



Environmental Reconnaissance Survey

Covelo/Round Valley Non-Motorized Needs Assessment and
Engineered Feasibility Study

April 2013

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Appendix E (U.S. Fish and Wildlife Service Status Ranks, Global and State Ranking and California Native Plant Society Rarity Rankings)

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1. Introduction

1.1 Project Summary

This consolidated report addresses a project in Round Valley and the community of Covelo with elements funded by separate grants. The purpose of MCOG's Environmental Justice (EJ) project is to prepare a non-motorized needs technical study, which will identify improvements for bicycle and pedestrian access to schools, services, Tribal facilities and other destinations on County and Tribal roads. The EJ project area includes Howard Street, Foothill Boulevard and other major roads identified in the 2010 *Walk/Bike Path and Community Revitalization Strategy*.

The purpose of the Caltrans State Planning & Research (SP&R) grant project is to prepare an engineered feasibility study for improving SR 162 for bicycle and pedestrian use. The project limits are from postmile 28.58 to 30.72 on SR 162, which includes improvements within downtown Covelo.

1.2 Purpose of the Report

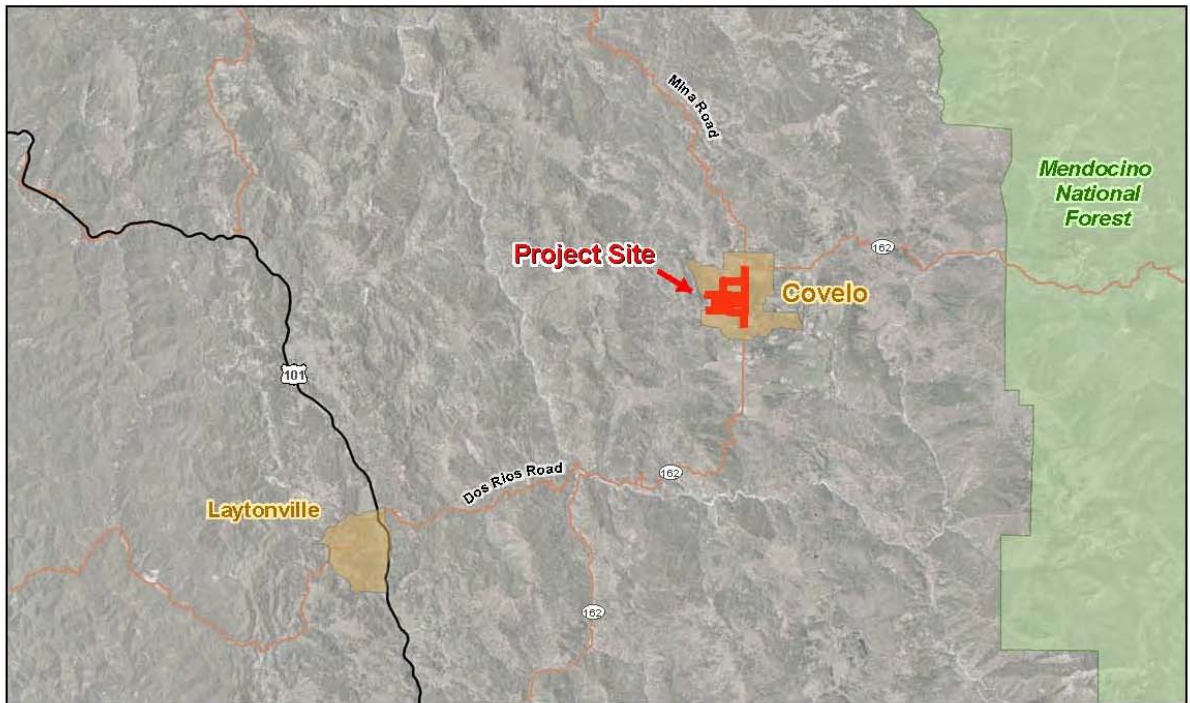
This Environmental Reconnaissance Report is intended to document the biological conditions/constraints throughout the study area. A reconnaissance-level site investigation of existing conditions was conducted throughout the study area in March 2013, to identify the presence or potential presence of biological resources listed under the Federal Endangered Species Act (ESA), the presence or potential presence of species listed as endangered or threatened under the California Endangered Species Act (CESA) or considered a species of special concern (SSC) by the California Department of Fish and Wildlife (CDFW), or the potential for special-status plant species having a rare plant ranking as determined by the California Native Plant Society (CNPS) rare plant inventory, and to present the potential of sensitive habitats as listed by the CDFW. This report also discusses the necessary steps required for the project to comply with federal, state, and local regulatory environmental compliance requirements and provides basic permit information. No permits or environmental compliance documents were collected, initiated, or completed for this effort, nor were regulatory agencies contacted for additional information.

1.3 Location

This Environmental Reconnaissance is being undertaken in Covelo, a census designated place located in Round Valley, Mendocino County, California. Covelo is approximately 14 miles northeast of Laytonville and can be accessed from California State Route (SR) 162 off-of highway 101. A vicinity map is included as Figure 1. The SR 162 corridor is the primary north-south route between the town of Covelo and the Round Valley Indian Reservation's administrative services, including a health center and Tribal offices. The State highway acts as the central collector through the community, intersecting County roads, and creating a series of local access routes to schools, housing centers and other services. Route 162 is a 22 – 26' wide, two-lane, conventional highway with narrow or non-existent shoulders. Route 162 is classified as a major collector according to the California State Highway Log (2002). The current route concept for SR 162 is a conventional two-lane highway.

The project study boundary (PSB) covers approximately 8.55 miles within and around the main town center of Covelo. The PSB includes three levels of priority segments: High priority segments which are designated for high level analysis and planning leading up to a 30% conceptual design, Medium priority segments where the route alignment and illustrative design cross sections will be based on limited analysis, and low priority segments which will have planning and concepts developed with limited information and less detail. The PSB and priority project segments and sub-segments are depicted on Figure 2, and these areas were analyzed to evaluate the likeliness of environmental features and potential project constraints or likelihood of permitting requirements.

1.1.1 Figure 1 Vicinity map



- Project Boundary
- Major Road
- Freeway
- Town/City Boundary
- National Park or Forest

<p>Paper Size 8.5" x 11" (ANSI A)</p> <p>0 1 2 3 4 5 Miles</p> <p>Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet</p>			<p>MCOG and CalTrans Covelo/Round Valley Non-Motorized Needs Assessment and EFS</p>	<p>Job Number 8410146 Revision A Date 12 Jun 2013</p>
<p>Vicinity Map and Project Location</p>			<p>Figure 1</p>	

© 112435 MCOG/8410146 MCOG Covelo Round Valley EFS/08-GIS/Map/Figures/F1_Vicinity.mxd
 © 2012. While every care has been taken to prepare this map, GHD (and DATA CUSTODIAN) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.
 Data source: USDA NAIP Imagery, 2010; USA Base Map, 2013; GHD data, 2013. Created by:ame hows

1.1.2 Figure 2 Proposed Project Segments



- | | | | | | | |
|--------------------------------------------------------|--------------------------------------------------------------|-----------------------------------|-------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------|-------------------------------------------------|
| 1. SR 162 Class 1 Trail
Hurt Road to
Biggar Lane | 2. SR 162 South of Trail
Tribal Lands to
Howard Street | 3. Off-Road Trail on Tribal Lands | 7. Henderson Ln (E-W)
7a West end to
Tabor Lane | 8. Foothill Blvd
8a West end to
Tabor Lane | 9. Crawford Rd
9a Biggar Lane to
Henderson Road | 10. Tabor Ln
Tabor Lane to
Henderson Road |
| 1a Biggar Lane to
Tribal Lands | 2a Howard Street to
Commercial Street | 4. Howard St | 7b Tabor Lane to
Crawford Road | 8b Tabor Lane to
Crawford Road | 9b Henderson Road to
Foothill Boulevard | 11. Biggar Ln |
| 1b Tribal Lands | 2b | 5. Airport Rd | 7c Crawford Road to
east end | 8c Crawford Road to
Henderson Road | | |
| 1c Tribal Lands | | 6. Henderson Rd (N-S) | | | | |

Paper Size 11" x 17" (ANSI B)

0 300 600 900 1200 1500 Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

GHD **MCOG**

MCOG and Caltrans
Covelo/Round Valley Non-Motorized Needs Assessment and EFS

Job Number: 8410146
Revision: C
Date: 30 May 2013

**Overview
Project Segments and Subsegments**

Figure 2

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1.4 Overview of Study Area

Round Valley is rich in both environmental and cultural resources. Round Valley is a federally recognized Indian reservation in northern Mendocino County and extending into the southern part of Trinity County. The Project site is partially developed with human infrastructure including residential units and a small town center isolated to route 162 and Howard Street. The majority of the site is largely agricultural. There are two creek crossings in the PSB. Mill Creek crosses Bigger Lane in the northern part of the PSB and Town Creek is located in the southern portion of the PSB where it crosses Route 162 (Commercial Street). In addition to the creeks and human infrastructure, the landscape matrix of the project site contains drainage ditches adjacent to a majority of the roadway segments, with some patches of wetland and riparian habitats discussed in further detail below. Private parcels were not surveyed if access permission was not secured at the time of this survey. These segments are further broken down into 11 potential projects identified as the following sub segments which are also shown on Figure 2, and are as follows:

1.4.1 SR 162: Class 1 Trail

- North extent = south side of Hurt Road
- South extent = north side of Howard Street
- West extent = 40' west of western edge of pavement
- East extent = western edge of pavement (except for special areas)
- Special areas
 - Howard St Intersection: 100' radius from center of intersection East Ln
 - Intersection: 100' radius from center of intersection
 - Entire road prism to fence line north of East Ln until west side hits Tribal property
 - Entrance to cultural dance grounds: 100' radius from center of intersection
 - Biggar Ln Intersection: 100' radius from center of intersection
 - Mill Creek (from west edge of bridge to 45 feet west of bridge)
 - Mill Creek (from west edge of bridge to 25 feet east of bridge)

1.4.2 SR 162 South of Trail

- North extent = Howard St
- South extent = Southern side of study area
- West extent = 20' west of edge of pavement
- East extent = 20' east of edge of pavement
- SR 162 Intersection: 100' radius from center of intersection

1.4.3 Off-Road Trail (running east to west) from 162 to Henderson Road (50 feet wide centered on parcel boundary)

- North extent = 30' north of parcel boundary
- South extent = 30' south of parcel boundary
- East extent = Edge of pavement on west side of 162
- West extent = East side of Henderson Road
- Note: no access permission to be on private property on east side of Henderson Lane for this segment
- Note: no access permission to be on private property on the north side of the parcel line for this segment
- Off –Road Trail (south) from 162 to Henderson Road (50 feet wide centered on parcel boundary)
 - North extent = 30' north of parcel boundary

- South extent = 30' south of parcel boundary
- West extent = East side of Henderson Road
- West extent = Edge of pavement on west side of 162

1.4.4 Howard St.

- North extent = 20' north of edge of pavement
- South extent = 20' south of edge of pavement
- West extent = East side of Airport Blvd
- East extent = Western edge of pavement on west side of 162
- SR 162 Intersection= 100' radius from center of intersection
- Airport Rd Intersection= 100' radius from center of intersection

1.4.5 Airport Rd.

- North extent = Intersection of Henderson Rd and Foothill Blvd
- South extent = 500' south of center of intersection of Howard St and Airport Blvd
- West extent = parcel boundary west of Airport Blvd.
- East extent = parcel boundary east of Airport Blvd.
- Intersection of Henderson Ln and Foothill Blvd: 100' radius from center of intersection
- Intersection of Howard St and Airport Road: 100' radius from center of intersection

1.4.6 Henderson Rd (North- South)

- North extent = Corner of Henderson Rd and Henderson Rd
- South extent = Intersection of Henderson Rd and Airport Blvd
- West extent = 20' west of edge of pavement
- East extent = 20' east of edge of pavement
- Intersection of Henderson Ln and Foothill Blvd: 100' radius from center of intersection

1.4.7 Henderson (East - West)

- North extent = 20' north of edge of pavement
- South extent = 20' south of edge of pavement
- West extent = Crawford Rd Intersection
- East extent = Corner of Henderson Rd and Henderson Rd
- Intersection of Henderson Rd and Crawford Rd: 100' radius from center of intersection

1.4.8 Foothill Boulevard

- North extent = 20' north of edge of pavement
- South extent = 20' south of edge of pavement
- West extent = western extent of pavement
- East extent = Corner of Henderson Rd and Airport Rd
- Intersection of Foothill Blvd with Henderson Rd and Crawford Rd: 100' radius from center of intersection
- Intersection of Foothill Blvd with Crawford Rd: 100' radius from center of intersection
- Intersection of Foothill Blvd with Tabor Ln: 100' radius from center of intersection

1.4.9 Crawford Road

- Crawford Rd Intersection: 100' radius from center of intersection

1.4.10 Tabor Lane

- North extent = Henderson Lane
- South extent = Foothill Blvd
- West extent = 20' west of edge of pavement

- East extent = 20' east of edge of pavement
- Intersection of Foothill Blvd with Henderson Rd and Crawford Rd: 100' radius from center of intersection
- Intersection of Tabor Lane with Henderson Lane: 100' radius from center of intersection
- Intersection of Tabor Lane with Foothill Blvd: 100' radius from center of intersection

1.1.1 Bigger Road

- North extent = 20' north of edge of pavement
- South extent = 20' south of edge of pavement
- West extent = East side of Henderson Road
- East extent = Western edge of pavement on west side of 162
- SR 162 Intersection: 100' radius from center of intersection
- Crawford Rd Intersection: 100' radius from center of intersection

These segments and their potential permitting requirements are discussed in further detail below in Section 3, Results.

2. Methods

2.1 Research Methods

The initial analysis consisted of review of existing environmental literature and data results from database queries of potential on-site sensitive species which were evaluated using the Covelo East and West USGS 7.5 quadrangles. The data base queries include the California Natural Diversity Database (CNDDDB) [CDFW February 2013]; the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants (CNPS February 2013); lists of special-status species and natural communities that may occur in the project area as provided by the U.S. Fish and Wildlife Service (USFWS) [USFWS, 2013]; and lists of special-status species and natural communities that may occur in the project area as provided by the U.S. Fish and Wildlife Service (FWS) [FWS 2013]

Additional existing data was reviewed when available, such as soil and ecological maps and descriptions generated by the Natural Resources Conservation Service (NRCS) [NRCS 2013] and wetlands mapping from U.S. Fish and Wildlife Service (FWS) National Wetlands Inventory (NWI) [FWS 1987]. NWI maps are compiled using a variety of remote sensing data sources, including aerial photographs, infrared photography, and soils data. NWI maps do not necessarily represent an accurate extent of jurisdictional wetlands in the study area. Finally, the CalFlora database in conjunction with the Jepson Herbarium database was consulted for site specific species cross referencing for potential rare plants in the project vicinity. When available, Geographic Information System (GIS) data was overlaid with the project study boundary.

2.2 Environmental Reconnaissance Survey Methods

On March 6, 7, and 8, 2013 GHD field staff performed a reconnaissance level investigation of environmental and biological resources within the PSB. The survey was meant to identify the potential for environmental impacts and to identify potential permits that would result from implementing the project. This field reconnaissance effort, focused on identifying the potential presence of wetland, riparian, and special-status plant species (listed as rare, threatened, endangered, or candidate for rare, threatened, or endangered species listing under the state or federal Endangered Species Acts, CNPS rare plant ranking, or of local importance) or habitats present within the proposed project trail segments. The project area topographic maps, aerial photography maps, the California Department of Fish and Wildlife CNDDDB and CNPS Rare Plant Inventory were consulted using Covelo East and West quadrangles prior to and during the survey to determine potential sensitive species or habitat occurrence.

Field work was conducted by walking each of the proposed trail segments and documenting findings using a tablet PC with Global Positioning System (GPS) technology which operates with GIS software. For each location were a potential wetland requiring a formal wetland delineation, areas that would require stream crossing or for those areas containing special status species and/or habitats observed, was documented in the field by taking a GPS data point. These areas would then be recommended for further investigations and protocol level surveys in order to fulfill potential permit requirements as described in further detail below in Section 3 of this report. The survey was high in coverage (95-100%).

3. Results

3.1 Special Status Plants, Animals, & Habitats Literature Results

The mapping results are provided as a map book containing 37 figures (see Appendix F). A compilation of flora and fauna obtained from the literature search can be found in Table 1 below. The combined list identifies eight species potentially present in the project area. A list of federal endangered, threatened and candidate species for the Covelo east and Covelo west USGS quadrangles was downloaded from the web site of the U.S. Fish and Wildlife Service Arcata Field Office on April 2013 (Appendix A). The USFWS lists are often of a general nature and do not indicate presence, merely the need for further review. The CNDDDB Occurrence Report RareFind 4 identifies eleven species potentially present in the project vicinity, and includes the Covelo east and West quadrangles (Appendix B). The CNPS rare plant inventory identifies five species potentially present in the project vicinity five plant species (Appendix C) and with the inclusion of the USFWS Fortuna Quad listed Species, the Western lily was added to the list of potential species to occur. NWI maps can be found in Appendix D.

1.1.3 Table 1 Listed/Proposed Rare, Threatened and Endangered Species

1. Legend of ranking and listings are provide in Appendix E

Scientific Name	Common Name	Ranking/listing	C. West	C. East	Potential to Occur
Amphibians					
<i>Rana boylei</i>	foothill yellow-legged frog	S2S3	X	X	High
Birds					
<i>Brachyramphus marmoratus</i>	marbled murrelet	FT	X	X	Low
<i>Coccyzus americanus</i>	Western yellow-billed cuckoo	FC	X	X	Low
<i>Strix occidentalis caurina</i>	northern spotted owl	FT	X	X	Low
Fish					
<i>Acipenser medirostris</i>	green sturgeon	FT		x	Low
<i>Oncorhynchus kisutch</i>	S. OR/N. CA coho salmon	FT		x	Low
<i>Oncorhynchus mykiss</i>	Northern California steelhead	FT	X	X	Low
<i>Oncorhynchus tshawytscha</i>	CA coastal chinook salmon	FT	X	X	Low
Habitats					
Valley Oak Woodland	Valley Oak Woodland	G3S2.1			Low
North Central Coast Summer Steelhead Stream	North Central Coast Summer Steelhead Stream	G?SNR			Low
Plants					
<i>Calystegia collina ssp. tridactylosa</i>	three-fingered morning-glory	1B.2		X	Low
<i>Limnanthes bakeri</i>	Baker's meadowfoam	1B.1		X	Moderate
<i>Lupinus milo-bakeri</i>	Milo Baker's lupine	1B.1	X	X	High
<i>Piperia candida</i>	white-flowered rein orchid	1B.2		X	Low
<i>Potamogeton epihydrus</i>	Nuttall's ribbon-leaved pondweed	2.2	X	X	Low
Mammals					
<i>Martes pennanti</i>	fisher, West Coast DPS	FC	X	X	Low
<i>Antrozous pallidus</i>	pallid bat	G5S3			High
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	G4 S2S3			High
<i>Lasiurus blossevillii</i>	western red bat	G5S3?			High
<i>Lasiurus cinereus</i>	hoary bat	G5S4?			High
<i>Myotis evotis</i>	long-eared myotis	G5S4?			High
Reptiles					
<i>Actinemys marmorata</i>	western pond turtle	G3G4S3			Moderate

1.2 Potential Environmental Permit Requirements Results

Table 2, below, identifies the potential environmental per *Grindelia hirsutula* mitting requirements for each segment of the project. The table identifies the potential need for 14 individual environmental compliance documents, permits, and environmental studies which may be required for project planning and construction implementation. For the purposes of clarity, the remainder of this memo will refer to these documents as “permits,” though they are not all officially “permits.” In matrix format, the table identifies by segment which permits may be “required,” have a “high likelihood” of being required, have a “low likelihood” of being required, or will not be required. Conservative assumptions were made in many cases.

The table was developed with the use of GIS and by consulting several sources. Each segment of the project was intersected with a state-wide layer of “blue line streams” developed by the United State Geographical Survey (USGS), the U.S. Fish and Wildlife Service National Wetlands Inventory, and all Federal/Public Lands (CPAD). In some cases, the likelihood of certain permits increases in locations in which the project intersects any of the above entities. For instance, the likelihood of a 404 and 1600 permit increases in locations in which the project crosses a blue line stream; or for instance, a NEPA document would be required whenever a project crosses through Federal Lands.

The sections below consider each permit in the table, discuss the nature of the permit, and identify the threshold triggers for each permit. Figure Set 3 (Appendix F) displays the PSB, representative photographs and field reconnaissance findings which correspond to the findings in Table 2.

2.

2.1.1 Table 2 Potential Permit and Environmental Studies Requirements

Project Segments	Sub-segments	Improvements Potential CrossTribal Lands															
			CEQA Document	NEPA Document ¹	Initial Cultural Resource Study	Protocol Level Botanical Survey	Protocol Level Wildlife Survey	Federal Biological Assessment	State Biological Evaluation	Other Special Studies for CEQA/NEPA	Wetland Delineation and Jurisdictional Determination	404 Permit (USACE)	State 401 Permit (RWQCB)	Federal 401 Permit (USEPA)	1600 Permit (DFW)	State Lands Permit	
1. SR 162 Class I Trail	1a. Hurt Road to Biggar Lane	Y	R	R	C	R	R	L	R	R	R	R	H	R	R	R	H
	1b. Biggar Lane to Tribal Lands	Y	R	R	C	R	R	L	R	R	R	R	H	N	N	N	H
	1c. Tribal Lands	Y	R	R	C	R	R	L	R	R	R	R	H	N	N	N	H
2. SR 162 South of Trail	2a. Tribal Lands to Howard St	N	R	H	C	R	R	L	R	R	R	R	H	N	N	N	H
	2b. Howard Street to Commerical St	N	R	H	C	R	R	L	R	R	R	R	H	R	R	R	H
3. Off-Road Trail through Tribal Lands (running east/west)		Y	R	R	C	R	R	L	H	R	R	R	H	L	L	L	H
4. Howard St.		N	R	H	C	R	R	L	R	R	R	R	H	H	L	N	H
5. Airport Road		N	R	H	C	R	R	L	R	R	R	R	H	R	R	N	H
6. Henderson Rd (north-south)		N	R	H	C	R	R	L	L	R	R	R	H	R	R	N	H
7. Henderson Ln (east-west)	7a. West end to Tabor Ln	N	R	H	C	R	R	L	L	R	R	R	H	R	R	N	H
	7b. Tabor Lane to Crawford Rd	N	R	H	C	R	R	L	L	R	R	R	H	R	R	N	H
	7c. Crawford Rd to east end	N	R	H	C	R	R	L	L	R	R	R	H	R	R	N	H
8. Foothill Blvd	8a. West end to Tabor Ln	N	R	H	C	R	R	L	L	R	R	R	H	R	R	N	H
	8b. Tabor Ln to Crawford Rd	N	R	H	C	R	R	L	L	R	R	R	H	R	R	N	H
	8c. Crawford Rd to Henderson Rd	N	R	H	C	R	R	L	L	R	R	R	H	R	R	N	H
9. Crawford Rd	9a. Biggar Lane to Henderson Ln	N	R	H	C	R	R	L	L	R	R	R	H	R	R	N	H
	9b. Henderson Ln to Foothill Blvd	N	R	H	C	R	R	L	L	R	R	R	H	R	R	N	H
10. Tabor Ln		N	R	H	C	R	R	L	L	R	R	R	H	R	R	N	H
11. Biggar Ln		N	R	H	C	R	R	L	R	R	R	R	H	R	H	N	H

Code: R= Required; H= High Likelihood; L= Low Likelihood; N= Not required; C= Completed.

1. NEPA would be required for any project that receives federal funding or that passes through federal lands. Those segments that are known to pass through Tribal property (i.e. Federal Lands) would require a NEPA document and are therefore listed as "Required." The remainder of the segments has been marked as "Low Likelihood" of requiring NEPA because it is assumed that there is at least a possibility that federal funds would be required to construct some of these segments. NEPA would not likely be required for any segments that do not pass through federal lands and that do not receive federal funding

4. Environmental Permits and Processes Discussion

1.1 California Environmental Quality Act

Review under the California Environmental Quality Act is required whenever a state or local government entity initiates a project, funds a project, or issues a permit decision. The CEQA document is prepared or overseen by a designated lead agency. An Initial Study determines the appropriate level of environmental review; for a project such as this one spanning the length of a county, there is a possibility that an EIR would be required. However if all identified impacts can be adequately mitigated, a Mitigated Negative Declaration (MND) may be adequate. Every segment of the project would require some level of CEQA documentation. Mendocino County would most likely be the California Environmental Quality Act (CEQA) Lead Agency for most of the trail segments. Other likely agencies include the Mendocino Council of Governments and other non-federal agencies with permitting authority over segments of the trail. See below for a discussion of a Programmatic EIR.

1.2 National Environmental Policy Act

Compliance with the National Environmental Policy Act (NEPA) is required whenever there is federal involvement in the project. The trail would cross tribal lands which trigger NEPA permitting; in addition, federal involvement may also include funding, approval, or issuance of permits. If the project does not qualify for a Categorical Exclusion (CE) or Programmatic Categorical Exclusion (PCE), additional environmental documentation under NEPA may be necessary prior to project approval of funding by a federal agency.

NEPA will be required for any project that receives federal funding or that passes through federal lands such as: Segment's 1a through 1c, and Segment 3 which pass through federal lands and would therefore require a NEPA document. The remainder has a "high likelihood" of requiring NEPA because it is assumed that there is a high likelihood that federal funds would be required to construct any of the segments. However, NEPA would not likely be required for any segments that do not pass through federal lands and that would not receive federal funding.

1.3 Other CEQA/NEPA Considerations:

From a CEQA/NEPA perspective, project segmentation may occur when the project as described and analyzed in a single CEQA or NEPA process does not encompass the entire project. Segmentation can occur when portions of a project that are dependent on other portions of the project to make them functional are evaluated in separate documents. An example would be if Segments S1 and S2 were analyzed in separate CEQA documents, but then constructed simultaneously. In this example, the "entire project" would consist of both Segments 1 and 2, even though the project was analyzed in two separate documents and therefore "segmented." However, if S1 and S2 could not function without the other, then these projects must be analyzed in the same document. Alternatively, if the projects are analyzed in separate documents then they must be analyzed in the cumulative impacts section of the document. So the document for S1 must address construction and operation of S2 in the cumulative impacts section in sufficient detail to determine if

there is a potential for cumulative impacts and the need for mitigations to address the overlapping impacts. Therefore, if the roads/trails system is considered a single project then the document should address all project components.

If a project has reasonably foreseeable additional components, they must be analyzed concurrently as part of a single project. The flaw of segmentation is that it can divide larger projects into smaller components, which, when viewed independently, may not lead to the identification of the full range and intensity of impacts resulting from the entire project when viewed as a whole. Linear infrastructure network projects (such as transmission lines, pipe networks, roads, and trails) may present a special challenge when considering whether a project is in danger of being segmented, because there may be no clear cut method of determining where an individual project starts and ends - and whether it should be analyzed as part of a larger project or as an individual action simply occurring on a larger network. Following court decisions, the standard for determining whether a road project is an individual action warranting individual CEQA/NEPA analysis is if it is: of substantial length; and is between logical termini, such as population centers or major crossroads, etc; and has independent utility.

In cases like the Covelo Trail Project where a series of closely related projects may be implemented over a period of time under a single comprehensive plan, a programmatic EIR/S (PEIR/S) may be prepared. Use of a PEIR/S enables the CEQA/NEPA lead agency to evaluate the environmental impacts of the overall program at one time. Once a PEIR/S has been approved for a project, individual activities proposed under the program may be approved without further environmental review, provided their effects were fully analyzed in the PEIR.

A PEIR would not necessarily be required or triggered, but is an approach that should be considered by a lead agency when a project is a series of related actions which can be characterized as one large project. Once a PEIR is in place the following documents may be used to evaluate individual projects:

- Supplemental or Subsequent EIR
- Mitigated Negative or Negative Declaration
- CEQA/NEPA within the scope Checklist (if a project was completely addressed in the PEIR)

Whether a PEIR gets prepared (vs. a MND, EIR, or other CEQA process) is ultimately up to the lead agency.

According to the California Environmental Resources Evaluation System (ceres.ca.gov)

Where individual projects are, or a phased project is, to be undertaken and where the total undertaking comprises a project with significant environmental effect, the Lead Agency should prepare a single program EIR for the ultimate project. Where an individual project is a necessary precedent for action on a larger project, or commits the Lead Agency to a larger project, with significant environmental effect, an EIR must address itself to the scope of the larger project. Where one project is one of several similar projects of a public agency but is not deemed a part of a larger undertaking or a larger project, the agency may prepare one EIR for all projects, or one for each project, but should always comment upon the cumulative effect (Guidelines §15165).

2.1.2 Cultural Resources

Preparation of CEQA/NEPA documents would trigger a need for cultural resources studies in at least some portions of the trail corridor. Reconnaissance level studies and inclusion of reasonable mitigation measures would likely be suitable for most areas, unless those studies identify concentrations of cultural resources. An initial cultural resource study for this project has already been initiated.

2.1.3 Federal Endangered Species Act Compliance (Protocol Level Surveys and Biological Assessments)

Based on available knowledge at this time the project is not expected to result in any adverse impacts to federally threatened or endangered species or habitats and GHD does not anticipate the need for formal Section 7 Endangered Species Act ESA consultation. However, when a USACE permit is required for impacts to jurisdictional wetlands or other waters and the project has the potential to cause adverse impacts to federally-listed threatened or endangered species, the USACE must initiate consultation with U.S. Fish and Wildlife Service (FWS) and/or the National Marine Fisheries Service (NMFS) pursuant to Section 7 of the ESA. Although unlikely for the proposed project, because no threatened, or endangered species are currently known to be present within the proposed trail alignment footprint, if future studies determine that a listed species is present or if a species is added to the list and is present in the area, then informal or formal consultation, including preparation of a Biological Assessment, may be required.

Potential issues include salmonids (steelhead, coho, chinook) which occur in the Middle Fork of the Eel River tributaries which run through the project including Mill Creek and Town Creeks; and northern spotted owls, marbled murrelets, western yellow-billed cuckoo, and the Pacific fisher in more remote and heavily wooded portions in the project region, yet outside of the proposed trail corridor. If federally listed species are present near the project area, this could in some cases trigger protocol surveys and seasonal or buffer area restrictions; alternatively presumed presence with avoidance measures may also be adequate.

There is no documentation of northern spotted owl nesting territories in the project study boundary, however, if they are found to occur near the trail corridor, a variety of requirements ranging from pre-construction protocol surveys to seasonal noise and visual buffers during construction would be triggered, depending on distance to the nest.

California Endangered Species Act (Protocol Level Surveys and Biological Assessments):

The California Endangered Species Act requires consultation with the CDFW when preparing CEQA documents to ensure that the lead agency actions do not jeopardize the existence of listed species.

A number of state listed sensitive species could potentially occur close to the trail corridor. These species include: a state threatened and CNPS 1B.1 listed plant species Milo Bakers lupine (*Lupinus milo-bakeri*). This plant has known occurrences identified in roadside ditches on SR 162. The Western pond turtle (*Actinymys marmorata*) a species that is state ranked as S3 (is a reflection of the rarity or endangerment condition of an element) was observed in close proximity to a proposed trail segments near SR 162 approximately 0.32 miles east of Mina Road. In addition, the pallid bat (*Antozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), western red bat (*Lasiurus blossevillii*), hoary bat (*Lasiurus cinereus*) and the long eared myotis (*Myotis evotis*) have a high probability to inhabit the proposed trail corridor, as these species have documented occurrences in the vicinity of Covelo as noted in the CNDDDB occurrence report (2013). While the exact location for these species is unknown, micro habitat for these species includes buildings, walls and ceilings, crevices, spaces under bark, and snags, dense foliage of medium sized trees, and habitat edges all of which were observed during the field reconnaissance work. Lastly, the foothill yellow-legged frog (*Rana boylei*) is likely present in the PSB.

By incorporating the development of reasonable avoidance or mitigation measures in the CEQA document, such as seasonal work windows and buffer zones around bat habitats or other native

migratory bird nests during the nesting season, impacts can likely be reduced to less than significant. However a thorough review is recommended especially where wetland, stream, drainage ditches, or riparian impacts may occur, for those areas where the trail or associated access departs from the existing right-of-way and crosses previously undisturbed ground, and for areas where rare plants are known to occur.

A number of plant species identified as rare by the California Native Plant Society (CNPS) occur in both Covelo east and west quadrangles with some occurrences documented within drainage ditches in the general project vicinity as stated above; CEQA requires that these species be considered in the planning process, thus a protocol level study is recommended during the appropriate bloom period (Table 3). If rare species are located mitigation measures may be required.

Table 3 Rare Plant Bloom Periods

Scientific Name	Common Name	Rare Plant	Bloom time	Habitat	Likelihood to Occur
<i>Calystegia collina</i> <i>ssp. tridactylosa</i>	three-fingered morning-glory	1B.2	April-June	serpentinite, rocky, gravelly, openings.; Chaparral; Cismontane woodland	low
<i>Limnanthes bakeri</i>	Baker's meadowfoam	1B.1	April- May	Meadows and seeps; Marshes and swamps (freshwater); Valley and foothill grassland (vernally mesic); Vernal pools	moderate
<i>Lupinus milo-bakeri</i>	Milo Baker's lupine	1B.1	June- September	Cismontane woodland (often along roadsides); Valley and foothill grassland	high
<i>Piperia candida</i>	white-flowered rein orchid	1B.2	March- September	sometimes serpentinite; Broadleafed upland forest; Lower montane coniferous forest; North Coast coniferous forest	low
<i>Potamogeton epihydrus</i>	Nuttall's ribbon-leaved pondweed	2.2	June- September	Marshes and swamps (assorted shallow freshwater)	low

2.1.4 Other Special Studies for CEQA/NEPA

CEQA and NEPA require special studies for key resources that may be impacted by the project. For instance, the Protocol level rare plant described above would serve as special studies. Other special studies that could be required include aesthetic studies, air quality studies, geologic studies, hazardous materials studies, noise studies, and traffic studies. At this time it is unknown if any of these studies would be required. However, it is possible that special studies could be required for parts of the project. For example, geotechnical surveys may be required in the creek crossing locations.

2.1.5 U.S. Army Corps of Engineers (USACE) Section 404 Nationwide Permit

The USACE regulates discharges of dredged or fill material into Waters of the United States under Section 404 of the Clean Water Act (CWA). The project may result in unavoidable fill of some jurisdictional wetlands or Waters of the U.S. during project implementation. There are also two potential stream crossings along the SR 162 project segment, although the trail will be designed to cross the creeks with a bridge, essentially avoiding impacts to wetlands or waters of the U.S. However, if filling of wetlands or Waters of the U.S. are unavoidable, the project will require a USACE Section 404 Permit. The project may qualify for a streamlined USACE Nationwide 14

Permit for Linear Transportation Projects, which includes trails. Prior to authorizing wetland fill under Section 404, a wetland delineation must be submitted and verified by the USACE. Impacts that cause a loss of jurisdictional wetland will require an approved wetland mitigation and monitoring plan (MMP), accompanied by an adaptive management plan and long term maintenance plan.

A formal wetland delineation is recommended during the planning phase of any segment which crosses a potential wetland identified in this report, and for those areas where ditches (potential Waters of the U.S.) occur adjacent to the roads, where the trail may be constructed in order to verify potential wetlands or Waters of the U.S. and to request a jurisdictional determination. Wherever ground disturbing work would occur below the ordinary high water mark (OHWM) of a stream crossing a delineation and 404 permit would also be required.

2.1.6 Regional Water Quality Control Board (RWQCB)

Section 401 Water Quality Certification and National Pollutant Discharge Elimination System (NPDES) Requirements: Pursuant to section 401 of the federal CWA, projects that require a USACE permit for discharge of dredge or fill material must obtain water quality certification to confirm compliance with state water quality requirements. If the project results in unavoidable fill of wetlands or Waters of the U.S., Section 401 Certification from the RWQCB will be required. The RWQCB will also likely require CRAM evaluation of impacted habitats and mitigation for compensation of impacts.

The CWA requires that any discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge complies with a NPDES permit. These regulations require that discharges of stormwater from construction projects that cause one or more acres of soil disturbance must be in compliance with an NPDES permit. If the project disturbs more than one acre of soil, it must comply with the Construction General stormwater permit issued by the State Water Resource Control Board. The Construction General permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

Additionally, the RWQCB may take jurisdiction on a variety of drainage ditches and swales identified in the PSB and a formal delineation of the features will be required throughout the PSB.

2.1.7 California Department of Fish & Wildlife Section 1602

Under Fish and Game Code Section 1602 (Streambed Alteration) the CDFW has jurisdiction over proposed activities that may substantially modify a river, stream, or lake. The current trail alignment is proposed to cross Town and Mill Creeks, inferring direct or indirect impacts could occur in these streams crossing locations. Additionally, CDFW jurisdiction extends at least to the top of bank and may sometimes include adjacent riparian zones. As a result, a 1600 Streambed Alteration Agreement including special conditions to avoid or minimize impacts is anticipated along project segment SR 162 Class 1 Trail- sub segments 1a Hurt Road to Bigger Lane and 2b Howard Street to Commercial Street.

2.1.8 California Department of Transportation (Caltrans)

Encroachment Permits (EP) and/or other agreements may be required for use of or alterations to any area within a Caltrans right-of-way. A Caltrans EP would be required along SR route 162 (Segments 1 and 2) No modifications within the right-of-way are currently proposed, but future safety and access improvements within Caltrans right-of-way are possible.

2.1.9 County Permits

County EP are required for all segments of the PSB with the exception of where Cal-trans EP are required. Additionally, county grading permits will need to be obtained for project implementation.

2.1.10 California State Lands Commission

The State Lands Commission (SLC) has jurisdiction over sovereign public lands, including: the beds of California's naturally navigable rivers, lakes and streams, as well as the state's tide and submerged lands along the state's more than 1,100 miles of coastline, extending from the shoreline out to three miles offshore. The location and extent of sovereign lands are generally defined by reference to the ordinary high and low water marks of tidal and navigable waterways. Because the boundaries of these lands are often legally based upon the last natural extent and location of the subject water body, they are not necessarily apparent from a present day site inspection, and substantial research is needed to define the extent of the State's ownership interests. Because the project crosses tributaries associated with the Eel River, further inquiry regarding the extent of SLC's jurisdiction should be conducted.

2.1.11 Permit Summary

In summary, a variety of permits and related environmental review would be necessary for project planning and design. In general, agencies are supportive of trail projects especially when they are a part of the early planning and collaboration process. Currently the proposed trail would follow an existing road shoulder, and environmental impacts are most likely where access points, parking areas, or short departures from the existing road shoulder are proposed. Any work within the identified creek crossings would also trigger various permit requirements. The present document is intended to identify potential permits and environmental planning considerations at a project-wide scale.

3. Conclusions

3.1 Potential Permits and Environmental Constraints by Project Segment

Each project segment and sub segment is shown on Figure 2. Figure Set 3 (Appendix F) displays the results from the environmental reconnaissance field work which focused on potential project permits and constraints. The figure set also contains representative photographs of the different habitats or constraints observed during the field reconnaissance effort. Table 2 in section 3.2 above highlights the potential permit requirements to be considered for implementing the proposed trail project.

In essence, the trail project will require a formal wetland delineation following USACE protocol to identify impacts to wetland habitat or Waters of the U.S.; particularly in the areas identified as potential wetland, ditch, and the known creek crossings. A majority of the PSB contained what appeared to be drainage ditches that would fall under either the USACE and/or RWQCB jurisdiction. The types of ditches identified on Figure Set 3 (representative photos provided) include drainages with running water, drainage ditches with evident flow paths connected by culverts, drainages comprised of hydrophytic vegetation, and swales. There are three places on Figure Set 3 where three parameter wetlands have been identified and require a formal delineation and mapping. One example is the Off-Road trail segment which runs east/west through tribal lands near

the water treatment plant. At this location, a man-made drainage ditch was constructed adjacent to existing wetland.

Another example of where a formal wetland delineation would be required is project segment 1 SR 162 Class 1 Trail, *sub-segment 1a Hurt Road to Bigger Lane* and project segment 2 SR 162 South of Trail, *sub-segment 2b Howard Street to Commercial Street*; these sub-segments cross either Mill Creek or Town Creek and as a result, a formal wetland and Waters of the U.S. delineation following USACE protocol is recommended at this location to identify and/or avoid potential impacts to wetlands or waters of the U.S. If the proposed trail design would impact either of these creeks, it will also likely trigger a CDFW 1600 permit in addition to 404 and 401 permits to comply with the CWA.

Potential biological surveys required for implementing this proposed trail project include, at a minimum, a protocol level intensive botanical site inventory of vascular plant species, with emphasis on species identified in the data base queries. This survey will need to be conducted at the appropriate season to locate flowering individuals of listed species. For example, the Milo Bakers lupin is a state threatened and CNPS listed rare plant (1B.1) and has been documented in the occurrence records within the proposed trail alignment.

Additionally, five bat species have been recorded in the Covelo vicinity and the commercial area of the PSB along SR 162 from Hurt Road to the project southern terminus, along *project segment 4 Howard Street*, and *project segment 9 Henderson Road north/south*, which all contain potential micro habitat for these species including buildings, walls and ceilings, crevices, spaces under bark, and snags, dense foliage of medium sized trees, and habitat edges all of which were observed during the field reconnaissance work. Further, these segments also contain viable habitat for migratory nesting birds. Therefore, these areas may need to be further assessed with CEQA special studies in order to identify and offset adverse impacts to the potential fauna along these routes. Additional studies required by CEQA/NEPA may also include geotechnical studies in those locations where bridge crossing are proposed. This project will also undergo conventional county encroachment, and grading permits.

4. References

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<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

USFWS, 2012. *Listed/Proposed Threatened and Endangered Species for Covelo East and West Quads. Document numbers: 894221839-183644 and 894246454-183548.* FWS Arcata Field Station, U. S. Fish and Wildlife Service (USFWS). Accessed: April 29, 2013: <http://www.fws.gov/arcata/specieslist/search.asp>

USFWS, 1987. *National Wetland Inventory (NWI).* U.S. Fish and Wildlife Service (USFWS). Portland, OR. Accessed: <http://www.fws.gov/wetlands>.

Appendices

Appendix A (USFWS Listed/Proposed Threatened and Endangered Species for the COVELO WEST & EAST Quads)

Candidate species included

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Listed/Proposed Threatened and Endangered Species for the COVELO EAST Quad (Candidates Included)

April 29, 2013

Document number: 894246454-183548

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KEY:

(PE) Proposed Endangered Proposed in the Federal Register as being in danger of extinction

(PT) Proposed Threatened Proposed as likely to become endangered within the foreseeable future

(E) Endangered Listed in the Federal Register as being in danger of extinction

(T) Threatened Listed as likely to become endangered within the foreseeable future

(C) Candidate Candidate which may become a proposed species Habitat Y = Designated, P = Proposed, N = None Designated

* Denotes a species Listed by the National Marine Fisheries Service

Type	Scientific Name	Common Name	Category	Critical Habitat
Fish				
*	<i>Oncorhynchus mykiss</i>	Northern California steelhead	T	Y
*	<i>Oncorhynchus tshawytscha</i>	CA coastal chinook salmon	T	Y
Birds				
	<i>Brachyramphus marmoratus</i>	marbled murrelet	T	Y
	<i>Coccyzus americanus</i>	Western yellow-billed cuckoo	C	N
	<i>Strix occidentalis caurina</i>	northern spotted owl	T	Y
Mammals				
	<i>Martes pennanti</i>	fisher, West Coast DPS	C	N

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Listed/Proposed Threatened and Endangered Species for the COVELO WEST Quad (Candidates Included)

April 29, 2013

Document number: 894221839-183644

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KEY:

(PE) Proposed Endangered Proposed in the Federal Register as being in danger of extinction

(PT) Proposed Threatened Proposed as likely to become endangered within the foreseeable future

(E) Endangered Listed in the Federal Register as being in danger of extinction

(T) Threatened Listed as likely to become endangered within the foreseeable future

(C) Candidate Candidate which may become a proposed species Habitat Y = Designated, P = Proposed, N = None Designated

* Denotes a species Listed by the National Marine Fisheries Service

Type	Scientific Name	Common Name	Category	Critical Habitat
Fish				
*	<i>Acipenser medirostris</i>	green sturgeon	T	Y
*	<i>Oncorhynchus kisutch</i>	S. OR/N. CA coho salmon	T	Y
*	<i>Oncorhynchus mykiss</i>	Northern California steelhead	T	Y
*	<i>Oncorhynchus tshawytscha</i>	CA coastal chinook salmon	T	Y
Birds				
	<i>Brachyramphus marmoratus</i>	marbled murrelet	T	Y
	<i>Coccyzus americanus</i>	Western yellow-billed cuckoo	C	N
	<i>Strix occidentalis caurina</i>	northern spotted owl	T	Y
Mammals				
	<i>Martes pennanti</i>	fisher, West Coast DPS	C	N

Appendix B - (CNDDDB Occurrence Report)

Covelo East and West Quads



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 74926	EO Index: 15683
Key Quad: Covelo East (3912372)	Element Code: AAABH01050
Occurrence Number: 93	Occurrence Last Updated: 2009-04-30

Scientific Name: <i>Rana boylei</i>	Common Name: foothill yellow-legged frog
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDB Element Ranks:	BLM_S-Sensitive
Global: G3	CDFW_SSC-Species of Special Concern
State: S2S3	IUCN_NT-Near Threatened
	USFS_S-Sensitive

General Habitat: PARTLY-SHADED, SHALLOW STREAMS & RIFFLES WITH A ROCKY SUBSTRATE IN A VARIETY OF HABITATS.	Micro Habitat: NEED AT LEAST SOME COBBLE-SIZED SUBSTRATE FOR EGG-LAYING. NEED AT LEAST 15 WEEKS TO ATTAIN METAMORPHOSIS.
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Last Date Observed: 1993-08-22	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1993-08-22	Occurrence Rank: Excellent
Owner/Manager: UNKNOWN	Trend: Fluctuating
Presence: Presumed Extant	

Location:
ALONG WILLIAMS CREEK, JUST UPSTREAM OF MIDDLE FORK EEL RIVER CONFLUENCE; ~2.7 MI WEST OF EEL RIVER RANGER STATION.

Detailed Location:
MAPPED TO 300 YARD SECTION OF WILLIAMS CREEK, BEGINNING 100 YARDS UPSTREAM FROM HWY 162 BRIDGE CROSSING. FROGS FOUND IN DEEP POOLS IN 1992 & FOUND IN A FLOWING STREAM IN 1993.

Ecological:
HABITAT CONSISTED OF PERENNIAL CREEK THAT FLOWS THROUGH METAMORPHIC ROCK CREEKBED; CREEK STOPPED FLOWING IN AUGUST 1992 - DEEP POOLS REMAINED; CREEK FLOWED IN SUMMER 1993. SALMON & STEELHEAD SPAWN HERE; SQUAWFISH ALSO FOUND HERE.

Threats:
NO BULLFROGS DETECTED.

General:
IN 1992: 8 ADULTS, 13 JUV & 23 LARVAE OBS ON 18 JUL; 12 AD & 63 JUV OBS ON 16 AUG; 6 AD & 65 JUV OBS ON 8 SEP. IN 1993: 2 AD & 12 LARVAE OBS ON 1 AUG; 41 LARVAE OBS ON 7 AUG; 5 ADULTS, 1 JUV & 16 LARVAE OBS ON 22 AUG.

PLSS: T23N, R11W, Sec. 30 (M)	Accuracy: nonspecific area	Area (acres): 17
UTM: Zone-10 N4407708 E488566	Latitude/Longitude: 39.81928 / -123.13359	Elevation (feet): 1,460

County Summary: Mendocino	Quad Summary: Covelo East (3912372)
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Sources:

STA92F0002	STAUB, R. - FIELD SURVEY FORM FOR RANA BOYLII 1992-07-18
STA92F0003	STAUB, R. - FIELD SURVEY FORM FOR RANA BOYLII 1992-08-16
STA92F0004	STAUB, R. - FIELD SURVEY FORM FOR RANA BOYLII 1992-09-08
STA93F0003	STAUB, R. - FIELD SURVEY FORM FOR RANA BOYLII 1993-08-01
STA93F0004	STAUB, R. - FIELD SURVEY FORM FOR RANA BOYLII 1993-08-07
STA93F0005	STAUB, R. - FIELD SURVEY FORM FOR RANA BOYLII 1993-08-22



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 74941	EO Index: 75947
Key Quad: Covelo East (3912372)	Element Code: AAABH01050
Occurrence Number: 751	Occurrence Last Updated: 2009-05-04

Scientific Name: <i>Rana boylei</i>	Common Name: foothill yellow-legged frog
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDB Element Ranks:	BLM_S-Sensitive
Global: G3	CDFW_SSC-Species of Special Concern
State: S2S3	IUCN_NT-Near Threatened
	USFS_S-Sensitive

General Habitat: PARTLY-SHADED, SHALLOW STREAMS & RIFFLES WITH A ROCKY SUBSTRATE IN A VARIETY OF HABITATS.	Micro Habitat: NEED AT LEAST SOME COBBLE-SIZED SUBSTRATE FOR EGG-LAYING. NEED AT LEAST 15 WEEKS TO ATTAIN METAMORPHOSIS.
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Last Date Observed: 1991-05-19	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1991-05-19	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
ALONG POOR MANS CREEK AND HWY 162, AT EAST END OF POOR MANS VALLEY; ABOUT 0.5 MI WEST OF WILLIAMS CREEK CONFLUENCE.

Detailed Location:
MAPPED TO CAS LOCALITY DESCRIPTION: "APPROX 8 KM NE OF COVELO, POOR MANS CREEK, E END OF POOR MANS VALLEY, APPROXIMATELY 200 M W OF HWY 162 [T23N, R12W, SEC 25 (NW QUARTER)]."

Ecological:
Threats:

General:
1 COLLECTED ON 19 MAY 1991 (CAS 178883) BY J. V. VINDUM.

PLSS: T23N, R12W, Sec. 25 (M)	Accuracy: nonspecific area	Area (acres): 35
UTM: Zone-10 N4408625 E487189	Latitude/Longitude: 39.82752 / -123.14970	Elevation (feet): 1,520

County Summary: Mendocino	Quad Summary: Covelo East (3912372)
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Sources:
CAS91S0001 CALIFORNIA ACADEMY OF SCIENCES - 1991 CAS HERPETOLOGY HOLDINGS (INCLUDES STANFORD UNIVERSITY COLLECTIONS) FOR RANA BOYLII 1991-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	74943	EO Index:	75948
Key Quad:	Covelo East (3912372)	Element Code:	AAABH01050
Occurrence Number:	752	Occurrence Last Updated:	2009-05-04

Scientific Name:	<i>Rana boylei</i>	Common Name:	foothill yellow-legged frog
Listing Status:	Federal: None State: None	Rare Plant Rank:	
CNDDB Element Ranks:	Global: G3 State: S2S3	Other Lists:	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFS_S-Sensitive

General Habitat:	Micro Habitat:
PARTLY-SHADED, SHALLOW STREAMS & RIFFLES WITH A ROCKY SUBSTRATE IN A VARIETY OF HABITATS.	NEED AT LEAST SOME COBBLE-SIZED SUBSTRATE FOR EGG-LAYING. NEED AT LEAST 15 WEEKS TO ATTAIN METAMORPHOSIS.

Last Date Observed:	1991-06-23	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1991-06-23	Occurrence Rank:	Unknown
Owner/Manager:	BLM	Trend:	Unknown
Presence:	Presumed Extant		

Location:
 ALONG MIDDLE FORK EEL RIVER; ~0.3 MI WSW OF WILLIAMS CREEK CONFLUENCE, ~0.3 MI NORTH OF SILVER CREEK CONFLUENCE.

Detailed Location:
 MAPPED TO COORDINATES GIVEN BY CAS & LOCALITY DESCRIPTION: "APPROX 6 MI E COVELO, MIDDLE FORK EEL RIVER, APPROXIMATELY 500 M DOWNSTREAM FROM CONFLUENCE WITH WILLIAMS CREEK [T23N, R11W, SEC 31 (NE QUARTER OF NE QUARTER)]."

Ecological:
Threats:

General:
 1 ADULT COLLECTED ON 23 JUN 1993 (CAS 178885) BY J. V. VINDUM.

PLSS: T23N, R12W, Sec. 36 (M)	Accuracy: 1/10 mile	Area (acres): 0
UTM: Zone-10 N4406949 E488172	Latitude/Longitude: 39.81244 / -123.13818	Elevation (feet): 1,380

County Summary:	Quad Summary:
Mendocino	Covelo East (3912372)

Sources:
 CAS91S0001 CALIFORNIA ACADEMY OF SCIENCES - 1991 CAS HERPETOLOGY HOLDINGS (INCLUDES STANFORD UNIVERSITY COLLECTIONS) FOR RANA BOYLII 1991-XX-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 69012	EO Index: 69762
Key Quad: Covelo West (3912373)	Element Code: AMACC01070
Occurrence Number: 85	Occurrence Last Updated: 2007-04-19

Scientific Name: <i>Myotis evotis</i>	Common Name: long-eared myotis
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: BLM_S-Sensitive
CNDDDB Element Ranks:	IUCN_LC-Least Concern
Global: G5	WBWG_M-Medium Priority
State: S4?	

General Habitat: FOUND IN ALL BRUSH, WOODLAND & FOREST HABITATS FROM SEA LEVEL TO ABOUT 9000 FT. PREFERS CONIFEROUS WOODLANDS & FORESTS.	Micro Habitat: NURSERY COLONIES IN BUILDINGS, CREVICES, SPACES UNDER BARK, & SNAGS. CAVES USED PRIMARILY AS NIGHT ROOSTS.
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Last Date Observed: 1998-09-03	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1998-09-03	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
COVELO.

Detailed Location:
EXACT LOCATION UNKNOWN, AS SOURCE GIVES LOCALITY ONLY AS "COVELO." MAPPED IN GENERAL VICINITY OF COVELO.

Ecological:
Threats:

General:
BAT(S) DETECTED ON 3 SEP 1998.

PLSS: T22N, R13W, Sec. 01 (M)	Accuracy: 4/5 mile	Area (acres): 0
UTM: Zone-10 N4404783 E478471	Latitude/Longitude: 39.79273 / -123.25144	Elevation (feet): 1,400

County Summary: Mendocino	Quad Summary: Covelo East (3912372), Covelo West (3912373)
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Sources:
PIE04R0001 PIERSON, E.D., W.E. RAINEY & C. CORBEN - DISTRIBUTION AND STATUS OF WESTERN RED BATS (LASIURUS BLOSSEVILLII) IN CALIFORNIA 2004-04-15



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 69012	EO Index: 69760
Key Quad: Covelo West (3912373)	Element Code: AMACC05030
Occurrence Number: 216	Occurrence Last Updated: 2007-04-19

Scientific Name: <i>Lasiurus cinereus</i>	Common Name: hoary bat
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: IUCN_LC-Least Concern
CNDDB Element Ranks:	WBWG_M-Medium Priority
Global: G5	
State: S4?	

General Habitat: PREFERS OPEN HABITATS OR HABITAT MOSAICS, WITH ACCESS TO TREES FOR COVER & OPEN AREAS OR HABITAT EDGES FOR FEEDING.	Micro Habitat: ROOSTS IN DENSE FOLIAGE OF MEDIUM TO LARGE TREES. FEEDS PRIMARILY ON MOTHS. REQUIRES WATER.
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Last Date Observed: 1998-09-03	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1998-09-03	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
COVELO.

Detailed Location:
EXACT LOCATION UNKNOWN, AS SOURCE GIVES LOCALITY ONLY AS "COVELO." MAPPED IN GENERAL VICINITY OF COVELO.

Ecological:
Threats:

General:
BAT(S) DETECTED ON 3 SEP 1998.

PLSS: T22N, R13W, Sec. 01 (M)	Accuracy: 4/5 mile	Area (acres): 0
UTM: Zone-10 N4404783 E478471	Latitude/Longitude: 39.79273 / -123.25144	Elevation (feet): 1,400

County Summary: Mendocino	Quad Summary: Covelo East (3912372), Covelo West (3912373)
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Sources:
PIE04R0001 PIERSON, E.D., W.E. RAINEY & C. CORBEN - DISTRIBUTION AND STATUS OF WESTERN RED BATS (LASIURUS BLOSSEVILLII) IN CALIFORNIA 2004-04-15



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 69012	EO Index: 69761
Key Quad: Covelo West (3912373)	Element Code: AMACC05060
Occurrence Number: 81	Occurrence Last Updated: 2007-04-19

Scientific Name: <i>Lasiurus blossevillii</i>	Common Name: western red bat
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	IUCN_LC-Least Concern
Global: G5	USFS_S-Sensitive
State: S3?	WBWG_H-High Priority

General Habitat:
ROOSTS PRIMARILY IN TREES, 2-40 FT ABOVE GROUND, FROM SEA LEVEL UP THROUGH MIXED CONIFER FORESTS.

Micro Habitat:
PREFERS HABITAT EDGES & MOSAICS WITH TREES THAT ARE PROTECTED FROM ABOVE & OPEN BELOW WITH OPEN AREAS FOR FORAGING.

Last Date Observed: 1998-09-03	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1998-09-03	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
COVELO.

Detailed Location:
EXACT LOCATION UNKNOWN, AS SOURCE GIVES LOCALITY ONLY AS "COVELO." MAPPED IN GENERAL VICINITY OF COVELO.

Ecological:
Threats:

General:
BAT(S) DETECTED ON 3 SEP 1998.

PLSS: T22N, R13W, Sec. 01 (M)	Accuracy: 4/5 mile	Area (acres): 0
UTM: Zone-10 N4404783 E478471	Latitude/Longitude: 39.79273 / -123.25144	Elevation (feet): 1,400

County Summary: Mendocino	Quad Summary: Covelo East (3912372), Covelo West (3912373)
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Sources:
PIE04R0001 PIERSON, E.D., W.E. RAINEY & C. CORBEN - DISTRIBUTION AND STATUS OF WESTERN RED BATS (LASIURUS BLOSSEVILLII) IN CALIFORNIA 2004-04-15



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 69012	EO Index: 69759
Key Quad: Covelo West (3912373)	Element Code: AMACC08010
Occurrence Number: 223	Occurrence Last Updated: 2007-04-19

Scientific Name: <i>Corynorhinus townsendii</i>	Common Name: Townsend's big-eared bat
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	BLM_S-Sensitive
Global: G4	CDFW_SSC-Species of Special Concern
State: S2S3	IUCN_LC-Least Concern
	USFS_S-Sensitive
	WBWG_H-High Priority

General Habitat: THROUGHOUT CALIFORNIA IN A WIDE VARIETY OF HABITATS. MOST COMMON IN MESIC SITES.	Micro Habitat: ROOSTS IN THE OPEN, HANGING FROM WALLS & CEILINGS. ROOSTING SITES LIMITING. EXTREMELY SENSITIVE TO HUMAN DISTURBANCE.
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Last Date Observed: 1998-09-03	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1998-09-03	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
COVELO.

Detailed Location:
EXACT LOCATION UNKNOWN, AS SOURCE GIVES LOCALITY ONLY AS "COVELO." MAPPED IN GENERAL VICINITY OF COVELO.

Ecological:

Threats:

General:

BAT(S) DETECTED ON 3 SEP 1998.

PLSS: T22N, R13W, Sec. 01 (M)	Accuracy: 4/5 mile	Area (acres): 0
UTM: Zone-10 N4404783 E478471	Latitude/Longitude: 39.79273 / -123.25144	Elevation (feet): 1,400

County Summary: Mendocino	Quad Summary: Covelo East (3912372), Covelo West (3912373)
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Sources:
PIE04R0001 PIERSON, E.D., W.E. RAINEY & C. CORBEN - DISTRIBUTION AND STATUS OF WESTERN RED BATS (LASIURUS BLOSSEVILLII) IN CALIFORNIA 2004-04-15



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 69012	EO Index: 69758
Key Quad: Covelo West (3912373)	Element Code: AMACC10010
Occurrence Number: 396	Occurrence Last Updated: 2007-04-19

Scientific Name: <i>Antrozous pallidus</i>	Common Name: pallid bat
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	
CNDDDB Element Ranks:	Other Lists:
Global: G5	BLM_S-Sensitive
State: S3	CDFW_SSC-Species of Special Concern
	IUCN_LC-Least Concern
	USFS_S-Sensitive
	WBWG_H-High Priority

General Habitat: DESERTS, GRASSLANDS, SHRUBLANDS, WOODLANDS & FORESTS. MOST COMMON IN OPEN, DRY HABITATS WITH ROCKY AREAS FOR ROOSTING.	Micro Habitat: ROOSTS MUST PROTECT BATS FROM HIGH TEMPERATURES. VERY SENSITIVE TO DISTURBANCE OF ROOSTING SITES.
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Last Date Observed: 1998-09-03	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1998-09-03	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
COVELO.

Detailed Location:
EXACT LOCATION UNKNOWN, AS SOURCE GIVES LOCALITY ONLY AS "COVELO." MAPPED IN GENERAL VICINITY OF COVELO.

Ecological:

Threats:

General:

BAT(S) DETECTED ON 3 SEP 1998.

PLSS: T22N, R13W, Sec. 01 (M)	Accuracy: 4/5 mile	Area (acres): 0
UTM: Zone-10 N4404783 E478471	Latitude/Longitude: 39.79273 / -123.25144	Elevation (feet): 1,400

County Summary: Mendocino	Quad Summary: Covelo East (3912372), Covelo West (3912373)
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Sources:
 PIE04R0001 PIERSON, E.D., W.E. RAINEY & C. CORBEN - DISTRIBUTION AND STATUS OF WESTERN RED BATS (LASIURUS BLOSSEVILLII) IN CALIFORNIA 2004-04-15



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	74925	EO Index:	15690
Key Quad:	Covelo East (3912372)	Element Code:	ARAAD02030
Occurrence Number:	414	Occurrence Last Updated:	2009-04-30

Scientific Name:	<i>Emys marmorata</i>	Common Name:	western pond turtle
Listing Status:	Federal: None State: None	Rare Plant Rank:	
CNDDB Element Ranks:	Global: G3G4 State: S3	Other Lists:	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive

General Habitat:	Micro Habitat:
A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.	NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.

Last Date Observed:	1993-08-22	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1993-08-22	Occurrence Rank:	Excellent
Owner/Manager:	UNKNOWN	Trend:	Fluctuating
Presence:	Presumed Extant		

Location:
WILLIAMS CREEK AND MIDDLE FORK EEL RIVER; ABOUT 2.4 MI WEST OF EEL RIVER RANGER STATION, ABOUT 6.4 MI ENE OF COVELO.

Detailed Location:
NORTH FEATURE MAPPED TO 300 YARD SECTION OF WILLIAMS CREEK STARTING 100 YARDS UPSTREAM OF HWY 162 BRIDGE JCT. SOUTH FEATURE MAPPED TO STRETCH OF MIDDLE FORK EEL RIVER FROM CONFLUENCE WITH WILLIAMS CREEK TO 0.5 MI UPSTREAM.

Ecological:
HABITAT CONSISTED OF PERENNIAL CREEK THAT WAS FLOWING UNDERGROUND DUE TO LOW RAINFALL IN 1992; IN 1993 CREEK WAS FLOWING NORMALLY. CREEKBED COMPOSED OF METAMORPHIC ROCK. TURTLES DETECTED IN & ALONGSIDE DEEP POOLS OF WATER, SEEN FORAGING.

Threats:
General:
3 ADULTS & 1 JUVENILE OBSERVED 16 AUG 1992 IN ONE REMAINING DEEP POOL. 5 ADULTS OBS 22 AUG 1993. SALMON & STEELHEAD SPAWN HERE; PIKEMINNOW ALSO FOUND HERE.

PLSS:	T23N, R11W, Sec. 31 (M)	Accuracy:	nonspecific area	Area (acres):	61
UTM:	Zone-10 N4407159 E488607	Latitude/Longitude:	39.81433 / -123.13310	Elevation (feet):	1,400

County Summary:	Quad Summary:
Mendocino	Newhouse Ridge (3912371), Covelo East (3912372)

Sources:

STA92F0001	STAUB, R. - FIELD SURVEY FORM FOR CLEMMYS MARMORATA MARMORATA 1992-08-16
STA93F0001	STAUB, R. - FIELD SURVEY FORM FOR CLEMMYS MARMORATA MARMORATA 1993-08-22
STA93F0002	STAUB, R. - FIELD SURVEY FORM FOR CLEMMYS MARMORATA MARMORATA 1993-08-22



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 45938	EO Index: 45938
Key Quad: Covelo East (3912372)	Element Code: ARAAD02030
Occurrence Number: 528	Occurrence Last Updated: 2001-09-13

Scientific Name: <i>Emys marmorata</i>	Common Name: western pond turtle
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDB Element Ranks:	BLM_S-Sensitive
Global: G3G4	CDFW_SSC-Species of Special Concern
State: S3	IUCN_VU-Vulnerable
	USFS_S-Sensitive

General Habitat: A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.	Micro Habitat: NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.
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Last Date Observed: 1999-05-01	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1999-05-01	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
HIGHWAY 162, 0.35 MILE EAST OF MINA ROAD, ROUND VALLEY

Detailed Location:

Ecological:

Threats:

General:

ONE MALE COLLECTED AND DEPOSITED AT CAS (#208851).

PLSS: T23N, R12W, Sec. 30 (M)	Accuracy: 1/10 mile	Area (acres): 0
UTM: Zone-10 N4407489 E479341	Latitude/Longitude: 39.81714 / -123.24137	Elevation (feet): 1,380

County Summary: Mendocino	Quad Summary: Covelo East (3912372)
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Sources:
VIN99U0001 VINDUM, J.V. (CALIFORNIA ACADEMY OF SCIENCES) - SCIENTIFIC COLLECTING PERMIT REPORT (PERMIT #801067-03) FOR HERPS COLLECTED IN 1999; SPECIMENS DEPOSITED AT CAS. 1999-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	25365	EO Index:	5605
Key Quad:	Leech Lake Mtn. (3912381)	Element Code:	CARA2634CA
Occurrence Number:	1	Occurrence Last Updated:	2008-08-05

Scientific Name:	<i>North Central Coast Summer Steelhead Stream</i>	Common Name:	North Central Coast Summer Steelhead Stream
Listing Status:	Federal: None State: None	Rare Plant Rank:	
CNDDDB Element Ranks:	Global: G? State: SNR	Other Lists:	

General Habitat:	<input type="checkbox"/>	Micro Habitat:	<input type="checkbox"/>
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Last Date Observed:	1991-XX-XX	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1991-XX-XX	Occurrence Rank:	Good
Owner/Manager:	USFS-MENDOCINO NF	Trend:	Fluctuating
Presence:	Presumed Extant		

Location:
MIDDLE FORK EEL RIVER, APPROX 10-15 MILES NORTHEAST OF COVELO ON HWY 162, MENDOCINO COUNTY.

Detailed Location:
LOWER LIMIT REPORTED BY LOCALS AT WILLIAMS CREEK CONFLUENCE (SURVEYS FROM LAST 20 YEARS FOUND STEELHEAD DOWN TO BAR CK CONFL). UPPER LIMIT AT UHL CK CONFL. ALSO INCL LOWER 1.5 MILES OF BALM OF GILEAD CK & NF-MF EEL UP TO WILLOW CK CONFL.

Ecological:
LARGE POOLS WITH COLD WATER CRITICAL STEELHEAD HABITAT DURING SUMMER. OSBORN ROUGHS LIKELY FISH BARRIER EXCEPT FOR STEELHEAD & PACIFIC LAMPREY DURING HIGH FLOWS. BELOW BARRIER SACRAMENTO SUCKER, SQUAWFISH, CALIF ROACH, & INTRODUCED FISHES.

Threats:
POACHING ADULT STEELHEAD. PREDATION BY ADULT SQUAWFISH ON JUVENILE STEELHEAD. SEDIMENT DEPOSIT FROM SLIDE ON MAPLE CRK.

General:
449 ADULT STEELHEAD IN 1990 LOWEST COUNT IN 12 YEARS. JUVENILE STEELHEAD COUNT IN HEADWATER AREA HIGHER THAN PREVIOUS 10 YEAR AVG. 90% OF HOLDING AREA BETWEEN FERN POINT AND HELL HOLE CANYON.

PLSS: T24N, R11W, Sec. 07 (M)	Accuracy: nonspecific area	Area (acres): 2,343
UTM: Zone-10 N4421879 E498675	Latitude/Longitude: 39.94704 / -123.01551	Elevation (feet): 3,100

County Summary:	Quad Summary:
Mendocino, Trinity	Newhouse Ridge (3912371), Covelo East (3912372), Leech Lake Mtn. (3912381), Wrights Ridge (4012311), Four Corners Rock (4012312)

Sources:

BRO90R0001	BROWN, L. & P. MOYLE - EEL RIVER SURVEY: FINAL REPORT 1990-XX-XX
JON90U0001	JONES, W. - SUMMER STEELHEAD SURVEY MIDDLE FORK EEL RIVER, TRINITY AND MENDOCINO COUNTIES, 1990. 1990-XX-XX
JON92R0001	JONES, W. - HISTORICAL DISTRIBUTION AND RECENT TRENDS OF SUMMER STEELHEAD, ONCORHYNCHUS MYKISS IN THE EEL RIVER, CALIFORNIA. 1992-01-XX
JON94U0001	JONES, W. - HISTORICAL RANGE OF SUMMER STEELHEAD ON MIDDLE FORK EEL RIVER. (PHONE CONVERSATION) 1994-01-18
MOY91R0001	MOYLE, P. & C. SWIFT - CATALOGUE OF POTENTIAL AQUATIC DIVERSITY AREAS 1991-09-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 07622	EO Index: 28795
Key Quad: Covelo East (3912372)	Element Code: CTT71130CA
Occurrence Number: 6	Occurrence Last Updated: 1998-07-31

Scientific Name: <i>Valley Oak Woodland</i>	Common Name: Valley Oak Woodland
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	
Global: G3	
State: S2.1	

General Habitat:	Micro Habitat:
<input type="checkbox"/>	<input type="checkbox"/>

Last Date Observed: 1980-11-18	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1980-11-18	Occurrence Rank: Unknown
Owner/Manager: BIA-ROUND VALLEY RES	Trend: Increasing
Presence: Presumed Extant	

Location:
GRIST CREEK SITE. 0.1 MILE SOUTH OF END OF UNNAMED FARM ROAD. NEAR JUNCTION GRIST CREEK & COVELO ROAD.

Detailed Location:

Ecological:

RCC 100%. QUERCUS LOBATA. HEIGHT APPROXIMATELY 20 M. VIGOR GOOD. LOAMY ENTISOL, ON RECENT ALLUVIUM. FAIRLY PRISTINE REMNANT.

Threats:

CATTLE PASTURE NEARBY. PROBABLY GRAZED. CLEARING FOR AG OR CONSTRUCTION POSSIBLE THREAT.

General:

SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T22N, R12W, Sec. 07 (M)	Accuracy: 1/5 mile	Area (acres): 0
UTM: Zone-10 N4403135 E479874	Latitude/Longitude: 39.77792 / -123.23501	Elevation (feet): 1,365

County Summary:	Quad Summary:
Mendocino	Covelo East (3912372)

Sources:
HOL80F0003 HOLSTEIN, G. - FIELD SURVEY OF GRIST CREEK IN MENDOCINO COUNTY 1980-11-18



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	07639	EO Index:	28792
Key Quad:	Covelo East (3912372)	Element Code:	CTT71130CA
Occurrence Number:	15	Occurrence Last Updated:	1998-07-31

Scientific Name:	<i>Valley Oak Woodland</i>		
Common Name:	Valley Oak Woodland		
Listing Status:	Federal:	None	Rare Plant Rank:
	State:	None	Other Lists:
CNDDDB Element Ranks:	Global:	G3	
	State:	S2.1	

General Habitat:	<input type="checkbox"/>	Micro Habitat:	<input type="checkbox"/>
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Last Date Observed:	1980-11-18	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1980-11-18	Occurrence Rank:	Unknown
Owner/Manager:	UNKNOWN	Trend:	Unknown
Presence:	Presumed Extant		

Location:
SOUTH OF HURT ROAD AT BM 1360, 0.35 MILE WEST OF LOGAN LANE 1.4 MILES EAST OF COVELO ROAD. NE OF COVELO.

Detailed Location:

Ecological:

QUERCUS LOBATA RCC 100%. HEIGHT ABOUT 13 M, SOME YOUNG TREES. UNDERSTORY OF SYMPHORICARPOS RIVULARIS W/NO BARE GROUND. LOAMY ENTISOL ON RECENT ALLUVIUM. PRISTINE.

Threats:

PASTURE AND HORSES NEARBY. CLEARING FOR AG, CONST POSSIBLE THREAT.

General:

ROUND VALLEY INDIAN RESERVATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS:	T23N, R12W, Sec. 32 (M)	Accuracy:	1/5 mile	Area (acres):	0
UTM:	Zone-10 N4407325 E481050	Latitude/Longitude:	39.81570 / -123.22140	Elevation (feet):	1,360

County Summary:	Quad Summary:
Mendocino	Covelo East (3912372)

Sources:
HOL80F0005 HOLSTEIN, G. - FIELD SURVEY OF HURT ROAD IN MENDOCINO COUNTY (VALLEY OAK WOODLAND: NC71130) 1980-11-18



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 07627	EO Index: 28790
Key Quad: Covelo East (3912372)	Element Code: CTT71130CA
Occurrence Number: 16	Occurrence Last Updated: 1998-07-31

Scientific Name: <i>Valley Oak Woodland</i>	Common Name: Valley Oak Woodland
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	
Global: G3	
State: S2.1	

General Habitat:	Micro Habitat:
<input type="checkbox"/>	<input type="checkbox"/>

Last Date Observed: 1980-11-18	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1980-11-18	Occurrence Rank: Unknown
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
0.3 MILE SOUTH OF FAIRBANKS LANE; 0.7 MILE EAST OF COVELO ROAD TO 0.3 MILE WEST OF ADOBE LANE. COVELO VICINITY.

Detailed Location:
REMNANT OF MORE EXTENSIVE COMMUNITY.

Ecological:
LOAMY ENTISOL ON RECENT ALLUVIUM. POOR REPRODUCTION. ANNUAL GRASSLAND UNDERSTORY, MEDIUM GRAZING. UNDERSTORY MODIFIED BY PROLONGED CATTLE GRAZING.

Threats:
ADJ GRAZED LAND, CLEARED OF TREES. CUTTING FOR FUEL, AG OR CONSTRUCTION A THREAT.

General:
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T22N, R12W, Sec. 20 (M)	Accuracy: 1 mile	Area (acres): 0
UTM: Zone-10 N4400420 E480486	Latitude/Longitude: 39.75347 / -123.22779	Elevation (feet): 1,360

County Summary:	Quad Summary:
Mendocino	Jamison Ridge (3912362), Covelo East (3912372)

Sources:
HOL80F0006 HOLSTEIN, G.L. - FIELD SURVEY OF FAIRBANKS LANE IN MENDOCINO COUNTY (VALLEY OAK WOODLAND: NC71130) 1980-11-18



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	07630	EO Index:	28774
Key Quad:	Covelo East (3912372)	Element Code:	CTT71130CA
Occurrence Number:	61	Occurrence Last Updated:	1998-08-02

Scientific Name:	<i>Valley Oak Woodland</i>		Common Name:	Valley Oak Woodland
Listing Status:	Federal:	None	Rare Plant Rank:	
	State:	None	Other Lists:	
CNDDDB Element Ranks:	Global:	G3		
	State:	S2.1		

General Habitat:	<input type="checkbox"/>	Micro Habitat:	<input type="checkbox"/>
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Last Date Observed:	1980-11-18	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1980-11-18	Occurrence Rank:	Unknown
Owner/Manager:	PVT	Trend:	Increasing
Presence:	Presumed Extant		

Location:
ROUND VALLEY. NORTH SIDE OF EAST LANE 1.0 MILE EAST OF COVELO ROAD. ALSO SECTION 6.

Detailed Location:
LOAMY ENTISOL ON RECENT ALLUVIUM.

Ecological:
100% RCC Q. LOBTATA. REPRODUCTION MODERATE. UNDERSTORY MODERATED BY SYMPHORICARPOS RIVULARIS. NO EVIDENCE OF DISTURBANCE. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO,

Threats:
SURROUNDING LAND CLEARED FOR AGRICULTURE.

General:
SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS:	T22N, R12W, Sec. 05 (M)	Accuracy:	1/5 mile	Area (acres):	0
UTM:	Zone-10 N4405076 E480426	Latitude/Longitude:	39.79542 / -123.22863	Elevation (feet):	1,355

County Summary:	Quad Summary:
Mendocino	Covelo East (3912372)

Sources:
HOL80F0001 HOLSTEIN, G.H. - FIELD SURVEY OF OAK WOODLAND IN MENDOCINO COUNTY 1980-11-18



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 07605	EO Index: 8776	
Key Quad: Covelo East (3912372)	Element Code: PDFAB2B4E0	
Occurrence Number: 1	Occurrence Last Updated: 1994-11-08	

Scientific Name: <i>Lupinus milo-bakeri</i>	Common Name: Milo Baker's lupine
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists:
State: Threatened	
CNDDDB Element Ranks:	
Global: G1Q	
State: S1	

General Habitat: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: IN ROADSIDE DITCHES, DRY GRAVELLY AREAS ALONG ROADS, AND ALONG SMALL STREAMS. 395-430 M.
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Last Date Observed: 1986-07-23	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1986-07-23	Occurrence Rank: Fair
Owner/Manager: CALTRANS	Trend: Decreasing
Presence: Presumed Extant	

Location:
COVELO, S OF MILL CREEK CROSSING OF HWY 162.

Detailed Location:
PLANTS EXTEND SOUTH TO NEAR FIRE STATION. IN ROADSIDE DITCH.

Ecological:

Threats:
HERBICIDE SPRAYING AND OTHER ROAD MAINTENANCE ACTIVITIES THREATEN.

General:
500 PLANTS IN 1982; POPULATION DECREASED TO 10 IN 1984 DUE TO MISUSE OF HERBICIDE. CALTRANS IMPROVED OCCURRENCE IN 1985 BY SEEDING. HUNDREDS OF PLANTS IN 1986.

PLSS: T23N, R13W, Sec. 36 (M)	Accuracy: specific area	Area (acres): 17
UTM: Zone-10 N4406526 E478761	Latitude/Longitude: 39.80844 / -123.24812	Elevation (feet): 1,390

County Summary: Mendocino	Quad Summary: Covelo East (3912372)
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- Sources:**
- BAR84U0007 BARROWS, K. - ELEMENT PRESERVATION PLAN FOR LUPINUS MILO-BAKERI 1984-08-02
 - BAR85U0002 BARROWS, K. - MEMO REGARDING FIELD SURVEY OF EO #2, #4. 1985-06-13
 - BOO84F0002 BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1984-07-11
 - BOO84U0001 BOOTH, J. - LETTER REGARDING THE SPRAYING OF LUPINUS MILO-BAKERI. 1984-08-06
 - BOO86F0007 BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1986-07-23
 - BOO86F0008 BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1986-07-23
 - COC85M0003 COCHRANE, S. - MAP - LUPINUS MILO-BAKERI OCCURRENCES 1985-06-19
 - EAS79M0001 EASTON, R. - MAP FROM CALTRANS 1979-XX-XX
 - HOL82F0001 HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
 - HOL82M0001 HOLLAND, R. & V. DAINS - MAP OF SITES OF LUPINUS MILO-BAKERI. 1982-07-14
 - NIE77U0015 NIEHAUS, T. - RARE PLANT STATUS REPORT FOR LUPINUS MILO-BAKERI, CNPS. 1977-XX-XX
 - SMI82S0002 SMITH, G. - SMITH #7767 HSC #84528 1982-07-12
 - STO80F0002 STOPHER, M. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1980-07-23



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	07642	EO Index:	12330
Key Quad:	Covelo East (3912372)	Element Code:	PDFAB2B4E0
Occurrence Number:	2	Occurrence Last Updated:	2005-05-10

Scientific Name:	<i>Lupinus milo-bakeri</i>	Common Name:	Milo Baker's lupine
Listing Status:	Federal: None State: Threatened	Rare Plant Rank:	1B.1
CNDDDB Element Ranks:	Global: G1Q State: S1	Other Lists:	

General Habitat:	Micro Habitat:
CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	IN ROADSIDE DITCHES, DRY GRAVELLY AREAS ALONG ROADS, AND ALONG SMALL STREAMS. 395-430 M.

Last Date Observed:	2003-07-12	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	2003-07-12	Occurrence Rank:	Fair
Owner/Manager:	CALTRANS, PVT	Trend:	Unknown
Presence:	Presumed Extant		

Location:
 NORTHEAST OF COVELO, EAST OF MINA ROAD ALONG HWY 162, NORTH ON FRAZIER LANE, AND SOUTH ON BARNES LANE.

Detailed Location:
 CONSISTS OF A NUMBER OF SUBPOPULATIONS MAPPED AS FIVE POLYGONS: THREE ALONG HWY 162 FROM 0.4 TO 1.6 MILES EAST OF MINA ROAD, ONE 0.35 MILES NORTH OF HWY 162 ON FRAZIER LANE, AND ONE SOUTH OF HWY 162 ALONG BARNES LANE AND BIGGAR LANE.

Ecological:
 ALONG IMMEDIATE ROADSIDE, BANKS OF ROADSIDE DITCHES, AND IN ORCHARDS. COMPETING WITH MELIOLLOTUS ALBA, CENTAUREA SOLSTITIALIS, AND RUBUS SP.

Threats:
 HERBICIDE SPRAYING, ROADSIDE MAINTENANCE, AND EXOTIC PLANTS.

General:
 INCLUDES TYPE LOCALITY. CONSULT CNDDDB FOR DETAILS ON POPULATION NUMBERS. INCLUDES FORMER EOS #3, 4, 11, 12, AND 17. FORMER EO 17, LOCATED JUST W OF BARNES LANE, INTRODUCED BY CALTRANS IN 1985.

PLSS:	T23N, R12W, Sec. 31 (M)	Accuracy:	specific area	Area (acres):	93
UTM:	Zone-10 N4407414 E480268	Latitude/Longitude:	39.81648 / -123.23054	Elevation (feet):	1,400

County Summary:	Quad Summary:
Mendocino	Covelo East (3912372)



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Sources:

BAK42S0001	BAKER - BAKER #10343 NCC 1942-XX-XX
BAKNDS0001	BAKER - BAKER #9977 NCC XXXX-XX-XX
BAR84U0007	BARROWS, K. - ELEMENT PRESERVATION PLAN FOR LUPINUS MILO-BAKERI 1984-08-02
BAR85U0002	BARROWS, K. - MEMO REGARDING FIELD SURVEY OF EO #2, #4. 1985-06-13
BOO84F0003	BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1984-07-11
BOO84F0004	BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1984-07-11
BOO84F0005	BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1984-07-11
BOO84F0006	BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1984-07-11
BOO84M0001	BOOTH, J. - MAP FOR LUPINUS MILO-BAKERI 1984-XX-XX
BOO84U0001	BOOTH, J. - LETTER REGARDING THE SPRAYING OF LUPINUS MILO-BAKERI. 1984-08-06
BOO86F0009	BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1986-07-23
BOO86F0010	BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1986-07-23
BOO86F0011	BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1986-07-23
BOO86F0012	BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1986-07-23
BOO86F0013	BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1986-07-23
BOO86F0014	BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1986-07-23
COC85F0018	COCHRANE, S. ET AL. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1985-06-19
COC85F0019	COCHRANE, S. ET AL. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1985-06-19
COC85F0020	COCHRANE, S. ET AL. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1985-06-19
COC85F0024	COCHRANE, S. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1985-06-19
COC85M0003	COCHRANE, S. - MAP - LUPINUS MILO-BAKERI OCCURRENCES 1985-06-19
EAS79M0001	EASTON, R. - MAP FROM CALTRANS 1979-XX-XX
HOL82F0002	HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
HOL82F0003	HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
HOL82F0004	HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
HOL82F0005	HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
HOL82F0011	HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
HOL82F0012	HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
HOL82M0001	HOLLAND, R. & V. DAINS - MAP OF SITES OF LUPINUS MILO-BAKERI. 1982-07-14
LOZ88F0001	LOZIER, L. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1988-09-10
LOZ91F0016	LOZIER, L. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1991-09-01
NIE77U0015	NIEHAUS, T. - RARE PLANT STATUS REPORT FOR LUPINUS MILO-BAKERI, CNPS. 1977-XX-XX
PAL92F0001	PALMER, P. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1992-07-17
PAL93F0001	PALMER, P. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1993-07-17
PAL94F0001	PALMER, P. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1994-07-02
SCH82F0003	SCHOMER, C. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-10-04
SMI80S0002	SMITH, G. & C. WHEELER - SMITH #5902 HSC #84526 1980-06-16
SMI82S0001	SMITH, G. - SMITH #7650 HSC #84527 1982-07-09
SMINDS0002	SMITH, G. - SMITH #7774 HERBARIUM UNKNOWN XXXX-XX-XX
WHE03F0001	WHEELER, C. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 2003-07-12



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 07602	EO Index: 8160
Key Quad: Covelo East (3912372)	Element Code: PDFAB2B4E0
Occurrence Number: 5	Occurrence Last Updated: 1994-11-08

Scientific Name: <i>Lupinus milo-bakeri</i>	Common Name: Milo Baker's lupine
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists:
State: Threatened	
CNDDDB Element Ranks:	
Global: G1Q	
State: S1	

General Habitat: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: IN ROADSIDE DITCHES, DRY GRAVELLY AREAS ALONG ROADS, AND ALONG SMALL STREAMS. 395-430 M.
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Last Date Observed: XXXX-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1985-06-19	Occurrence Rank: None
Owner/Manager: CALTRANS	Trend: Unknown
Presence: Possibly Extirpated	

Location:
ABOUT 1/2 MI S OF COVELO, ALONG HWY 162.

Detailed Location:

Ecological:

Threats:

General:

INFORMATION FROM CNPS MAP. NO PLANTS SEEN IN 1982, 1984 OR 1985.

PLSS: T22N, R13W, Sec. 12 (M)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-10 N4403927 E478695	Latitude/Longitude: 39.78503 / -123.24881	Elevation (feet): 1,390

County Summary:

Mendocino

Quad Summary:

Covelo East (3912372)

Sources:

BOO84U0001	BOOTH, J. - LETTER REGARDING THE SPRAYING OF LUPINUS MILO-BAKERI. 1984-08-06
CNPNDM0005	CALIFORNIA NATIVE PLANT SOCIETY - MAP FOR LUPINUS MILO-BAKERI XXXX-XX-XX
HOL82F0006	HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
HOL82M0001	HOLLAND, R. & V. DAINS - MAP OF SITES OF LUPINUS MILO-BAKERI. 1982-07-14



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 07606	EO Index: 8389	
Key Quad: Covelo East (3912372)	Element Code: PDFAB2B4E0	
Occurrence Number: 6	Occurrence Last Updated: 1994-11-08	

Scientific Name: <i>Lupinus milo-bakeri</i>	Common Name: Milo Baker's lupine
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists:
State: Threatened	
CNDDDB Element Ranks:	
Global: G1Q	
State: S1	

General Habitat: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: IN ROADSIDE DITCHES, DRY GRAVELLY AREAS ALONG ROADS, AND ALONG SMALL STREAMS. 395-430 M.
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Last Date Observed: XXXX-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1985-06-19	Occurrence Rank: None
Owner/Manager: CALTRANS	Trend: Unknown
Presence: Possibly Extirpated	

Location:
ABOUT 1/2 MI N OF COVELO, ALONG HWY 162, BOTH SIDES OF RD.

Detailed Location:

Ecological:

Threats:

General:

ONLY LOCATION INFORMATION FROM CNPS MAPS. NO PLANTS SEEN IN 1982, 1984 OR 1985.

PLSS: T22N, R13W, Sec. 01 (M)	Accuracy: nonspecific area	Area (acres): 23
UTM: Zone-10 N4405834 E478712	Latitude/Longitude: 39.80221 / -123.24867	Elevation (feet): 1,390

County Summary:

Mendocino

Quad Summary:

Covelo East (3912372)

Sources:

- BAR84U0007 BARROWS, K. - ELEMENT PRESERVATION PLAN FOR LUPINUS MILO-BAKERI 1984-08-02
- BOO84U0001 BOOTH, J. - LETTER REGARDING THE SPRAYING OF LUPINUS MILO-BAKERI. 1984-08-06
- CNPNDM0005 CALIFORNIA NATIVE PLANT SOCIETY - MAP FOR LUPINUS MILO-BAKERI XXXX-XX-XX
- COC85F0022 COCHRANE, S. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1985-06-19
- COC85M0003 COCHRANE, S. - MAP - LUPINUS MILO-BAKERI OCCURRENCES 1985-06-19
- HOL82F0007 HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
- HOL82M0001 HOLLAND, R. & V. DAINS - MAP OF SITES OF LUPINUS MILO-BAKERI. 1982-07-14
- NIE77U0015 NIEHAUS, T. - RARE PLANT STATUS REPORT FOR LUPINUS MILO-BAKERI, CNPS. 1977-XX-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 07607	EO Index: 8390
Key Quad: Covelo East (3912372)	Element Code: PDFAB2B4E0
Occurrence Number: 7	Occurrence Last Updated: 1994-11-08

Scientific Name: <i>Lupinus milo-bakeri</i>	Common Name: Milo Baker's lupine
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists:
State: Threatened	
CNDDDB Element Ranks:	
Global: G1Q	
State: S1	

General Habitat: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: IN ROADSIDE DITCHES, DRY GRAVELLY AREAS ALONG ROADS, AND ALONG SMALL STREAMS. 395-430 M.
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Last Date Observed: XXXX-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1985-06-19	Occurrence Rank: None
Owner/Manager: CALTRANS	Trend: Unknown
Presence: Possibly Extirpated	

Location:
ALONG HWY 162 JUST N OF COVELO, JUST N OF EAST LANE.

Detailed Location:

Ecological:

Threats:

General:

INFORMATION FROM CNPS MAPS. NO PLANTS SEEN IN 1982, 1984 OR 1985.

PLSS: T22N, R12W, Sec. 06 (M)	Accuracy: 1/5 mile	Area (acres): 0
UTM: Zone-10 N4405259 E478892	Latitude/Longitude: 39.79703 / -123.24655	Elevation (feet): 1,390

County Summary:

Mendocino

Quad Summary:

Covelo East (3912372)

Sources:

- BOO84U0001 BOOTH, J. - LETTER REGARDING THE SPRAYING OF LUPINUS MILO-BAKERI. 1984-08-06
- CNPNDM0005 CALIFORNIA NATIVE PLANT SOCIETY - MAP FOR LUPINUS MILO-BAKERI XXXX-XX-XX
- COC85F0022 COCHRANE, S. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1985-06-19
- COC85M0003 COCHRANE, S. - MAP - LUPINUS MILO-BAKERI OCCURRENCES 1985-06-19
- HOL82F0008 HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
- HOL82M0001 HOLLAND, R. & V. DAINS - MAP OF SITES OF LUPINUS MILO-BAKERI. 1982-07-14
- NIE77U0015 NIEHAUS, T. - RARE PLANT STATUS REPORT FOR LUPINUS MILO-BAKERI, CNPS. 1977-XX-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 07614	EO Index: 4479
Key Quad: Covelo East (3912372)	Element Code: PDFAB2B4E0
Occurrence Number: 8	Occurrence Last Updated: 1994-11-08

Scientific Name: <i>Lupinus milo-bakeri</i>	Common Name: Milo Baker's lupine
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists:
State: Threatened	
CNDDDB Element Ranks:	
Global: G1Q	
State: S1	

General Habitat: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: IN ROADSIDE DITCHES, DRY GRAVELLY AREAS ALONG ROADS, AND ALONG SMALL STREAMS. 395-430 M.
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Last Date Observed: 1942-08-19	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1985-06-19	Occurrence Rank: Unknown
Owner/Manager: BIA-ROUND VALLEY RES, PVT	Trend: Decreasing
Presence: Presumed Extant	

Location:
ROUND VALLEY, 3 MI N OF COVELO.

Detailed Location:
MAPPED AS NON-SPECIFIC POLYGON ALONG HIGHWAY 162.

Ecological:
AT EDGE OF SMALL STREAM IN OPEN MEADOW; ASSOCIATED WITH QUERCUS LOBATA, SALIX AND FRAXINUS.

Threats:
GRAZING COULD THREATEN.

General:
NOT FOUND IN 1982, 1984 OR 1985. AREA IS A HEAVILY GRAZED STREAM COURSE.

PLSS: T23N, R12W, Sec. 19 (M)	Accuracy: nonspecific area	Area (acres): 54
UTM: Zone-10 N4409088 E478765	Latitude/Longitude: 39.83153 / -123.24816	Elevation (feet): 1,390

County Summary: Mendocino	Quad Summary: Covelo East (3912372)
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Sources:

BOO84U0001	BOOTH, J. - LETTER REGARDING THE SPRAYING OF LUPINUS MILO-BAKERI. 1984-08-06
COC85F0023	COCHRANE, S. ET AL. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1985-06-19
CON42S0001	CONSTANCE & BAKER - CONSTANCE #3006 DS 1942-08-10
HOL82F0009	HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
HOL82M0001	HOLLAND, R. & V. DAINS - MAP OF SITES OF LUPINUS MILO-BAKERI. 1982-07-14



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	07604	EO Index:	7951
Key Quad:	Covelo East (3912372)	Element Code:	PDFAB2B4E0
Occurrence Number:	9	Occurrence Last Updated:	1994-11-07

Scientific Name:	<i>Lupinus milo-bakeri</i>	Common Name:	Milo Baker's lupine
Listing Status:	Federal: None State: Threatened	Rare Plant Rank:	1B.1
CNDDDB Element Ranks:	Global: G1Q State: S1	Other Lists:	

General Habitat:	CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat:	IN ROADSIDE DITCHES, DRY GRAVELLY AREAS ALONG ROADS, AND ALONG SMALL STREAMS. 395-430 M.
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Last Date Observed:	1986-07-23	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1986-07-23	Occurrence Rank:	Good
Owner/Manager:	CALTRANS	Trend:	Decreasing
Presence:	Presumed Extant		

Location:
COVELO, APPROX ONE MI S OF CENTER OF TOWN, NEAR JCT HWY 162 AND WATTENBURG RD.

Detailed Location:
JUST SOUTH OF GRIST CREEK.

Ecological:
ALONG ROADSIDE DITCHES AND DRAINAGES; ASSOCIATED WITH PHALARIS TRIBULUS.

Threats:
ROADSIDE MAINTENANCE ACTIVITIES THREATEN.

General:
175 PLANTS IN 1982, POPULATION DECREASED BY 25% IN 1984 DUE TO HIGHWAY WORK ON BRIDGE, 100 PLANTS IN 1986.

PLSS: T22N, R13W, Sec. 12 (M)	Accuracy: specific area	Area (acres):	4
UTM: Zone-10 N4403483 E478695	Latitude/Longitude: 39.78103 / -123.24879	Elevation (feet):	1,385

County Summary:	Quad Summary:
Mendocino	Covelo East (3912372)

- Sources:**
- BOO84F0001 BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1984-07-11
 - BOO84U0001 BOOTH, J. - LETTER REGARDING THE SPRAYING OF LUPINUS MILO-BAKERI. 1984-08-06
 - BOO86F0006 BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1986-07-23
 - COC85M0003 COCHRANE, S. - MAP - LUPINUS MILO-BAKERI OCCURRENCES 1985-06-19
 - EAS79M0001 EASTON, R. - MAP FROM CALTRANS 1979-XX-XX
 - HOL82F0010 HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
 - HOL82M0001 HOLLAND, R. & V. DAINS - MAP OF SITES OF LUPINUS MILO-BAKERI. 1982-07-14
 - NIE77U0015 NIEHAUS, T. - RARE PLANT STATUS REPORT FOR LUPINUS MILO-BAKERI, CNPS. 1977-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 07610	EO Index: 4477
Key Quad: Covelo East (3912372)	Element Code: PDFAB2B4E0
Occurrence Number: 10	Occurrence Last Updated: 1994-11-07

Scientific Name: <i>Lupinus milo-bakeri</i>	Common Name: Milo Baker's lupine
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists:
State: Threatened	
CNDDDB Element Ranks:	
Global: G1Q	
State: S1	

General Habitat: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: IN ROADSIDE DITCHES, DRY GRAVELLY AREAS ALONG ROADS, AND ALONG SMALL STREAMS. 395-430 M.
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Last Date Observed: 1984-07-11	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1985-06-19	Occurrence Rank: Unknown
Owner/Manager: CALTRANS	Trend: Unknown
Presence: Presumed Extant	

Location:
ALONG HWY 162, APPROX 1.5 MI N OF COVELO, NEAR RANGER STATION.

Detailed Location:
ALONG BOTH SIDES OF HWY.

Ecological:
ASSOCIATED WITH POISON OAK, WILD GRAPE, AND SAMBUCUS SP.

Threats:
ROADSIDE MAINTENANCE THREATENS.

General:
SEEN IN 1979, 1982, AND 1984. AREA MOWED IN 1982. POPULATION HEALTHY IN 1984, BUT NOT SEEN IN 1985.

PLSS: T23N, R13W, Sec. 25 (M)	Accuracy: specific area	Area (acres): 7
UTM: Zone-10 N4407565 E478760	Latitude/Longitude: 39.81781 / -123.24816	Elevation (feet): 1,396

County Summary: Mendocino	Quad Summary: Covelo East (3912372)
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- Sources:**
- COC85M0003 COCHRANE, S. - MAP - LUPINUS MILO-BAKERI OCCURRENCES 1985-06-19
 - EAS79M0001 EASTON, R. - MAP FROM CALTRANS 1979-XX-XX
 - HOL82F0011 HOLLAND, R. & V. DAINS - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-07-14
 - HOL82M0001 HOLLAND, R. & V. DAINS - MAP OF SITES OF LUPINUS MILO-BAKERI. 1982-07-14
 - NIE77U0015 NIEHAUS, T. - RARE PLANT STATUS REPORT FOR LUPINUS MILO-BAKERI, CNPS. 1977-XX-XX
 - SCH82F0003 SCHOMER, C. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1982-10-04



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 07643	EO Index: 7789
Key Quad: Covelo East (3912372)	Element Code: PDFAB2B4E0
Occurrence Number: 14	Occurrence Last Updated: 1994-12-27

Scientific Name: <i>Lupinus milo-bakeri</i>	Common Name: Milo Baker's lupine
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists:
State: Threatened	
CNDDDB Element Ranks:	
Global: G1Q	
State: S1	

General Habitat: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: IN ROADSIDE DITCHES, DRY GRAVELLY AREAS ALONG ROADS, AND ALONG SMALL STREAMS. 395-430 M.
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Last Date Observed: 1979-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1979-XX-XX	Occurrence Rank: None
Owner/Manager: PVT	Trend: Unknown
Presence: Extirpated	

Location:
EAST OF COVELO ALONG EAST LANE NEAR CROSSING OF MILL CREEK AND LITTLE SLOUGH.

Detailed Location:
PLANTS SEEN ON SOUTH SIDE OF BRIDGE.

Ecological:
Threats:

General:
2 PLANTS SEEN IN 1979. NOT SEEN IN 1985 SURVEY.

PLSS: T22N, R12W, Sec. 05 (M)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-10 N4404973 E481696	Latitude/Longitude: 39.79452 / -123.21379	Elevation (feet): 1,349

County Summary: Mendocino	Quad Summary: Covelo East (3912372)
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Sources:

BOO85U0001	BOOTH, J. - PERSONAL COMMUNICATION TO S. COCHRANE REGARDING 1979 SIGHTING OF LUPINUS MILO-BAKERI (ON FIELD SURVEY FORM). 1985-06-19
COC85M0003	COCHRANE, S. - MAP - LUPINUS MILO-BAKERI OCCURRENCES 1985-06-19



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 07599	EO Index: 7423	
Key Quad: Covelo East (3912372)	Element Code: PDFAB2B4E0	
Occurrence Number: 15	Occurrence Last Updated: 1989-08-11	

Scientific Name: <i>Lupinus milo-bakeri</i>	Common Name: Milo Baker's lupine
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists:
State: Threatened	
CNDDDB Element Ranks:	
Global: G1Q	
State: S1	

General Habitat: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: IN ROADSIDE DITCHES, DRY GRAVELLY AREAS ALONG ROADS, AND ALONG SMALL STREAMS. 395-430 M.
--------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------

Last Date Observed: 1986-07-23	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1986-07-23	Occurrence Rank: Unknown
Owner/Manager: CALTRANS	Trend: Unknown
Presence: Presumed Extant	

Location:
0.13 MILE SOUTH OF FAIRBANKS ROAD ON EAST SIDE OF HIGHWAY 162.

Detailed Location:

Ecological:

Threats:

General:

20 PLANTS SEEN ALONG ROADSIDE IN BARREN AREA.

PLSS: T22N, R12W, Sec. 19 (M)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-10 N4400796 E478766	Latitude/Longitude: 39.75682 / -123.24788	Elevation (feet): 1,405

County Summary:

Mendocino

Quad Summary:

Covelo East (3912372)

Sources:

BOO86F0004 BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1986-07-23



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 07601	EO Index: 7424
Key Quad: Covelo East (3912372)	Element Code: PDFAB2B4E0
Occurrence Number: 16	Occurrence Last Updated: 1991-09-13

Scientific Name: <i>Lupinus milo-bakeri</i>	Common Name: Milo Baker's lupine
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists:
State: Threatened	
CNDDDB Element Ranks:	
Global: G1Q	
State: S1	

General Habitat: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: IN ROADSIDE DITCHES, DRY GRAVELLY AREAS ALONG ROADS, AND ALONG SMALL STREAMS. 395-430 M.
--------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------

Last Date Observed: 1986-07-23	Occurrence Type: Introduced Back into Native Hab./Range
Last Survey Date: 1986-07-23	Occurrence Rank: Unknown
Owner/Manager: CALTRANS	Trend: Unknown
Presence: Presumed Extant	

Location:
W SIDE OF HWY 162, 0.8 MI N OF FAIRBANKS RD, S OF COVELO.

Detailed Location:

Ecological:

Threats:

General:

40 PLANTS IN 1986. THIS OCCURRENCE WAS PLANTED BY CALTRANS IN 1985.

PLSS: T22N, R13W, Sec. 13 (M)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-10 N4402286 E478702	Latitude/Longitude: 39.77024 / -123.24867	Elevation (feet): 1,400

County Summary:

Mendocino

Quad Summary:

Covelo East (3912372)

Sources:

BOO86F0005 BOOTH, J. - FIELD SURVEY FORM FOR LUPINUS MILO-BAKERI 1986-07-23



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	20901	EO Index:	9248
Key Quad:	Covelo East (3912372)	Element Code:	PDLIM02020
Occurrence Number:	15	Occurrence Last Updated:	1992-03-31

Scientific Name:	<i>Limnanthes bakeri</i>	Common Name:	Baker's meadowfoam
Listing Status:	Federal: None State: Rare	Rare Plant Rank:	1B.1
CNDDB Element Ranks:	Global: G1 State: S1	Other Lists:	BLM_S-Sensitive

General Habitat:	Micro Habitat:
FRESHWATER MARSH, VALLEY AND FOOTHILL GRASSLAND, MEADOWS AND SEEPS, VERNAL POOLS.	SEASONALLY MOIST OR SATURATED SITES W/IN GRASSLAND; ALSO IN SWALES, ROADSIDE DITCHES & MARGINS OF MARSHY AREAS. 175 -910 M.

Last Date Observed:	1991-05-06	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1991-05-06	Occurrence Rank:	Good
Owner/Manager:	UNKNOWN	Trend:	Unknown
Presence:	Presumed Extant		

Location:
WILLIAMS VALLEY, ALONG LIGHT-DUTY ROAD (UNNAMED?).

Detailed Location:

Ecological:
ROADSIDE DITCHES AND LOW DRAINAGES IN SEASONAL WET MEADOW. ASSOCIATED WITH JUNCUS SP., LIMNANTHES DOUGLASII, PLEUROPOGON DAVYI, ETC.

Threats:

General:
10,000+ PLANTS SEEN IN 1991. MORE PLANTS SEEN OVER FENCE ON PRIVATE LAND, BUT NOT SURVEYED.

PLSS:	T23N, R12W, Sec. 23 (M)	Accuracy:	specific area	Area (acres):	4
UTM:	Zone-10 N4409390 E485388	Latitude/Longitude:	39.83439 / -123.17076	Elevation (feet):	1,560

County Summary:	Quad Summary:
Mendocino	Covelo East (3912372)

Sources:
BOO91F0002 BOOTH, J. - FIELD SURVEY FORM FOR LIMNANTHES BAKERI 1991-05-06

Appendix C (CNPS Inventory Results)




Plant List

5 matches found. *Click on scientific name for details*

Search Criteria

Found in Quad **39123G2**

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Remove Photos](#)

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank	Photo
Calystegia collina ssp. tridactylosa	three-fingered morning-glory	Convolvulaceae	perennial rhizomatous herb	1B.2	S1	G4T1	 <p>© 2003 BLM, Arcata Field Office</p>
Limnanthes bakeri	Baker's meadowfoam	Limnanthaceae	annual herb	1B.1	S1	G1	 <p>© 2004 Dean Wm. Taylor</p>
Lupinus milo-bakeri	Milo Baker's lupine	Fabaceae	annual herb	1B.1	S1	G1Q	

[Piperia candida](#) white-flowered rein orchid Orchidaceae perennial herb 1B.2 S2 G3?



© 1986 Dan Post

[Potamogeton epihydrus](#) Nuttall's ribbon-leaved pondweed Potamogetonaceae perennial rhizomatous herb 2.2 S2.2? G5 no photo available

Suggested Citation

California Native Plant Society (CNPS). 2013. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA. Accessed on Friday, February 22, 2013.

Search the Inventory

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CNPS *California Native Plant* Inventory of Rare and Endangered Plants

Plant List

2 matches found. *Click on scientific name for details*

Search Criteria

Found in Quad 39123G3

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank	Photo
Lupinus milo-bakeri	Milo Baker's lupine	Fabaceae	annual herb	1B.1	S1	G1Q	 <p>Jo-Ann Ordano© 2000 California Academy of Sciences</p>
Potamogeton epihydrus	Nuttall's ribbon-leaved pondweed	Potamogetonaceae	perennial rhizomatous herb	2.2	S2.2?	G5	no photo available

Suggested Citation

California Native Plant Society (CNPS). 2013. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA. Accessed on Wednesday, May 22, 2013.

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[The Calflora Database](#)

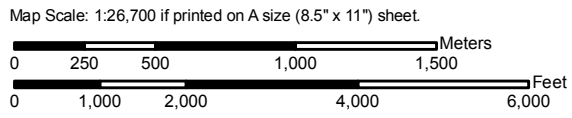
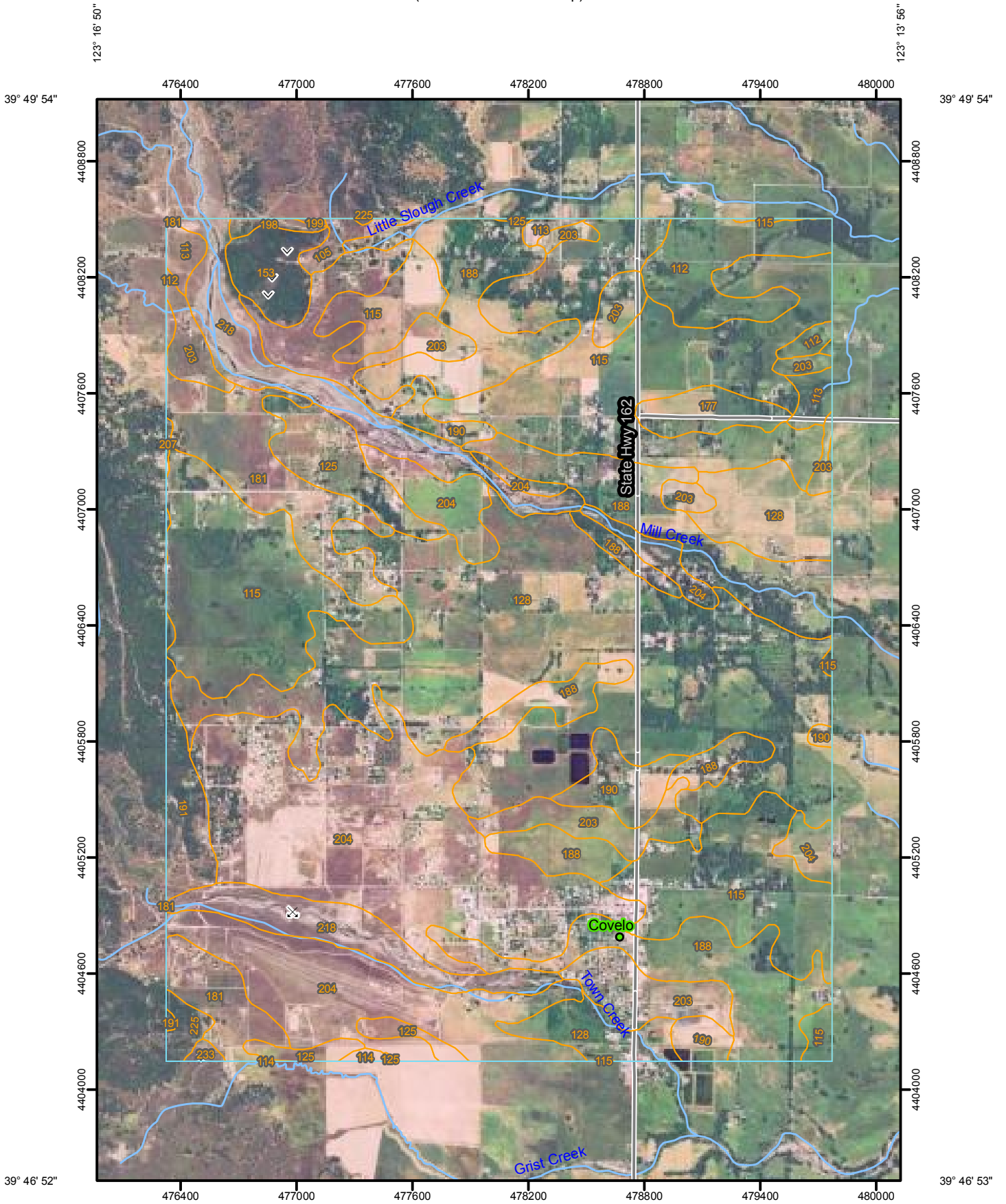
[Studio Simple](#)

[TRC](#)






































Appendix D (NRCS Soils Map)

Map Unit Legend included

Soil Map—Mendocino County, Eastern Part and Southwestern Part of Trinity County, California
(Covelo NRCS Soils Map)



MAP LEGEND

	Area of Interest (AOI)		Very Stony Spot
	Area of Interest (AOI)		Wet Spot
	Soils		Other
	Soil Map Units		
Special Point Features			
	Blowout		Gully
	Borrow Pit		Short Steep Slope
	Clay Spot		Other
	Closed Depression		Political Features
	Gravel Pit		Cities
	Gravelly Spot		Water Features
	Landfill		Streams and Canals
	Lava Flow	Transportation	
	Marsh or swamp		Rails
	Mine or Quarry		Interstate Highways
	Miscellaneous Water		US Routes
	Perennial Water		Major Roads
	Rock Outcrop		Local Roads
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		
	Spoil Area		
	Stony Spot		

MAP INFORMATION

Map Scale: 1:26,700 if printed on A size (8.5" x 11") sheet.

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 10N NAD83

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

Soil Survey Area: Mendocino County, Eastern Part and Southwestern Part of Trinity County, California
Survey Area Data: Version 8, Jan 13, 2012

Date(s) aerial images were photographed: 6/14/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Mendocino County, Eastern Part and Southwestern Part of Trinity County, California (CA687)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
105	Bearwallow-Hellman-Witherell complex, 30 to 50 percent slopes	13.9	0.4%
112	Clear Lake clay, 0 to 2 percent slopes	92.5	2.5%
113	Cole loam, drained, 0 to 2 percent slopes	30.9	0.8%
114	Cole loam, drained, 2 to 5 percent slopes	3.1	0.1%
115	Cole clay loam, 0 to 2 percent slopes	753.1	20.3%
125	Feliz clay loam, gravelly substratum, 0 to 2 percent slopes	84.1	2.3%
128	Gielow sandy loam, 0 to 5 percent slopes	782.7	21.1%
153	Hopland-Woodin complex, 50 to 75 percent slopes	43.8	1.2%
177	Pinole gravelly loam, 0 to 2 percent slopes	34.6	0.9%
181	Pinole very gravelly loam, 0 to 2 percent slopes	169.4	4.6%
188	Russian loam, 0 to 2 percent slopes	461.7	12.4%
190	Russian loam, gravelly substratum, 0 to 2 percent slopes	73.2	2.0%
191	Sanhedrin-Asabeen-Speaker gravelly loams, 30 to 50 percent slopes	49.2	1.3%
198	Shortyork-Yorkville-Witherell complex, 9 to 15 percent slopes	6.8	0.2%
199	Shortyork-Yorkville-Witherell complex, 15 to 30 percent slopes	1.1	0.0%
203	Talmage gravelly sandy loam, 0 to 2 percent slopes	244.9	6.6%
204	Talmage very gravelly sandy loam, 0 to 2 percent slopes	664.5	17.9%
207	Updegraff-Sanhedrin complex, 15 to 50 percent slopes	1.7	0.0%
218	Xerofluvents-Riverwash complex, 0 to 2 percent slopes	186.9	5.0%
225	Yorktree-Hopland-Woodin complex, 30 to 50 percent slopes	13.5	0.4%
233	Yorkville-Squawrock-Witherell complex, 30 to 50 percent slopes	3.6	0.1%
Totals for Area of Interest		3,715.3	100.0%

Appendix E (U S. Fish and Wildlife Service Status
Ranks, Global and State Ranking and California Native
Plant Society Rarity Rankings)

U S. Fish and Wildlife Service Status Ranks, Global and State Ranking and California Native Plant Society Rarity Rankings

USFWS Status Ranks

- (PE) Proposed Endangered Proposed in the Federal Register as being in danger of extinction
- (PT) Proposed Threatened Proposed as likely to become endangered within the foreseeable future
- (E) Endangered Listed in the Federal Register as being in danger of extinction
- (T) Threatened Listed as likely to become endangered within the foreseeable future
- (C) Candidate which may become a proposed species Habitat Y = Designated, P = Proposed, N = None Designated
- * Denotes a species Listed by the National Marine Fisheries Service

Global Ranking: The global rank (G-rank) is a reflection of the overall condition of an element throughout its global range.

- G1 = Less than 6 viable element occurrences (EOs) OR less than 1,000 individuals OR less than 2,000 acres.
- G2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres.
- G3 = 21-80 EOs OR 3,000-10,000 individuals OR 10,000-50,000 acres.
- G4 = Apparently secure; this rank is clearly lower than G3 but factors exist to cause some concern; i.e., there is some threat, or somewhat narrow habitat.
- G5 = Population or stand demonstrably secure to ineradicable due to being commonly found in the world.

State Ranking - The state rank (S-rank) is assigned much the same way as the global rank, except state ranks in California often also contain a threat designation attached to the S-rank.

- S1 = Less than 6 EOs OR less than 1,000 individuals OR less than 2,000 acres
- S1.1 = very threatened
- S1.2 = threatened
- S1.3 = no current threats known
- S2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres
- S2.1 = very threatened
- S2.2 = threatened
- S2.3 = no current threats known
- S3 = 21-80 EOs or 3,000-10,000 individuals OR 10,000-50,000 acres
- S3.1 = very threatened
- S3.2 = threatened
- S3.3 = no current threats known
- S4 = Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat. NO THREAT RANK.
- S5 = Demonstrably secure to ineradicable in California. NO THREAT RANK.

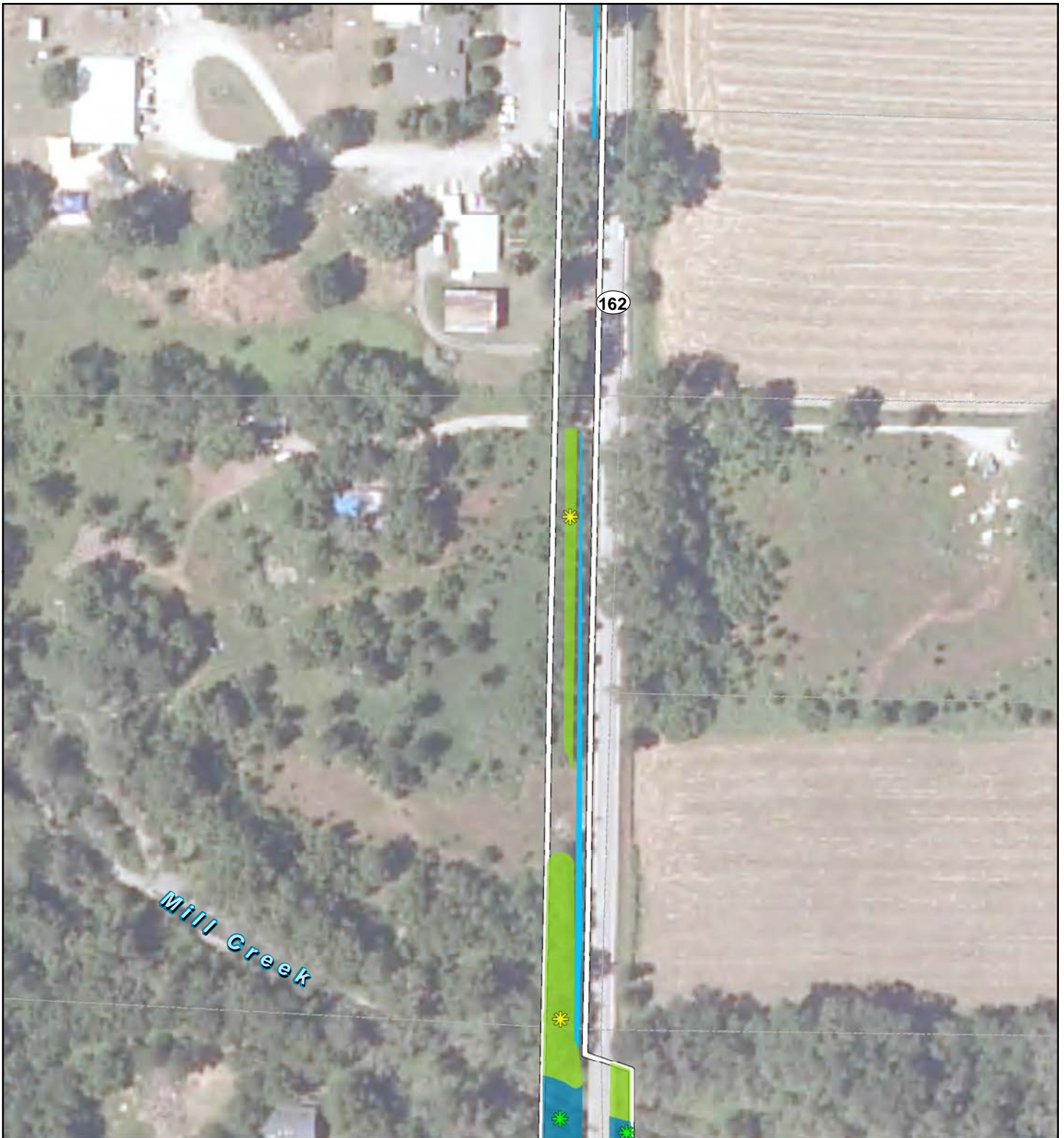
Appendix F (Map Book of Biological Resource Constraints: Figure Set 3)



Habitat-General Study Area Round Valley Parcels		Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.		Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch		Photo Point Photo Orientation Field-of-View		Key Map
Biological Restrictions Riparian Dripline Sensitive Habitat								

Paper Size 8.5" x 11" (ANSI A) 0 50 100 150 Feet Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet			MCOG and Caltrans Covelo/Round Valley Non-Motorized Needs Assessment & EFS Reconnaissance Level Biological Investigation	Job Number 8410146 Revision A Date 11 Jun 2013	Figure 3-1
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 Data source: Mendocino County; parcel data; Casil; road data; GHD field work: 3/6-8/13 Created by: gldavidson
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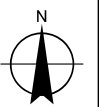
<p>Habitat-General</p> <ul style="list-style-type: none"> Biological Restrictions Riparain Dripline Sensitive Habitat <p> Study Area</p> <p> Round Valley Parcels</p>	<p>Animal Habitat</p> <ul style="list-style-type: none"> Rocky Substrate Creek Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> Palustrine Wetland Riverine Palustrine Ditch 	<p> Photo Point</p> <p> Photo Orientation Field-of-View</p>	<p>Key Map</p> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td></tr> <tr><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td></tr> <tr><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td><td>32</td><td>33</td><td>34</td></tr> <tr><td>35</td><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td><td>41</td><td>42</td></tr> </table>	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



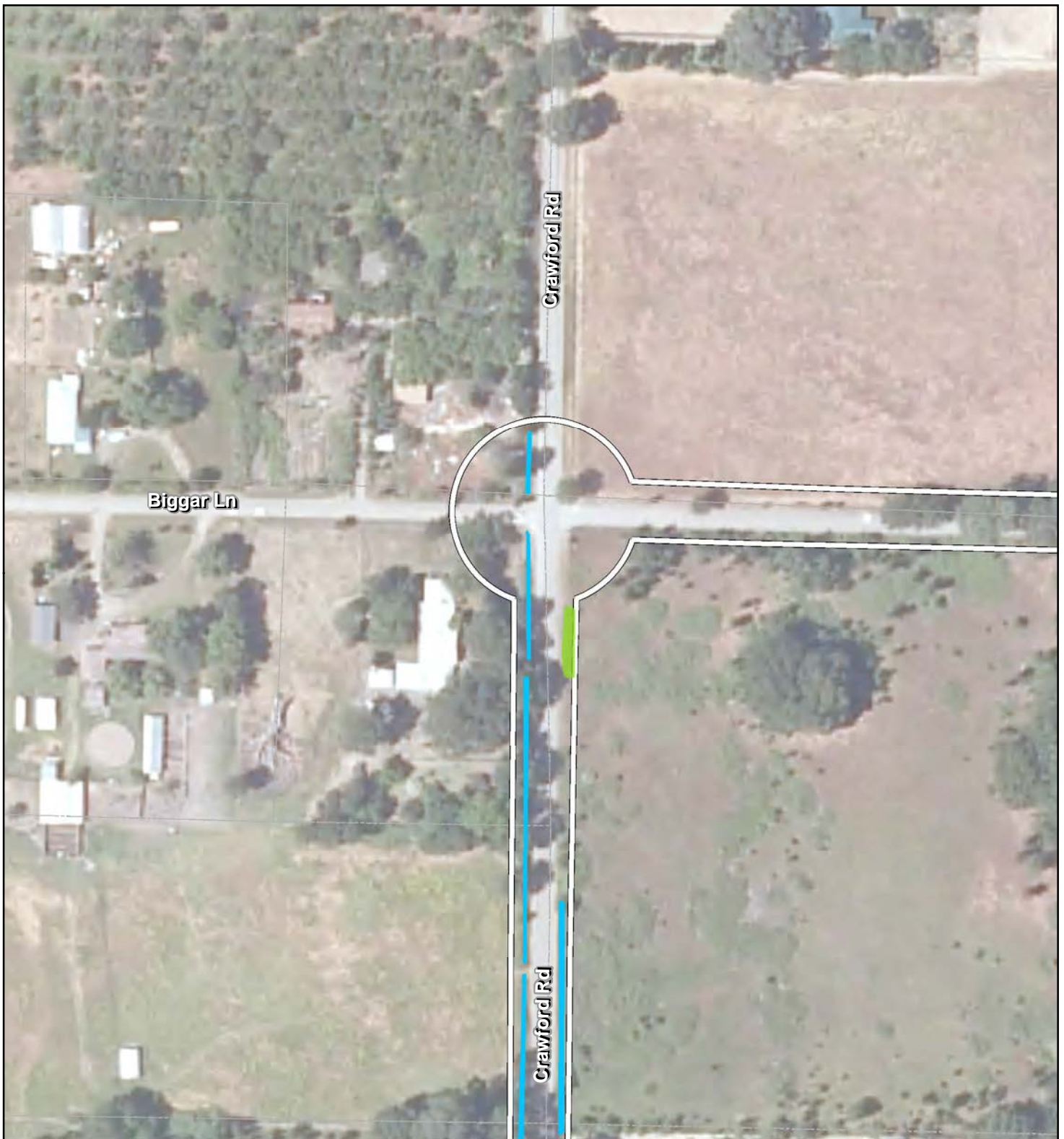
MCOG and Caltrans
Covelo/Round Valley Non-Motorized
Needs Assessment & EFS

**Reconnaissance Level
Biological Investigation**

Job Number | 8410146
Revision | A
Date | 11 Jun 2013

Figure 3-2

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Data source: Mendocino County: parcel data; Casil: road data; GHD field work: 3/6-8/13 Created by: gldavidson



Habitat-General Study Area Round Valley Parcels Biological Restrictions Riparian Dripline Sensitive Habitat		Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.		Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch Photo Point Photo Orientation Field-of-View		Key Map
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Paper Size 8.5" x 11" (ANSI A) 0 50 100 150 Feet Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet			MCOG and Caltrans Covelo/Round Valley Non-Motorized Needs Assessment & EFS Reconnaissance Level Biological Investigation	Job Number 8410146 Revision A Date 11 Jun 2013
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Figure 3-3

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 Data source: Mendocino County; parcel data; Casil; road data; GHD field work: 3/6-8/13 Created by: gldavidson



Biggar Ln



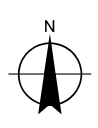
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Paper Size 8.5" x 11" (ANSI A)

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

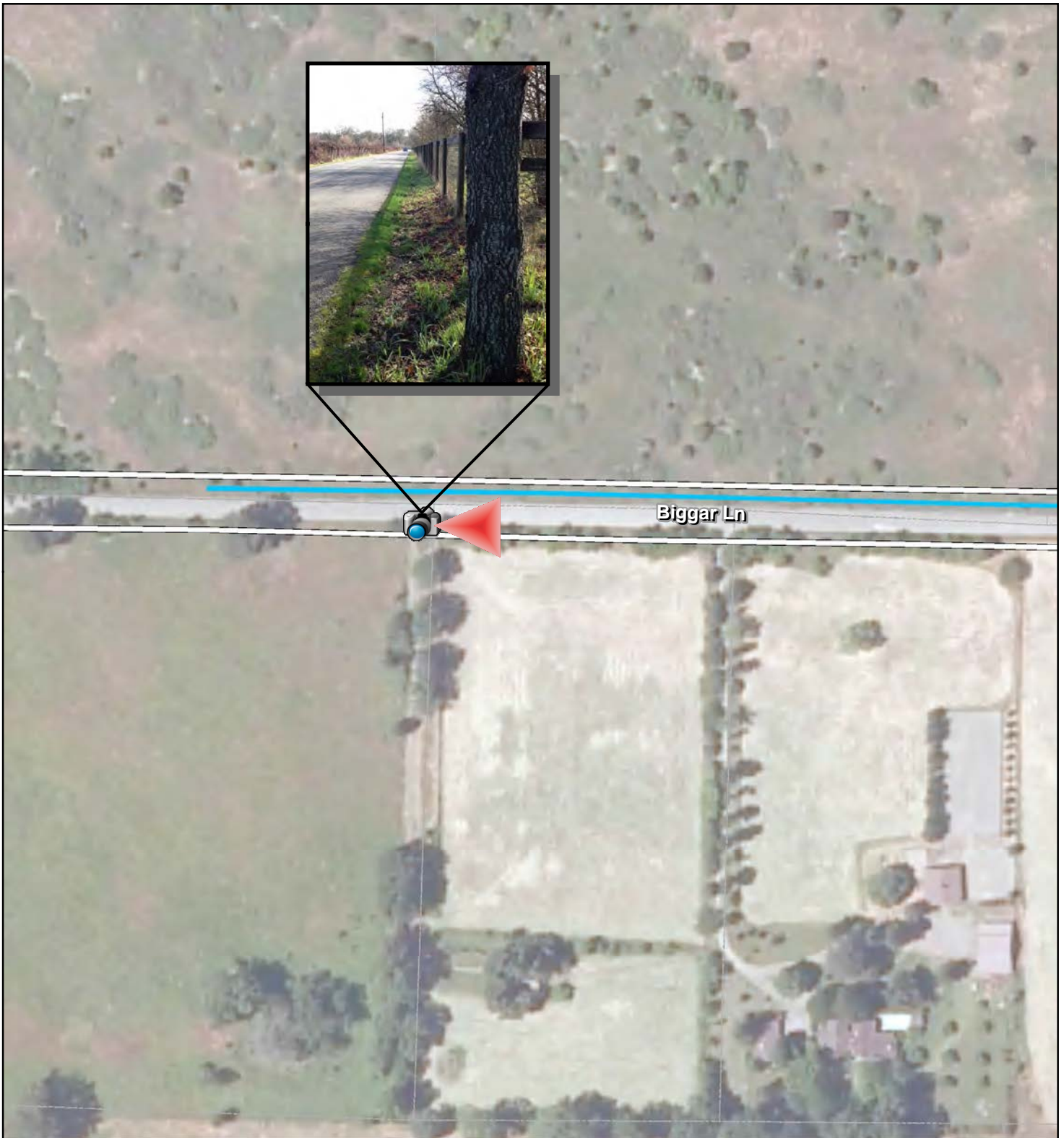


MCOG and Caltrans
Covelo/Round Valley Non-Motorized
Needs Assessment & EFS

**Reconnaissance Level
Biological Investigation**

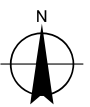
Job Number | 8410146
Revision | A
Date | 11 Jun 2013

Figure 3-4



Study Area Round Valley Parcels	Habitat-General Biological Restrictions Riparain Dripline Sensitive Habitat	Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.	Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch	Photo Point Photo Orientation Field-of-View	
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Paper Size 8.5" x 11" (ANSI A)
 0 50 100 150
 Feet
 Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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Figure 3-5



<p>Habitat-General</p> <ul style="list-style-type: none"> Biological Restrictions Riparain Dripline Sensitive Habitat <p> Round Valley Parcels</p>	<p>Animal Habitat</p> <ul style="list-style-type: none"> Rocky Substrate Creek Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> Palustrine Wetland Riverine Palustrine Ditch 	<p> Photo Point</p> <p> Photo Orientation Field-of-View</p>	<p>Key Map</p>
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Habitat-General Study Area Round Valley Parcels		Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.		Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch		Photo Point Photo Orientation Field-of-View		Key Map
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Figure 3-7



<p>Habitat-General</p> <ul style="list-style-type: none"> Study Area Round Valley Parcels 	<ul style="list-style-type: none"> Biological Restrictions Riparian Dripline Sensitive Habitat 	<p>Animal Habitat</p> <ul style="list-style-type: none"> Rocky Substrate Creek Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> Palustrine Wetland Riverine Palustrine Ditch 	<ul style="list-style-type: none"> Photo Point Photo Orientation Field-of-View 	<p>Key Map</p> <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td></tr> <tr><td>33</td><td>34</td></tr> <tr><td>35</td><td>36</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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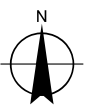
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<p>Habitat-General</p> <ul style="list-style-type: none"> Biological Restrictions Riparain Dripline Sensitive Habitat <p> Round Valley Parcels</p>	<p>Animal Habitat</p> <ul style="list-style-type: none"> Rocky Substrate Creek Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> Palustrine Wetland Riverine Palustrine Ditch 	<p> Photo Point</p> <p> Photo Orientation Field-of-View</p>	<p>Key Map</p> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td></tr> <tr><td>33</td><td>34</td></tr> <tr><td>35</td><td>36</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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Figure 3-9



<p>Study Area</p> <p>Round Valley Parcels</p>	<p>Habitat-General</p> <ul style="list-style-type: none"> ● Biological Restrictions ● Riparian Dripline ● Sensitive Habitat 	<p>Animal Habitat</p> <ul style="list-style-type: none"> ✱ Rocky Substrate Creek ✱ Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> ✱ Palustrine Wetland ✱ Riverine — Palustrine Ditch 	<p> Photo Point</p> <p> Photo Orientation Field-of-View</p>	<p>Key Map</p> <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td></tr> <tr><td>33</td><td>34</td></tr> <tr><td>35</td><td>36</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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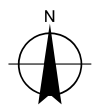
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Study Area Round Valley Parcels	Habitat-General Biological Restrictions Riparian Dripline Sensitive Habitat	Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.	Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch	Photo Point Photo Orientation Field-of-View	
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Figure 3-11



Habitat-General Study Area Round Valley Parcels Biological Restrictions Riparain Dripline Sensitive Habitat		Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.		Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch Photo Point Photo Orientation Field-of-View		Key Map
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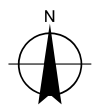
Figure 3-12

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Habitat-General Study Area Round Valley Parcels Biological Restrictions Riparian Dripline Sensitive Habitat		Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.		Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch Photo Point Photo Orientation Field-of-View		Key Map
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Figure 3-13



Henderson Rd

Henderson Rd

<p> Study Area</p> <p> Round Valley Parcels</p>	<p>Habitat-General</p> <p> Biological Restrictions</p> <p> Riparain Dripline</p> <p> Sensitive Habitat</p>	<p>Animal Habitat</p> <p> Rocky Substrate Creek</p> <p> Bird & Bat Habitat</p> <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <p> Palustrine Wetland</p> <p> Riverine</p> <p> Palustrine Ditch</p>	<p> Photo Point</p> <p> Photo Orientation Field-of-View</p>	<p>Key Map</p> <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td></tr> <tr><td>33</td><td>34</td></tr> <tr><td>35</td><td>36</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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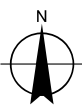
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











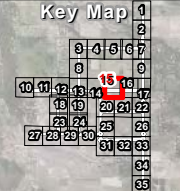
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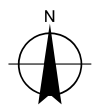
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Figure 3-15



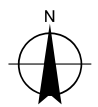
<p>Study Area</p> <p>Round Valley Parcels</p>	<p>Habitat-General</p> <ul style="list-style-type: none"> ● Biological Restrictions ● Riparain Dripline ● Sensitive Habitat 	<p>Animal Habitat</p> <ul style="list-style-type: none"> ✱ Rocky Substrate Creek ✱ Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> ✱ Palustrine Wetland ✱ Riverine — Palustrine Ditch 	<p> Photo Point</p> <p> Photo Orientation Field-of-View</p>	<p>Key Map</p> <table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr> <tr><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td></tr> <tr><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
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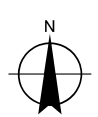
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Habitat-General Study Area Round Valley Parcels Biological Restrictions Riparian Dripline Sensitive Habitat		Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.		Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch Photo Point Photo Orientation Field-of-View		Key Map
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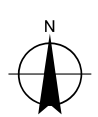
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Figure 3-17



Habitat-General Study Area Round Valley Parcels		Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.		Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch		Photo Point Photo Orientation Field-of-View	Key Map
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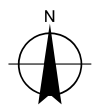
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Figure 3-18



Study Area Round Valley Parcels	Habitat-General Biological Restrictions Riparian Dripline Sensitive Habitat	Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.	Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch	Photo Point Photo Orientation Field-of-View	Key Map
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 Date 11 Jun 2013

Figure 3-19

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Habitat-General Study Area Round Valley Parcels		Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.		Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch		Photo Point Photo Point Photo Orientation Field-of-View Photo Orientation Field-of-View	Key Map
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<p>Habitat-General</p> <ul style="list-style-type: none"> Biological Restrictions Riparain Dripline Sensitive Habitat <p> Study Area</p> <p> Round Valley Parcels</p>	<p>Animal Habitat</p> <ul style="list-style-type: none"> Rocky Substrate Creek Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> Palustrine Wetland Riverine Palustrine Ditch <p> Photo Point</p> <p> Photo Orientation Field-of-View</p>	<p>Key Map</p> <table border="1" style="border-collapse: collapse; text-align: center; width: 100px; height: 100px;"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td></tr> <tr><td>33</td><td>34</td></tr> <tr><td>35</td><td>36</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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Figure 3-21

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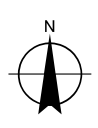
<p> Study Area</p> <p> Round Valley Parcels</p>	<p>Habitat-General</p> <p> Biological Restrictions</p> <p> Riparian Dripline</p> <p> Sensitive Habitat</p>	<p>Animal Habitat</p> <p> Rocky Substrate Creek</p> <p> Bird & Bat Habitat</p> <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <p> Palustrine Wetland</p> <p> Riverine</p> <p> Palustrine Ditch</p>	<p> Photo Point</p> <p> Photo Orientation Field-of-View</p>	<p>Key Map</p> <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td></tr> <tr><td>33</td><td>34</td></tr> <tr><td>35</td><td>36</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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Figure 3-22

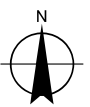
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Study Area Round Valley Parcels	Habitat-General Biological Restrictions Riparain Dripline Sensitive Habitat	Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.	Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch	Photo Point Photo Orientation Field-of-View	
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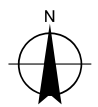
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Figure 3-23



Study Area Round Valley Parcels	Habitat-General Biological Restrictions Riparian Dripline Sensitive Habitat	Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.	Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch	Poor Drainag Photo Point Photo Orientation Field-of-View	Key Map <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td></tr> <tr><td>33</td><td>34</td></tr> <tr><td>35</td><td>36</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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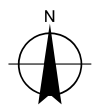
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Figure 3-24



<p>Habitat-General</p> <ul style="list-style-type: none"> Study Area Round Valley Parcels Biological Restrictions Riparian Dripline Sensitive Habitat 	<p>Animal Habitat</p> <ul style="list-style-type: none"> Rocky Substrate Creek Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> Palustrine Wetland Riverine Palustrine Ditch 	<p> Photo Point</p> <p> Photo Orientation Field-of-View</p>	<p>Key Map</p> <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td></tr> <tr><td>33</td><td>34</td></tr> <tr><td>35</td><td>36</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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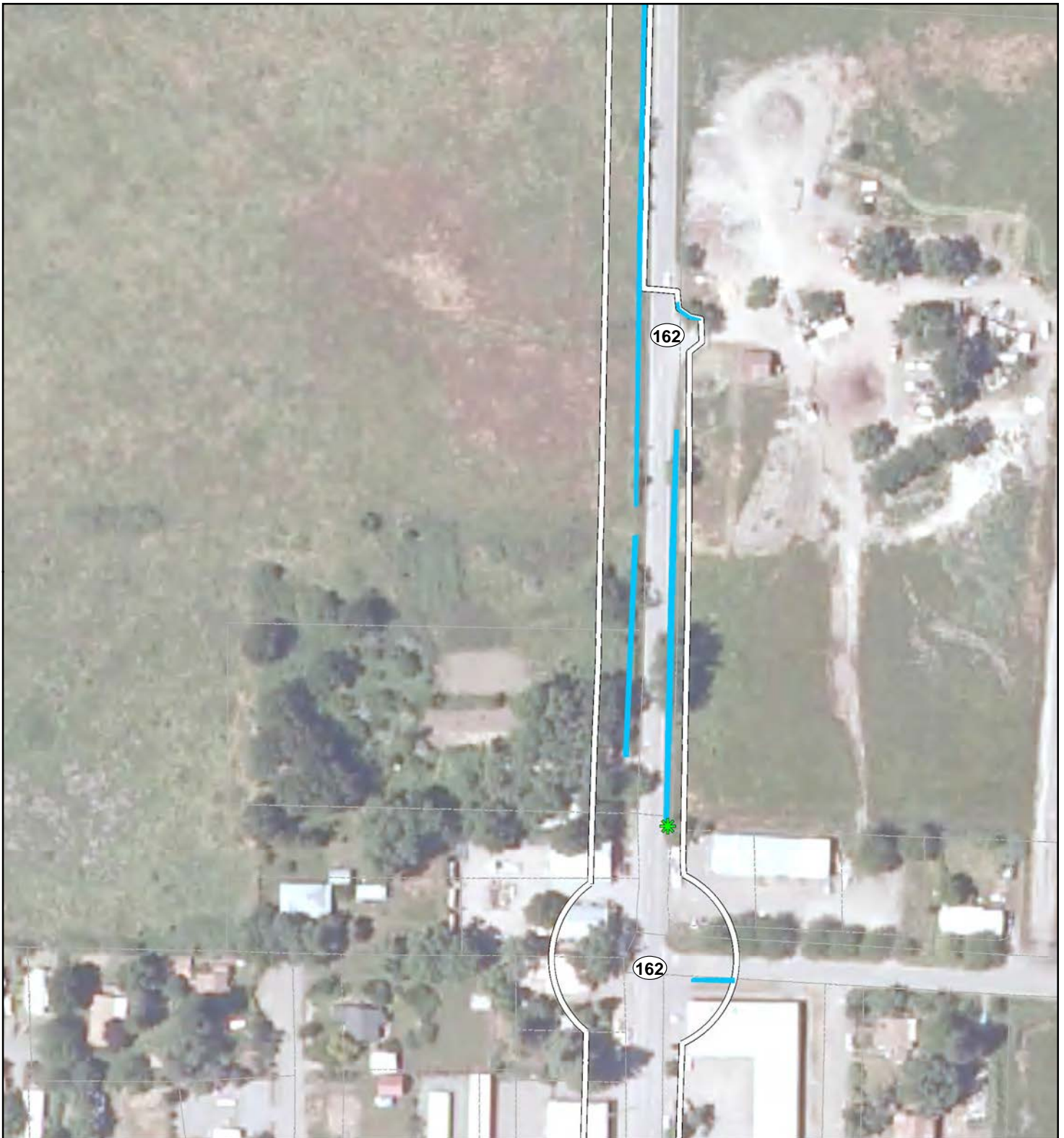


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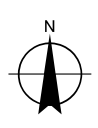
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<p>Habitat-General</p> <ul style="list-style-type: none"> Study Area Round Valley Parcels Biological Restrictions Riparain Dripline Sensitive Habitat 	<p>Animal Habitat</p> <ul style="list-style-type: none"> Rocky Substrate Creek Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> Palustrine Wetland Riverine Palustrine Ditch 	<ul style="list-style-type: none"> Photo Point Photo Orientation Field-of-View 	<p>Key Map</p> <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td></tr> <tr><td>33</td><td>34</td></tr> <tr><td>35</td><td>36</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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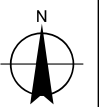
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Figure 3-26



<p>Habitat-General</p> <ul style="list-style-type: none"> Biological Restrictions Riparain Dripline Sensitive Habitat <p> Round Valley Parcels</p>	<p>Animal Habitat</p> <ul style="list-style-type: none"> Rocky Substrate Creek Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> Palustrine Wetland Riverine Palustrine Ditch 	<p> Photo Point</p> <p> Photo Orientation Field-of-View</p>	<p>Key Map</p> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td></tr> <tr><td>33</td><td>34</td></tr> <tr><td>35</td><td>36</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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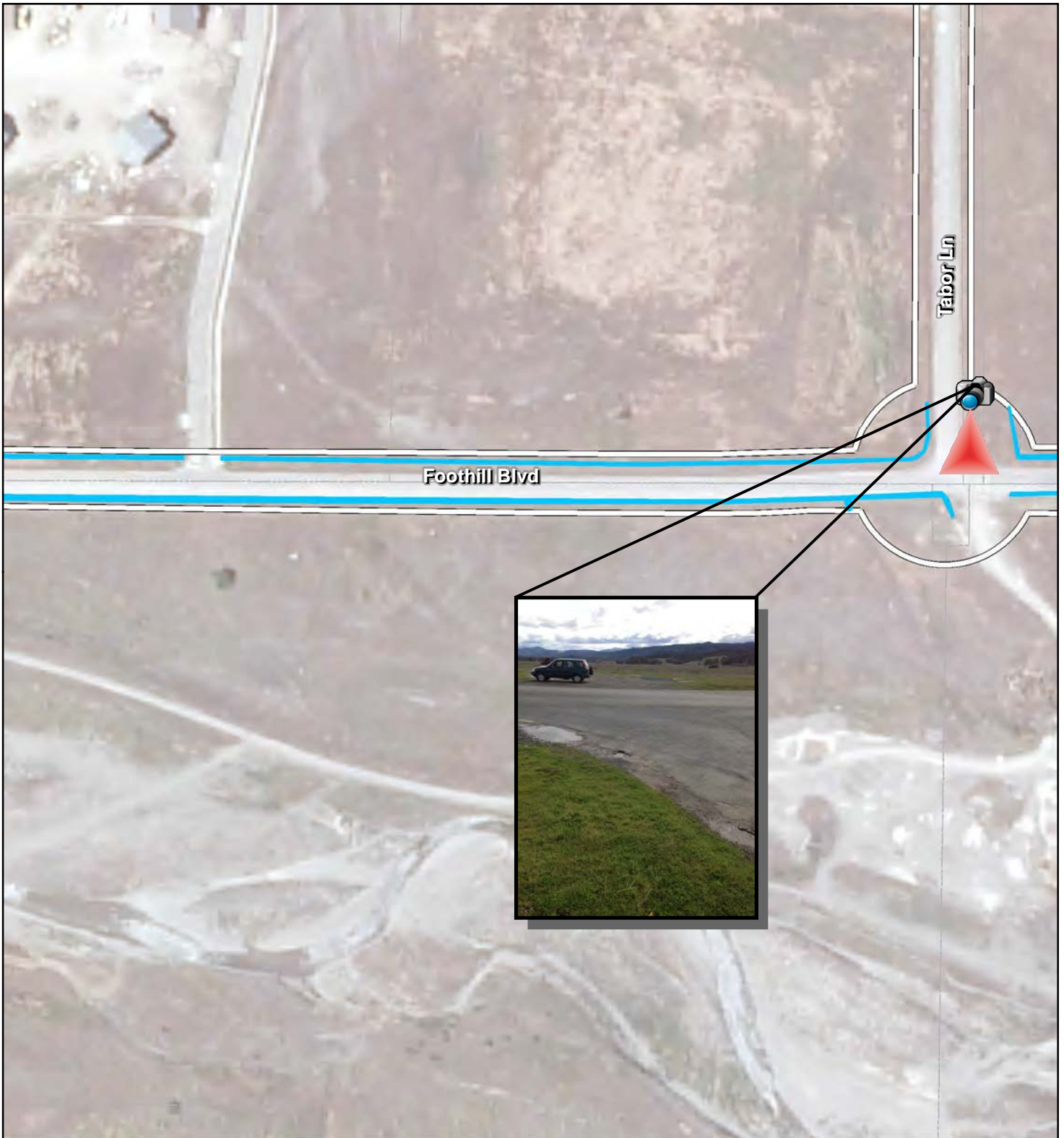
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**Reconnaissance Level
 Biological Investigation**

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 Revision | A
 Date | 11 Jun 2013

Figure 3-27



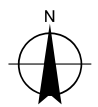
<p>Study Area</p> <p>Round Valley Parcels</p>	<p>Habitat-General</p> <ul style="list-style-type: none"> ● Biological Restrictions ● Riparain Dripline ● Sensitive Habitat 	<p>Animal Habitat</p> <ul style="list-style-type: none"> ✱ Rocky Substrate Creek ✱ Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> ✶ Palustrine Wetland ✶ Riverine — Palustrine Ditch 	<p>Photo Point</p> <p>Photo Orientation Field-of-View</p>	<p>Key Map</p> <table border="1" style="font-size: small;"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
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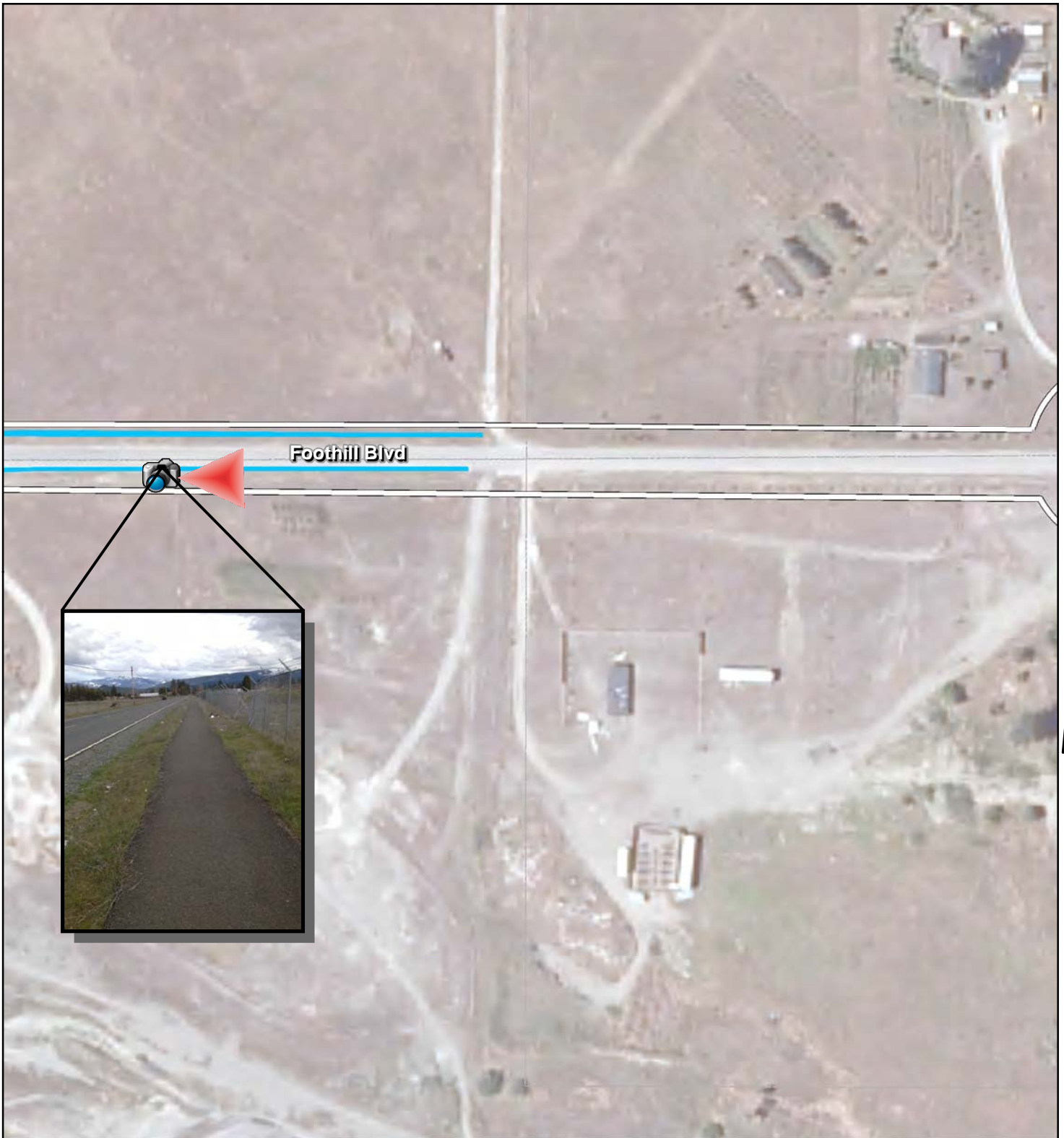


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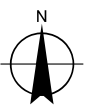
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Date 11 Jun 2013

Figure 3-28



<p>Habitat-General</p> <ul style="list-style-type: none"> Study Area Biological Restrictions Riparain Dripline Round Valley Parcels Sensitive Habitat 	<p>Animal Habitat</p> <ul style="list-style-type: none"> Rocky Substrate Creek Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> Palustrine Wetland Riverine Palustrine Ditch 	<p> Photo Point</p> <p> Photo Orientation Field-of-View</p>	<p>Key Map</p> <table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td></tr> <tr><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td></tr> <tr><td>31</td><td>32</td></tr> <tr><td>33</td><td>34</td></tr> <tr><td>35</td><td>36</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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Figure 3-29

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<p>Study Area</p> <p>Round Valley Parcels</p>	<p>Habitat-General</p> <ul style="list-style-type: none"> Biological Restrictions Riparian Dripline Sensitive Habitat 	<p>Animal Habitat</p> <ul style="list-style-type: none"> Rocky Substrate Creek Bird & Bat Habitat <p>Plant Habitat</p> <p>ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.</p>	<p>Potential Wetland Location</p> <ul style="list-style-type: none"> Palustrine Wetland Riverine Palustrine Ditch 	<p>Photo Point</p> <p>Photo Orientation Field-of-View</p>	<p>Key Map</p> <table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr> <tr><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td></tr> <tr><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
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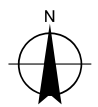
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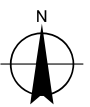
Job Number 8410146
Revision A
Date 11 Jun 2013

Figure 3-31



Habitat-General Study Area Round Valley Parcels		Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.		Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch		Photo Point Photo Orientation Field-of-View	Key Map
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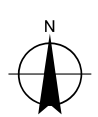
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Habitat-General Study Area Round Valley Parcels		Animal Habitat Rocky Substrate Creek Bird & Bat Habitat Plant Habitat ALL portions of the study have the appropriate habitat to host rare plants and therefore would require protocol level rare plant surveys.		Potential Wetland Location Palustrine Wetland Riverine Palustrine Ditch		Photo Point Photo Orientation Field-of-View																																					
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Figure 3-33

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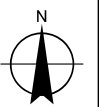
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Figure 3-34



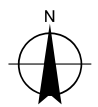
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Figure 3-35

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