of deep, sandy loam soils formed old alluvium from sedimentary rock and is situated on old, dissected terraces at elevations ranging from 500 to 1500 feet (CSRL 2023, USDA 1991). These soils are well drained with slow to rapid runoff and very slow permeability. They range from medium acid to slightly acid (USDA 1991). The Yokayo soil mapping units are not considered hydric (USDA 2023).

Russian Series: This series consists of deep, loamy soils formed in alluvium from sedimentary rock and is situated on floodplains and low stream terraces at elevations ranging from 400 to 1,500 feet (CSRL 2023, USDA 1991). These soils are well drained with slow runoff and moderate permeability. They are neutral pH (USDA 1991). The Russian soil mapping units are considered hydric (USDA 2023).

Cole Series: This series consists of very deep, clay loam soils formed in alluvium from mixed sources and is situated on stream terraces, floodplain steps, and alluvial fans at elevations ranging from 50 to 1,500 feet (CSRL 2023, USDA 1991). These soils are somewhat poorly drained with slow runoff and slow permeability. They range from



slightly acid to moderately alkaline (USDA 1991). The Cole soil mapping units are considered hydric (USDA 2023).

Pinole Series: This series consists of very deep, gravelly loam soils formed in alluvium weathered from mixed sources and is situated on terraces at elevations ranging from 200 to 1,500 feet (CSRL 2023, USDA 1991). These soils are well drained with slow to rapid runoff and moderately slow permeability. They range from slightly acid to neutral pH (USDA 1991). The Pinole soil mapping units are not considered hydric (USDA 2023).

Talmage Series: This series consists of shallow, gravelly sandy loam soils formed in alluvium from mixed sources and is situated on alluvial fans and plains at elevations ranging from 350 to 1,800 feet (CSRL 2023, USDA 1991). These soils are well drained with medium to very rapid runoff and moderate permeability. They range from slightly acid to neutral pH (USDA 1991). The Talmage soil mapping units are considered hydric (USDA 2023).

Feliz Series: This series consists of very deep, loamy soils formed in alluvium derived from mixed sedimentary rocks and is situated on floodplains and fans at elevations ranging from 160 to 1,750 feet (CSRL 2023, USDA 1991). These soils are well drained with slow to medium runoff and moderate permeability. They range from neutral to slightly alkaline (USDA 1991). The Feliz soil mapping units are not considered hydric (USDA 2023).

Kekewaka Series: This series consists of very deep, loamy soils formed in material weathered from sedimentary rocks and is situated on hills and mountains at elevations ranging from 1,000 to 4,800 feet (CSRL 2023, USDA 1991). These soils are well drained with slow to very rapid runoff and moderately slow permeability. They range from slightly acid to medium acid (USDA 1991). The Kekewaka soil mapping units are not considered hydric (USDA 2023).

Xerofluvents: This series consists of very deep, sandy loam soils formed in recent alluvium derived from sedimentary rock and is situated on floodplains at elevations ranging from 300 to 3,000 feet (USDA 1991). These soils are well to excessively drained. They range from slightly acid to moderately alkaline (USDA 1991). The Xerofluvents soil mapping units are not considered hydric (USDA 2023).

4.2 Climate and Hydrology

The Study Area is located in the inland region of Mendocino County. The average monthly maximum temperature in the area is 73 degrees Fahrenheit, while the average monthly minimum temperature is 43 degrees Fahrenheit. Predominantly, precipitation falls as rainfall between November and March with an annual average precipitation of 37 inches (WRCC 2023).

The Study Area is located in several local watersheds: Orr Creek-Russian River (HUC 12: 180101100403), East Fork Russian River-Russian River (HUC 12:180101100203), and Forsythe Creek (HUC 12: 180101100201). The regional watershed is Russian River (HUC 8: 18010110). The Study Area is located in the upper portion of the Russian River watershed, with capture sites at a distance of as much as approximately 1.2 miles from the Russian River to within several hundred feet. There are two unnamed blue line streams in the Study Area, located at UK.25 and UK.28/UK.29 (USGS 2018). The same blue-line streams are also mapped in the National



Wetlands Inventory (NWI) as excavated seasonally flooded intermittent stream (R4SBCx) or excavated temporarily flooded intermittent stream (USFWS 2023a) and California Aquatic Resources Inventory (CARI; SFEI 2017). Additionally, Hensley Creek, a USGS blue line stream is located near UK.11 (USGS 2018). This stream is classified as excavated seasonally flooded intermittent stream (R4SBCx). Detailed descriptions of aquatic resources are provided in Section 5.1 below.

4.3 Land Use

The majority of the Study Area is urban land that consists of roads, structures, roadside medians, private residential and private commercial lots, and parking lots. Undeveloped areas consist of non-native grassland, agriculture, scrub and oak woodland. Detailed land cover type descriptions are included in Section 5.1 below, and all observed plant species are included in Appendix B. Surrounding land uses include urban and agriculture (Google Earth 2023).

5.0 ASSESSMENT RESULTS

5.1 Vegetation Communities and Other Land Cover

WRA observed 11 land cover types within the Study Area, including eight terrestrial types and three aquatic resource types: urban, non-native grassland, developed, agriculture, coyote brush scrub, Himalayan blackberry, mixed oak woodland, riparian, intermittent stream, concrete lined stream, and drainage ditch. Land cover types within the Study Area are illustrated in Appendix A – Figures 4 and 5 and listed in Table 4 below. All plant species observed are included in Appendix B.

COMMUNITY / LAND COVERS	SENSITIVE STATUS	RARITY RANKING	ACRES WITHIN STUDY AREA				
TERRESTRIAL / COMMUNITY LAND COVER							
Non-native Grassland	Non-Sensitive	None	4.35				
Urban	Non-Sensitive	n/a	19.76				
Developed	Non-Sensitive	n/a	<0.01				
Drainage Ditch	Non-Sensitive	n/a	0.03				
Agriculture	Non-Sensitive	n/a	0.13				
Himalayan Blackberry Scrub	Non-Sensitive	None	0.16				
Coyote Brush Scrub	Non-Sensitive	G5 S5	0.02				
Mixed Oak Woodland	Sensitive	G4 S4	0.23				
Riparian	Sensitive	n/a	0.06				
AQUATIC RESOURCES							
Drainage Ditch ¹	Sensitive	n/a	0.02				
Intermittent Stream	Sensitive	n/a	0.13				

Table 4. Vegetation Communities and Other Land Cover Types



COMMUNITY / LAND COVERS	SENSITIVE STATUS	RARITY RANKING	ACRES WITHIN STUDY AREA		
Concrete Lined Channel	Sensitive	n/a	0.02		
Sensitve Drainage Ditch applies only to the drainage ditch at UK.10.					

5.1.1 Terrestrial Land Cover

Non-native Grassland (various vegetation alliances). CDFW Rank: None. Non-native grasslands are stands where non-native grasses are dominant in the herb canopy and native herbs have 10 percent or less relative cover and are not characteristic of the stand. Within the Study Area, non-native grasslands are best classified as wild oat grasslands and annual brome grasslands (CNPS 2023b). Dominant species are wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*). Associated species include plantain (*Plantago lanceolata*), hawkbit (*Leontodon saxatilis*), Bermuda grass (*Cynodon dactylon*), yellow star thistle (*Centaurea solstitialis*), and Dogtail grass (*Cynosurus echinatus*). Non-native grasslands are located in areas that are not developed or impacted daily (i.e., traffic, parking) along roadways, or are vegetated strips along roadways that are mowed annually but otherwise unmaintained. Scattered trees are present in areas classified as non-native grassland.

Urban (no vegetation alliance). CDFW Rank: None. Urban areas include roadways, driveway, dirt/gravel pullouts, parking lots, structures, private residence yards, commercial land, or vegetated areas that are heavily managed or impacted. As each of the trash capture sites are located along roadsides within urban areas, the majority of the Study Area is urban land.

Developed (no vegetation alliance). CDFW Rank: None. One developed area is present in the Study Area where a cement wingwall at a culvert outfall is present at UK.10.

Agriculture (no vegetation alliance). CDFW Rank: None. Agriculture land are areas where crops are grown, including wine grapes and hay.

Himalayan Blackberry Scrub (*Rubus armeniacus* **Semi-Natural Shrubland Association). CDFW Rank: None**. Himalayan blackberry scrub is classified under Himalayan blackberry-rattlebox-Edible Fig Riparian Scrub Shrubland Semi-Natural Alliance (CNPS 2023b). Himalayan blackberry scrub typically occurs in riparian habitats, mesic clearings, disturbed areas, and stock ponds throughout cismontane California (CNPS 2023b). Himalayan blackberry forms a dense canopy cover, precluding most other species. In the Study Area, Himalayan blackberry scrub occurs along roadside drainage ditches at UK.20 and UK.16.

Coyote Brush Scrub (*Baccharis pilularis* **Shrubland Alliance). CDFW Rank: G5 S5.** Coyote brush scrub typically occurs on coastal bluffs, terraces, stabilized dunes, stream sides, exposed slopes, and gaps in forest stands on various soil types throughout cismontane California (CNPS 2023b). In the Study Area, one small stand of coyote brush scrub is present along the upland edge of a roadside ditch at UK.16.

Mixed Oak Woodland (*Quercus* **spp. Woodland Alliance). CDFW Rank: G4 S4**. Mixed oak woodland typically occurs in valleys, on gentle to steep slopes on moderately deep soils in the California Coast Range (CNPS 2023b). Oak woodlands are classified for stands with 10 percent or more absolute cover of oak trees and the stand is at least 1 acre in size, or continuous with



such a stand. Within the Study Area one stand of mixed oak woodland is located on the hillslope at UK.16. The understory is dominated by Himalayan blackberry.

Riparian (no vegetation alliance). CDFW Rank: None. Riparian vegetation includes vegetation that occurs along the banks of a watercourse and is dependent on the water of the watercourse. Riparian vegetation also includes vegetation that provides ecological support to the watercourse, such as shading and erosion control. One stand of riparian vegetation is present near UK.03. The riparian vegetation is along the Russian River and is characterized by sand bar willow (*Salix exigua*) and Himalayan blackberry.

5.1.2 Aquatic Resources

There are three aquatic resource types in the Study Area: drainage ditch, intermittent stream, and concrete-lined stream.

Drainage Ditch: Drainage ditches are linear features that are dug in uplands to convey storm flow from developed areas, such as roads and parking lots. These features typically do not contain an obvious bed and bank nor support hydrophytic or riparian vegetation. Several drainage ditches are present, including at UK.02, UK.08, UK.10, UK.16, UK.20, UK.21, UK.23, and UK.28.

At UK.10 a drainage ditch is located from North State Street and runs east. As communicated by County of Mendocino staff to WRA, the ditch is man-made, dug in uplands, and conveys storm flow from developed areas of Lake Mendocino Drive and US 101 intersection. West of North State Street is a culvert that conveys water under the road. The ditch daylights on the east side of North State Street, through three 2-foot corrugated metal culverts enclosed in concrete and concrete wingwalls. Approximately 8linear feet of the ditch are lined with concrete (depicted as Developed and Concrete Lined Ditch on Figure 4k). This developed/concrete lined portion abuts the property line at a wire fence. Sediment has built up along the wire fence line, creating a small, vegetated island with Harding grass (*Phalaris* aquatica), curly dock (*Rumex crispus*), and tall cyperus (*Cyperus eragrostis*). No obvious bed and bank are present along the concrete portion of the ditch. Downstream of the concrete wingwall/slab, the ditch top-of-bank is 8-feet wide, and the ordinary high-water mark is 5-feet wide. Harding grass is dominant along the banks of the ditch; no riparian vegetation is present. Water was present in the ditch during the April 2023 site visit. Direct surface connection to the Russian River could not be determined using aerial imagery.

Intermittent Stream: Intermittent streams are linear features with a bed and bank formed by water that flows for at least three months and is groundwater fed. Intermittent streams typically support riparian or hydrophytic vegetation due to prolonged availability of water. Within the Study Area, four intermittent streams are present.

At UK.11, Hensley Creek, a USGS blue-line stream, is present approximately 65 feet south of the trash capture location. The stream top-of-bank is approximately 15 feet wide, and the ordinary high-water mark is approximately 10-feet wide. The northern banks of the stream do not have riparian vegetation while the south bank has cottonwood (*Populus fremontii*) and Pacific willow (*Salix lasiandra*). No water was present in the stream during the November 2022 site visit but water was present during the April 2023 site visit.



At UK.21 an unnamed stream is located at Ford Road and runs east. The stream is culverted at Ford Road where water enters the Study Area and is culverted in two locations downstream. Aerial imagery analysis suggests there is direct surface connection to the Russian River, located approximately 0.5 miles downstream. Water enters the Study Area through a cement box culvert under Ford Road. The banks and channel are cement-lined for approximately 50 feet. Sediment has built up in the cemented portion and supports hydrophytic plants, including water parsley (*Oenanthe sarmentosa*), smartweed (*Persicaria* sp.), and water speedwell (*Veronica anagallis-aquatica*). Water was present during the April 2023 site visit. The top-of-bank is approximately 20-feet wide, and the ordinary high-water mark is approximately 10-feet wide.

At UK.22, an unnamed stream enters the Study Area at a private driveway and runs south, connecting to the stream at UK.21. The stream channel and most of the banks are heavily vegetated with Himalayan blackberry and cattail (*Typha latifolia*); the vegetation prevented visual observation of the culvert at the driveway. A portion of the eastern bank is cemented; however, the channel and remainder of the stream is not cement lined. This feature is also presumably hydrologically connected to the Russian River via the same culverts and ditches of UK.21. The top-of-bank is approximately 15-feet wide, and the ordinary high-water mark is approximately 9-feet wide.

Concrete-lined Channel: Concrete-lined channels are stream or ditch features where concrete lines the channel and bank. These areas are present in portions of drainage ditch at UK.10 and intermittent stream at UK.21. Approximately 8-feet of the channel at UK.10 is lined with concrete due to the developed wing wall structure; at UK.21, the banks and channel are cement lined for approximately 50 feet downstream of the box culvert.

5.2 Special-status Species

5.2.1 Special-status Plants

Based upon a review of the resource databases listed in Section 3.0, 38 special-status plant species have been documented in the vicinity of the Study Area (Appendix C). None of these species have the potential to occur in the Study Area. The remaining species documented from the greater vicinity are unlikely or have no potential to occur for one or more of the following:

- Hydrologic conditions (e.g., lakes, seasonal wetlands) necessary to support the specialstatus plant species are not present in the Study Area;
- Edaphic (soil) conditions (e.g., adobe clay, serpentine) necessary to support the specialstatus plant species are not present in the Study Area;
- Topographic conditions (e.g., north-facing slope, montane) necessary to support the special-status plant species are not present in the Study Area;
- Unique pH conditions (e.g., alkali scalds, acidic bogs) necessary to support the specialstatus plant species are not present in the Study Area;
- Associated natural communities (e.g., interior chaparral, conifer forest) necessary to support the special-status plant species are not present in the Study Area;
- The Study Area is geographically isolated (e.g., below elevation, coastal environ) from the documented range of the special-status plant species;
- The historical landscape and/or habitat(s) of the Study Area were not suitable habitat prior to land/type conversion (e.g., reclaimed shoreline) to support the special-status plant species;



• Land use history and contemporary management (e.g., grading, intensive grazing) has degraded the localized habitat necessary to support the special-status plant species.

WRA biologists conducted protocol-level surveys in April and November. All plant species observed are listed in Appendix B. No special-status plant species were observed. Due to highly disturbed habitats of the trash capture locations, no special-status plants are determined to have potential to occur.

5.2.2 Special-status Wildlife

Of the 20 special-status wildlife species documented in the vicinity of the Study Area, all are excluded from the Study Area based on a lack of habitat features. Therefore, no special-status species have potential to occur within the Study Area. Features not found within the Study Area that are required to support special-status wildlife species include:

- Aquatic features with dense aggregations of emergent vegetation
- Ephemeral streams with rocky streambeds
- Perennial rivers and tributaries
- Old growth redwood or fir forest
- Sandy banks, beaches, or alkaline flats
- Riparian, coniferous, or hardwood forests
- Caves, mine shafts, or abandoned buildings

The absence of such habitat features eliminates components critical to the survival or movement of most special-status species found in the vicinity. For instance, red-bellied newt (Taricha rivularis) is known to occur in coastal, forested streams in the surrounding area. However, suitable aquatic habitat for breeding and redwood or hardwood forests for foraging habitat are absent, precluding this species from existing in the Study Area. Furthermore, numerous highspeed roads have been established since historical occurrences which act as dispersal barriers between known populations. Given the relative proximity to sensitive habitats, many species documented nearby are obligates to dense forest, grassland, or marsh habitats which are not present on or in the immediate vicinity of the Study Area. Similarly, anadromous fish species including steelhead and Chinook salmon, which are known to occur in the Russian River and tributaries, are not present in the Study Area due to the lack of suitable habitat for these species. In particular, Hensley Creek, a tributary to the Russian River, lies within the Study Area, but does not provide suitable habitat for anadromous fish. No spawning or rearing habitat for anadromous fish is known to occur at or upstream of any of the trash capture sites in the Study Area. No special-status wildlife were observed and no observed wildlife species list was compiled during the April 4, 2023 site visit.

5.3 Wildlife Corridors and Native Wildlife Nursery Sites

Wildlife movement between suitable habitat areas can occur via open space areas lacking substantial barriers. The terms "landscape linkage" and "wildlife corridor" are often used when referring to these areas. The key to a functioning corridor or linkage is that it connects two larger habitat blocks, also referred to as core habitat areas (Beier and Loe 1992; Soulé and Terbough 1999). It is useful to think of a "landscape linkage" as being valuable in a regional planning context, a broad scale mapping of natural habitat that functions to join two larger habitat blocks. The term "wildlife corridor" is useful in the context of smaller, local area planning, where wildlife movement may be facilitated by specific local biological habitats or passages and/or



may be restricted by barriers to movement. Above all, wildlife corridors must link two areas of core habitat and should not direct wildlife to developed areas or areas that are otherwise void of core habitat (Hilty et al. 2019).

The Study Area is not within a designated wildlife corridor based on the Essential Connectivity Areas geospatial dataset, which uses habitat modelling to identify areas of land with value as wildlife corridors (CalTrans 2010; CDFW 2023c). The site is located within a developed and relatively urbanized area of Mendocino County. While common wildlife species presumably utilize the site to some degree for movement at a local scale, the Study Area itself does not provide wildlife corridor functions.

No native wildlife nursery sites were observed within the Study Area during the November 14, 2022, and April 4, 2023 site visits. More specifically, no tricolored blackbird (*Agelaius tricolor*) colonies were documented. There are no Important Bird Areas (IBA; Audubon 2023) within 10 miles of the Study Area. The Study would not result in changes to the movement corridors for birds or local wildlife.

Ackerman, Hensley, and York Creeks, tributaries to the Russian River, are near the Study Area and Hensley Creek lies within the Study Area. The Project would have no impact on these tributaries of the Russian River and would not change fish or wildlife use of the riparian corridors even temporarily during construction. The Project would have no impact on wildlife corridors or native nursery sites.

6.0 ANALYTICAL METHODOLOGY AND SIGNIFICANCE THRESHOLD CRITERIA

Pursuant to Appendix G, Section IV of the State CEQA Guidelines, a project would have a significant impact on biological resources if it would:

- 1. 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 U.S. Fish and Wildlife Service;
- 2. 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 U.S. Fish and Wildlife Service;
- 3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- 5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or,
- 6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.



These thresholds were utilized in completing the analysis of potential project impacts for CEQA purposes. For the purposes of this analysis, a "substantial adverse effect" is generally interpreted to mean that a potential impact could directly or indirectly affect the resiliency or presence of a local biological community or species population. Potential impacts to natural processes that support biological communities and special-status species populations that can produce similar effects are also considered potentially significant. Impacts to individuals of a species or small areas of existing biological communities may be considered less than significant if those impacts are speculative, beneficial, de minimis, and/or would not affect the resiliency of a local population.

7.0 IMPACTS AND MITIGATION EVALUATION

Using the CEQA analysis methodology outlined in Section 6.0 above, the following section describes potential significant impacts to sensitive resources within the Study Area as well as suggested mitigation measures which are expected to reduce impacts to less than significant.

7.1 Special-status Species

This section analyzes the Project's potential impacts and mitigation for special-status species in reference to the significance threshold outlined in CEQA Appendix G, Part IV (a):

a) Does the project have the potential to 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 U.S. Fish and Wildlife Service?

7.1.1 Special-Status Plants

No special-status plants are determined to have high or moderate potential to occur in the Study Area. No impacts to special-status plants are anticipated.

7.1.2 Special-Status Wildlife

No special-status wildlife species are determined to have high or moderate potential to occur in the Study Area. No impacts to special-status wildlife are anticipated.

7.2 Sensitive Natural Communities and Land Cover Types

This section addresses the question:

b) Does 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 CDFW or U.S. Fish and Wildlife Service;

Sensitive natural communities within the Study Area include mixed oak woodland and riparian vegetation. No impacts to mixed oak woodland are anticipated as project-related activities are proposed along the roadside and will not remove oak trees. Understory vegetation to be impacted is dominated by invasive Himalayan blackberry. Riparian vegetation is present in the Study Area at UK.03 but will be fully avoided during construction. **No impacts** will occur to sensitive natural communities.



7.3 Aquatic Resources

This section analyzes the Project's potential impacts and mitigation for wetlands and other areas presumed or determined to be within the jurisdiction of the Corps or RWQCB in reference to the significance threshold outlined in CEQA Appendix G, Part IV (c):

c) Does the Project have the potential to have a substantial adverse effect on state or 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;

Aquatic resources located in the Study Area include intermittent streams located at UK.11, UK.21, and UK.22, and the drainage ditch at UK.10. The remaining drainage ditches within the Study Area are classified as non-jurisdictional upland.

Ground disturbance activities at UK.10 are estimated to be <0.01 acre (226 square feet) to concrete-lined channel, developed, and non-native grasslands for installation of a louvered panel on the existing concrete pad between the existing wingwalls, and an estimated 0.03 acre (1,300 square feet) of temporary ground disturbance to urban and non-native grasslands for staging (Figure 5a). Sediment has built up on the concrete-lined portion of the ditch, allowing for the establishment of non-native wetland plants in a small area; these plants and sediment will be removed for installation of the device.

Ground disturbance activities at UK.11 are estimated to be <0.01 acre (50 square feet) to install a small-scale CPS in an existing catch basin that will be enlarged slightly to accommodate the CPS, and an estimated 0.02 acre (750 square feet) of temporary ground disturbance to urban and non-native grasslands for staging. Hensley Creek is approximately 70 feet from the capture site, and neither the stream nor its riparian corridor will be disturbed by project activities.

Ground disturbance activities at UK.21 are estimated to be 0.02 acre (700 square feet; 70 linear feet) of concrete-lined stream, non-native grassland, and urban areas for installation of a netting device (Figure 5c) and an estimated 0.19 acre (8,276 square feet) of temporary disturbance of urban and non-native grassland for staging. Disturbance activities that will occur in the concrete-lined channel include removal of built-up sediment and vegetation and installation of the device. Sediment has built up on the concrete-lined portion of the stream, allowing for the establishment of native and non-native wetland plants along the edges of the channel; these plants and sediment will be removed for installation of the device.

Ground disturbance activities at UK.22 are estimated to be 0.02 acre (1,048 square feet; 37 linear feet) of permanent impact for construction of a concrete pad and wingwalls and installation and of louvered panel device and an estimated 0.09 acre (4,120 sq. ft.) of temporary disturbance to urban and non-native grassland for staging (Figure 5d). Permanent impact includes converting 0.01 acre (589 square feet) of earthen stream channel and banks and <0.01 acre (489 square feet) of invasive Himalayan blackberry, urban land, and non-native grassland for installation of a cement structure and capture device.

The placement and operation of devices at UK.10 and UK.21 are modifications to existing structures and are determined to have a less than significant impact on aquatic resources. No conversion of land cover will occur and the devices are not considered fill. As the function of



each device is to use the flow of water in the channel to remove trash, impacts to flow are considered less than significant. Removal of wetland vegetation at each of the locations is also considered a less than significant impact because the area to be removed is not substantial and can therefore be reasonably presumed to not create a substantial adverse effect on the aquatic resource. Additionally, the devices will improve the condition of the aquatic feature by reducing the amount of trash, a pollutant, that enters it.

Trash capture device installation at UK.22 will convert approximately 0.01 acre (589 square feet) of intermittent stream channel and banks to concrete and is considered a permanent impact. However, due to the necessary design elements of the device, the small area of impact, and the benefit to water quality and habitat values from the device, the impact is considered less than significant.

CAPTURE SITE	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE	POTENTIAL IMPACT TO WETLANDS/WATERS
UK.10	Large-scale Louvered Panel on concrete pad at outlet of culvert, approximately 30 feet from end of wing wall to end of wing wall and 2 feet in height. Construction to remain within existing concrete pad.	226 sq. ft.	Temporary impact: Removal of non- native wetland vegetation within existing concrete structure
UK.11	Small-scale CPS within existing catch basin to be expanded	50 sq. ft.	No jurisdictional impacts
UK.18a	Large-scale HDS or baffle box under N. Lovers Lane	200 sq. ft.	No jurisdictional impacts
UK.20	Large-scale HDS or Baffle Box within developed parking lot; drainage ditch adjacent to work site will not be disturbed by project activities.	200 sq. ft.	No jurisdictional impacts
UK.21	Large-scale Louvered Panel in concrete-lined, vegetated stream channel. Will require dual, 36-inch diameter tubes each 25 feet in length.	700 sq. ft.	Temporary impact: Removal of sediment and vegetation from existing concrete- lined channel
UK.22	Large-scale Louvered Panel in vegetated stream channel. Will require concrete pad and concrete sidewalls for weir into dual 36-inch diameter tubes each approximately 15 feet in length.	1,048 sq. ft.	Construction of concrete pad and wingwalls and installation of device in earthen channel. Permanent impact to 589 sq. ft of earthen channel.

Table 5. Capture Sites and Potential Impacts to Wetlands and Waters



The Project will have temporary in-water work to install trash capture devices, but all work is extremely localized, discrete, and BMPs will be implemented. As the Project will improve conditions of the intermittent streams through removal of trash, will include BMPs for water quality, will not have a substantial impact on sensitive biological resources, and regulatory permit conditions will be observed, the impact from the Project on aquatic resources is **less than significant** and no mitigation measures are necessary.

7.4 Wildlife Corridors and Native Wildlife Nursery Sites

This section analyzes the Project's potential impacts and mitigation for habitat corridors and linkages in reference to the significance threshold outlined in CEQA Appendix G, Part IV (d):

d) Does the Project have the potential to 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;

As noted in Section 5.3, no portions of the Study Area provide connectivity between areas of suitable habitat. For terrestrial species, all portions of the Study Area are within a greater context of urban development, and for aquatic species, there is no connectivity between the Study Area and freshwater habitats including the Russian River. All work is temporary and discrete, and the Project will not create a barrier to movement during or post construction. **No impact** will occur to migratory corridors for terrestrial and aquatic species.

7.5 Local Policies and Ordinances

This section analyzes the Project's potential impacts and mitigation based on conflicts with local policies and ordinances in reference to the significance threshold outlined in CEQA Appendix G, Part IV (e):

e) Does the Project have the potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;

The Project does not conflict with local policies or ordinances regarding biological resources.

7.6 Habitat Conservation Plans

This section analyzes the Project's potential impacts and mitigation based on conflicts with any adopted local, regional, and state habitat conservation plans in reference to the significance threshold outlined in CEQA Appendix G, Part IV (f):

f) Does the Project have the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

There are no local, regional, or state habitat conservation plans for the region of the Study Area.



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APPENDIX A. FIGURES





Mendocino County Stormwater Trash Capture Devices Project

Biological Resources Technical Report

Ukiah, Mendocino County, California



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DEFINITIONS

Study Area: The area where the assessment was performed, inclusive of 34 separate locations where a trash capture device is proposed and the surrounding 100-foot buffer at each location. The Study Area also encompasses the areas of impact of the Project and is the area evaluated for potential impacts to sensitive biological resources.



List of Acronyms

АММ	Avoidance and Minimization Measure
BCC	USFWS Birds of Conservation Concern
BGEPA	Bald and Golden Eagle Protection Act
BIOS	Biological Information and Observation System
BMPs	Best Management Practices
BRTR	Biological Resources Technical Report
Caltrans	California Department of Transportation
CARI	California Aquatic Resources Inventory
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEOA	California Environmental Quality Act
CEGC	California Eish and Game Code
CFD	California Fully Protected Species
CEP	Code of Federal Pequilations
	California Natural Diversity Database
CNDS	California Nativo Plant Society
CNFS	Country of Mondooino
County	
Corps	California Public Decourses Cada
CPRC	California Public Resources Code
CPS	connector pipe screens
CSRL	California Soils Resource Lab
CWA	Clean Water Act
EFH	Essential Fish Habitat
EPA	U.S. Environmental Protection Agency
ESA	Federal Endangered Species Act
HDS	hydrodynamic separators
Inventory	California Native Plant Society Rare Plant Inventory
IBA	Important Bird Areas
ΙΡαϹ	USFWS Information for Planning and Consultation
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation & Management Act
МВТА	Migratory Bird Treaty Act
MM	Mitigation Measure
NCCP	Natural Community Conservation Plan
NETR	National Environmental Title Research
NOAA	National Oceanic and Atmospheric Administration
NMFS	National Marine Fisheries Service
NPPA	California Native Plant Protection Act
NRCS	Natural Resource Conservation Service
NWI	National Wetlands Inventory
NWPL	National Wetland Plant List
онwм	Ordinary High Water Mark
Rank	California Rare Plant Ranks
RHA	Rivers and Harbors Act
RWQCB	Regional Water Quality Control Board
SC	State Candidate
SFEI	San Francisco Estuary Institute
SSC	Species of Special Concern
SSI	Special-status Invertebrates
SWRCB	State Water Resource Control Board
ТОВ	Top of Bank

U.S. Code
U.S. Department of Agriculture
U.S. Fish and Wildlife Service
U.S. Geological Survey
Western Bat Working Group
WRA, Inc.



1.0 INTRODUCTION

This Biological Resources Technical Report evaluates existing biological resources, potential impacts, and mitigation measures (if required) for the Mendocino County Stormwater Trash Capture Devices Project located in Mendocino County, California (Appendix A, Figure 1). The proposed project (Project) involves installation of trash capture devices at existing County stormwater drains within the greater Ukiah Valley, Mendocino County, California, at 34 separate locations. The installation of the devices is required by the State Water Resources Control Board (SWRCB).

1.1 Overview and Purpose

This report provides an assessment of biological resources at each of the proposed trash capture locations and associated 100-foot buffer distance (comprising the Study Area). The purpose of the assessment was to develop and gather information on sensitive land cover types and special-status plant and wildlife species to support an evaluation of the Project under the California Environmental Quality Act (CEQA). This report describes the results of the site visit, which assessed the Study Area for (1) the presence of sensitive land cover types, special-status plant species, and special-status wildlife species, (2) the potential for the site to support wildlife species, (3) the presence of potential wetlands, and (4) presence of special-status plants. Based on the results of the site assessment, potential impacts to sensitive land cover types and special-status species resulting from the proposed Project were evaluated. If the Project has the potential to result in significant impacts to these biological resources, measures to avoid, minimize, or mitigate for those significant impacts are described.

A biological resources assessment provides general information on the presence, or potential presence, of sensitive species and habitats. Additional focused studies (such as protocol level species surveys or a wetland delineation) may be required to support regulatory permit applications or to implement mitigation measures included in this report. This assessment is based on information available at the time of the study and on-site conditions that were observed on the dates the site was visited. Conclusions are based on currently available information used in combination with the professional judgement of the biologists completing this study.

1.2 Project Description

The purpose of the Project is to install certified trash full-capture systems to address trash runoff and comply with the April 2015 Trash Amendments adopted by the State Water Resources Control Board. The Project consists of 35 individual Ukiah Municipal Separate Storm Sewer System (MS4) sites (capture sites) located in unincorporated Mendocino County, in the communities of Calpella, The Forks, and Redwood Valley and the urbanized Ukiah area outside the Ukiah City limits (Appendix A, Figures 1 and 2). Specifically, the Project area extends from Plant Road at the border with the City of Ukiah at its southern extent (site location UK.33) to near the intersection of West Road and Ellen Lynn Street at the northern extent (site location UK.02). Capture sites are located along streets throughout developed areas including commercial, industrial, agricultural, and residential land uses.



Trash capture devices are to be located at existing storm water facilities along streets. The 34 trash capture devices are categorized as either small-scale or large-scale devices. Small-scale devices would include structures such as connector pipe screens (CPS) and hanging baskets installed at storm drain outlets. Large-scale devices would include structures such as hydrodynamic separators (HDS), netting devices and baffle boxes.

SMALL-SCALE DEVICES

Small-scale devices would include structures such as connector pipe screens (CPS) and hanging baskets installed at storm drain inlets.

Connector Pipe Screen (CPS): The CPS is a metal screen assembly installed inside a catch basin, in front of the outlet pipe, preventing debris from entering the storm drain system (Representative Image 1). CPSs are designed to be permanently mounted to the catch basin and may have a quick disconnect feature to facilitate pipe jetting or to prevent flooding should the basin drainage system become clogged. These units are designed to retain all trash and solids larger than five millimeters inside the catch basin, and once in place, also retain large volumes of sediment.



Representative Image 1. Example of CPS

Hanging Basket: The hanging basket is similar to the CPS in that it is a separate unit installed into the existing storm drain system (Representative Image 2). Typically installed in a catch basin, the hanging basket is an insert that keeps trash and large debris from entering the stormwater system. A frame is inserted into the top of the catch basin, paired with a basket with five millimeter opening perforations. The large screen openings allow ample flow-through and prevent clogging from sand and sediment entering the basket from streets and parking lots.



Representative Image 2. Example of Hanging Basket



LARGE-SCALE DEVICES

Large-scale devices would include structures such as hydrodynamic separators (HDS), netting devices, and baffle boxes.

Hydrodynamic Separators (HDS): HDSs are widely used in stormwater treatment. They are flowthrough structures with a settling or separation unit to remove sediment, floatable materials, and other pollutants (Representative Image 3). HDSs come in a wide range of designs, and some are as small as a standard manhole structure. These inline systems can be cleaned using a vacuum truck to pump out the trash, sediment, and water that collects in the bottom of the HDS.



Representative Image 3. Conceptual Design of HDS

Netting Devices: Netting devices are placed on discharge pipes to collect trash. Netting systems have one or more mesh bags and a metal frame guide system to support the nets. When netting devices become full, the nets can be removed and replaced with new nets. End-of-pipe systems can be installed at the actual discharge point to receiving waters, or at a collection point prior to discharge (Representative Image 4). These nets are installed above ground; therefore, they must be inspected at regular intervals to find and repair any damage that may occur during use.



Representative Image 4. Example of End-of-Pipe Netting System

Baffle Boxes: Baffle boxes are concrete or fiberglass structures containing a series of sediment settling chambers separated by baffles (Representative Image 5). The primary function of baffle boxes is to remove sediment, suspended particles, and associated pollutants from stormwater. Trash is removed through the metal cage fitted with five-millimeter mesh located at the flow line of the storm drain system. Baffle boxes can be located either in-line or at the end of storm pipes. Cleaning of baffle boxes can be accomplished through a manhole or hatch above ground with a vacuum truck, with no confined-spaced entry required for routine maintenance. Screened systems are hinged for easy access to collected sediments in the baffle chambers below.

Representative Image 5. Conceptual Design of Baffle Box



Louvered Panels: Louvered panels are used in small-scale and large-scale trash devices for removing solids from stormwater. The most common louvered panel is the Rosco Moss Storm Flo® which is a linear radial design. The Rosco Moss Storm Flo® is certified as a Full Capture System for compliance with California's discharge and trash capture regulations (Representative Image 6).



Representative Image 6. Example of Rosco Moss Storm Flo® Louvered Panel

Project construction includes two phases of work at trash capture sites. Tables 1 and 2 below summarize information for each of the capture sites.

1.2.1 Phase 1 Sites

Phase 1 site construction would occur at 30 sites during the dry season (May 15 to September 30) and is expected to commence in spring 2024. All project activities would occur within existing



developed structures in MS4 stormwater facilities. All devices to be installed are small-scale with the exception of UK.07, which is a large-scale device. No significant ground disturbance is anticipated, as only limited ground disturbance would occur as part of device installation work at the following capture sites: UK.01, UK.02, UK.04, UK.05, UK05a, UK.07, UK.09, UK.11, UK.16, UK.23, UK.26, UK.30, UK.32, UK.33, UK.34.

Phase 1 involves installation of trash capture devices where work will have no effect on a jurisdictional stream, channel or wetland and does not require review and permitting by state and federal regulatory agencies. No alteration of a streambed or stream bank, or dredge or fill of material within jurisdictional wetlands or waters, will occur at these sites. Area of ground disturbance for Phase 1 devices ranges from none to 200 square feet.

Equipment necessary for Phase 1 implementation would include:

- Pickup truck
- Vacuum truck
- Concrete drill
- Impact driver
- Street sweeper
- Pressure washer

No heavy machinery would be required. No road closures or vegetation removal would be required. Staging would occur on the existing sidewalk at each location and no construction materials would be staged overnight.

Table 1	. Phase I	1 Trash	Capture	Device	Type,	Location	and	Ground	Disturbanc	e

PHASE 1 – 2024 SITES WITH NO ANTICIPATED IMPACTS TO JURISDICTIONAL WETLANDS AND WATERS				
CAPTURE SITE	LOCATION	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE	
UK.01	E side of N State Street, 0.6 miles N of Hwy 101 Redwood Valley exit/West Road, Redwood Valley	15-foot long, 24-inch small-scale Louvered Panel at upland ditch, prior to culvert under N. State Street. Installation of weir headwall to upstream end.	Yes – 150 sq. ft.	
UK.02	W side of West Road at Cerro Lumber entranceway, Redwood Valley	10-foot long, 24-inch small-scale Louvered Panel at downstream end of culvert under private driveway. Installation of weir headwall to upstream end.	Yes – 150 sq. ft.	
UK.03	N side of East School Way at Schoolway Road, Redwood Valley	Small-scale CPS within existing catch basin	None	
UK.04	NE corner of N State Street/Moore Street intersection, Calpella	Small-scale CPS at existing catch basin to be deepened	Yes – 50 sq. ft.	



PHASE 1 – 2024 SITES WITH NO ANTICIPATED IMPACTS TO JURISDICTIONAL WETLANDS AND WATERS				
CAPTURE SITE	LOCATION	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE	
UK.05, 05a	E (UK.05) and W (UK.05a) sides of N State Street at Lindberg True Value Hardware, Calpella	Two small-scale devices: CPS in new catch basin at north location (UK.05) and CPS in existing catch basin at south location (UK.05a)	Yes – 50 sq. ft. each	
UK.06	W side of N State Street, 500 feet south of DenBeste Landscape Materials, Ukiah	Small-scale CPS within existing catch basin	None	
UK.07	E side of N State Street, across from Ukiah Country Manor Mobile Home Community, Ukiah	Large-scale HDS at existing catch basin location, will require new structure	Yes – 100 sq. ft.	
UK.08	N side of Lake Mendocino Drive, W of railroad line, Ukiah	Small-scale CPS within existing catch basin	None	
UK.09	N side of Lake Mendocino Drive, E of County Public Works yard, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.	
UK.11	NW side of N State Street/Hensley Creek Road intersection, Ukiah	Small-scale CPS within existing catch basin to be expanded	Yes – 50 sq. ft.	
UK.12	W side of N State Street at Calfire/Scootrz Deli entranceway, Ukiah	Small-scale CPS within existing catch basin	None	
UK.13	W side of N State Street at Taqueria Michoacan parking lot, Ukiah	Small-scale CPS within existing catch basin	None	
UK.14	NW side of N State Street/Orr Springs Road intersection at auto lot, Ukiah	Small-scale CPS within existing catch basin	None	
UK.16	S side of Pinoleville Road, 250 feet W of Hwy 101, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.	
UK.17	N side of Orr Springs Road between Wellmar Drive and Industry Road, Ukiah	Small-scale CPS within existing catch basin	None	
UK.18	S side of Lovers Lane at Ukiah Valley Fire station, Ukiah	Small-scale CPS within existing structure	None	


PHASE 1 – 20	024 SITES WITH NO ANTIC	PATED IMPACTS TO JURISDICTIONAL WATERS	WETLANDS AND
CAPTURE SITE	LOCATION	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE
UK.19	W side of N State Street N of Hwy 101 overpass and S of Best Western Hotel, Ukiah	Small-scale Hanging Basket within existing catch basin	None
UK.23	W side of Old River Road, 350 feet S of Foster Lane, Ukiah	Small-scale Louvered Panel at open ditch downstream of culvert	Yes – 150 sq. ft.
UK.25	W side of Dora Street, 165 feet S of Laws Avenue, Ukiah	Small-scale Hanging Basket within existing catch basin	None
UK.26	N side of Laws Avenue at Graystone Apartments, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.
UK.27	W side of S State Street, adjacent to 101 Market/Deli, Ukiah	Small-scale CPS within existing catch basin	None
UK.28	NW corner of S Dora Street/Fircrest Drive intersection, Ukiah	Small-scale CPS within existing catch basin	None
UK.29	W side of N Court Road, 155 feet N of Oak Knoll Road, Ukiah	Small-scale Hanging Basket within existing catch basin	None
UK.30	SW corner of S State Street/Whitmore Lane intersection, Ukiah	Small-scale Hanging Basket within new catch basin	Yes – 50 sq. ft.
UK.32	SW corner of S State Street/Gobalet Lane intersection, Ukiah	Small-scale Louvered Panel at open ditch downstream of culvert	Yes – 150 sq. ft.
UK.33	N side of Plant Road, 130 feet E of Taylor Drive, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.
UK.34	NW corner of Calpella Road/Lake Mendocino Drive, Ukiah	Small-scale CPS within new catch basin	Yes – 50 sq. ft.
UK.35	W side of N State Street, between A-Z Construction and DenBeste Landscape Materials, Ukiah	Small-scale CPS within existing catch basin	None
UK.36	N side of Oak Knoll Road, 100 feet W of N Court Road, Ukiah	Small-scale Hanging Basket within existing catch basin	None



1.2.2 Phase 2 Sites

Phase 2 site construction will occur at five sites and would also be implemented during the dry season (May 15 to September 30) and is expected to commence in spring 2025. Project activities would occur at locations that are not part of the County's MS4 stormwater facilities, and all devices to be installed are large-scale. None of these channels are named or natural streams; however, these features may be considered jurisdictional. Phase 2 work involves installation of trash capture devices within channels; however, only site UK.22 will impact an earthen channel for the development of a concrete slab and wing walls to place the device. Sites UK.10 and UK.21 will involve placement of a device in a concrete-lined channel. The device at UK.18a will be installed within an underground pipe that crosses Lovers Lane. At UK.20, the device will be installed within a parking lot above the channel's top of bank.

Equipment necessary for Phase 2 implementation would include:

- Concrete Delivery Truck
- Skip Loader
- Dump Truck
- Roller Compactor
- Flatbed Trailer
- Backhoe
- Crane
- Forklift
- Vibratory Hammer or Press (1)
- Pile Driving Hammer or Vibratory Driver (1)
- Diesel Engine
- Mud Handling Equipment
- 3 HP Submersible Pump
- HP Generator
- Tree Removal Equipment (Chainsaws, Chippers, Crew Trucks)
- Light Tower with Generator

A crane would be required to install and maintain netting devices. Any staging areas required would be located in developed areas, and no construction materials would be staged overnight. Lane closures and/or vegetation removal may be required at some of the sites.



PHASE	PHASE 2 – 2025 SITES WITH POTENTIAL IMPACTS TO JURISDICTIONAL WETLANDS AND WATERS			
CAPTURE SITE	LOCATION	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE	
UK.10	W side of N State Street, across from Frontage Road A/Dodge auto dealership, Ukiah	Large-scale Louvered Panel on concrete pad at outlet of culvert, approximately 30 feet from end of wing wall to end of wing wall and 2 feet in height. Construction to remain within concrete pad.	226 sq. ft.	
UK.18a	North Lovers Lane at entrance to apartment complex, 250 feet SW of fire station, Ukiah	Large-scale HDS or baffle box under N. Lovers Lane	200 sq. ft.	
UK.20	Hwy 101 W side frontage road, behind Raley's groceries, Ukiah	Large-scale HDS or Baffle Box within developed parking lot and Caltrans easement areas	200 sq. ft.	
UK.21	Hwy 101, Mazzoni Street overpass, W side	Large-scale Louvered Panel in concrete-lined, vegetated stream channel. Will require dual, 36-inch diameter tubes each 25 feet in length.	700 sq. ft.	
UK.22	Hwy 101, Mazzoni Street overpass, E side	Large-scale Louvered Panel in vegetated stream channel. Will require concrete pad and concrete sidewalls for weir into dual 36-inch diameter tubes each approximately 15 feet in length.	1,048 sq. ft.	

Table 2. Phase 2 Trash Capture Device Type, Location and Ground Disturbance

1.2.3 Best Management Practices

The Project will include Best Management Practices (BMPs) to avoid and minimize erosion, pollutants, and sediment deposition into the streams. BMPs shall include but are not limited to the following:

- All equipment used on site will be maintained in good working order. Any leaks will be repaired immediately, and if on-site repairs are not possible the equipment will be removed from the site immediately.
- All equipment and materials entering the site will be cleaned and disinfected prior to entry. Equipment will be cleaned with power washing methods to remove all dirt and seed. Hand and power tools will be disinfected by washing thoroughly and treating with a disinfectant solution.
- Erosion-control measures will be utilized throughout all phases of the Project where sediment runoff from construction may potentially enter waters. Erosion control structures will be monitored for effectiveness and will be repaired or replaced as needed. Appropriate erosion control measures will be installed around any stockpiles of soil or other materials that could be mobilized by rainfall or runoff. No monofilament erosion control materials shall be used. Work within 100 feet of streams will be postponed for 24 hours following a significant rain event (>0.25 inch in 24 hours).



- When working within channels on the site, the contractor will ensure that all work is completed in dry conditions. Stream diversion or pump-around practices may be employed, and any turbid water that accumulates in work areas will be filtered prior to re-entry into the waterway or wetland.
- After final grading has been completed, final erosion and sediment control measures will be installed prior to the first rainfall event. Erosion control measures will include but not be limited to silt fence, straw wattles, and coir fiber erosion control matting.

1.2.4 Ongoing Operation and Maintenance

Project operation would involve activities associated with the maintenance of trash capture devices. Large-scale HCDs, louvered panels, and baffle boxes would require cleaning approximately twice per year and would require approximately four hours for a team of two maintenance workers. Small-scale CPS and hanging baskets would require cleaning approximately three times per year and would require approximately 30 minutes for a team of two maintenance workers. Maintenance activities would generally include the following:

- Clearing trash and debris located immediately in front of a curb opening or side opening of a catch basin, and on top or between metal grates of a grated catch basin,
- Removing vegetation growing across and/or blocking the basin opening,
- Removing all trash and vegetative debris from inside the catch basin,
- Removing trash and debris in connector pipe openings, upstream or downstream,
- Replacing parts and entire devices as needed, and
- Disposing of debris, trash, organics, and sediment captured by devices at an approved facility for disposal in accordance with local and state requirements.

A vactor truck would be needed to maintain large-scale and possibly small-scale devices. A crane would also be needed to maintain netting devices.

1.3 Summary of Results

The Study Area includes two sensitive natural communities: mixed oak woodland and riparian. Each of these will be fully avoided and no impacts are anticipated.

Intermittent streams are present in the Study Area, at UK.11, UK.21, and UK.22. Project related impacts will be less than significant to the stream and stream functions.

No special-status plants were determined to have a high or moderate potential to occur in the Study Area and no impacts are anticipated.

No special-status wildlife species have the potential to occur in the Study Area. Therefore, no associated mitigation measures are necessary to avoid impacts for special-status wildlife species. Best Management Practices that will be included/observed during construction activities will provide avoidance measures to protect wildlife.



Table 3. Summary of Biological Resources Evaluation

CEQA Assessment Category ¹ IV – Biological Resources	Biological Resources Considered	Relevant Laws & Regulations	Responsible Regulatory Agency	Summary of Findings & Report Section ²
Question A. Special-status Species	Special-status Plants Special-status Wildlife Designated Critical Habitat	Federal Endangered Species Act CA Endangered Species Act CA Native Plant Protection Act Migratory Bird Treaty Act Bald & Golden Eagle Protection Act	U.S. Fish & Wildlife Service National Marine Fisheries Service CA Department of Fish & Wildlife	No potentially significant impacts were identified, and no mitigation is required for less than significant impacts. See Section 7.1 for more information.
Question B. Sensitive natural communities & riparian habitat	Sensitive Natural Communities Streams, Lakes & Riparian Habitat	CA Fish & Game Code Oak Woodland Conservation Act Porter-Cologne Act Clean Water Act	CA Department of Fish & Wildlife U.S. Army Corps of Engineers U.S. Environmental Protection Agency State Water Resources Control Board Regional Water Quality Control Board	No potentially significant impacts were identified, and no mitigation is required for less than significant impacts. See Section 7.2 for more information.
Question C. State and federally protected wetlands	Wetlands Unvegetated surface waters	Clean Water Act: Sections 404/401 Rivers & Harbors Act: Section 10 Porter-Cologne Act	U.S. Army Corps of Engineers U.S. Environmental Protection Agency State Water Resources Control Board	No potentially significant impacts were identified, and no mitigation is required for less than significant impacts. See Section 7.3 for more information

¹ CEQA Questions have been summarized here, see Section 6.2 for details.

² As given in this report, see Section 5.0 subheadings.

CEQA Assessment Category ¹ IV – Biological Resources	Biological Resources Considered	Relevant Laws & Regulations	Responsible Regulatory Agency	Summary of Findings & Report Section ²
			Regional Water Quality Control Board	
Question D. Fish & Wildlife corridors	Essential Fish Habitat Wildlife Corridors	Magnuson-Stevens Fishery Conservation & Management Act CA Fish & Game Code	National Marine Fisheries Service CA Department of Fish and Wildlife	No potentially significant impacts were identified, and no mitigation is required for less than significant impacts. See Section 7.4 for more information
Question E. Local policies	Protected Trees Coastal zone resources Other biological protections	Local Tree Ordinance General Plan (e.g., Stream & Wetland Setbacks) Local ordinances	Local and regional agencies CA Coastal Commission San Francisco Bay Conservation and Development Commission	No potentially significant impacts were identified, and no mitigation is required for less than significant impacts. See Section 7.5 for more information
Question F. Local, state, federal conservation plans	Habitat Conservation Plans Natural Community Conservation Plans	Federal Endangered Species Act Natural Community Conservation Planning Act	U.S. Fish and Wildlife Service CA Department of Fish and Wildlife	No potentially significant impacts were identified, and no mitigation is required for less than significant impacts. See Section 7.6 for more information



2.0 REGULATORY BACKGROUND

The following sections explain the regulatory context of the biological assessment, including applicable laws and regulations that were applied to the field investigations and analysis of potential project impacts. Table 3 shows the correlation between these regulations and each Biological Resources question in the Environmental Checklist Form (Appendix G) of the CEQA guidelines.

2.1 Federal and State Regulatory Setting

2.1.1 Vegetation and Aquatic Communities

CEQA provides protections for particular vegetation types defined as sensitive by the California Department of Fish and Wildlife (CDFW) and aquatic features protected by laws and regulations administered by the U.S Army Corps of Engineers (Corps), State Water Resources Control Board (SWRCB), and Regional Water Quality Control Boards (RWQCB). The laws and regulations that provide protection for these resources are summarized below.

SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened" (CDFW 2023a) and keeps records of their occurrences in its California Natural Diversity Database (CNDDB; CDFW 2023b). Natural communities are ranked 1 through 5 in the CNDDB based on NatureServe's (2023) methodology, with those communities ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or U.S. Fish and Wildlife Service (USFWS) must be considered and evaluated under CEQA (California Code of Regulations [CCR] Title 14, Div. 6, Chap. 3, Appendix G). In addition, this general class includes oak woodlands that are protected by local ordinances under the Oak Woodlands Protection Act and Section 21083.4 of California Public Resources Code (CPRC).

WATERS OF THE UNITED STATES, INCLUDING WETLANDS

The Corps regulates "Waters of the United States" under Section 404 of the Clean Water Act (CWA). Waters of the United States are defined in the Code of Federal Regulations (CFR) as including the territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, such as tributaries, lakes and ponds, impoundments of waters of the U.S., and wetlands that are hydrologically connected with these navigable features (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Corps Manual; Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Unvegetated waters including lakes, rivers, and streams may also be subject to Section 404 jurisdiction and are characterized by an ordinary high water mark (OHWM) identified based on field indicators such as the lack of vegetation, sorting of sediments, and other indicators of flowing or standing water. The placement of fill material into Waters of the United States generally requires a permit from the Corps under Section 404 of the CWA.



The Corps also regulates construction in navigable waterways of the U.S. through Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 U.S. Code [USC] 403). Section 10 of the RHA requires Corps approval and a permit for excavation or fill, or alteration or modification of the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor or refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the United States. Section 10 requirements apply only to navigable waters themselves, and are not applicable to tributaries, adjacent wetlands, and similar aquatic features not capable of supporting interstate commerce.

WATERS OF THE STATE, INCLUDING WETLANDS

The term "Waters of the State" is defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The SWRCB and nine RWQCB protect waters within this broad regulatory scope through many different regulatory programs. Waters of the State in the context of a CEQA Biological Resources evaluation include wetlands and other surface waters protected by the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2019). The SWRCB and RWQCB issue permits for the discharge of fill material into surface waters through the State Water Quality Certification Program, which fulfills requirements of Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Clean Water Act permit are also required to obtain a Water Quality Certification. If a project does not require a federal permit but does involve discharge of dredge or fill material into surface waters of the State, the SWRCB and RWQCB may issue a permit in the form of Waste Discharge Requirements.

SECTIONS 1600-1616 OF CALIFORNIA FISH AND GAME CODE

Streams and lakes, as habitat for fish and wildlife species, are regulated by CDFW under Sections 1600-1616 of California Fish and Game Code (CFGC). Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream," which includes creeks and rivers, is defined in the CCR as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). The term "stream" can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). Riparian vegetation has been defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFG 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

2.1.2 Special-status Species

ENDANGERED AND THREATENED PLANTS, FISH, AND WILDLIFE

Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the Federal Endangered Species Act (ESA), or the California Endangered Species Act (CESA). Specific protections and permitting mechanisms for these species differ under each of these acts, and a species' designation under one law does not automatically provide protection under the other.



The ESA (16 USC 1531 et seq.) is implemented by the USFWS and the National Marine Fisheries Service (NMFS). The USFWS and NMFS maintain lists of endangered and threatened plant and animal species (referred to as "listed species"). "Proposed" or "candidate" species are those that are being considered for listing and are not protected until they are formally listed as threatened or endangered. Under the ESA, authorization must be obtained from the USFWS or NMFS prior to take of any listed species. "Take" under the ESA is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Take under the ESA includes direct injury or mortality to individuals, disruptions in normal behavioral patterns resulting from factors such as noise and visual disturbance and impacts to habitat for listed species. Actions that may result in take of an ESA-listed species may obtain a permit under ESA Section 10, or via the interagency consultation described in ESA Section 7. Federally listed plant species are only protected when take occurs on federal land.

The ESA also provides for designation of critical habitat, which are specific geographic areas containing physical or biological features "essential to the conservation of the species." Protections afforded to designated critical habitat apply only to actions that are funded, permitted, or carried out by federal agencies. Critical habitat designations do not affect activities by private landowners if there is no other federal agency involvement.

The CESA (CFGC 2050 et seq.) prohibits the take of any plant and animal species that the CFGC determines to be an endangered or threatened species in California. CESA regulations include take protection for threatened and endangered plants on private lands, as well as extending this protection to candidate species that are proposed for listing as threatened or endangered under CESA. The definition of a "take" under CESA ("hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") only applies to direct impact to individuals, and does not extend to habitat impacts or harassment. CDFW may issue an Incidental Take Permit under CESA to authorize take if it is incidental to otherwise lawful activity and if specific criteria are met. Take of these species is also authorized if the geographic area is covered by a Natural Community Conservation Plan (NCCP), as long as the NCCP covers that activity.

FULLY PROTECTED SPECIES AND DESIGNATED RARE PLANT SPECIES

This category includes specific plant and wildlife species that are designated in the CFGC as protected even if not listed under CESA or ESA. Fully Protected Species includes specific lists of birds, mammals, reptiles, amphibians, and fish designated in CFGC. Fully protected species may not be taken or possessed at any time. No licenses or permits may be issued for take of fully protected species, except for necessary scientific research and conservation purposes. The definition of "take" is the same under the California Fish and Game Code and the CESA. By law, CDFW may not issue an Incidental Take Permit for Fully Protected Species. Under the California Native Plant Protection Act (NPPA), CDFW has listed 64 "rare" or "endangered" plant species, and prevents "take", with few exceptions, of these species. CDFW may authorize take of species protected by the NPPA through the Incidental Take Permit process, or under a NCCP.

SPECIAL PROTECTIONS FOR NESTING BIRDS AND BATS

The federal Bald and Golden Eagle Protection Act provides relatively broad protections to both of North America's eagle species (bald eagle [Haliaeetus leucocephalus] and golden eagle [Aquila chrysaetos]) that in some regards are similar to those provided by the ESA. In addition to regulations for special-status species, most native birds in the United States, including non-status species, have baseline legal protections under the Migratory Bird Treaty Act of 1918 and



CFGC, i.e., sections 3503, 3503.5 and 3513. Under these laws/codes, the intentional harm or collection of adult birds as well as the intentional collection or destruction of active nests, eggs, and young is illegal. For bat species, the Western Bat Working Group (WBWG 2023) designates conservation status for species of bats, and those with a high or medium-high priority are typically given special consideration under CEQA.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act provides for conservation and management of fishery resources in the U.S., administered by NMFS. This Act establishes a national program intended to prevent overfishing, rebuild overfished stocks, ensure conservation, and facilitate long-term protection through the establishment of Essential Fish Habitat (EFH). EFH consists of aquatic areas that contain habitat essential to the long-term survival and health of fisheries, which may include the water column, certain bottom types, vegetation (e.g., eelgrass (*Zostera* spp.)), or complex structures such as oyster beds. Any federal agency that authorizes, funds, or undertakes action that may adversely affect EFH is required to consult with NMFS.

SPECIES OF SPECIAL CONCERN, MOVEMENT CORRIDORS, AND OTHER SPECIAL-STATUS SPECIES UNDER CEQA

To address additional species protections afforded under CEQA, CDFW has developed a list of special species as "a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status." This list includes lists developed by other organizations, including for example, the Audubon Watch List Species, the Bureau of Land Management Sensitive Species, and USFWS Birds of Special Concern. Plant species on the California Native Plant Society (CNPS) Plant Inventory (Inventory; CNPS 2023a) with California Rare Plant Ranks (Rank) of 1 and 2, as well as some with a Rank of 3 or 4, are also considered special-status plant species and must be considered under CEQA. Some Rank 3 and Rank 4 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare. Movement and migratory corridors for native wildlife (including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

2.2 Local Plans and Policies

2.2.1 Mendocino County General Plan

The Mendocino County General Plan contains policies pertaining to the following biological resources categories:

- Watersheds Policies RM-1 through RM-5
- Water Resources Policies RM-6 through RM-18
- Water Quality Policies RM-19 through RM-23
- Ecosystem Polices RM-24 through RM-35



3.0 ASSESSMENT METHODOLOGY

On November 14, 2022, and April 4, 2023, WRA, Inc. (WRA) biologists visited the Study Area to map vegetation, aquatic features, and other land cover types; document plant and wildlife species present; and evaluate on-site habitat for the potential to support special-status species as defined by CEQA. Prior to the site visit, WRA biologists reviewed literature resources and performed database searches to assess the potential for sensitive land cover types and special-status special-status species, including:

- Soil Survey of Mendocino County, Eastern Part and Southwestern Part of Trinity County (USDA 1991)
- Ukiah, Elledge Peak, and Redwood Valley 7.5-minute U.S. Geological Survey (USGS) quadrangle (USGS 2018)
- Contemporary aerial photographs (Google Earth 2023)
- Historical aerial photographs (NETR 2023)
- National Wetlands Inventory (USFWS 2023a)
- California Aquatic Resources Inventory (SFEI 2017)
- California Natural Diversity Database (CNDDB) (CDFW 2023a)
- Biological Information and Observation System (BIOS) (CDFW 2023b)
- CNPS Inventory (CNPS 2023a)
- Consortium of California Herbaria (CCH1 2023, CCH2 2023)
- USFWS Information for Planning and Consultation (USFWS 2023b)
- eBird Online Database (Cornell Lab of Ornithology 2023)
- California Bird Species of Special Concern in California (Shuford and Gardali 2008)
- California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)
- A Manual of California Vegetation, Online Edition (CNPS 2023b)
- California Natural Community List (CDFW 2023c)
- Database searches (i.e., CNDDB, CNPS) for special-status species focused on the Potter Valley, Cow Mountain, Purdy's Garden, Orr Springs, Ukiah, Redwood Valley, Laughlin Range, Boonville, and Elledge Peak USGS 7.5-minute quadrangles.

Following the remote assessment, WRA biologists completed a field review to document: (1) land cover types (e.g., vegetation communities, aquatic resources), (2) existing conditions and to determine if such provide suitable habitat for any special-status plant or wildlife species, (3) if and what type of aquatic land cover types (e.g., wetlands) are present, and (4) if special-status species are present³.

3.1 Vegetation Communities and Other Land Cover Types

During the site visit, WRA evaluated the species composition and area occupied by distinct vegetation communities, aquatic communities, and other land cover types. Mapping of these classifications utilized a combination of aerial imagery and ground surveys. In most instances,

³ Due to the timing of the assessment, it may or may not constitute protocol-level species survey; see Sections 3.2.3 and 3.2.3 for information on whether the site assessment would constitute a formal or protocol-level species survey.



communities are characterized and mapped based on distinct shifts in plant assemblage (vegetation) and follow the California Natural Community List (CDFW 2023c) and A Manual of California Vegetation, Online Edition (CNPS 2023b). These resources cannot anticipate every component of every potential vegetation assemblage in California, and so in some cases, it is necessary to identify other appropriate vegetative classifications based on best professional judgment of WRA biologists. When undescribed variants are used, it is noted in the description. Vegetation alliances (natural communities) with a CDFW Rank of 1 through 3 (globally critically imperiled [S1/G1], imperiled [S2/G2], or vulnerable [S3/G3]) (CDFW 2023a), were evaluated as sensitive as part of this evaluation.

The site was reviewed for the presence of wetlands and other aquatic resources according to the methods described in the Corps Manual (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West* (Corps 2008) and A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar and McColley 2008) and *A Guide to Ordinary High Water Mark Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States* (Mersel 2014). Areas meeting these indicators were mapped as aquatic resources and categorized using the vegetation community classification methods described above. Aquatic communities which are mapped in the NMFS EFH Mapper (NMFS 2023) or otherwise meet criteria for designation as EFH are indicated as such in the community description below in Section 5.1. The presence of riparian habitat was evaluated based on woody plant species meeting the definition of riparian provided in *A Field Guide to Lake and Streambed Alteration Agreements, Section 1600-1607, California Fish and Game Code* (CDFG 1994) and based on best professional judgement of biologists completing the field surveys.

3.2 Special-status Species

3.2.1 General Assessment

Potential occurrence of special-status species in the Study Area was evaluated by first determining which special-status species occur in the vicinity of the Study Area through a literature and database review as described above. The presence of suitable habitat for special-status species was evaluated during the site visit(s) based on physical and biological conditions of the site as well as the professional expertise of the investigating biologists. The potential for each special-status species to occur in the Study Area was then determined according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Unlikely.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.



• **Present.** Species is observed on the site or has been recorded (i.e., CNDDB, other reports) on the site in the recent past.

If a more thorough assessment was deemed necessary, a targeted or protocol-level assessment or survey was conducted or recommended as a future study. If a special-status species was observed during the site visit, its presence was recorded and discussed below in Section 5.2. If designated critical habitat is present for a species, the extent of critical habitat present and an evaluation of critical habitat elements is provided as part of the species discussions below.

3.2.2 Special-status Plants

To determine the presence or absence of special-status plant species, focused surveys were conducted within the Study Area on November 11, 2022, and April 4, 2023. The surveys correspond to the period sufficient to observe and identify those special-status plants determined to have the potential to occur. The field surveys were conducted by botanists familiar with the flora of Mendocino and surrounding counties. The surveys performed follow those described by resource experts and agencies (CNPS 2001, CDFW 2018b). Plants were identified using *The Jepson Manual*, 2nd Edition (Baldwin et. al. 2012) and Jepson Flora Project (eFlora 2023), to the taxonomic level necessary to determine whether they were sensitive. Plant names follow those of Jepson Flora Project (eFlora 2023), unless otherwise noted.

3.2.3 Special-status Wildlife

A general wildlife assessment was performed on April 4, 2023. This assessment consisted of traversing the entirety of the Study Area. Habitat elements required or associated with certain species (e.g., foothill yellow-legged frog) or species groups (e.g., bats, anadromous fish) were searched for and noted. Such habitat elements include, but are not limited to plant assemblages and vegetation structure; stream depth, width, hydro-period, slope, and bed-and-bank structure; rock outcrops, caves, cliffs, overhangs, and substrate texture and rock content; history of site alteration and contemporary disturbances; etc. No protocol-level surveys for special-status wildlife were conducted during the April 4, 2023, assessment.

3.3 Wildlife Corridors and Native Wildlife Nursery Sites

To account for potential impacts to wildlife movement/migratory corridors, biologists reviewed maps from the California Essential Connectivity Project (CalTrans 2010), and habitat connectivity data available through the CDFW Biogeographic Information and Observation System (CDFW 2023b). Additionally, aerial imagery (Google Earth 2023) for the local area was referenced to assess if local core habitat areas were present within, or connected to the Study Area. This assessment was refined based on observations of on-site physical and/or biological conditions, including topographic and vegetative factors that can facilitate wildlife movement, as well as on-site and off-site barriers to connectivity.

The potential presence of native wildlife nursery sites is evaluated as part of the site visit and discussion of individual wildlife species below. Examples of native wildlife nursery sites include nesting sites for native bird species (particularly colonial nesting sites), marine mammal pupping sites, and colonial roosting sites for other species (such as for monarch butterfly [*Danaus plexippus*]).



4.0 ECOLOGICAL SETTING

The proposed project is located within unincorporated areas of Mendocino County. The project consists of 34 individual capture sites located in unincorporated Mendocino County near the City of Ukiah, including the communities of Calpella, The Forks, and Redwood Valley. Specifically, the project site extends from Plant Road at the border with the City of Ukiah at its southern extent (site location UK.33) to near the intersection of West Road and Ellen Lynn Street at the northern extent (site location UK.02). Figures 1 and 2 (Appendix A) show the locations for installation of the 34 trash capture devices. Capture sites are located along streets in urban areas including commercial, industrial, agricultural, and residential land uses. The Study Area includes all areas affected by the Project, as well as the 100-foot buffer from the trash capture device location. Additional details of the local setting follow below.

4.1 Soils and Topography

The overall topography of the Study Area is flat valley floor with elevations ranging from approximately 500 to 600 feet above sea level. According to the *Soil Survey of Mendocino County, Eastern Part and Southwestern Part of Trinity County* (USDA 1991), the Study Area is underlain by 10 soil mapping units: Pinnobie loam 2 to 8 percent slope, Yokayo sandy loam, 0 to 8 percent slope, Russian Loam, gravelly substratum, 0 to 2 percent slope, Cole loam, drained, 0 to 2 percent slope, Xerofluvents, 0 to 2 percent slope, Pinole gravelly loam, 0 to 2 percent slope, Talmage gravelly sandy loam, 0 to 2 percent slope, Feliz clay loam, gravelly substratum, 0 to 2 percent slope, Pinole very gravelly loam, 0 to 2 percent slope, Kekawaka-Casabonne-Wohly complex, 30 to 50 percent slope, and Urban Land. Soils within the Study Area are shown in Appendix A, Figure 3. The parent soil series of all the Study Area's mapping units are summarized below.

Pinnobie Series: This series consists of deep, loamy soils formed in alluvium from sedimentary rocks and is situated on terrace and slopes at elevations ranging from 500 to 1,500 feet (CSRL 2023, USDA 1991). These soils are well drained with slow or medium runoff and moderate permeability. They range from slightly acid to neutral (USDA 1991). The Pinnobie soil mapping units are not considered hydric (USDA 2023).

Yokayo Series: This series consists of deep, sandy loam soils formed old alluvium from sedimentary rock and is situated on old, dissected terraces at elevations ranging from 500 to 1500 feet (CSRL 2023, USDA 1991). These soils are well drained with slow to rapid runoff and very slow permeability. They range from medium acid to slightly acid (USDA 1991). The Yokayo soil mapping units are not considered hydric (USDA 2023).

Russian Series: This series consists of deep, loamy soils formed in alluvium from sedimentary rock and is situated on floodplains and low stream terraces at elevations ranging from 400 to 1,500 feet (CSRL 2023, USDA 1991). These soils are well drained with slow runoff and moderate permeability. They are neutral pH (USDA 1991). The Russian soil mapping units are considered hydric (USDA 2023).

Cole Series: This series consists of very deep, clay loam soils formed in alluvium from mixed sources and is situated on stream terraces, floodplain steps, and alluvial fans at elevations ranging from 50 to 1,500 feet (CSRL 2023, USDA 1991). These soils are somewhat poorly drained with slow runoff and slow permeability. They range from



slightly acid to moderately alkaline (USDA 1991). The Cole soil mapping units are considered hydric (USDA 2023).

Pinole Series: This series consists of very deep, gravelly loam soils formed in alluvium weathered from mixed sources and is situated on terraces at elevations ranging from 200 to 1,500 feet (CSRL 2023, USDA 1991). These soils are well drained with slow to rapid runoff and moderately slow permeability. They range from slightly acid to neutral pH (USDA 1991). The Pinole soil mapping units are not considered hydric (USDA 2023).

Talmage Series: This series consists of shallow, gravelly sandy loam soils formed in alluvium from mixed sources and is situated on alluvial fans and plains at elevations ranging from 350 to 1,800 feet (CSRL 2023, USDA 1991). These soils are well drained with medium to very rapid runoff and moderate permeability. They range from slightly acid to neutral pH (USDA 1991). The Talmage soil mapping units are considered hydric (USDA 2023).

Feliz Series: This series consists of very deep, loamy soils formed in alluvium derived from mixed sedimentary rocks and is situated on floodplains and fans at elevations ranging from 160 to 1,750 feet (CSRL 2023, USDA 1991). These soils are well drained with slow to medium runoff and moderate permeability. They range from neutral to slightly alkaline (USDA 1991). The Feliz soil mapping units are not considered hydric (USDA 2023).

Kekewaka Series: This series consists of very deep, loamy soils formed in material weathered from sedimentary rocks and is situated on hills and mountains at elevations ranging from 1,000 to 4,800 feet (CSRL 2023, USDA 1991). These soils are well drained with slow to very rapid runoff and moderately slow permeability. They range from slightly acid to medium acid (USDA 1991). The Kekewaka soil mapping units are not considered hydric (USDA 2023).

Xerofluvents: This series consists of very deep, sandy loam soils formed in recent alluvium derived from sedimentary rock and is situated on floodplains at elevations ranging from 300 to 3,000 feet (USDA 1991). These soils are well to excessively drained. They range from slightly acid to moderately alkaline (USDA 1991). The Xerofluvents soil mapping units are not considered hydric (USDA 2023).

4.2 Climate and Hydrology

The Study Area is located in the inland region of Mendocino County. The average monthly maximum temperature in the area is 73 degrees Fahrenheit, while the average monthly minimum temperature is 43 degrees Fahrenheit. Predominantly, precipitation falls as rainfall between November and March with an annual average precipitation of 37 inches (WRCC 2023).

The Study Area is located in several local watersheds: Orr Creek-Russian River (HUC 12: 180101100403), East Fork Russian River-Russian River (HUC 12:180101100203), and Forsythe Creek (HUC 12: 180101100201). The regional watershed is Russian River (HUC 8: 18010110). The Study Area is located in the upper portion of the Russian River watershed, with capture sites at a distance of as much as approximately 1.2 miles from the Russian River to within several hundred feet. There are two unnamed blue line streams in the Study Area, located at UK.25 and UK.28/UK.29 (USGS 2018). The same blue-line streams are also mapped in the National



Wetlands Inventory (NWI) as excavated seasonally flooded intermittent stream (R4SBCx) or excavated temporarily flooded intermittent stream (USFWS 2023a) and California Aquatic Resources Inventory (CARI; SFEI 2017). Additionally, Hensley Creek, a USGS blue line stream is located near UK.11 (USGS 2018). This stream is classified as excavated seasonally flooded intermittent stream (R4SBCx). Detailed descriptions of aquatic resources are provided in Section 5.1 below.

4.3 Land Use

The majority of the Study Area is urban land that consists of roads, structures, roadside medians, private residential and private commercial lots, and parking lots. Undeveloped areas consist of non-native grassland, agriculture, scrub and oak woodland. Detailed land cover type descriptions are included in Section 5.1 below, and all observed plant species are included in Appendix B. Surrounding land uses include urban and agriculture (Google Earth 2023).

5.0 ASSESSMENT RESULTS

5.1 Vegetation Communities and Other Land Cover

WRA observed 11 land cover types within the Study Area, including eight terrestrial types and three aquatic resource types: urban, non-native grassland, developed, agriculture, coyote brush scrub, Himalayan blackberry, mixed oak woodland, riparian, intermittent stream, concrete lined stream, and drainage ditch. Land cover types within the Study Area are illustrated in Appendix A – Figures 4 and 5 and listed in Table 4 below. All plant species observed are included in Appendix B.

COMMUNITY / LAND COVERS	RARITY RANKING	ACRES WITHIN STUDY AREA		
TERRES	STRIAL / COMMUNITY LAND CO	OVER		
Non-native Grassland	Non-Sensitive	None	4.35	
Urban	Non-Sensitive	n/a	19.76	
Developed	Non-Sensitive	n/a	<0.01	
Drainage Ditch	Non-Sensitive	n/a	0.03	
Agriculture	Non-Sensitive	n/a	0.13	
Himalayan Blackberry Scrub	Non-Sensitive	None	0.16	
Coyote Brush Scrub	Non-Sensitive	G5 S5	0.02	
Mixed Oak Woodland	Sensitive	G4 S4	0.23	
Riparian	Sensitive	n/a	0.06	
AQUATIC RESOURCES				
Drainage Ditch ¹	Sensitive	n/a	0.02	
Intermittent Stream	Sensitive	n/a	0.13	

Table 4. Vegetation Communities and Other Land Cover Types



COMMUNITY / LAND COVERS	SENSITIVE STATUS	RARITY RANKING	ACRES WITHIN STUDY AREA	
Concrete Lined Channel	Sensitive	n/a	0.02	
Consider Designed Ditch and is a she to the designed ditch at UK 10				

¹Sensitve Drainage Ditch applies only to the drainage ditch at UK.10.

5.1.1 Terrestrial Land Cover

Non-native Grassland (various vegetation alliances). CDFW Rank: None. Non-native grasslands are stands where non-native grasses are dominant in the herb canopy and native herbs have 10 percent or less relative cover and are not characteristic of the stand. Within the Study Area, non-native grasslands are best classified as wild oat grasslands and annual brome grasslands (CNPS 2023b). Dominant species are wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*). Associated species include plantain (*Plantago lanceolata*), hawkbit (*Leontodon saxatilis*), Bermuda grass (*Cynodon dactylon*), yellow star thistle (*Centaurea solstitialis*), and Dogtail grass (*Cynosurus echinatus*). Non-native grasslands are located in areas that are not developed or impacted daily (i.e., traffic, parking) along roadways, or are vegetated strips along roadways that are mowed annually but otherwise unmaintained. Scattered trees are present in areas classified as non-native grassland.

Urban (no vegetation alliance). CDFW Rank: None. Urban areas include roadways, driveway, dirt/gravel pullouts, parking lots, structures, private residence yards, commercial land, or vegetated areas that are heavily managed or impacted. As each of the trash capture sites are located along roadsides within urban areas, the majority of the Study Area is urban land.

Developed (no vegetation alliance). CDFW Rank: None. One developed area is present in the Study Area where a cement wingwall at a culvert outfall is present at UK.10.

Agriculture (no vegetation alliance). CDFW Rank: None. Agriculture land are areas where crops are grown, including wine grapes and hay.

Himalayan Blackberry Scrub (*Rubus armeniacus* Semi-Natural Shrubland Association). CDFW Rank: None. Himalayan blackberry scrub is classified under Himalayan blackberry-rattlebox-Edible Fig Riparian Scrub Shrubland Semi-Natural Alliance (CNPS 2023b). Himalayan blackberry scrub typically occurs in riparian habitats, mesic clearings, disturbed areas, and stock ponds throughout cismontane California (CNPS 2023b). Himalayan blackberry forms a dense canopy cover, precluding most other species. In the Study Area, Himalayan blackberry scrub occurs along roadside drainage ditches at UK.20 and UK.16.

Coyote Brush Scrub (*Baccharis pilularis* **Shrubland Alliance). CDFW Rank: G5 S5.** Coyote brush scrub typically occurs on coastal bluffs, terraces, stabilized dunes, stream sides, exposed slopes, and gaps in forest stands on various soil types throughout cismontane California (CNPS 2023b). In the Study Area, one small stand of coyote brush scrub is present along the upland edge of a roadside ditch at UK.16.

Mixed Oak Woodland (*Quercus* **spp. Woodland Alliance). CDFW Rank: G4 S4**. Mixed oak woodland typically occurs in valleys, on gentle to steep slopes on moderately deep soils in the California Coast Range (CNPS 2023b). Oak woodlands are classified for stands with 10 percent or more absolute cover of oak trees and the stand is at least 1 acre in size, or continuous with



such a stand. Within the Study Area one stand of mixed oak woodland is located on the hillslope at UK.16. The understory is dominated by Himalayan blackberry.

Riparian (no vegetation alliance). CDFW Rank: None. Riparian vegetation includes vegetation that occurs along the banks of a watercourse and is dependent on the water of the watercourse. Riparian vegetation also includes vegetation that provides ecological support to the watercourse, such as shading and erosion control. One stand of riparian vegetation is present near UK.03. The riparian vegetation is along the Russian River and is characterized by sand bar willow (*Salix exigua*) and Himalayan blackberry.

5.1.2 Aquatic Resources

There are three aquatic resource types in the Study Area: drainage ditch, intermittent stream, and concrete-lined stream.

Drainage Ditch: Drainage ditches are linear features that are dug in uplands to convey storm flow from developed areas, such as roads and parking lots. These features typically do not contain an obvious bed and bank nor support hydrophytic or riparian vegetation. Several drainage ditches are present, including at UK.02, UK.08, UK.10, UK.16, UK.20, UK.21, UK.23, and UK.28.

At UK.10 a drainage ditch is located from North State Street and runs east. As communicated by County of Mendocino staff to WRA, the ditch is man-made, dug in uplands, and conveys storm flow from developed areas of Lake Mendocino Drive and US 101 intersection. West of North State Street is a culvert that conveys water under the road. The ditch daylights on the east side of North State Street, through three 2-foot corrugated metal culverts enclosed in concrete and concrete wingwalls. Approximately 8linear feet of the ditch are lined with concrete (depicted as Developed and Concrete Lined Ditch on Figure 4k). This developed/concrete lined portion abuts the property line at a wire fence. Sediment has built up along the wire fence line, creating a small, vegetated island with Harding grass (*Phalaris* aquatica), curly dock (*Rumex crispus*), and tall cyperus (*Cyperus eragrostis*). No obvious bed and bank are present along the concrete portion of the ditch. Downstream of the concrete wingwall/slab, the ditch top-of-bank is 8-feet wide, and the ordinary high-water mark is 5-feet wide. Harding grass is dominant along the banks of the ditch; no riparian vegetation is present. Water was present in the ditch during the April 2023 site visit. Direct surface connection to the Russian River could not be determined using aerial imagery.

Intermittent Stream: Intermittent streams are linear features with a bed and bank formed by water that flows for at least three months and is groundwater fed. Intermittent streams typically support riparian or hydrophytic vegetation due to prolonged availability of water. Within the Study Area, four intermittent streams are present.

At UK.11, Hensley Creek, a USGS blue-line stream, is present approximately 65 feet south of the trash capture location. The stream top-of-bank is approximately 15 feet wide, and the ordinary high-water mark is approximately 10-feet wide. The northern banks of the stream do not have riparian vegetation while the south bank has cottonwood (*Populus fremontii*) and Pacific willow (*Salix lasiandra*). No water was present in the stream during the November 2022 site visit but water was present during the April 2023 site visit.



At UK.21 an unnamed stream is located at Ford Road and runs east. The stream is culverted at Ford Road where water enters the Study Area and is culverted in two locations downstream. Aerial imagery analysis suggests there is direct surface connection to the Russian River, located approximately 0.5 miles downstream. Water enters the Study Area through a cement box culvert under Ford Road. The banks and channel are cement-lined for approximately 50 feet. Sediment has built up in the cemented portion and supports hydrophytic plants, including water parsley (*Oenanthe sarmentosa*), smartweed (*Persicaria* sp.), and water speedwell (*Veronica anagallis-aquatica*). Water was present during the April 2023 site visit. The top-of-bank is approximately 20-feet wide, and the ordinary high-water mark is approximately 10-feet wide.

At UK.22, an unnamed stream enters the Study Area at a private driveway and runs south, connecting to the stream at UK.21. The stream channel and most of the banks are heavily vegetated with Himalayan blackberry and cattail (*Typha latifolia*); the vegetation prevented visual observation of the culvert at the driveway. A portion of the eastern bank is cemented; however, the channel and remainder of the stream is not cement lined. This feature is also presumably hydrologically connected to the Russian River via the same culverts and ditches of UK.21. The top-of-bank is approximately 15-feet wide, and the ordinary high-water mark is approximately 9-feet wide.

Concrete-lined Channel: Concrete-lined channels are stream or ditch features where concrete lines the channel and bank. These areas are present in portions of drainage ditch at UK.10 and intermittent stream at UK.21. Approximately 8-feet of the channel at UK.10 is lined with concrete due to the developed wing wall structure; at UK.21, the banks and channel are cement lined for approximately 50 feet downstream of the box culvert.

5.2 Special-status Species

5.2.1 Special-status Plants

Based upon a review of the resource databases listed in Section 3.0, 38 special-status plant species have been documented in the vicinity of the Study Area (Appendix C). None of these species have the potential to occur in the Study Area. The remaining species documented from the greater vicinity are unlikely or have no potential to occur for one or more of the following:

- Hydrologic conditions (e.g., lakes, seasonal wetlands) necessary to support the specialstatus plant species are not present in the Study Area;
- Edaphic (soil) conditions (e.g., adobe clay, serpentine) necessary to support the specialstatus plant species are not present in the Study Area;
- Topographic conditions (e.g., north-facing slope, montane) necessary to support the special-status plant species are not present in the Study Area;
- Unique pH conditions (e.g., alkali scalds, acidic bogs) necessary to support the specialstatus plant species are not present in the Study Area;
- Associated natural communities (e.g., interior chaparral, conifer forest) necessary to support the special-status plant species are not present in the Study Area;
- The Study Area is geographically isolated (e.g., below elevation, coastal environ) from the documented range of the special-status plant species;
- The historical landscape and/or habitat(s) of the Study Area were not suitable habitat prior to land/type conversion (e.g., reclaimed shoreline) to support the special-status plant species;



• Land use history and contemporary management (e.g., grading, intensive grazing) has degraded the localized habitat necessary to support the special-status plant species.

WRA biologists conducted protocol-level surveys in April and November. All plant species observed are listed in Appendix B. No special-status plant species were observed. Due to highly disturbed habitats of the trash capture locations, no special-status plants are determined to have potential to occur.

5.2.2 Special-status Wildlife

Of the 20 special-status wildlife species documented in the vicinity of the Study Area, all are excluded from the Study Area based on a lack of habitat features. Therefore, no special-status species have potential to occur within the Study Area. Features not found within the Study Area that are required to support special-status wildlife species include:

- Aquatic features with dense aggregations of emergent vegetation
- Ephemeral streams with rocky streambeds
- Perennial rivers and tributaries
- Old growth redwood or fir forest
- Sandy banks, beaches, or alkaline flats
- Riparian, coniferous, or hardwood forests
- Caves, mine shafts, or abandoned buildings

The absence of such habitat features eliminates components critical to the survival or movement of most special-status species found in the vicinity. For instance, red-bellied newt (Taricha rivularis) is known to occur in coastal, forested streams in the surrounding area. However, suitable aquatic habitat for breeding and redwood or hardwood forests for foraging habitat are absent, precluding this species from existing in the Study Area. Furthermore, numerous highspeed roads have been established since historical occurrences which act as dispersal barriers between known populations. Given the relative proximity to sensitive habitats, many species documented nearby are obligates to dense forest, grassland, or marsh habitats which are not present on or in the immediate vicinity of the Study Area. Similarly, anadromous fish species including steelhead and Chinook salmon, which are known to occur in the Russian River and tributaries, are not present in the Study Area due to the lack of suitable habitat for these species. In particular, Hensley Creek, a tributary to the Russian River, lies within the Study Area, but does not provide suitable habitat for anadromous fish. No spawning or rearing habitat for anadromous fish is known to occur at or upstream of any of the trash capture sites in the Study Area. No special-status wildlife were observed and no observed wildlife species list was compiled during the April 4, 2023, site visit.

5.3 Wildlife Corridors and Native Wildlife Nursery Sites

Wildlife movement between suitable habitat areas can occur via open space areas lacking substantial barriers. The terms "landscape linkage" and "wildlife corridor" are often used when referring to these areas. The key to a functioning corridor or linkage is that it connects two larger habitat blocks, also referred to as core habitat areas (Beier and Loe 1992; Soulé and Terbough 1999). It is useful to think of a "landscape linkage" as being valuable in a regional planning context, a broad scale mapping of natural habitat that functions to join two larger habitat blocks. The term "wildlife corridor" is useful in the context of smaller, local area planning, where wildlife movement may be facilitated by specific local biological habitats or passages and/or



may be restricted by barriers to movement. Above all, wildlife corridors must link two areas of core habitat and should not direct wildlife to developed areas or areas that are otherwise void of core habitat (Hilty et al. 2019).

The Study Area is not within a designated wildlife corridor based on the Essential Connectivity Areas geospatial dataset, which uses habitat modelling to identify areas of land with value as wildlife corridors (CalTrans 2010; CDFW 2023c). The site is located within a developed and relatively urbanized area of Mendocino County. While common wildlife species presumably utilize the site to some degree for movement at a local scale, the Study Area itself does not provide wildlife corridor functions.

No native wildlife nursery sites were observed within the Study Area during the November 14, 2022, and April 4, 2023, site visits. More specifically, no tricolored blackbird (*Agelaius tricolor*) colonies were documented. There are no Important Bird Areas (IBA; Audubon 2023) within 10 miles of the Study Area. The Study would not result in changes to the movement corridors for birds or local wildlife.

Ackerman, Hensley, and York Creeks, tributaries to the Russian River, are near the Study Area and Hensley Creek lies within the Study Area. The Project would have no impact on these tributaries of the Russian River and would not change fish or wildlife use of the riparian corridors even temporarily during construction. The Project would have no impact on wildlife corridors or native nursery sites.

6.0 ANALYTICAL METHODOLOGY AND SIGNIFICANCE THRESHOLD CRITERIA

Pursuant to Appendix G, Section IV of the State CEQA Guidelines, a project would have a significant impact on biological resources if it would:

- 1. 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 U.S. Fish and Wildlife Service;
- 2. 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 U.S. Fish and Wildlife Service;
- 3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- 5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or,
- 6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.



These thresholds were utilized in completing the analysis of potential project impacts for CEQA purposes. For the purposes of this analysis, a "substantial adverse effect" is generally interpreted to mean that a potential impact could directly or indirectly affect the resiliency or presence of a local biological community or species population. Potential impacts to natural processes that support biological communities and special-status species populations that can produce similar effects are also considered potentially significant. Impacts to individuals of a species or small areas of existing biological communities may be considered less than significant if those impacts are speculative, beneficial, de minimis, and/or would not affect the resiliency of a local population.

7.0 IMPACTS AND MITIGATION EVALUATION

Using the CEQA analysis methodology outlined in Section 6.0 above, the following section describes potential significant impacts to sensitive resources within the Study Area as well as suggested mitigation measures which are expected to reduce impacts to less than significant.

7.1 Special-status Species

This section analyzes the Project's potential impacts and mitigation for special-status species in reference to the significance threshold outlined in CEQA Appendix G, Part IV (a):

a) Does the project have the potential to 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 U.S. Fish and Wildlife Service?

7.1.1 Special-Status Plants

No special-status plants are determined to have high or moderate potential to occur in the Study Area. No impacts to special-status plants are anticipated.

7.1.2 Special-Status Wildlife

No special-status wildlife species are determined to have high or moderate potential to occur in the Study Area. No impacts to special-status wildlife are anticipated.

7.2 Sensitive Natural Communities and Land Cover Types

This section addresses the question:

b) Does 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 CDFW or U.S. Fish and Wildlife Service;

Sensitive natural communities within the Study Area include mixed oak woodland and riparian vegetation. No impacts to mixed oak woodland are anticipated as project-related activities are proposed along the roadside and will not remove oak trees. Understory vegetation to be impacted is dominated by invasive Himalayan blackberry. Riparian vegetation is present in the Study Area at UK.03 but will be fully avoided during construction. **No impacts** will occur to sensitive natural communities.



7.3 Aquatic Resources

This section analyzes the Project's potential impacts and mitigation for wetlands and other areas presumed or determined to be within the jurisdiction of the Corps or RWQCB in reference to the significance threshold outlined in CEQA Appendix G, Part IV (c):

c) Does the Project have the potential to have a substantial adverse effect on state or 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;

Aquatic resources located in the Study Area include intermittent streams located at UK.11, UK.21, and UK.22, and the drainage ditch at UK.10. The remaining drainage ditches within the Study Area are classified as non-jurisdictional upland.

Ground disturbance activities at UK.10 are estimated to be <0.01 acre (226 square feet) to concrete-lined channel, developed, and non-native grasslands for installation of a louvered panel on the existing concrete pad between the existing wingwalls, and an estimated 0.03 acre (1,300 square feet) of temporary ground disturbance to urban and non-native grasslands for staging (Figure 5a). Sediment has built up on the concrete-lined portion of the ditch, allowing for the establishment of non-native wetland plants in a small area; these plants and sediment will be removed for installation of the device.

Ground disturbance activities at UK.11 are estimated to be <0.01 acre (50 square feet) to install a small-scale CPS in an existing catch basin that will be enlarged slightly to accommodate the CPS, and an estimated 0.02 acre (750 square feet) of temporary ground disturbance to urban and non-native grasslands for staging. Hensley Creek is approximately 70 feet from the capture site, and neither the stream nor its riparian corridor will be disturbed by project activities.

Ground disturbance activities at UK.21 are estimated to be 0.02 acre (700 square feet; 70 linear feet) of concrete-lined stream, non-native grassland, and urban areas for installation of a netting device (Figure 5c) and an estimated 0.19 acre (8,276 square feet) of temporary disturbance of urban and non-native grassland for staging. Disturbance activities that will occur in the concrete-lined channel include removal of built-up sediment and vegetation and installation of the device. Sediment has built up on the concrete-lined portion of the stream, allowing for the establishment of native and non-native wetland plants along the edges of the channel; these plants and sediment will be removed for installation of the device.

Ground disturbance activities at UK.22 are estimated to be 0.02 acre (1,048 square feet; 37 linear feet) of permanent impact for construction of a concrete pad and wingwalls and installation and of louvered panel device and an estimated 0.09 acre (4,120 sq. ft.) of temporary disturbance to urban and non-native grassland for staging (Figure 5d). Permanent impact includes converting 0.01 acre (589 square feet) of earthen stream channel and banks and <0.01 acre (489 square feet) of invasive Himalayan blackberry, urban land, and non-native grassland for installation of a cement structure and capture device.

The placement and operation of devices at UK.10 and UK.21 are modifications to existing structures and are determined to have a less than significant impact on aquatic resources. No conversion of land cover will occur and the devices are not considered fill. As the function of



each device is to use the flow of water in the channel to remove trash, impacts to flow are considered less than significant. Removal of wetland vegetation at each of the locations is also considered a less than significant impact because the area to be removed is not substantial and can therefore be reasonably presumed to not create a substantial adverse effect on the aquatic resource. Additionally, the devices will improve the condition of the aquatic feature by reducing the amount of trash, a pollutant, that enters it.

Trash capture device installation at UK.22 will convert approximately 0.01 acre (589 square feet) of intermittent stream channel and banks to concrete and is considered a permanent impact. However, due to the necessary design elements of the device, the small area of impact, and the benefit to water quality and habitat values from the device, the impact is considered less than significant.

CAPTURE SITE	TRASH CAPTURE DEVICE TYPE AND SITE DESCRIPTION	GROUND DISTURBANCE	POTENTIAL IMPACT TO WETLANDS/WATERS
UK.10	Large-scale Louvered Panel on concrete pad at outlet of culvert, approximately 30 feet from end of wing wall to end of wing wall and 2 feet in height. Construction to remain within existing concrete pad.	226 sq. ft.	Temporary impact: Removal of non- native wetland vegetation within existing concrete structure
UK.11	Small-scale CPS within existing catch basin to be expanded	50 sq. ft.	No jurisdictional impacts
UK.18a	Large-scale HDS or baffle box under N. Lovers Lane	200 sq. ft.	No jurisdictional impacts
UK.20	Large-scale HDS or Baffle Box within developed parking lot; drainage ditch adjacent to work site will not be disturbed by project activities.	200 sq. ft.	No jurisdictional impacts
UK.21	Large-scale Louvered Panel in concrete-lined, vegetated stream channel. Will require dual, 36-inch diameter tubes each 25 feet in length.	700 sq. ft.	Temporary impact: Removal of sediment and vegetation from existing concrete- lined channel
UK.22	Large-scale Louvered Panel in vegetated stream channel. Will require concrete pad and concrete sidewalls for weir into dual 36-inch diameter tubes each approximately 15 feet in length.	1,048 sq. ft.	Construction of concrete pad and wingwalls and installation of device in earthen channel. Permanent impact to 589 sq. ft of earthen channel.

Table 5. Capture Sites and Potential Impacts to Wetlands and Waters



The Project will have temporary in-water work to install trash capture devices, but all work is extremely localized, discrete, and BMPs will be implemented. As the Project will improve conditions of the intermittent streams through removal of trash, will include BMPs for water quality, will not have a substantial impact on sensitive biological resources, and regulatory permit conditions will be observed, the impact from the Project on aquatic resources is **less than significant** and no mitigation measures are necessary.

7.4 Wildlife Corridors and Native Wildlife Nursery Sites

This section analyzes the Project's potential impacts and mitigation for habitat corridors and linkages in reference to the significance threshold outlined in CEQA Appendix G, Part IV (d):

d) Does the Project have the potential to 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;

As noted in Section 5.3, no portions of the Study Area provide connectivity between areas of suitable habitat. For terrestrial species, all portions of the Study Area are within a greater context of urban development, and for aquatic species, there is no connectivity between the Study Area and freshwater habitats including the Russian River. All work is temporary and discrete, and the Project will not create a barrier to movement during or post construction. **No impact** will occur to migratory corridors for terrestrial and aquatic species.

7.5 Local Policies and Ordinances

This section analyzes the Project's potential impacts and mitigation based on conflicts with local policies and ordinances in reference to the significance threshold outlined in CEQA Appendix G, Part IV (e):

e) Does the Project have the potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;

The Project does not conflict with local policies or ordinances regarding biological resources.

7.6 Habitat Conservation Plans

This section analyzes the Project's potential impacts and mitigation based on conflicts with any adopted local, regional, and state habitat conservation plans in reference to the significance threshold outlined in CEQA Appendix G, Part IV (f):

f) Does the Project have the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

There are no local, regional, or state habitat conservation plans for the region of the Study Area.



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APPENDIX A. FIGURES



APPENDIX B. SPECIES⁴ OBSERVED IN AND AROUND THE STUDY AREA

SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³
Agrostis sp.	Bentgrass	non-native	annual, perennial	-	-	-
			grass			
Artemisia douglasiana	California mugwort	native	perennial herb	-	-	FAC
Avena barbata	Slim oat	non-native (invasive)	annual, perennial	-	Moderate	-
			grass			
Azolla sp.	Mosquito fern	native	fern	-	-	OBL
Baccharis pilularis	Coyote brush	native	shrub	-	-	-
Bellis perennis	English lawn daisy	non-native	perennial herb	-	-	-
Brassica rapa	Common mustard	non-native (invasive)	annual herb	-	Limited	FACU
Briza maxima	Rattlesnake grass	non-native (invasive)	annual grass	-	Limited	-
Bromus diandrus	Ripgut brome	non-native (invasive)	annual grass	-	Moderate	-
Bromus hordeaceus	Soft chess	non-native (invasive)	annual grass	-	Limited	FACU
Cardamine oligosperma	Idaho bittercress	native	annual, perennial herb	-	-	FAC
Carex barbarae	Valley sedge	native	perennial grasslike herb	-	-	FAC
Centaurea solstitialis	Yellow starthistle	non-native (invasive)	annual herb	-	High	-
Cichorium intybus	Chicory	non-native	perennial herb	-	-	FACU
Claytonia perfoliata	Miner's lettuce	native	annual herb	-	-	FAC
Conium maculatum	Poison hemlock	non-native (invasive)	perennial herb	-	Moderate	FACW
Cynodon dactylon	Bermuda grass	non-native (invasive)	perennial grass	-	Moderate	FACU
Cynosurus echinatus	Dogtail grass	non-native (invasive)	annual grass	-	Moderate	-

Plant Species Observed within the Study Area during the Biological Resources Assessment in November 2022 and April 2023.

⁴ Observed wildlife species list was not conducted during the wildlife assessment.



SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³
Cyperus eragrostis	Tall cyperus	native	perennial grasslike herb	-	-	FACW
Daucus carota	Carrot	non-native	perennial herb	-	-	UPL
Epilobium campestre	Smooth boisduvalia	native	annual herb	-	-	OBL
Erodium botrys	Big heron bill	non-native	annual herb	-	-	FACU
Eschscholzia californica	California poppy	native	annual, perennial herb	-	-	-
Festuca myuros	Rattail sixweeks grass	non-native (invasive)	annual grass	-	Moderate	FACU
Festuca perennis	Italian rye grass	non-native (invasive)	annual, perennial grass	-	Moderate	FAC
Foeniculum vulgare	Fennel	non-native (invasive)	perennial herb	-	High	-
Geranium molle	Crane's bill geranium	non-native	annual, perennial herb	-	-	-
Hedera helix	English ivy	non-native (invasive)	vine, shrub	-	High	FACU
Hirschfeldia incana	Short-podded mustard	non-native (invasive)	perennial herb	-	Moderate	-
Hordeum marinum ssp. gussoneanum	Mediterranean barley	non-native (invasive)	annual grass	-	Moderate	FAC
Lamium amplexicaule	Henbit	non-native	annual herb	-	-	-
Lemna sp.	Duckweed	native	perennial herb	-	-	OBL
Leontodon saxatilis	Hawkbit	non-native	annual herb	-	-	FACU
Lysimachia arvensis	Scarlet pimpernel	non-native	annual herb	-	-	FAC
Morus sp.	Mulberry	non-native	tree	-	-	-
Nasturtium officinale	Watercress	native	perennial herb (aquatic)	-	-	OBL
Oenanthe sarmentosa	Water parsley	native	perennial herb	-	-	OBL
Paspalum dilatatum	Dallis grass	non-native	perennial grass	-	-	FAC
Persicaria sp.	Smartweed	native	perennial herb	-	-	FACW
Phalaris aquatica	Harding grass	non-native (invasive)	perennial grass	-	Moderate	FACU
Plantago lanceolata	Ribwort	non-native (invasive)	perennial herb	-	Limited	FAC
Poa annua	Annual blue grass	non-native	annual grass	-	-	FAC



SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³
Polygonum aviculare	Prostrate knotweed	non-native	annual, perennial herb	-	-	FAC
Populus fremontii ssp. fremontii	Fremont cottonwood	native	tree	-	-	FAC
Quercus lobata	Valley oak	native	tree	-	-	FACU
Quercus wislizeni var. wislizeni	Interior live oak	native	tree, shrub	-	-	-
Robinia sp.	Black Locust	non-native	tree	-	-	-
Rubus armeniacus	Himalayan blackberry	non-native (invasive)	shrub	-	High	FAC
Rubus ursinus	California blackberry	native	vine, shrub	-	-	FAC
Rumex conglomeratus	Green dock	non-native	perennial herb	-	-	FACW
Rumex crispus	Curly dock	non-native (invasive)	perennial herb	-	Limited	FAC
Salix exigua	Narrowleaf willow	native	tree, shrub	-	-	FACW
Salix lasiandra	Pacific willow	native	tree	-	-	FACW
Salix lasiolepis	Arroyo willow	native	tree, shrub	-	-	FACW
Senecio vulgaris	Common groundsel	non-native	annual herb	-	-	FACU
Sequoia sempervirens	Coast redwood	native	tree	-	-	-
Silybum marianum	Milk thistle	non-native (invasive)	annual, perennial herb	-	Limited	-
Stellaria media	Chickweed	non-native	annual herb	-	-	FACU
Trifolium hirtum	Rose clover	non-native (invasive)	annual herb	-	Limited	-
Trifolium subterraneum	Subterranean clover	non-native	annual herb	-	-	-
Typha latifolia	Broadleaf cattail	native	perennial herb	-	-	OBL
Umbellularia californica	California bay	native	tree	-	-	FAC
Veronica anagallis- aquatica	Water speedwell	non-native	perennial herb	-	-	OBL

Note: All species identified using the Jepson eFlora [Jepson Flora Project (eds.) 2023]; nomenclature follows Jepson eFlora [Jepson Flora Project (eds.) 2023] or Rare Plant Inventory (CNPS 2023). Sp.: "species", intended to indicate that the observer was confident in the identity of the genus but uncertain which species.

¹ California Native Plant Society. 2023a. Rare Plant Inventory (online edition, v9.5). Sacramento, California. Online at: http://rareplants.cnps.org/; most recently accessed: April 2023.

FE: Federal Endangered

FT:	Federal Threatened
SE:	State Endangered
ST:	State Threatened
SR:	State Rare
Rank 1A:	Plants presumed extinct in California
Rank 1B:	Plants rare, threatened, or endangered in California and elsewhere
Rank 2:	Plants rare, threatened, or endangered in California, but more common elsewhere
Rank 3:	Plants about which we need more information – a review list
Rank 4:	Plants of limited distribution – a watch list

² California Invasive Plant Council. 2023. California Invasive Plant Inventory Database. California Invasive Plant Council, Berkeley, CA. Online at: http://www.calipc.org/paf/; most recently accessed: September 2023

High:	Severe ecological impacts; high rates of dispersal and establishment; most are widely distributed ecologically.
Moderate:	Substantial and apparent ecological impacts; moderate-high rates of dispersal, establishment dependent on disturbance; limited-
	moderate distribution ecologically
Limited:	Minor or not well documented ecological impacts; low-moderate rate of invasiveness; limited distribution ecologically
Assessed:	Assessed by Cal-IPC and determined to not be an existing current threat

³ U.S. Army Corps of Engineers. 2023. National Wetland Plant List, version 3.5. Engineer Research and Development Center. Cold Regions Research and Engineering Laboratory, Hanover, NH. Online at: http://wetland-plants.usace.army.mil/

OBL:	Almost always found in wetlands
FACW:	Usually found in wetlands
FAC:	Equally found in wetlands and uplands
FACU:	Usually not found in wetlands
UPL:	Almost never found in wetlands
NL:	Not listed, assumed almost never found in wetlands
NI:	No information; not factored during wetland delineation



APPENDIX C. SPECIAL-STATUS SPECIES POTENTIAL TABLE

Potential for Special-Status Plant and Wildlife Species to Occur within the Study Area.

List Compiled from the California Department of Fish and Wildlife Natural Diversity Database (CDFW 2024a), U.S. Fish and Wildlife Service Information for Planning and Consultation Species Lists (USFWS 2024a), and California Native Plant Society Rare Plant Inventory (CNPS 2024a) search of the Ukiah and surrounding eight U.S. Geological Survey 7.5' quadrangles.

SCIENTIFIC NAME	STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS²		
PLANTS						
Franciscan onion Allium peninsulare var. franciscanum	Rank 1B.2	Cismontane woodland, valley and foothill grassland. Elevation ranges from 170 to 1000 feet (52 to 305 meters). Blooms (Apr)May-Jun.	Unlikely . The Study Area does not include serpentine soils.	Not Present . No Recommendations for this species.		
Raiche's manzanita Arctostaphylos stanfordiana ssp. raichei	Rank 1B.1	Chaparral, lower montane coniferous forest (openings). Elevation ranges from 1475 to 3395 feet (450 to 1035 meters). Blooms Feb-Apr.	No Potential . The Study Area does not include chaparral or conifer forest nor is underlain by serpentine soils.	Not Present . No Recommendations for this species.		
Brewer's milk-vetch Astragalus breweri	Rank 4.2	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland (openings, often gravelly). Elevation ranges from 295 to 2395 feet (90 to 730 meters). Blooms Apr-Jun.	Unlikely . The Study Area does not include chaparral or meadows and limited woodland habitat. Grassland present is highly disturbed and unlikely to support this species.	Not Present . No Recommendations for this species.		
Sonoma sunshine Blennosperma bakeri	FE, SE, Rank 1B.1	Valley and foothill grassland (mesic), vernal pools. Elevation ranges from 35 to 360 feet (10 to 110 meters). Blooms Mar-May.	No Potential . The Study Area does not include vernal pools or seasonal wetlands.	Not Present . No Recommendations for this species.		
watershield Brasenia schreberi	Rank 2B.3	Marshes and swamps (freshwater). Elevation ranges from 0 to 7220 feet (0 to 2200 meters). Blooms Jun-Sep.	Unlikely . The streams within the Study Area have little to no marsh habitat.	Not Present. No Recommendations for this species.		
bristly sedge Carex comosa	Rank 2B.1	Coastal prairie, marshes and swamps (lake margins), valley and foothill grassland. Elevation ranges from 0 to 2050 feet (0 to 625 meters). Blooms May-Sep.	No Potential . The Study Area does not include lakes and species occurs in less urban locations.	Not Present . No Recommendations for this species.		
Rincon Ridge ceanothus Ceanothus confusus	Rank 1B.1	Chaparral, cismontane woodland, closed-cone coniferous forest. Elevation ranges from 245 to 3495 feet (75 to 1065 meters). Blooms Feb-Jun.	No Potential . The Study Area does not include chaparral, or conifer forest and is not underlain by volcanic or serpentine soils.	Not Present. No Recommendations for this species.		



SCIENTIFIC NAME	STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS²
California lady's-slipper Cypripedium californicum	Rank 4.2	Bogs and fens, lower montane coniferous forest. Elevation ranges from 100 to 9025 feet (30 to 2750 meters). Blooms Apr-Aug(Sep).	No Potential . The Study Area does not include bogs/fens or conifer forest underlain by serpentine soils.	Not Present . No Recommendations for this species.
mountain lady's-slipper Cypripedium montanum	Rank 4.2	Broadleafed upland forest, cismontane woodland, lower montane coniferous forest, north coast coniferous forest. Elevation ranges from 605 to 7300 feet (185 to 2225 meters). Blooms Mar- Aug.	Unlikely . The Study Area does not include conifer forest and limited woodland habitat. Woodland habitat understory dominated by invasive species that likely preclude this species.	Not Present . No Recommendations for this species.
bare monkeyflower Erythranthe nudata	Rank 4.3	Chaparral, cismontane woodland. Elevation ranges from 655 to 2295 feet (200 to 700 meters). Blooms May-Jun.	No Potential . The Study Area is not underlain by serpentine soils.	Not Present. No Recommendations for this species.
stinkbells Fritillaria agrestis	Rank 4.2	Chaparral, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Elevation ranges from 35 to 5100 feet (10 to 1555 meters). Blooms Mar-Jun.	Unlikely . The Study Area is not underlain by heavy clay soils.	Not Present . No Recommendations for this species.
Purdy's fritillary Fritillaria purdyi	Rank 4.3	Chaparral, cismontane woodland, lower montane coniferous forest. Elevation ranges from 575 to 7400 feet (175 to 2255 meters). Blooms Mar-Jun.	Unlikely . The Study Area does not include conifer forest or chaparral and limited woodland with a dominance of non- native shrubs that would likely exclude this species.	Not Present . No Recommendations for this species.
Roderick's fritillary Fritillaria roderickii	SE, Rank 1B.1	Coastal bluff scrub, coastal prairie, valley and foothill grassland. Elevation ranges from 50 to 1310 feet (15 to 400 meters). Blooms Mar-May.	No Potential . The Study Area is not located along the coast. This species is considered synonymous with F. biflora, which is not considered sensitive.	Not Present . No Recommendations for this species.
Boggs Lake hedge-hyssop Gratiola heterosepala	SE, Rank 1B.2	Marshes and swamps (lake margins), vernal pools. Elevation ranges from 35 to 7790 feet (10 to 2375 meters). Blooms Apr-Aug.	No Potential . The Study Area does not include lake margins or vernal pools.	Not Present . No Recommendations for this species.
Mendocino tarplant Hemizonia congesta ssp. calyculata	Rank 4.3	Cismontane woodland, valley and foothill grassland. Elevation ranges from 740 to 4595 feet (225 to 1400 meters). Blooms Jul-Nov.	Unlikely . While the Study Area includes grassland habitat this species typically occurs in forest openings which are not present.	Not Present. No Recommendations for this species.
Tracy's tarplant Hemizonia congesta ssp. tracyi	Rank 4.3	Coastal prairie, lower montane coniferous forest, north coast coniferous forest. Elevation ranges from 395 to 3935 feet (120 to 1200 meters). Blooms (Mar-Apr)May-Oct.	Unlikely . The Study Area is not located very near the coast nor includes conifer forest.	Not Present . No Recommendations for this species.



SCIENTIFIC NAME	STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS²
glandular western flax Hesperolinon adenophyllum	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 490 to 4315 feet (150 to 1315 meters). Blooms May-Aug.	No Potential . The Study Area does not include serpentine soils.	Not Present . No Recommendations for this species.
Bolander's horkelia Horkelia bolanderi	Rank 1B.2	Chaparral, lower montane coniferous forest, meadows and seeps, valley and foothill grassland. Elevation ranges from 1475 to 3610 feet (450 to 1100 meters). Blooms (May)Jun-Aug.	Unlikely . The Study Area does not include vernal pools or wet meadows.	Not Present . No Recommendations for this species.
small groundcone Kopsiopsis hookeri	Rank 2B.3	Lower montane coniferous forest, north coast coniferous forest, upper montane coniferous forest. Elevation ranges from 295 to 2905 feet (90 to 885 meters). Blooms Apr-Aug.	No Potential . The Study Area does not include conifer forest.	Not Present . No Recommendations for this species.
Burke's goldfields Lasthenia burkei	FE, SE, Rank 1B.1	Meadows and seeps (mesic), vernal pools. Elevation ranges from 50 to 1970 feet (15 to 600 meters). Blooms Apr-Jun.	Unlikely . The Study Area does not include vernal pools or wet meadows.	Not Present . No Recommendations for this species.
Colusa layia Layia septentrionalis	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 330 to 3595 feet (100 to 1095 meters). Blooms Apr-May.	Unlikely . The Study Area does not include chaparral and has low quality woodland habitat that is dominated by non-native shrubs in the understory.	Not Present . No Recommendations for this species.
bristly leptosiphon Leptosiphon aureus	Rank 4.2	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Elevation ranges from 180 to 4920 feet (55 to 1500 meters). Blooms Apr-Jul.	Unlikely . While the Study Area includes grassland habitat, this species typically occurs in less disturbed locations and in openings in woodlands.	Not Present . No Recommendations for this species.
broad-lobed leptosiphon Leptosiphon latisectus	Rank 4.3	Broadleafed upland forest, cismontane woodland. Elevation ranges from 560 to 4920 feet (170 to 1500 meters). Blooms Apr-Jun.	Unlikely . The Study Area does not include woodland habitat with a grassland understory.	Not Present . No Recommendations for this species.
woolly-headed lessingia Lessingia hololeuca	Rank 3	Broadleafed upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 50 to 1000 feet (15 to 305 meters). Blooms Jun-Oct.	Unlikely . The Study Area has limited woodland habitat and the grassland habitat is highly disturbed. Additionally, the soils are not serpentine or clay.	Not Present . No Recommendations for this species.


SCIENTIFIC NAME	STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS²
redwood lily Lilium rubescens	Rank 4.2	Broadleafed upland forest, chaparral, lower montane coniferous forest, north coast coniferous forest, upper montane coniferous forest. Elevation ranges from 100 to 6265 feet (30 to 1910 meters). Blooms (Mar)Apr-Aug(Sep).	No Potential . The Study Area does not include forest or typical woodland habitat for this species.	Not Present . No Recommendations for this species.
Baker's meadowfoam Limnanthes bakeri	SR, Rank 1B.1	Marshes and swamps (freshwater), meadows and seeps, valley and foothill grassland (vernally mesic), vernal pools. Elevation ranges from 575 to 2985 feet (175 to 910 meters). Blooms Apr-May.	Unlikely . The Study Area lacks wetlands.	Not Present . No Recommendations for this species.
Mendocino bush-mallow Malacothamnus mendocinensis	Rank 1B.1	Chaparral, cismontane woodland. Elevation ranges from 705 to 755 feet (215 to 230 meters). Blooms Jun-Aug.	Unlikely . The Study Area does not include chaparral and has low quality woodland habitat that is dominated by non-native shrubs in the understory.	Not Present . No Recommendations for this species.
green monardella Monardella viridis	Rank 4.3	Broadleafed upland forest, chaparral, cismontane woodland. Elevation ranges from 330 to 3315 feet (100 to 1010 meters). Blooms Jun-Sep.	No Potential . The Study Area does not contain chaparral or is underlain by volcanic soils.	Not Present . No Recommendations for this species.
Baker's navarretia Navarretia leucocephala ssp. bakeri	Rank 1B.1	Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools. Elevation ranges from 15 to 5710 feet (5 to 1740 meters). Blooms Apr-Jul.	No Potential. The Study Area does not include vernal pools or alkali soils.	Not Present . No Recommendations for this species.
Gairdner's yampah Perideridia gairdneri ssp. gairdneri	Rank 4.2	Broadleafed upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 2000 feet (0 to 610 meters). Blooms Jun-Oct.	Unlikely . The Study Area does not include vernally wet places.	Not Present . No Recommendations for this species.
white-flowered rein orchid Piperia candida	Rank 1B.2	Broadleafed upland forest, lower montane coniferous forest, north coast coniferous forest. Elevation ranges from 100 to 4300 feet (30 to 1310 meters). Blooms (Mar-Apr)May-Sep.	No Potential . The Study Area does not include forest or typical woodland habitat for this species.	Not Present . No Recommendations for this species.
Mayacamas popcornflower Plagiobothrys lithocaryus	Rank 1A	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 985 to 1475 feet (300 to 450 meters). Blooms Apr-May.	Unlikely . The Study Area does not include mesic grassland habitat and low-quality woodland habitat.	Not Present . No Recommendations for this species.



SCIENTIFIC NAME	STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS²	
North Coast semaphore grass Pleuropogon hooverianus	ST, Rank 1B.1	Broadleafed upland forest, meadows and seeps, north coast coniferous forest. Elevation ranges from 35 to 2200 feet (10 to 671 meters). Blooms Apr-Jun.	No Potential . The Study Area does not include mesic sites in woodland habitat.	Not Present . No Recommendations for this species.	
Lobb's aquatic buttercup Ranunculus lobbii	Rank 4.2	Cismontane woodland, north coast coniferous forest, valley and foothill grassland, vernal pools. Elevation ranges from 50 to 1540 feet (15 to 470 meters). Blooms Feb-May.	Unlikely . The Study Area does not include vernally mesic sites.	Not Present . No Recommendations for this species.	
Bolander's catchfly Silene bolanderi	Rank 1B.2	Chaparral (edges), cismontane woodland, lower montane coniferous forest, meadows and seeps, north coast coniferous forest. Elevation ranges from 1380 to 3775 feet (420 to 1150 meters). Blooms May-Jun.	No Potential . The Study Area does not include chaparral, or conifer forest.	Not Present . No Recommendations for this species.	
Hoffman's bristly jewelflower Streptanthus glandulosus ssp. hoffmanii	Rank 1B.3	Chaparral, cismontane woodland, valley and foothill grassland (often serpentine). Elevation ranges from 395 to 1560 feet (120 to 475 meters). Blooms Mar-Jul.	No Potential . The Study Area is not underlain by serpentine soils.	Not Present . No Recommendations for this species.	
beaked tracyina Tracyina rostrata	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 295 to 4165 feet (90 to 1270 meters). Blooms May-Jun.	Unlikely . The Study Area includes woodlands with dense understory and the grasslands are heavily disturbed and disturbance activities likely preclude this annual species.	Not Present . No Recommendations for this species.	
Santa Cruz clover Trifolium buckwestiorum	Rank 1B.1	Broadleafed upland forest, cismontane woodland, coastal prairie. Elevation ranges from 115 to 2000 feet (35 to 610 meters). Blooms Apr-Oct.	Unlikely . The Study Area is not located near the coast and does not include moist grassland habitat.	Not Present . No Recommendations for this species.	
oval-leaved viburnum Viburnum ellipticum	Rank 2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Elevation ranges from 705 to 4595 feet (215 to 1400 meters). Blooms May- Jun.	Unlikely . The Study Area includes a small area of woodland with an understory dominated by invasive shrubs which likely preclude this species.	Not Present . No Recommendations for this species.	
		WILDLIFE			
	MAMMALS				



SCIENTIFIC NAME	STATUS	НАВІТАТ	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS ²
Pallid bat - Antrozous pallidus	SSC, WBWG High Priority	Found in a variety of habitats ranging from grasslands to mixed forests, favoring open and dry, rocky areas. Roost sites include crevices in rock outcrops and cliffs, caves, mines, and also hollow trees and various manmade structures such as bridges, barns, and buildings (including occupied buildings). Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Unlikely. Potential roosting habitat include trees along busy, high-speed roads (i.e., North State Street or U.S. Highway 101). No open, foraging habitat occurs within the Study Area. The Study Area lacks rocky areas such as cliffs, caves or buildings to roost which are the species preferred roost locations. Due to these facts and the relatively high level of disturbance to potential roost sites, the species' potential to occur within the Study Area is low.	No further actions are recommended for this species.
Townsend's big-eared bat - Corynorhinus townsendii	SSC, WBWG High Priority	Associated with a wide variety of habitats from deserts to higher elevation mixed and coniferous forests. Females form maternity colonies in buildings, caves and mines, and males roost singly or in small groups. Foraging typically occurs at edge habitats near wooded areas, e.g., along streams.	Unlikely. Potential roosting habitat include trees along busy, high-speed roads (i.e., North State Street or U.S. Highway 101). Foraging habitat in the form of freshwater streams occur nearby the Study Area. The Study Area lacks open areas with buildings, caves, or mines to roost which are the species preferred roost locations. Due to these facts and the relatively high level of disturbance to potential roost sites, the species' potential to occur within the Study Area is low.	No further actions are recommended for this species.
Sonoma tree vole - Arborimus pomo	SSC	North coast fog belt from Oregon border to Sonoma County. Occurs 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.	Unlikely. The Study Area lacks the Douglas fir, redwood, or montane hardwood-conifer forested habitats where this species is typically found. No Douglas fir were observed within the Study Area during the several site visits, which the species almost exclusively feeds on. The nearest occurrence of this species known is from 6 miles due west in 1993 (CDFW 2023b).	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS	НАВІТАТ	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS ²
Fisher - Pekania pennanti	SSC	Intermediate to large-tree stages of coniferous forests and deciduous- riparian areas with high percent canopy closure. Use cavities, snags, logs and rocky areas for cover and denning. Need large areas of mature, dense forest.	Unlikely. The Study Area lacks the conifer forested habitats with dense canopy cover where this species is typically found. Only single or a scattering of riparian trees exist within the Study Area. The nearest occurrence of this species known is from 8.2 miles southeast in 1941 (CDFW 2023b).	No further actions are recommended for this species.
		BIRDS		
Tri-colored blackbird - Agelaius tricolor	ST, SSC	Nearly endemic to California, where it is most numerous in the Central Valley and vicinity. Highly colonial, nesting in dense aggregations over or near freshwater in emergent growth or riparian thickets. Also uses flooded agricultural fields. Abundant insect prey near breeding areas essential.	Unlikely. The Study Area lacks the freshwater habitats with dense aggregations of emergent vegetation (i.e., cattails, tule) or agricultural fields where this species is typically found. Riparian vegetation exists nearby the Study Area but is limited to small streams. The nearest occurrence of this species known is from 9.3 miles northeast in Potter Valley where a known colony have persisted since 2004 (CDFW 2023b).	No further actions are recommended for this species.
Grasshopper sparrow - Ammodramus savannarum	SSC	Summer resident. Breeds in open grasslands in lowlands and foothills, generally with low- to moderate- height grasses and scattered shrubs. Well-hidden nests are placed on the ground.	Unlikely. The Study Area lacks large, open grassland habitats where this species typically forages and nests. There are some small patches of ruderal non-native grasses, forbs, and shrubs, but these are likely too small and fragmented for a population to persist as these are surrounded by numerous commercial businesses and high-speed roads within the Study Area. The nearest occurrence of this species known is from 7.4 miles south in 1991 (CDFW 2023b).	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS	НАВІТАТ	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS ²
Northern goshawk - Accipiter gentilis	SSC	Year-round resident in extensive forest habitats, primarily those with old growth or otherwise mature stands of conifer and/or conifer/hardwood. Nests in trees. Preys on birds and mammals.	Unlikely. The Study Area lacks large, forested habitats where this species typically forages and nests. There are some small patches of riparian trees, but these are likely too small and fragmented for a population to persist as these are surrounded by numerous commercial businesses and high-speed roads within the Study Area. The only occurrence within the surrounding area is from 13.8 miles northeast in 1999 (CDFW 2023b).	No further actions are recommended for this species.
Northern spotted owl - Strix occidentalis caurina	ST, FT, SCC	Year-round resident in dense, structurally complex forests, primarily those with old-growth conifers. In Marin County, uses both coniferous and mixed (coniferous-hardwood) forests. Nests on platform-like substrates in the forest canopy, including in tree cavities. Preys on mammals.	Unlikely. The Study Area lacks dense, forested habitats with old-growth conifers or hardwoods where this species typically forages and nests. There are some small patches of riparian trees, but these are likely too small and fragmented for a population to persist as these are surrounded by numerous commercial businesses and high-speed roads within the Study Area. There are no documented occurrences of this species within the surrounding area (CDFW 2023b). This species generally occurs in more forest habitats to the east in Goat Mountain or along the coast north of Point Arena (Cornell 2023).	No further actions are recommended for this species.
Western yellow-billed cuckoo - <i>Coccyzus</i> americanus occidentalis	SE, FT	Summer resident, breeding in dense riparian forests and jungles, typically with early successional vegetation present. Utilizes densely foliaged deciduous trees and shrubs. Eats mostly caterpillars. Current breeding distribution within California very restricted.	Unlikely. The Study Area lacks riparian habitats with dense aggregations of emergent vegetation where this species typically forages and nests. There are some small patches of deciduous trees, but these are isolated and surrounded by numerous commercial businesses and high-speed roads within the Study Area. The nearest occurrence within the surrounding area is from 26.7 miles west in 1997 (Cornell 2023).	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS	НАВІТАТ	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS ²
Western snowy plover - Charadrius nivosus nivosus	FT, SSC	Federal listing applies only to the Pacific coastal population. Year-round resident and winter visitor. Occurs on sandy beaches, salt pond levees, and the shores of large alkali lakes. Nests on the ground, requiring sandy, gravelly or friable soils.	No Potential. The Study Area does not possess sandy beaches, salt pond levees, or the shores of large alkali lakes where this species nests and forages.	No further actions are recommended for this species.
		REPTILES & AMPH	IIBIANS	
Foothill yellow-legged frog - Rana boylii pop. 1	SSC	Found in or adjacent to rocky streams in a variety of habitats. Prefers partly shaded, shallow streams and riffles with a rocky substrate; requires at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis. Feeds on both aquatic and terrestrial invertebrates.	Unlikely. The Study Area does not contain rocky, shallow streams with riparian vegetation or basking habitat suitable for foraging and breeding habitat for this species. Several dozen breeding occurrences of this species have been documented within the immediate vicinity of the Study Area. The closest occurrence was within 1 mile east of the Study Area in 2016 (CDFW 2023b). The Study Area is urbanized with numerous high-speed roads that act as dispersal barriers that limit their use as migratory corridors for this species between nearby occupied sites.	No further actions are recommended for this species.
Red-bellied salamander - Taricha rivularis	SSC	Inhabits coastal forests from southern Sonoma County northward, with an isolated population in Santa Clara County. Redwood forest provides typical habitat, though other forest types (e.g., hardwood) are also occupied. Adults are terrestrial and fossorial. Breeding occurs in streams, usually with relatively strong flow.	Unlikely. The Study Area lacks the forested stream and seep habitats where this species is typically found. The tributaries to the west may support populations of this species; however, these habitats are not present within the Study Area. This species was previously found within the Study Area in 1939 (CDFW 2023b). More recent occurrences of this species reside within the forested areas of Cleland Mountains to the east with the nearest being approximately 0.7 miles in 1985 to the south (CDFW 2023b).	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS²
Western pond turtle - Emys marmorata	FP, SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	Unlikely. The Study Area does not have ponds, irrigation ditches, or other aquatic features with suitable aquatic conditions or basking habitat to support this species. Several breeding occurrences of this species have been documented within the immediate vicinity of the Study Area. The closest occurrence was within 0.2 mile east of the Study Area in 2004 (CDFW 2023b). The Study Area is urbanized with numerous high-speed roads that act as dispersal barriers that limit their use as migratory corridors for this species between nearby occupied sites.	No further actions are recommended for this species.
		FISH		
Clear Lake Tule perch - Hysterocarpus traskii lagunae	SSC	Tule Perch are most often found in low-elevation lakes, streams, and estuarine environments. Within a river or stream Tule Perch tend to occupy deep pools that have complex cover in the form of aquatic and overhanging vegetation. They feed on invertebrates, plants, and zooplankton, mostly by swimming along the bottom of the stream. In addition, these fish are found near tules in areas where the lake floor is made up of gravel and or sand.	No Potential. The Study Area is outside the range of this species as it is only found in Clear, Lower Blue, and Upper Blue Lakes.	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS²
Steelhead - central CA coast DPS summer run - Oncorhynchus mykiss irideus pop. 48	SE, FT	The federal designation refers to populations occurring below impassable barriers in coastal basins from Redwood Creek to, and including, the Gualala River. The state designation refers only to the summer- run. The majority of adult steelhead enter the river in the fall or winter and spawn in early winter or spring, although summer-run steelhead enter rivers in late spring to early summer. Spawn in cool, clear streams with high dissolved oxygen and gravel riffle substrate. Deeper pools with sufficient riparian cover for rearing are necessary for successful breeding.	Unlikely. The Study Area is outside the known distribution of where this species is typically found. The tributaries to the west may support populations of this species; however, these habitats are not present within the Study Area. The nearest occurrence of this species is approximately 6.3 miles west in 2014 in the north fork of the Navarro River which is in a different watershed (CDFW 2023b).	No further actions are recommended for this species.
Steelhead - central CA coast DPS winter run - <i>Oncorhynchus mykiss irideus</i> pop. 49	FT	The federal designation refers to populations occurring below impassable barriers in coastal basins from Redwood Creek to, and including, the Gualala River. The state designation refers only to the summer- run. The majority of adult steelhead enter the river in the fall or winter and spawn in early winter or spring, although summer-run steelhead enter rivers in late spring to early summer. Spawn in cool, clear streams with high dissolved oxygen and gravel riffle substrate. Deeper pools with sufficient riparian cover for rearing are necessary for successful breeding.	Unlikely. The Study Area is near the known distribution of this species within the Russian River and nearby tributaries including Ackerman, York and Forsythe Creeks. However, suitable flows and habitats for steelhead spawning, rearing and migration are not present within the Study Area (CDFW 2023b).	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS	НАВІТАТ	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS²
Coho salmon - southern Oregon/northern California ESU Oncorhynchus kisutch	FT, ST, SSC	Occurs in inland and in coastal marine waters from the Cape Blanco, Oregon, through Punta Gorda, California. Adult coho salmon enter fresh water from September through January to spawn. Requires beds of medium to small gravel substrate and sufficient dissolved oxygen for spawning. Rearing habitat consists of riparian cover, cool water and sufficient dissolved oxygen.	Unlikely. The Study Area is within the species' designated Essential Fish Habitat (NMFS 2023). However, the Russian River and its tributaries including Ackerman and York Creeks, which are within 150 feet of the Study Area, are not known to support populations of this species. The closest known distribution of this species in the Russian River is in Alexander Valley approximately 41 miles to south where numerous dispersal barriers occur (CDFW 2023b).	No further actions are recommended for this species.
Chinook salmon – California coastal ESU Oncorhynchus tshawytscha	FT	California Coastal Chinook Salmon ESU includes all naturally spawned populations of Chinook salmon from rivers and streams south of the Klamath River (exclusive) to the Russian River (inclusive). Adult numbers depend on pool depth and volume, amount of cover, and proximity to gravel. Water temps >27 degrees C lethal to adults.	Unlikely. This species' known distribution occurs within the reaches of the Russian River, designated as Critical Habitat, in proximity to the Study Area (CDFW 2023b). However, aquatic features in the Study Area do not provide suitable freshwater spawning, rearing and migratory habitat to support the presence of this species.	No further actions are recommended for this species.
		INVERTEBRAT	TES	
Western bumble bee - Bombus occidentalis	Under federal review	Formerly common throughout much of western North America; populations from southern British Columbia to central California have nearly disappeared (Xerces 2015). Occurs in a wide variety of habitat types. Nests are constructed annually in pre- existing cavities, usually on the ground (e.g., mammal burrows). Many plant species are visited and pollinated.	No Potential. The Study Area is outside the current known distribution of the species. Only one occurrence in the surrounding area 9.3 miles west in 1949 (CDFW 2023b).	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ¹	RECOMMENDATIONS²
Monarch butterfly - Danaus plexippus plexippus pop. 1	FC, CDFW overwinter ing sites protected	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	Unlikely. The Study Area is outside of the overwintering range of the species. The species may pass through during migration or seasonally nectaring; however, the urban and ruderal habitats present do not provide consistent nectar sources and no milkweed species were observed. No occurrences are documented in CNDDB. The nearest occurrence is 8.6 miles south near Hopland in 2016 (Xerces Society 2023). The nearest monarch wintering occurrence is 21 miles west in Camptche in 2020 (Xerces Society 2023).	No further actions are recommended for this species.

FE:	Federal Endangered
FP:	Federal Proposed
FT:	Federal Threatened
SE:	State Endangered
ST:	State Threatened
SR:	State Rare
Rank 1A:	Plants presumed extinct in California
Rank 1B:	Plants rare, threatened, or endangered in California and elsewhere
Rank 2:	Plants rare, threatened, or endangered in California, but more common elsewhere
Rank 3:	Plants about which we need more information – a review list
Rank 4:	Plants of limited distribution – a watch list

Potential for Occurrence:

No Potential. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

Unlikely. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

Present. Species was observed on the site or has been recorded (i.e., CNDDB, other reports) on the site recently.

Results and Recommendations:



Present: Species was observed on the site or has been recorded (i.e., CNDDB, other reports) on the site recently.

Assumed Present: Species is assumed to be present on-site based on the presence of key habitat components.

Assumed Present without Impact: Species assumed present; however, project activities will not have an impact on the species.

Presumed Absent: Species is presumed to not be present due to a lack of key habitat components.

Not Present: Species is considered not present due to a clear lack of any suitable habitat and/or local range limitations.

Not Observed: Species was not observed during dedicated/formal surveys.

Presence Unknown: Species has the potential to be present, but no dedicated surveys to determine absence/presence were performed.



APPENDIX D. REPRESENTATIVE PHOTOGRAPHS