

Addendum to the 2017 Initial Study / Proposed Mitigated Negative Declaration

**Covelo State Route 162 Corridor Multi-
Purpose Trail, SCH No. 2017102051**

Mendocino Council Of Governments

September 21, 2023



Contents

1.	Introduction.....	1
1.1	Background.....	1
1.2	Framework for Evaluation of Project Modifications	2
2.	Changes to Project Since 2022 ISMND Addendum	2
2.1	Mill Creek Bridge Crossing.....	2
2.2	Trail Realignment.....	3
2.3	Construction Schedule	3
3.	Analysis of Potential Environmental Effects	3
3.1	Aesthetics	3
3.2	Agricultural and Forest Resources	3
3.3	Air Quality	3
3.4	Biological Resources.....	4
3.5	Cultural Resources.....	4
3.6	Energy	5
3.7	Geology & Soils.....	5
3.8	Greenhouse Gas Emissions.....	5
3.9	Hazards and Hazardous Materials	5
3.10	Hydrology and Water Quality.....	5
3.11	Land Use and Planning	6
3.12	Mineral Resources	6
3.13	Noise.....	6
3.14	Population and Housing	6
3.15	Public Services.....	6
3.16	Recreation.....	6
3.17	Transportation/Traffic	6
3.18	Tribal Cultural Resources	7
3.19	Utilities and Service Systems	7
3.20	Wildfire.....	7
3.21	Mandatory Findings of Significance.....	7
4.	List of Preparers	7
4.1	Mendocino Council of Governments.....	7
4.2	GHD.....	7

1. Introduction

1.1 Background

The Mendocino Council of Governments (MCOG), in partnership with the California Department of Transportation (Caltrans) and the Round Valley Indian Tribe (RVIT), have received grant funding for the design and construction of the Covelo SR 162 Corridor Multi-Purpose Trail. Non-motorized travel is an important form of transportation in Round Valley. Covelo and the Round Valley Indian Reservation are not served by public transportation. Children, elderly and low-income residents use non-motorized travel modes. The need for safe pedestrian corridors was identified by local residents as a high priority in the Covelo/Round Valley Non-Motorized Needs Assessment and Engineered Feasibility Study (2014) and in Making Safe & Healthy Community Connections in Round Valley – Walk/Bike Path and Community Revitalization Strategy (2010).

The purpose of this project is to reduce the potential for conflicts between bicyclists, pedestrians, and vehicles within a portion of the State Route (SR) 162 Corridor and increase mobility options in the community. SR 162 serves as “Main Street” within the community of Covelo. The highway has no developed facilities for bicycles or pedestrians and the drainage ditches on both sides of the highway force non-motorized users to travel in the vehicle lanes. The project would link critical activity centers within the community, including schools, the downtown center, tribal facilities, and residential areas.

On December 4, 2017, MCOG adopted an Initial Study/Mitigated Negative Declaration (2017 ISMND) and Mitigation Monitoring and Reporting Program and approved the Covelo State Route 162 Corridor Multi-Purpose Trail Project (Project). Since adoption of the 2017 ISMND, the Project has had a CEQA addendum in 2022 to include slight adjustments to the alignment of the proposed bridge crossing of Mill Creek. The project is under construction as of the summer of 2023. The contractor cleared some additional areas near Mill Creek beyond the boundary originally identified. Also due to the contractor’s planned means and methods, some temporary fill will be needed in the vicinity of Mill Creek for a crane pad. These are relatively minor changes that slightly expand the extent of the planned work while not materially changing the anticipated nature of the work and associated impacts. Also, due to the recent placement of several grave sites, it is necessary to slightly realign the trail along the Round Valley Indian Reservation Headquarters Cemetery.

MCOG has evaluated the recent changes in the project during construction along with the circumstances surrounding the project pursuant to the California Environmental Quality Act (CEQA). The changes to the project design have been evaluated and measured against the standards set forth in CEQA Guidelines Section 15162 which outlines the circumstances under which a CEQA Lead Agency is required to prepare a Subsequent MND. No elements requiring the preparation of a Subsequent MND have been identified, as the changes in the project design along with the circumstances surrounding the project do not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects requiring new mitigation measures beyond those previously addressed in the 2017 ISMND and the 2022 addendum. Under CEQA Guidelines Section 15164, a CEQA Lead Agency may prepare an Addendum to a previously adopted negative declaration to analyze changes in a project, or in circumstances surrounding a project, where the record indicates that a subsequent negative declaration is not required. Therefore, an Addendum to the 2017 ISMND and 2022 addendum has been determined to be the appropriate CEQA document.

This Addendum reflects the analysis of the MCOG as the CEQA Lead Agency. Further, it demonstrates that the environmental analysis, impacts, and mitigation requirements identified in the 2017 ISMND and 2022 addendum remain essentially unchanged by the minor changes to the project described herein. The project modifications do not result in a new significant impact or substantial increase in the severity of a previously identified significant impact, and therefore do not exceed the level of impacts identified in the 2017 ISMND or the 2022 addendum.

Per CEQA Guidelines Section 15164(c), an Addendum need not be circulated for public review. Per CEQA Guidelines Section 15164(d), the decision-making body shall consider an Addendum prior to making a decision on the project. Accordingly, this Addendum, along with the 2017 ISMND and 2022 addendum, will be considered by the decision-making bodies prior to any future decision on the project. This Addendum, along with the previous environmental

analyses, is on file with and may be obtained from the Mendocino Council of Governments, 525 S. Main Street, Suite B, Ukiah, California, 95482.

1.2 Framework for Evaluation of Project Modifications

As directed by CEQA Guidelines Section 15162, when an MND has been adopted for a project, no subsequent MND shall be prepared, unless one or more of the following circumstances occur:

1. Substantial changes are proposed in the project which will require major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revision of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous MND was adopted, shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous MND;
 - b. Significant effects previously examined will be substantially more severe than shown in the previous MND;
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous MND would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The changes in environmental impacts due to modifications in the project or changed conditions have been evaluated and measured against the standards set forth in paragraphs 1, 2, and 3 above. The environmental analysis is provided in Section 3.

2. Changes to Project Since 2022 ISMND Addendum

Changes to the project are limited to the Mill Creek bridge crossing and a trail realignment adjacent to Round Valley Indian Reservation Headquarters Cemetery. No additional changes to the project are proposed.

2.1 Mill Creek Bridge Crossing

The construction of the North-South segment of the Covelo Trail along the western side of Highway 162 requires the construction of a 240 foot long bridge for the crossing of Mill Creek. The bridge will be built from three 80 foot prefabricated sections. There will be two bents on pile foundations supporting the center section and each end will be built on a pile supported headwall. Four to ten piles would be required for each bent and may be either driven or drilled depending on site conditions. All support headwalls and bents will be located outside of the active channel.

The previous addendum included that the Mill Creek Bridge would need to be moved east of SR 162 due to the presence of a sewer main in close proximity to the proposed location of the bridge. This was an error, and the bridge would have been moved west instead. However, after sonar reconnaissance to determine the sewer main location, it is no longer required to move the bridge from its original design location. Therefore, the 2022 addendum is no longer required.

Vegetation clearing related to the bridge installation has occurred beyond what was analyzed in previous CEQA documents and outside of the California Department of Fish and Wildlife (CDFW) 1600 permitted area, as well as outside of the previously defined Project Area (Figure 1). This vegetation clearing included the removal of oak trees (Figure 2 and 3) as described in Table 2.1.1.

Table 2.1.1 Mill Creek Bridge Crossing Vegetation Clearing

Impact Type	Total Additional Impacts	Mitigation Ratio	Mitigation Required
Vegetation removal	3,646 square feet	1x	3,646 square feet
Oak removal <12 inch diameter at breast height (dbh)	9 trees	3x	27 trees
Oak removal 12-18 inch dbh	1 tree	4x	4 trees
Oak removal >18 inch dbh	7 trees	5x	35 trees

The contractor who is installing the bridge would also require a temporary cut of approximately 173 cubic yards (CY) and a temporary fill of approximately 44 CY to make a pad for the crane for bridge installation (Figure 1). Following construction, this would be regraded to its original contours.

2.2 Trail Realignment

The Round Valley Indian Reservation Headquarters Cemetery is located at the northwest corner of Biggar Lane and SR 162. The original design showed that the trail would be located on the east side (outside) of the cemetery fence, immediately adjacent to the cemetery. That portion of the cemetery was unused at the time, but since the 2017 IS/MND, there have been additional burials within the previously planned trail area. Therefore, it is necessary that the trail alignment be relocated approximately 20 feet east, closer to SR 162.

2.3 Construction Schedule

Construction activities started in in the spring of 2023 and are currently estimated to continue until the end of 2025.

3. Analysis of Potential Environmental Effects

The following discussion analyzes the likelihood of the project changes, as described in Section 2, to result in new or substantially more significant effects, or the need for new mitigation measures as compared to those studied in the 2017 ISMND and 2022 addendum.

3.1 Aesthetics

The project modifications include adjustments within the Mill Creek riparian area and a trail realignment. Construction of the project as now envisioned will require slightly expanded removal of vegetation as compared to the original design. The vegetation impacts would be temporary, and a significant change in visual conditions would not result. The trail realignment along the Cemetery would bring the trail closer to SR 162, although a significant change in visual conditions would not result. The project changes would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects relative to those identified in the 2017 ISMND or the 2022 addendum. All impacts related to aesthetics would remain less than significant or no impact.

3.2 Agricultural and Forest Resources

The project modifications do not require revisions to the evaluation of Agricultural and Forest Resources. The location of the project is essentially unchanged from that evaluated in the 2017 ISMND, and there are no agricultural and forest resources in the project area that would be impacted by the updated bridge alignment. The project changes would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for agricultural and forest resources than previously addressed in the 2017 ISMND. All impacts related to agricultural and forest resources would remain less than significant or no impact.

3.3 Air Quality

As the construction equipment and duration would remain essentially the same as that evaluated in the 2017 ISMND, the project changes would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects relative to those identified in the 2017 ISMND. The project would continue to

incorporate Environmental Protection Action 2 (Implement Air Quality Emission Control Measures During Construction). All impacts related to air quality would remain less than significant.

3.4 Biological Resources

The Mill Creek Bridge Crossing has a slightly expanded vegetation impact as shown in Figure 2 and 3, as well as Table 2.1.1. The riparian vegetation in the area of the bridge was surveyed in September 2017, and no sensitive plant species were observed within the Project study boundary. Riparian vegetation within Mill Creek is generally uniform, and the impacts to the expanded area outside of the 2017 ISMND Project Area are expected to be similar to those analyzed in the 2017 ISMND. Additional Valley Oaks beyond what was previously planned for were also identified as being removed by the Project's contractor, and impacts to the Valley Oaks would be mitigated through additional planting as defined within the LSAA and the Mitigation Measure BIO-5 (Appendix B).

The proposed temporary cut and fill associated with the crane pad for the bridge installation is located within upland areas, and no additional wetland impacts would result.

Existing mitigation measures included in the 2017 ISMND would remain to reduce the impacts related to the contractor's bridge installation construction means and methods to a less than significant level, including:

- Mitigation Measure BIO-1 Conduct Seasonally Appropriate Pre-Construction Plant Surveys
- Mitigation Measure BIO-2 Survey and (if necessary) Relocation of Sensitive Amphibian Surveys
- Mitigation Measure BIO-3 Conduct Bird Surveys for Protect Avian Species
- Mitigation Measure BIO-4 Replacement of Impacted Riparian Vegetation
- Mitigation Measure BIO-4b Pile Driving in Mill Creek
- Mitigation Measure BIO-5 Protection and Replacement of Oak Trees
- Mitigation Measure BIO-6 Mitigate Direct and Temporary Impacts to Wetlands During Construction

The footprint of the project is essentially unchanged from that evaluated in the 2017 ISMND. The intensity and duration of construction remain the same, and the modified project does not involve any additional construction activities below the ordinary high-water mark of Mill Creek or within any wetland. Mitigation measures would remain applicable to the modified project, avoiding potential adverse impacts to special-status species, migratory birds, riparian habitat, and existing trees. The project would also continue to incorporate Environmental Protection Action 3 (Construction Measure for Avoiding Special-status Wildlife Species Habitat).

The Project has coordinated with jurisdictional resource agencies and applicable project approvals were obtained from each agency, and an updated LSAA is currently being prepared. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for biological resources previously addressed in the 2017 ISMND or the 2022 addendum. With the incorporation of the planned mitigation measures, all potential impacts related to biological resources would be reduced to a less than significant level or no impact.

3.5 Cultural Resources

The Historical Resources Survey conducted by Tom Origer & Associates and completed in September 2017 and identified six historical resources in the overall project area and provided recommendations for their treatment. None of the resources were identified in the immediate vicinity of the bridge, thus the proposed temporary cut and fill related to the crane pad is not anticipated to impact any identified historical resources. Additionally, no resources were identified in the vicinity of the proposed trail alignment east of the Round Valley Indian Reservation Headquarters Cemetery.

Existing mitigation measures for cultural resources would remain applicable, including:

- Mitigation Measure CR-1 Protect Archaeological Resources During Construction
- Mitigation Measure CR-2 Protect Paleontological Resources During Construction
- Mitigation Measure CR-3 Protect Human Remains if Encountered During Construction

The modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects relative to those identified in the 2017 ISMND. With the incorporation of mitigation measures, all potential impacts to cultural resources would be reduced to a less than significant level.

3.6 Energy

The project modifications do not require substantial revisions to the evaluation of energy as defined in the 2022 addendum. The project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. Impacts would remain less than significant or no impact.

3.7 Geology & Soils

The project modifications do not require substantial revisions to the evaluation of geology and soils. The project site for the trail realignment along the cemetery is approximately 20 feet away from the original alignment evaluated in the 2017 ISMND, and there are no changes to the risks associated with faults, ground shaking, liquefaction, landslides, expansive soils, or septic systems based on the same geologic setting. The project would continue to incorporate Environmental Protection Action 1 (Geotechnical Design). The modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects relative to those identified in the 2017 ISMND or 2022 addendum. All impacts related to geology and soils would remain less than significant.

3.8 Greenhouse Gas Emissions

The project modifications do not require substantial revisions to the evaluation of greenhouse gas emissions. The intensity and duration of construction would be essentially unchanged from that evaluated in the 2017 ISMND and 2022 addendum. The modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for greenhouse gas emissions than previously addressed in the 2017 ISMND and 2022 addendum. All impacts related to greenhouse gases would remain less than significant.

3.9 Hazards and Hazardous Materials

The project modifications do not require substantial revisions to the evaluation of hazards and hazardous materials. The intensity and duration of construction and the types of materials to be utilized during construction would be essentially unchanged from that evaluated in the 2017 ISMND and the 2022 addendum. Existing mitigation measures for hazard-related impacts would remain applicable the minor project changes, including:

- Mitigation Measure HAZ-1 Impacted Soil and Groundwater Sampling and Analysis
- Mitigation Measure HAZ-2 Prepare and Implement Fire Safety Plan

The modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for hazards and hazardous materials than previously addressed in the 2017 ISMND and 2022 addendum. All impacts related to hazards and hazardous materials would remain less than significant or no impact.

3.10 Hydrology and Water Quality

The project modifications do not require substantial revisions to the evaluation of hydrology and water quality. The footprint of the project within the Mill Creek corridor is essentially unchanged from that evaluated in the 2017 ISMND and the 2022 addendum and would not require any additional in-water work or potential for new unanalyzed water quality impacts. The project changes do not result in physical barriers that would inhibit the existing floodplain characteristics of Mill Creek. The trail realignment is not located within any mapped wetlands. The modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects relative to those identified in the 2017 ISMND or the 2022 addendum. All impacts related to hydrology and water quality would remain less than significant or no impact.

3.11 Land Use and Planning

The modified project would not affect environmental resources related to land use and planning. The modified trail alignment would not physically divide an established community or conflict with the Mendocino County General Plan. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for land use and planning previously addressed in the 2017 ISMND or the 2022 addendum. All impacts related to land use and planning would remain no impact.

3.12 Mineral Resources

The modified project would not affect any resources related to mineral resources. The modified project is not located on, or would result in the loss of, a known mineral resource. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for mineral resources previously addressed in the 2017 ISMND or 2022 addendum. All impacts related to mineral resources would remain less than significant.

3.13 Noise

The intensity and duration of construction would be unchanged from that evaluated in the 2017 ISMND. The modified project does not require construction work to occur at night but does require grading for cut and fill along Mill Creek. Mitigation Measure NOI-1 (Hours of Construction) and Mitigation Measure NOI-2 (Implement BMPs from Construction) from the 2017 ISMND would remain applicable to the modified project, limiting the contractor's construction work hours and methods such that noise is reduced to acceptable levels. The modified project would not result in new significant environmental effects or a substantial increase in noise. The project's noise-related impacts would remain less than significant with the incorporation of mitigation.

3.14 Population and Housing

The modified project would not displace existing housing or people. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for population and housing previously addressed in the 2017 ISMND or the 2022 addendum. There would be no impact related to population and housing.

3.15 Public Services

The modified project would not result in a land use that would increase the need for public service. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for public services previously addressed in the 2017 ISMND or 2022 addendum. There would be no impact related to public services.

3.16 Recreation

The Project, as modified, would continue to benefit recreation. The duration of construction would remain the same as previously evaluated in the 2017 ISMND and 2022 addendum. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for recreation previously addressed in the 2017 ISMND or 2022 addendum. Any potential impact related to recreation would remain less than significant.

3.17 Transportation/Traffic

The purpose of this project is unaffected by the updated trail alignment, and it remains to reduce the potential for conflicts between bicyclists, pedestrians, and vehicles within a portion of the SR 162 Corridor and increase mobility options in the community. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for transportation/traffic previously addressed in the 2017 ISMND or 2022 addendum. All impacts related to transportation and traffic would remain less than significant or no impact.

3.18 Tribal Cultural Resources

The modified project does not require substantial revisions to the evaluation of tribal cultural resources as defined in the 2022 addendum. Existing mitigation measures for tribal cultural resources would remain applicable, including:

- Mitigation Measure CR-1 Protect Archaeological Resources During Construction
- Mitigation Measure CR-2 Protect Paleontological Resources During Construction
- Mitigation Measure CR-3 Protect Human Remains if Encountered During Construction

With the incorporation of the mitigation measures above, and the ongoing participation of RVIT in the project, impacts to tribal cultural resources are not expected. No impact to tribal cultural resources would result. No additional mitigation measures are required in this Addendum to offset potential impacts related to tribal cultural resources.

3.19 Utilities and Service Systems

The modified project does not require water or wastewater services and would not result in an appreciable increase in impervious surfaces and storm water runoff. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for utilities and service systems previously addressed in the 2017 ISMND or 2022 addendum. All impacts related to utilities and service systems would remain less than significant or no impact.

3.20 Wildfire

The modified project would not increase hazards related to wildfire as defined in the 2022 addendum. The Project update addresses realigning a portion of the trail that was already part of the project, as well as additional clearing for bridge construction, and are within the same vicinity thus there would be no measurable change in wildfire risk related to the overall project. The project would continue to incorporate Mitigation Measure HAZ-2 (Prepare and Implement Fire Safety Plan). All impacts related to wildfire would remain less than significant or no impact.

3.21 Mandatory Findings of Significance

This Addendum discusses the topic areas in the sequence as they are addressed in the 2017 ISMND and 2022 addendum. This section concludes that the project changes, together with changes in circumstances, are not likely to cause a substantial change in impacts and would not result in new significant impacts relative to the previously adopted 2017 ISMND or 2022 addendum, and mitigation measures are available to reduce these impacts to levels of less-than-significant. The project changes would not result in new significant environmental effects or a substantial increase in the severity of effects related to the mandatory findings of significance previously addressed in the 2017 ISMND and 2022 addendum.

4. List of Preparers

4.1 Mendocino Council of Governments

Nephele Barrett, Executive Director

James Sookne, Regional Project Manager

4.2 GHD

Misha Schwarz, Senior Environmental Scientist

Christian Hernandez, Environmental Scientist

Steve McHaney, Project Manager/Engineer

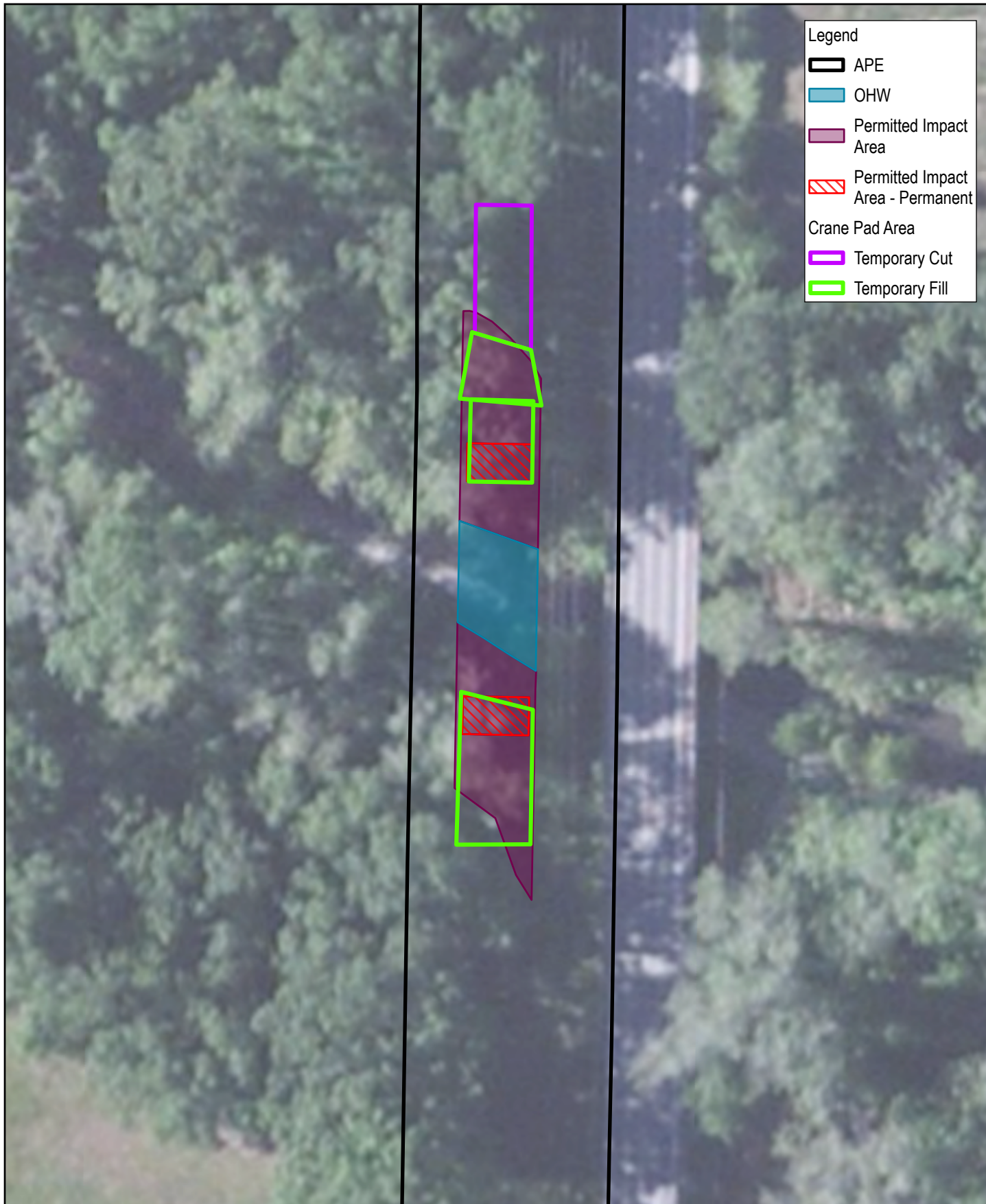
Appendix A

Figures







Figure 1: Crane Pad Permitted Impact Area

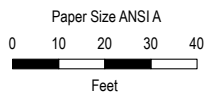
Figure 2: Crane Pad Area and Trees within Riparian Dripline by Diameter

Figure 3: Trees within Riparian Dripline by Species



Legend

-  APE
-  OHW
-  Permitted Impact Area
-  Permitted Impact Area - Permanent
- Crane Pad Area**
-  Temporary Cut
-  Temporary Fill



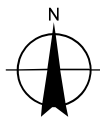
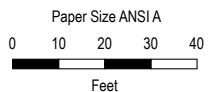
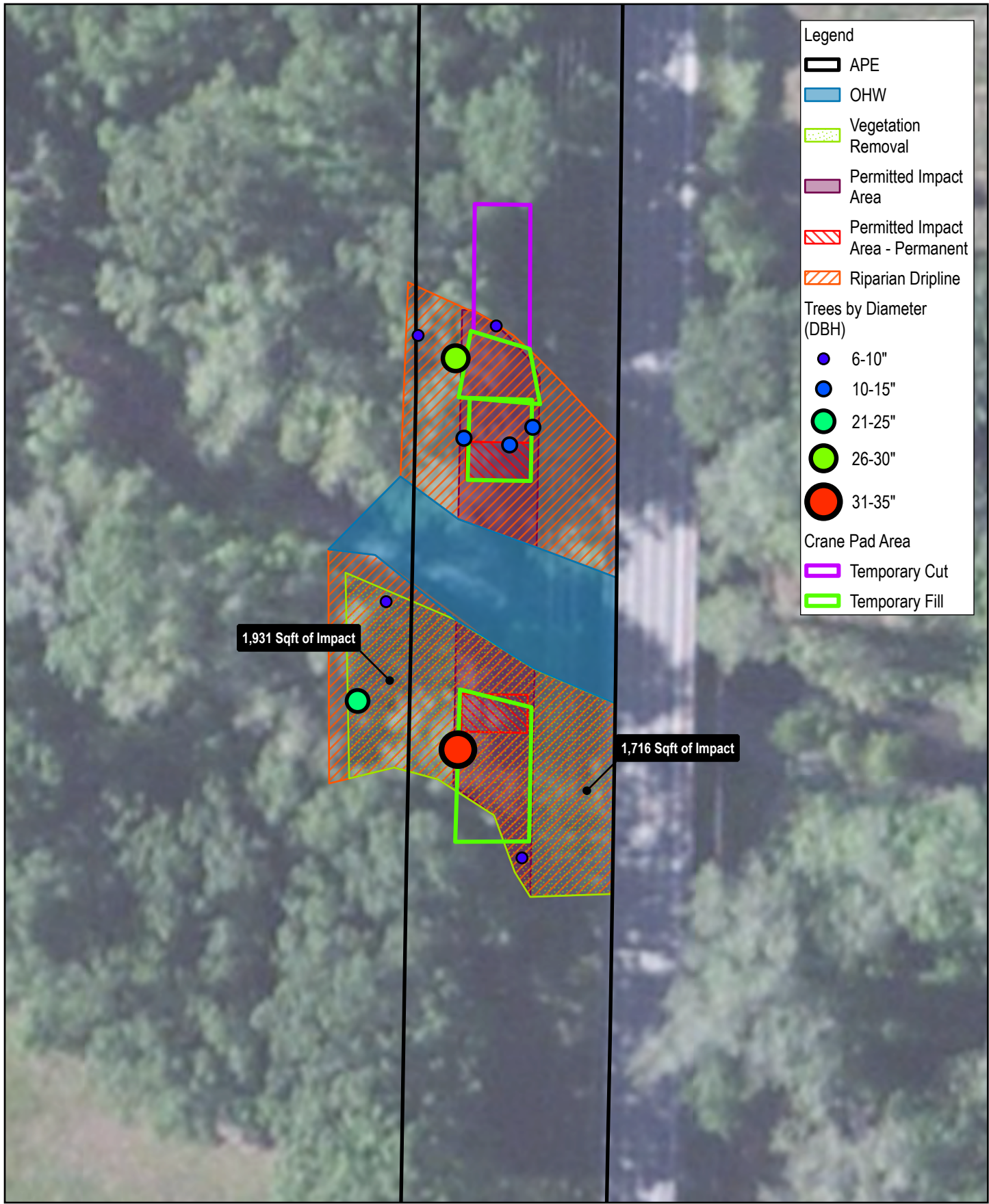
Mendocino Council of Governments
Covelo SR 162 Corridor
Multi-purpose Trail

Project No. 12614298
Revision No. -
Date 1/08/2023

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

**Crane Pad
Permitted Impact Area**

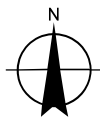
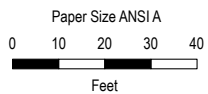
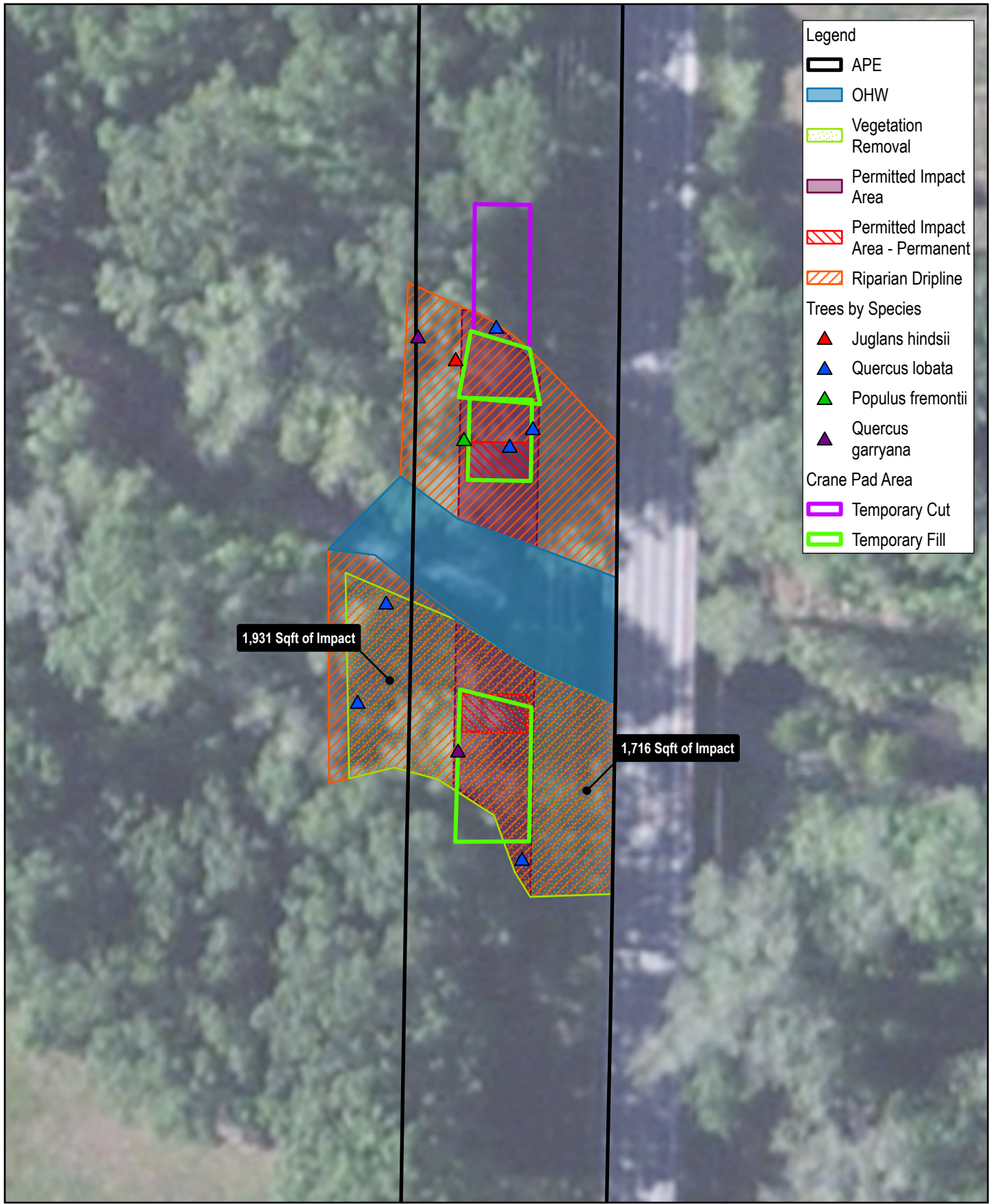
FIGURE 1



Mendocino Council of Governments
 Covelo SR 162 Corridor
 Multi-purpose Trail
**Crane Pad Area and
 Trees within Riparian Dripline
 by Diameter**

Project No. 12614298
 Revision No. -
 Date 1/08/2023

FIGURE 2



Mendocino Council of Governments
Covelo SR 162 Corridor
Multi-purpose Trail

Project No. 12614298
Revision No. -
Date 1/08/2023

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

**Trees within Riparian Dripline
by Species**

FIGURE 3

Appendix B

Tree Impact Biological Memorandum



Technical Memorandum

July 14, 2023

To	Nephele Barrett – MCOG James Sookne – MCOG		
From	Misha Schwarz, Senior Environmental Scientist – GHD Christian Hernandez, Environmental Scientist – GHD	Project. No.	12614298
Subject	Mendocino Council of Governments (MCOG) Covelo State Route 162 Corridor Multi-Purpose Trail Project – Tree Impact Biological Memorandum		

1. Introduction

1.1 Purpose and Findings

The purpose of this memorandum is to provide a biological site assessment to support the Mendocino Council of Governments (MCOG) Covelo State Route 162 Corridor Multi-Purpose Trail Project (Project). Specifically, this memo addresses the trees and other vegetation removed by the Project’s contractor which were outside of the California Department of Fish and Wildlife (CDFW) permitted area. The permitted area is within the Mill Creek riparian corridor and the previously defined Area of Potential Extent (APE) (hereby designated as the Project Study Boundary (PSB)). As described within this memo, it was found that based on GHD’s field investigation and analysis, 14 trees had been removed outside of the permitted area. All the trees that were removed are oaks and will require mitigation. Additional riparian vegetation had also been removed outside of the permitted area and GHD recommends replanting these areas as warranted following construction.

1.2 Project Description

The Project consists of the construction and operation of a Class I multi-purpose trail along the SR 162 corridor from Howard Street in the community of Covelo, north to Hurt Road. The Project would reduce the potential for conflicts between bicyclists, pedestrians, and vehicles within the SR 162 Corridor and increase mobility options in the community.

1.3 Location

The PSB is approximately 1.25 miles north of Covelo, at the crossing of Mill Creek by State Route 162, in the County of Mendocino, State of California; Section 31, Township 23N, Range 12W; Mt. Diablo Base and Meridian, in the Covelo East, Calif. U.S. Geological Survey 7.5-minute quadrangle. Latitude 39.8113°, Longitude -123.24814°.

2. Project Permits and Mitigations

The following are relevant Project permit conditions and CEQA mitigation measures related to the tree and vegetation removal by the Project’s contractor.

2.1 Lake and Streambed Alteration Agreement (LSAA)

Measure 2.9 Vegetation Removal. Disturbance or removal of vegetation shall be kept to the minimum necessary to complete project-related activities. Except for trees marked for removal on plans submitted to and approved by the Department, no native trees with a trunk diameter at breast height (dbh) in excess of four (4) inches shall be removed or damaged without prior consultation and approval of a Department representative. Vegetation marked for protection may only be trimmed with hand tools to the extent necessary to gain access to the work sites. Fewer than ten trees are marked for removal in the Jurisdictional Area for this project.

Measure 2.24 Replace Trees In-Kind. Native trees removed for Project activities in the Jurisdictional Area shall be replaced in kind at a ratio of 3:1 and maintained until established. Permittee shall monitor and maintain, as necessary, all plants for five years to ensure successful revegetation. All planting shall have a minimum of 80% survival after five years. If 80% survival is not attained, further in-kind plantings and five-year monitoring period(s) shall continue until the success criteria are attained.

Measure 2.25 Riparian Revegetation. Replacement of impacted riparian vegetation shall be as presented in the notification materials. Areas too shaded by the new structure to grow native plants shall not be considered as part of the revegetation area. All planting shall have a minimum of 80% survival after five years. If 80% survival is not attained, further in-kind plantings and five-year monitoring period(s) shall continue until the success criteria are attained.

The Project's LSAA permitting allowed for temporary and permanent riparian impacts within the riparian dripline as delineated within Appendix A – Figure 1.

2.2 Mitigation Measures

Mitigation Measure BIO-4a: Replacement of Impacted Riparian Vegetation

Where the bridge placement directly impacts riparian through vegetation removal, the following (or similar) planting plan will be implemented to re-establish and/or replace riparian vegetation impacted at a minimum 1:1 ratio. In areas where vegetation is temporarily impacted through construction activities, the replacement area will be onsite in the area of impact, to re-establish impacted vegetation. Where impacts are a result of direct impact such as from bridge footings, trail footprint, and/or fill slopes, replacement will be in an area adjacent to existing riparian so as to expand and/or fill in gaps in the existing riparian corridor. For areas above the top of bank (TOB), the planting plan includes tree and shrub species similar to those anticipated to be impacted. For the area above the OHWM (i.e., not in stream channel), and below the TOB, a second planting plan is proposed that focuses on willow and herbaceous species along with hydroseeding, which is a similar assemblage to existing conditions. For impact areas between the OHWM and the TOB, the area will also be covered with one inch diameter biodegradable jute mesh. All riparian impact areas and replacement areas will be broadcast or hydroseeded with native grass seed mix that includes not more than 50% sterile seed as a component of mix (refer to manufacturer's recommendation for maximum quantity of sterile seed recommended). Seeding shall occur after impact occurs and prior to onset of winter rains. Two implementation options exist for seeding: 1) may be before, or 2) after the planting plan is implemented, depending on when nursery stock is available and nursery contractor availability. If possible, seeding should occur immediately after impact (Option 1) so as to provide timely revegetation and ground cover of impacted area, with nursery contractor following up with implementing planting plan just prior to winter rains which would then provide passive irrigation for the nursery plants. If it is determined that implementation of the planting plan by nursery contractor would disrupt the seeded surface due to trampling, Option 2 approach would be to implement the planting plan immediately after impact occurs, with immediate follow up of seeding. Following is the recommended planting plan, with substitutions to plant species allowed if consulting with project biologist:

Planting plan above top of bank for temporary impacts:

- Arroyo willow (*Salix lasiolepis*) [may be salvaged from impact area and/or stakes cut from adjacent riparian]
- Coffeeberry (*Fragula californica*)

- Western mock orange (*Philadelphus lewisii*)
- Snow berry (*Symphoricarpos albus var. laevigatus*)
- Creek clematis (*Clematis ligusticifolia*)
- Mugwort (*Artemisia douglasiana*)
- Wild rye (*Elymus glaucus*) [may include additional native grass species in the mix for hydroseeding purposes]

Planting plan below top of bank for temporary impacts and for direct impacts:

- Arroyo willow (*Salix lasiolepis*) [may be salvaged from impact area and/or stakes cut from adjacent riparian]
- Creek clematis (*Clematis ligusticifolia*)
- mugwort (*Artemisia douglasiana*)
- Wild rye (*Elymus glaucus*) [may include additional native grass species in the mix for hydroseeding purposes]

Mitigation Measure BIO-5: Protection and Replacement of Oak Trees

MCOG will ensure that the following measures will be taken to reduce potential impacts to oak trees:

Impacts to oak trees from construction and long-term operation will be calculated at the drip line (combines direct impacts to trunks and potential indirect impacts within the drip line). An arborist or biologist will conduct a tree survey prior to construction within areas where direct or indirect impacts to oaks are anticipated. The arborist or biologist will document tree species and dbh of all oaks with canopy or trunks within the impact area, with an impact defined as ground disturbance or compaction within the dripline. Project mitigation for direct and indirect impacts will be calculated as follows:

- <12 inch dbh will provide minimum of 3:1 mitigation ratio
- 12-18 inch dbh will provide minimum of 4:1 mitigation ratio
- >18 inch dbh will provide minimum of 5:1 mitigation ratio

The replacement species composition and final number of trees to be planted at the mitigation area shall be subject to approval by CDFW. Although the project site has sufficient area to accommodate the required tree mitigation, alternative sites may be considered including local parks or schools or installation of trees on adjacent properties for screening purposes to the satisfaction of CDFW, Caltrans, the MCOG, and relevant property owners.

A Habitat Mitigation Plan (HMP) will be prepared that provides a description of the mitigation site, site selection criteria, and appropriate conditions of oak growth, plant propagation methods, acorn collection if any, implementation, maintenance, and monitoring, to be submitted to CDFW for consideration. The HMP will describe whether overplanting is recommended to allow for mitigation ratios to be achieved.

The following tree protection measures will also be included in the project in order to protect trees to be preserved during construction:

Pre-construction treatments:

1. The MCOG shall retain a consulting scientist (arborist or biologist). The construction superintendent shall meet with the consulting scientist before beginning work to discuss work procedures and tree protection.
2. Fence all trees to be retained within the trail and staging construction areas by a minimum of 10 feet beyond the drip line to completely enclose the Tree Protection Zones prior to staging, grubbing, or grading. Fences shall be orange construction avoidance fence staked at regular intervals of approximately 10 feet on center, or six foot chain link or equivalent as approved by consulting arborist or biologist. Fences are to remain until all grading and construction is completed.

3. If pruning of trees to be preserved is necessary to clean the crown and to provide clearance, all such activity shall be completed or supervised by an arborist or qualified biologist and follow the Best Management Practices for Pruning of the International Society of Arboriculture.

During construction:

1. No grading, construction, demolition or other work shall occur within the Tree Protection Zone. Any modifications must be approved and monitored by the consulting arborist or biologist.
2. Root pruning will be minimized, and if necessary, any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, a consulting arborist or biologist.
3. If injury should occur to any tree during construction, it shall be evaluated as soon as possible by the consulting arborist or biologist to determine if impact should be accounted for in the mitigation requirements.
4. No excess soil, chemicals, debris, equipment or other materials shall be placed or stored within the Tree Protection Zone.

3. Methods

3.1 Preliminary Investigations

Prior to site visits, previous technical environmental reports for the Project were reviewed for previously defined boundaries for the Project, including the extent of the Project Area, the LSAA boundaries, and the Habitat Mitigation Monitoring Plan (HMMP) (GHD 2019).

3.2 Field Survey Methods

A site field survey was conducted by GHD environmental scientist Christian Hernandez (hereafter surveyor), on June 13, 2023. The surveyor conducted a pedestrian survey of the PSB with a focus on the areas outside of the previously permitted area. From each identified stump, a latitude and longitudinal location was gathered, the diameter of the stump was measured, and the height of the stump was measured. Only trees with a minimum stump diameter of 6 inches were recorded. Each stump was identified using primary and secondary indicators as outlined within *The Jepson Manual* (Baldwin et al. 2012). Primary indicators included using vegetation growing from the stump, whereas secondary indicators included the presence of surrounding fruit such as acorns or walnuts. To gather the diameter at breast height (DBH), representative standing trees from the surrounding riparian area were measured at approximate stump heights and at DBH. This was then correlated with the previously measured stump height to approximate the DBH. The extent of additional vegetation removal outside of the previously permitted area was also mapped.

The surveyor also built upon the previously mapped Project riparian dripline to map the new PSB. Approximation was done using locations of mapped stumps, aerial and satellite imagery, and the remaining riparian dripline.

The ordinary high water mark (OHW) was also expanded to include the new PSB using indicators from the *Western Mountains, Valleys, and Coast: A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States* (Mersel 2014).

The GPS used was an Eos Arrow 100 Submeter Global Positioning System (GPS) Receiver with Global Navigation Satellite System (GNSS) and an iPad running ArcGIS Collector software in the WGS84 datum.

4. Results

Within the riparian dripline and within the jurisdiction of CDFW, ten trees were identified as cut (Appendix A – Figure 2 and 3). Of the 10 trees, four were removed outside of the permitted LSAA boundary (Table 1).

Beyond the riparian dripline and CDFW's jurisdiction, and outside of the previously defined Project APE, a total of 14 oak trees were cut (Figure 4 and 5) (Table 2).

Vegetation was removed within the riparian dripline of Mill Creek along its southern bank (Appendix A – Figure 2 and 3). This included areas outside of the permitted LSAA boundary (Table 3).

Table 1 Riparian Tree Impacts

Species	Approximated DBH (inches)	Required Mitigation Ratio
<i>Quercus lobata</i>	6	3:1
<i>Quercus lobata</i>	25	5:1
<i>Juglans hindsii</i>	26	3:1
<i>Quercus garryana</i>	9	3:1
Total Revegetation Required		14

Table 2 Tree Impacts Outside APE

DBH	Oak Trees Cut	Mitigation Ratio	Total Required
<12	7	3:1	21
12-18	1	4:1	4
>18	6	5:1	30
Total	14		55

Table 3 Riparian Vegetation Removal

Total Impacts	5,127 Square feet
LSAA Permitted Removal	1,481 Square feet
Unpermitted Removal	3,646 Square feet

5. Conclusion and Recommendations

Of the trees removed by the Project's contractor, four were removed outside of the LSAA permitted area within the riparian dripline. Per ratios established in LSA measure 2.24, as well as the BIO-5 mitigation measure ratios for oaks, 14 trees will need to be replanted for the Project that were unpermitted for removal. These trees are to be replaced in kind with a minimum of 80% survival after five years.

Of the riparian vegetation removed by the Project's contractor, 3,646 square feet were removed outside of the LSAA permitted area. Per LSAA measure 2.25, revegetation would need to be conducted with a minimum of 80% survival after five years.

All oak trees within the Project's previously defined APE were recorded and mitigated for through previous permitting processes (GHD 2019). However, the Project's contractor removed an additional 14 trees, all oak species, outside of the defined APE. Note that any tree cut that was on the line for the APE boundary was considered outside and not previously recorded. To properly mitigate for this with the BIO-5 mitigation measure

ratios for oaks, 55 trees will need to be replanted for the Project that were unpermitted for removal. These trees are to be replaced in kind with a minimum of 80% survival after five years.

GHD and MCOG met with CDFW on June 28, 2023, regarding the Mill Creek riparian cutting and vegetation removal. Following the meeting, and the impacts reported within this memorandum, it is thus recommended that MCOG prepare the following:

1. A California Environmental Quality Act (CEQA) addendum
2. A LSAA amendment
3. A revegetation plan

Regards



Christian Hernandez
Environmental Scientist



Misha Shwarz
Senior Environmental Scientist

6. References

Baldwin, B. D., D. Goldman, D. Keil, R. Patterson, T. Rosatti, D. Wilken. 2012. The Jepson Manual, Second Edition. University of California Press. Berkeley, California, USA.

GHD. 2019. Covelo Trail Project Habitat Mitigation and Monitoring Plan.

Mersel and Lichvar, 2014. Western Mountains, Valleys, and Coast: A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States. <https://hdl.handle.net/11681/5501>

Appendix A

Figures

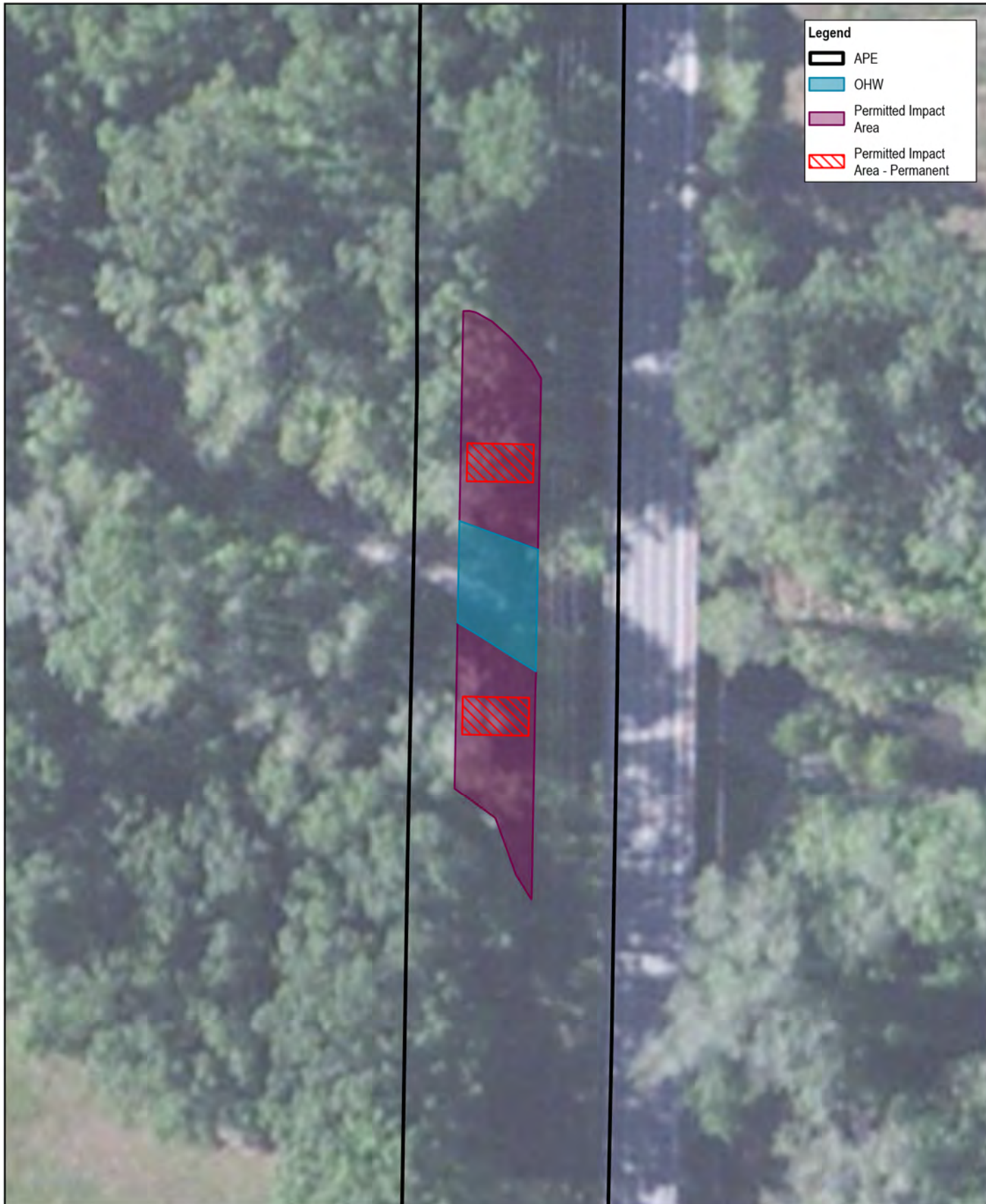
Figure 1: Permitted Impact Area

Figure 2: Trees within Riparian Dripline by Diameter

Figure 3: Trees within Riparian Dripline by Species

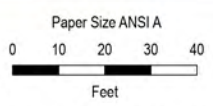
Figure 4: Complete Tree Survey by Diameter

Figure 5: Complete Tree Survey by Species



Legend

-  APE
-  OHW
-  Permitted Impact Area
-  Permitted Impact Area - Permanent



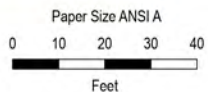
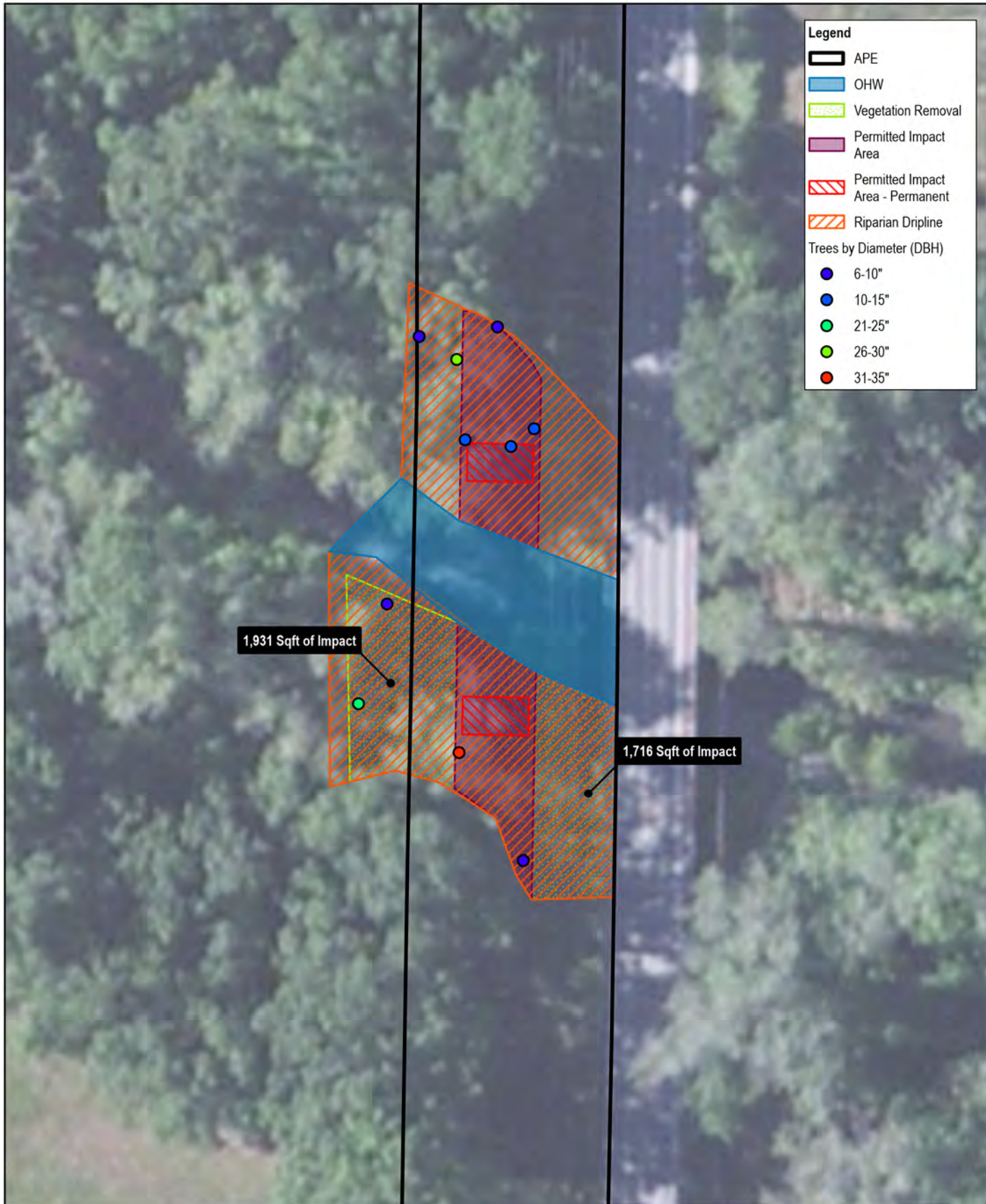
Mendocino Council of Governments
Covelo SR 162 Corridor
Multi-purpose Trail

Project No. 12614298
Revision No. -
Date 6/27/2023

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

Permitted Impact Area

FIGURE 1



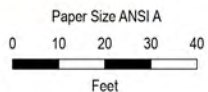
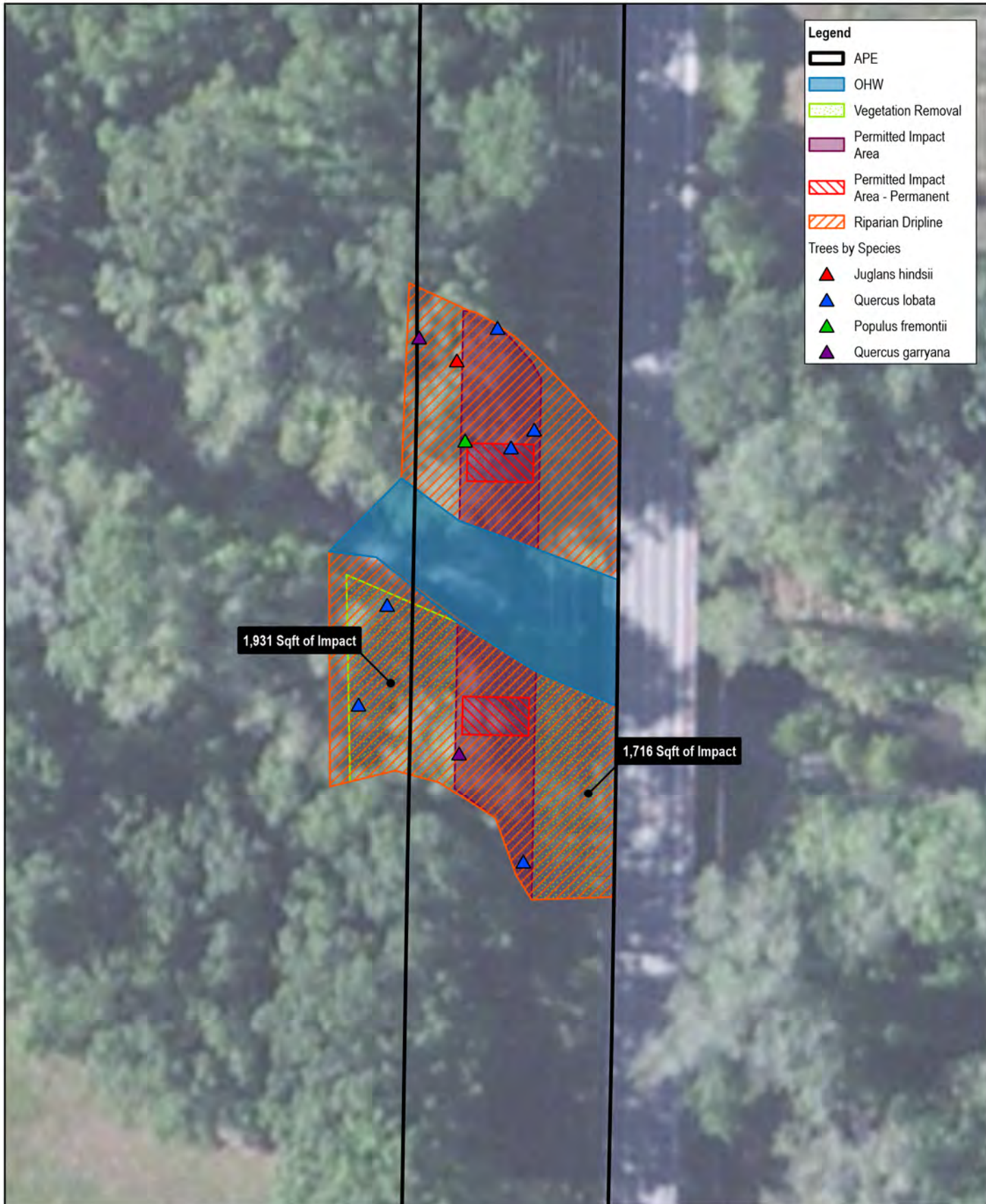
Mendocino Council of Governments
Covelo SR 162 Corridor
Multi-purpose Trail

Project No. 12614298
Revision No. -
Date 6/27/2023

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

**Trees within Riparian Dripline
by Diameter**

FIGURE 2



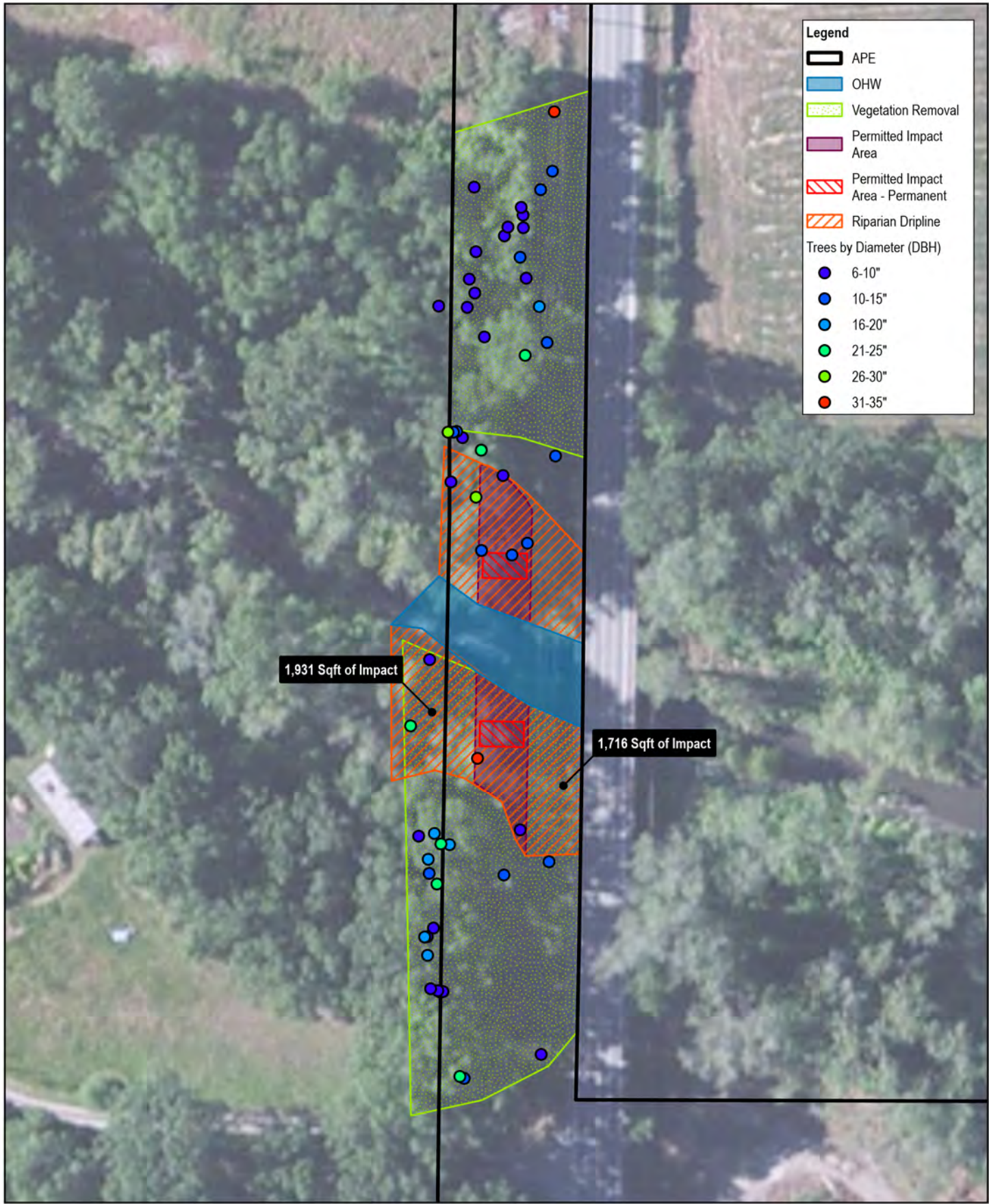
Mendocino Council of Governments
Covelo SR 162 Corridor
Multi-purpose Trail

Project No. 12614298
Revision No. -
Date 6/27/2023

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

**Trees within Riparian Dripline
by Species**

FIGURE 3



Legend

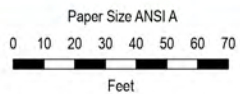
- APE
- OHW
- Vegetation Removal
- Permitted Impact Area
- Permitted Impact Area - Permanent
- Riparian Dripline

Trees by Diameter (DBH)

- 6-10"
- 10-15"
- 16-20"
- 21-25"
- 26-30"
- 31-35"

1,931 Sqft of Impact

1,716 Sqft of Impact

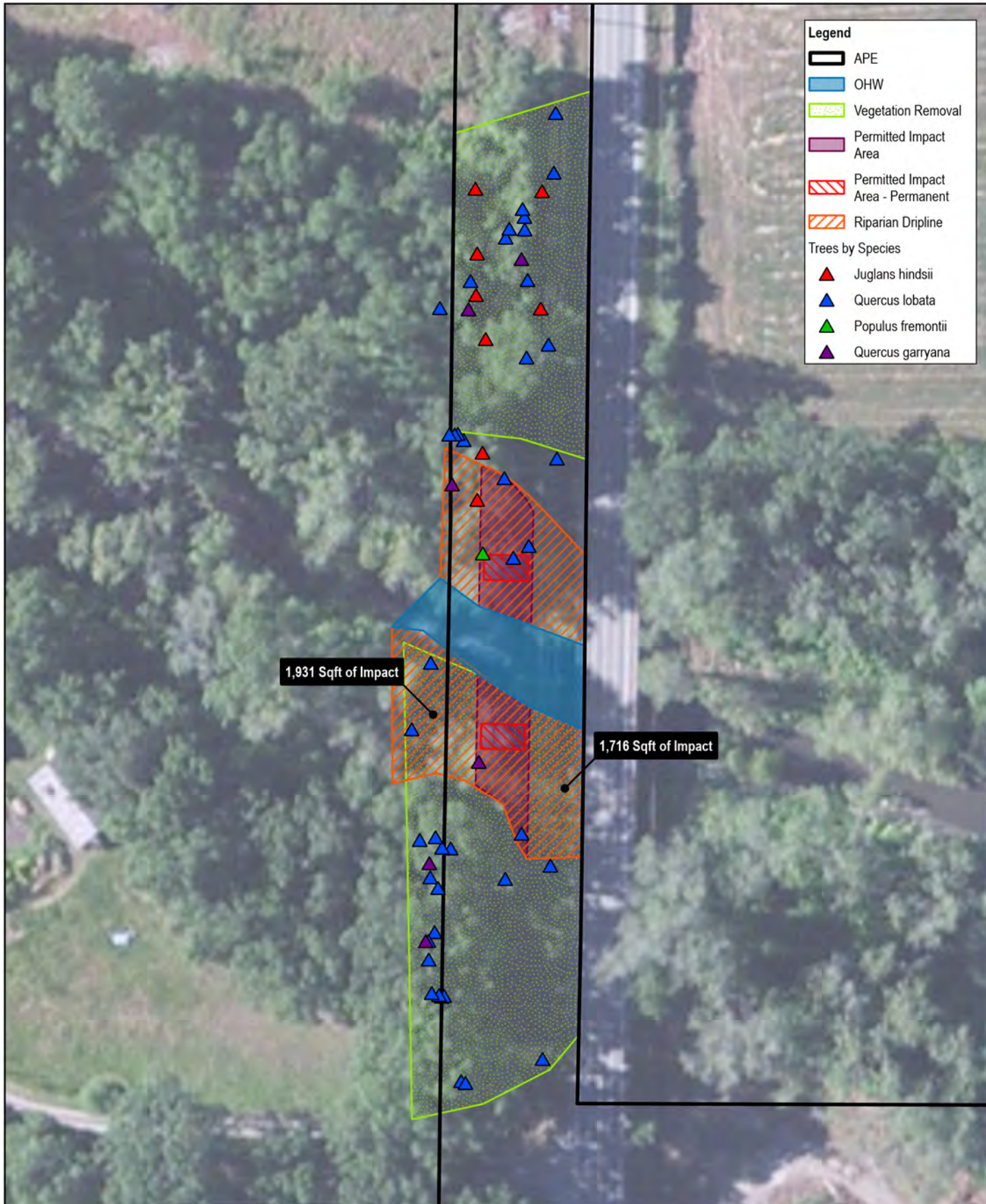


Mendocino Council of Governments
 Covelo SR 162 Corridor
 Multi-purpose Trail

Project No. 12614298
 Revision No. -
 Date 6/27/2023

**Complete Tree Survey
 by Diameter**

FIGURE 5



Legend

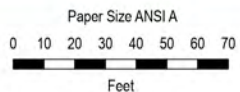
- APE
- OHW
- Vegetation Removal
- Permitted Impact Area
- Permitted Impact Area - Permanent
- Riparian Dripline

Trees by Species

- Juglans hindsii
- Quercus lobata
- Populus fremontii
- Quercus garryana

1,931 Sqft of Impact

1,716 Sqft of Impact



Mendocino Council of Governments
 Covelo SR 162 Corridor
 Multi-purpose Trail

Project No. 12614298
 Revision No. -
 Date 6/27/2023

**Complete Tree Survey
 by Species**

FIGURE 5



ghd.com

→ **The Power of Commitment**