INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

NOTE: The following is a sample form that may be tailored to satisfy individual agencies' needs and project circumstances. It may be used to meet the requirements for an initial study when the criteria set forth in the California Environmental Quality Act (CEQA) Guidelines have been met. Substantial evidence of potential impacts that are not listed on this form must also be considered. The sample questions in this form are intended to encourage thoughtful assessment of impacts, and do not necessarily represent thresholds of significance.

1. Project title: Digital 299 Broadband Project

2. Lead agency name and address:

California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

3. Contact person and phone number: ~~Andrew Barnsdale, 415-703-3221~~ Michael Rosauer, 415-601-5008

4. Project location: Counties of Humboldt, Trinity, and Shasta, California

5. Project sponsor's name and address:

Vero Fiber Networks
1023 Walnut Street
Boulder, Colorado 80302

6. General plan designation: Project spans federal, state, tribal, local, and private lands over three counties.

7. Zoning: Multiple zonings throughout three counties

8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

The Project includes the installation of approximately 300 miles of fiber optic cable consisting of both middle- and last-mile components with a focus on middle-mile infrastructure. Last-mile connections would be to Community Anchor Institutions such as schools, colleges, universities, libraries, hospitals, clinics, public safety agencies, and other government buildings, as well as approximately 300 households in the community of Lewiston. The Digital 299 Broadband Project (Digital 299) is proposed to occupy existing roads and rights-of-way (ROWs)/ easements. Digital 299 includes installation of new underground conduit; placement of fiber optic cables into existing available utility conduit; stringing fiber optic cable aerially onto existing utility poles or bridges; and construction of up to five prefabricated in-line amplifier (ILA) buildings to support signal regeneration, distribution, and interconnection. Neither new roads nor new poles are proposed as part of this Project. Cell towers are also not part of this Project but are expected to be a future project once the fiber optic cable is placed. See Chapter 2 of the Environmental Assessment (EA) for more details about the Project.

9. Surrounding land uses and setting: (Briefly describe project's surroundings)

The majority of the proposed Project is located within existing transportation and utility corridors. The primary existing land uses in the Project area are transportation and utilities. The Project would be surrounded by a variety of land uses that range from undeveloped federally owned and private lands to developed land in urban and rural areas. The primary surrounding land uses to the Project area are forest land and developed communities. Developed land uses within or adjacent to the Project area include agricultural land, industrial properties, suburban residential properties, rural residential properties, undeveloped woodland and forest land, urban areas, and recreation areas.

10. Other public agencies whose approval is required: (e.g., permits, financial approval, or participation agreement.)

The Bureau of Land Management (BLM), U.S. Forest Service (USFS), National Park Service (NPS), U.S. Bureau of Reclamation, U.S. Army Corps of Engineers, California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service, California Department of Transportation, California State Lands Commission, California Coastal Commission, California State Historic Preservation Officer, Trinity County, Humboldt County, and Shasta County (encroachment permits)

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

Pursuant to Section 106 of the National Historic Preservation Act and California Assembly Bill 52, consultation with Tribes began shortly after federal and state agencies were informed and engaged in the Project. A tribal contact list was compiled with input from the Native American Heritage Commission as well as federal and state agencies involved in the Project. Tribal consultations remain ongoing. Tribal input is being factored into Project routing, engineering, and protection measures for areas and sites of concern to Tribes.

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

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

DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

_____ _____

Signature *Date*

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from a "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063[c][3][D]). In this case, a brief discussion should identify the following:
   a) Earlier Analyses Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). References to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significant.

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

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

No impact: The proposed Project facilities would be located primarily underground and would consequently cause no long-term change to the visual character of the surrounding landscape. Project components would be primarily located within already developed transportation corridors. In areas where conduit and fiber are installed above ground, they would be hung on existing poles or bridges. There would not be an impact to any scenic vista.

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

No impact: Sections of State Route (SR) 299 are considered eligible state scenic highway; however, no section of SR 299 has been designated as scenic at the state level (Caltrans 2020). Additionally, the proposed Project development is primarily below ground within existing transportation corridors that have previously been disturbed. There would no impact to state scenic resources.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less than significant impact: The proposed Project would be primarily underground and would consequently cause no long-term change to the visual character of the surrounding landscape. Project components would be primarily located within already developed transportation corridors. In areas where conduit and fiber are installed above ground, they would be hung on existing poles or bridges.

The new aboveground facilities that would be constructed for the Project include ILA buildings. In order to prevent degradation of sensitive resources, including visual resources, ILA buildings would be required to be placed within a cohesive viewshed composed of like facilities and development. This has been added as resource protection measure **VR-1**. The Project will have a less than significant impact on aesthetics and visual resources, and impacts would be further minimized by the implementation of this measure.

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

Less than significant impact: The buried fiber constructed as part of the proposed Project would not result in any source of light or glare; however, ILA buildings installed as part of this Project have the potential to create new sources of light and glare as they would be equipped with standard 120VAC lighting. In order to ensure the buildings would not contribute to light or glare that would adversely affect views, the buildings would be required to be designed to utilize the minimum necessary outdoor lighting for safety and operations. This has been added as resource protection measure **VR-2**. The impacts would be less than significant and would be further minimized by the implementation of this measure.

Aesthetics Protection Measures

- **VR-1.** *ILA Building Siting.* ILA buildings will not be located in areas of sensitive resources, including visual resources. Buildings will be placed within a cohesive viewshed comprised of like facilities and development.

  Applicability: During siting of ILA buildings.

- **VR-2.** *ILA Building Light.* ILA buildings will be designed to utilize the minimum necessary outdoor lighting for safety and operations.

  Applicability: During ILA building design.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agriculture resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; as well as forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No impact: The proposed Project involves the placement of conduit and telecommunications fiber within established utility or transportation corridors and/or on existing structures. In Humboldt County, the Project area does not intersect but is adjacent to several parcels designated as Agricultural Exclusive, some of which are designated as contracts under the Williamson Act. In Trinity County, the Project area does not intersect nor is it adjacent to any parcels with state or local agricultural designations. In Shasta County, the Project area does not intersect but is adjacent to several parcels designated by Shasta County as Agricultural-Croplands, some of which are also designated by the CDC as Prime Farmland and Farmland of Statewide Importance; however, none of the Project area intersects areas zoned as farmland. There would be no conversion and thus no impact.

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

No impact: The Project ROW and Project area do not intersect any areas under Williamson Act contracts. The fiber installation would occur underground within existing transportation and utility corridors and would not impact agricultural land uses. There would be no conflicts with existing zoning for agricultural use or Williamson Act contracts.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No impact: While sections of the proposed Project are located within forest and forest-zoned land, the facilities would be placed within existing utility or transportation corridors. The use does not conflict with the existing zoning nor require re-zoning. There would be no impact.

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

No impact: The proposed Project requires placement of facilities within established transportation and utility corridors within forest land and areas zoned as timberland. While construction would take place within these areas, the Project would not result in a loss or conversion of forest land to non-forest use. There would be no impact.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No impact: There are no other foreseen changes resulting from the proposed Project that would result in conversion of farmland to non-agricultural use or forest land to non-forest use. There would be no impact.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

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

Less than significant impact: The Project area lies completely within Humboldt, Trinity, and Shasta counties, which span two air basins: the North Coast Air Basin (NCAB) and the Sacramento Valley Air Basin (SVAB). The NCAB is designated as in nonattainment for the state 24-hour and annual average particulate matter 10 micrometers in diameter and smaller (PM_{10}) standards (CARB 2019). The NCAB is listed as in attainment or unclassified for all other criteria pollutants (CARB 2019). The SVAB is listed as in nonattainment for multiple pollutants; however, the Shasta County AQMD, the affected subsection of the SVAB, is only in nonattainment for O3 and is in attainment or unclassified for all other criteria pollutants (CARB 2019). Other counties within the SVAB contribute to its nonattainment status for other pollutants.

The construction pollutant emissions were calculated using the emissions factors for the various heavy equipment used for the Project and the estimated number of days of construction and hours of construction per day (see **Appendix H** of the EA). The modeling results for construction emissions (also contained in EA) are summarized in **Table 1**.

TABLE 1
ESTIMATED CONSTRUCTION EMISSIONS BY POLLUTANT (METRIC TONS)

CO	NO_x	O_3 (as VOC[a])	$PM_{2.5}$	PM_{10}	SO_2	CO_2
48.2	137	12.0	10.3	10.6	20.0	14,500

[a] Volatile organic compound

The Project would contribute O_3 and O_3 precursors to the atmosphere. Shasta County is currently considered to be in nonattainment for 1-hour and 8-hour O_3 standards; however, the regularity of instances where O_3 levels exceed the air quality standards is infrequent, and the severity of exceedance is fairly low. In 2015, 2016, and 2017 there were a total of 11 days, 14 days, and 0 days, respectively, where the 8-hour standard was exceeded at the Shasta Lake Boulevard monitoring station. The Shasta County Health Department monitoring station recorded 5 exceedance days in 2016 and 0 the other two years. At the Anderson monitoring station, both 2015 and 2016 experienced two days where the 8-hour O_3 standard was exceeded, and the standard was never exceeded during 2017. At all locations during these three years, there were 0 days where the 1-hour standard was exceeded (SVAQEEP 2018). All locations show a decreasing trend in the number of days that the 8-hour standard is exceeded since 2007 (SVAQEEP 2018).

The Project would emit PM_{10} to the atmosphere due to construction vehicle emissions. The NCAB, which includes Humboldt County, is currently in nonattainment for PM_{10}; however, the number of days of nonattainment are relatively few compared to previous years due to the fact that the pulp mills along the coast are no longer in operation (NCUAQMD 1995). PM_{10} concentrations are also higher in urban and suburban areas during the winter months, as exceedance of the PM_{10} standard is primarily attributed to the

use of woodstoves (NCUAQMD 1995); however, the NCUAQMD has not exceeded the standard for the past five years and, given the very small amount of PM_{10} emissions anticipated by the Project, this is not a cumulatively considerable net increase that would move the air basin toward nonattainment.

As Project construction would occur over a period of up to two years, would be dispersed along a linear route that spans multiple counties and air basins, and is primarily located in rural areas where air quality is generally better, it is unlikely that emissions generated by the Project would directly or indirectly result in additional exceedance days for either the O_3 standard in Shasta County or the PM_{10} standard in Humboldt County. The linear nature of the Project, small crew size, and length of construction timeline would result in distributed effects rather than a concentrated increase.

It is difficult to determine how quickly air pollutants would be dispersed, as this is a function of many factors, including wind speed, wind direction, temperature, and atmospheric stability, among others. In unstable conditions, ground-level pollution is readily dispersed, while stable conditions typically result in pollution remaining near ground level.

Using a simplistic "box" model where pollutants only disperse within an area 100 meters to either side of the Project corridor and no more than 25 meters above ground surface, average O_3 emissions within this zone would be 0.009 parts per million or less, assuming the crews cover an average of 300 meters per day. This is representative of what might be encountered in close proximity to the Project area. Over time, concentrations would dissipate even further, resulting in a negligible net effect on ambient conditions. Given the highly transient nature of Project construction through predominantly rural areas, air quality impacts to sensitive receptors are anticipated to be negligible.

However, in order to reduce the generation of criteria pollutants, resource protection measure **AQ-2**, Minimize Idling, will be implemented to reduce the unnecessary emissions of O_3, nitrous oxides (NO_x), and PM_{10}. Idling times for vehicles must be no longer than 5 minutes, as required by California Code of Regulations (CCR), Title 13, Sections 2449(d)(3) and 2485. Additionally, resource protection measure **AQ-3**, Equipment Maintenance, is implemented to ensure all equipment is maintained in proper working conditions according to manufacturer specifications.

The Project would result in temporary, localized increases in pollutant concentrations as construction progresses, but effects would be spread out over distance and time and do not represent a cumulatively considerable net increase for either of the two pollutants for which the air basins are in nonattainment.

The Project has the potential to generate dust during the construction phase, an additional source of PM_{10} emissions. Generally, dust would settle within 300 feet of its source (EPA 2009). Resource protection measure **AQ-1**, Fugitive Dust Control, will be implemented to limit dust by restricting vehicle speed and requiring wetting of the ground before soil disturbance. Best management practices (BMPs) will be implemented to reduce and avoid fugitive dust emissions in accordance with Appendix G avoidance measures.

While the Project has the potential to emit criteria pollutants that are of concern within the air basins, given the location of the Project in relation to urban areas and the dispersed nature of the emissions over time and distance, the Project is highly unlikely to conflict with an adopted air quality plan. The impact is determined to be less than significant and would be further minimized by the implementation of resource protection measures mentioned above.

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

Less than significant impact: Based on the analysis and discussion in subpart a), the Project has the potential to generate criteria pollutants within both the NCAB and the SVAB that are currently in nonattainment. These pollutants are PM_{10} within the NCAB and O_3 within the SVAB.

As discussed in subpart a), the nonattainment areas for O_3 are typically urban areas. Part of the Project alignment passes through Redding, but most other alignment sections are in rural areas where O_3 concentrations are lower. O_3 emissions from Project construction would also be temporary, minor, and dispersed over time and distance.

Project construction has the potential to generate dust, a source of PM_{10} emissions. Humboldt County is in nonattainment for PM_{10}; however, the bulk of PM_{10} is due to the burning of wood in woodstoves. PM_{10} generated by fugitive dust would be localized to Project area, and the Project is incorporating dust control BMPs (**AQ-1**) to reduce impacts as much as possible.

As discussed in subsection a), resource protection measures will be implemented to reduce PM_{10}, NO_x, and O_3 impacts. Given that Project construction would only result in temporary, minor, localized impacts that are unlikely to violate an air quality standard or contribute substantially to nonattainment within either the NCAB or SVAB, the impact to these basins would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact: Project construction is generally located in rural areas where there are no sensitive receptors. In the areas where Project construction occurs within urban or suburban areas near schools and hospitals, air quality impacts would be temporary and minor, typically lasting two to three workdays in the immediate vicinity of any receptors. The pollutant concentrations resulting from the construction work are also minimal, as each Project construction crew would consist of a few pieces of heavy equipment and a handful of pickup trucks. There are some private residences along the alignment, but these are only considered sensitive receptors if there would be a long-term effect.

As a result, the Project is anticipated to have a less than significant impact regarding exposure of sensitive receptors to substantial pollutant concentrations.

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

No impact: Construction and operation of the proposed Project is not anticipated to result in any other emissions that would affect a substantial number of people. There would be no impact.

Air Quality Protection Measures

- **AQ-1.** *Fugitive Dust Control Measures.* The applicant shall implement the following dust control measures during Project construction:
    - Water all exposed surfaces two times daily unless already wet from precipitation. Exposed surfaces include but are not limited to spoils piles, graded areas, unpaved parking areas, staging areas, and access roads.
    - Cover or maintain at least 2 feet of free-board space on haul trucks transporting soil, sand, or other loose material off-site. Any haul trucks that travel along freeways or major roadways should be covered.
    - Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).

  Applicability: Project wide, for the duration of construction.

- **AQ-2.** *Minimize Idling*. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes, as required by CCR, Title 13, Sections 2449(d)(3) and 2485.

  Applicability: Project wide, for the duration of construction.

- **AQ-3.** *Equipment Maintenance*. Maintain all construction equipment in proper working condition according to manufacturer specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before its first operation at a Project site as well as routinely checked thereafter.

  Applicability: Project wide, for the duration of construction.

- **AQ-4.** *ILA Building Construction.* Air-quality-related resource protection measures listed in Appendix G will be followed during construction of ILA buildings.

  Applicability: During ILA building construction.

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

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

Less Than Significant with Mitigation Incorporated: Special-status species include those species protected by federal and state endangered species statutes and regulations as well as those considered as agency sensitive, rare, species of special concern, and candidate or proposed for listing by state and federal agencies. ~~If~~ Direct and significant impacts to up to 40 special-status plant species may occur if Vero Fiber Networks (Vero) trenches through dry waterways or places bore pits in vegetated areas~~,~~ ~~impacts to special-status species, waterways and sensitive habitats could occur.~~ Specifically, individual plants could be inadvertently crushed or buried by heavy machinery and vehicles or trampled by personnel at up to 402 dry waterways and up to approximately 1,200 bore pit excavation sites or approximately 300 miles of trenched road shoulder. Mitigation measures described in the Restoration Plan (**AMM BIO-3**) ~~will contribute to reducing~~reduce any unavoidable impacts to a less than significant level by restoring disturbed vegetation to near pre-disturbance levels (i.e., at least 80 percent of the total pre-construction percent cover), stabilizing soils, and minimizing the introduction or spread of invasive plants (i.e., so that invasive plants comprise less than 15 percent of total cover). Specifically, the impacted areas will be revegetated with a native seed mix; all exposed or disturbed areas (i.e., waterways and vegetated areas) within the construction corridor will be returned to pre-existing contours and conditions; and impacted areas will be monitored and maintained for a minimum of three years to ensure bank stabilization, regeneration of wanted species, accessibility, and compliance with annual and final performance standards, thereby reducing any impacts to less than significant.

In addition, significant impacts to special-status plants are expected to be avoided and minimized by the pre-construction surveys described in avoidance and minimization measure (**AMM**) **BIO-3** and the special-status plant clearance surveys described in **AMM BIO-8**. If sensitive natural communities are found in work areas or overland access routes during pre-construction surveys, those work areas and access routes will be repositioned where possible to avoid the plant(s) and a suitable buffer area to prevent root damage or other incidental damage, thereby avoiding direct and significant impacts to special-status plants. Per **AMM BIO-8**, if planned construction activities may result in impacts to special-

status plant species in areas that cannot be avoided by a minor re-route, the Project biologist will contact the appropriate agency to discuss the potential for salvaging the affected plants.

Impacts to other special-status taxa are expected to be less than significant.

The following federal and state laws were incorporated into the impact assessment for all special-status species and general wildlife:

- Bald and Golden Eagle Protection Act (50 Code of Federal Regulations [CFR] 22)
- California Coastal Act (14 CCR 13000 et seq, California Public Resources Code [CPRC] 30000 et seq)
- California Endangered Species Act (14 CCR 783 et seq)
- CEQA(14 CCR 15000 et seq, CPRC 21000 et seq)
- California Fish and Game Code (Section 1600 et seq)
- Clean Air Act (40 CFR 50 et seq)
- Clean Water Act (40 CFR 100 et seq)
- Federal Endangered Species Act (50 CFR 17)
- Magnuson-Stevens Fishery Conservation and Management Act (50 CFR 600)
- Migratory Bird Treaty Act (50 CFR 21)
- National Historic Preservation Act (36 CFR 80)
- National Environmental Policy Act (40 CFR 1500-1508)
- Rivers and Harbors Act (33 CFR 209 et seq)
- Wild and Scenic Rivers Act (36 CFR 297)

Determination of Special-Status Species to be Reviewed

Species lists for special-status wildlife, plants, lichen, and fungi were based on occurrence data within 1.5 miles of the Project footprint. A 1.5-mile search radius was chosen to identify potential special-status species because it encompasses a sufficient distance to accommodate for local habitat diversity and account for species most likely to migrate into the Project area. These data were collected to understand and characterize potentially affected biological resources. Occurrence data was evaluated for accuracy and to assess the potential for species occurrence within the survey area based on habitat suitability and quality. Species that did not meet the criteria for retention in further analyses were excluded from further review.

A total of 93 special-status plants and fungi were evaluated to determine if the Project would result in disturbance or loss to these species. After review and analysis, ~~41~~ 40 plant and fungi species were retained for further analysis in the Biological Evaluation (BE) (**Appendix I**), and 53 species were evaluated but excluded from further review. Rationale for excluding species from further analysis includes the lack of suitable habitat or vegetative community, elevation limitations, local extirpation, and extensive distance from known occurrences in well-surveyed/managed areas.

A total of ~~97~~ 94 special-status wildlife species were evaluated to determine if the Project would result in disturbance, injury, or mortality. After review and analysis, ~~61~~ 57 wildlife species were retained for further analysis in the BE (**Appendix I**) and 37 species were excluded from further review. Rationale for excluding certain wildlife is the same as the rationale for excluding plants and fungi discussed above. General wildlife, specifically migratory birds, were also evaluated as part of this review.

A total of 24 special-status fish species were evaluated to determine if the Project would result in disturbance, injury, or mortality. After review and analysis, 19 fish species were retained for further analysis in the BE (**Appendix I**) and 5 were excluded from further review. Rationale for excluding certain fishes is the same as the rationale for excluding certain other special-status species, as discussed above.

Reconnaissance-level field surveys were conducted on multiple occasions from April 2019 through May 2021; the surveys assessed the Project area within 25 feet from the edge of roadways. The purpose of the survey was to characterize potential habitat for special-status species; map/confirm the presence of

aquatic resources; and identify any special-status wildlife, plants, bryophytes, lichen, and fungi that may occur within the Project area. Incidental sightings of plant and wildlife species were also documented, although protocol-level surveys were not conducted for any special-status wildlife species. Surveys for special-status plants were conducted in portions of the construction corridor where direct impacts to plants might be possible. ~~Two~~ Multiple rounds of surveys were conducted in order to capture the varying blooming periods of target special-status plants, including a spring season (mid-April to mid-May 2019) and early summer (mid-June 2019) survey. The early summer survey was restricted to only a few target special-status plants and only occurred in those portions of the Project area with suitable habitat. Surveys were floristic in nature, where every plant taxon that occurs in the construction corridor is identified to the taxonomic level necessary to determine rarity and listing status. All segments of the construction corridor were surveyed for special-status plants with the exception of segments 11A and 14A, which were surveyed from a vehicle due to safety concerns. These segments are located along SR 299 between Salyer and Burnt Ranch and Burnt Ranch and Big Bar, respectively. Only one special-status species, white-flowered rein orchid (*Piperia candida*) was positively identified during surveys. Potentially occurring species, survey methodology, and survey results are described in greater detail in **Appendix I**.

Analysis of Project Impacts to Plants and Fungi

Direct and significant effects to special-status plants could occur from construction activities if Vero trenches through dry waterways or places bore pits in vegetated areas, as individual plants could be inadvertently crushed or buried by heavy machinery and vehicles or trampled by personnel at up to 402 dry waterways and up to approximately 1,200 bore pit excavation sites or approximately 300 miles of trenched road shoulder. Specifically, local populations of up to 40~~41~~ California Rare Plant Rank and/or agency-sensitive plant species could be significantly impacted ~~affected~~ by construction activities (see **Appendix I** for more information on the location of these species). Soil disturbance from trenching also has the potential to remove entire plants or sever tree roots. Mitigation measures described in the Restoration Plan (**AMM BIO-3**) will reduce any unavoidable impacts to a less than significant level by restoring any disturbed sensitive vegetation to pre-disturbance levels.

In practice, significant impacts to special-status plants are expected to be avoided and minimized by the preconstruction surveys described in **AMM BIO-3** and the special-status plant clearance surveys described in **AMM BIO-8**; if sensitive natural communities are found in work areas or overland access routes during pre-construction surveys, those work areas and access routes will be repositioned where possible to avoid direct and significant impacts to special-status species. As described in **AMM BIO-8**, clearance surveys for special-status plant species will occur prior to construction in appropriate habitat during appropriate seasons when special-status plants are present and identifiable (typically in spring and summer). In areas affected by recent wildfire, surveys will be particularly thorough where occurrences of sensitive plants are mapped, due to the elevated potential for dormant plant populations to reappear following burns. If planned construction activities may result in an impact to special-status plant species, the following measures will be taken: 1) a minor re- route of the alignment would be made to avoid the plant(s) and a suitable buffer area to prevent root damage or other incidental damage or 2) in areas that cannot be avoided by a minor re-route, the Project biologist will contact the appropriate agency to discuss the potential for salvaging the affected plants. A biological monitor shall be responsible for designating an appropriate buffer area or bore depth to minimize potential adverse impacts to the plants and their roots. If re-alignment is to occur on BLM, USFS, or NPS lands, the appropriate agency botanist must be contacted prior to work.

Direct effects to fungi could occur from trampling aboveground sporocarps (fruiting bodies) of fungal organisms during construction but would not affect the population overall. Impacts to the belowground portion (hyphae) of the organism are not likely. Soil disturbance from trenching would not likely impact any special-status fungal species since any soil disturbance would be limited to a small area as it relates to the entirety of the belowground portion of the fungal organism.

Indirect effects to special-status plants and fungi may also occur. Specifically, indirect effects include disruptions to the native seedbank, localized changes to hydrologic conditions, increased erosion and sediment transport, and the potential introduction of non-native invasive species.

~~The~~ In summary, the Restoration Plan and ~~avoidance and minimization measures (AMMs)~~**AMMs BIO-3, BIO-8**, and **BIO-9** will avoid or minimize effects to special-status plants and fungi to the extent

practicable. Measures in the Restoration Plan and **AMM BIO-3** will reduce impacts to a less than significant level in the event they do occur by restoring disturbed sensitive vegetation to pre-disturbance levels.

Analysis of Project Impacts to Special-Status Birds

Special-status birds such as marbled murrelet (MAMU) and northern spotted owl (NSO) receive attention and consideration for management given their regulatory status and their sensitivities to human-caused disturbance. Additionally, nesting birds are afforded protection and consideration per specific requirements in the CDFW code of regulations (CDFW code 3503 and 3503.5) as well as the Migratory Bird Treaty Act.

Large-scale clearing of vegetation is not anticipated; therefore, suitable MAMU nesting/roosting habitat would not be degraded, downgraded, or removed by Project activities. There is a very low potential of direct injury or mortality to MAMU; however, work during the nesting season may disturb nearby nesting birds. Noise and vibration created by heavy equipment during construction could lead to harassment of MAMU by causing birds to flush from their roosting or nesting sites. Harassment due to noise disturbance may occur when the sound level from Project activities exceeds ambient/pre-existing sound levels by 20 to 25 decibels (dB), as experienced by the animal (USFWS 2006).

Depending upon the nature of the terrain, geology, and environmental conditions, conduits may be installed using methods including plowing, horizontal directional drilling (HDD), rock saw, and trenching. The equipment associated with these methods produces noise levels in excess of 70 dB (with rock sawing up to 110 dB). This anticipated level of sound falls into the “extreme” (100 to 110 dB) category of noise, as defined by USFWS Harassment Guidelines (USFWS 2006). Harassment of nesting MAMU due to noise disturbance may occur to a distance of 0.25 mile in areas where ambient, existing background sound levels are less than 50 dB. These conditions are likely on the more remote segments of the Project alignment, particularly those segments along or adjacent to narrow dirt roads that run through late-successional forest habitats. In proximity to busy roads such as SR 299, which has an estimated “high” (81 to 90 dB) ambient sound level, the USFWS estimated harassment distance drops to 500 feet.

In addition to the noise disturbance effects described above, MAMU individuals flying to and from nests are vulnerable to auditory and visual disturbance from construction that occurs within 2 hours of sunrise or sunset. During the nesting season, this disturbance may preclude the ability of MAMU to feed nestlings by interfering with the departure and/or return of foraging adults as they travel to and from marine feeding areas.

Since Project activities would not remove any vegetation larger than 6 inches diameter at breast height (DBH), no effects to MAMU critical habitat (located along a 0.7-mile section of SR 299) are expected. Avoidance measures, which can be found at the end of this section, require that noise-generating work will not occur within 0.25 mile of suitable MAMU nesting habitat between March 24 and September 15. If work is necessary during this period, USFWS guidance will be used by the Project biologist to prescribe work buffers within 0.25 mile of unsurveyed nesting/roosting habitat. Impacts to MAMU would be less than significant and would be further minimized by the implementation of these measures.

Suitable NSO nesting/roosting, foraging, or dispersal habitat would not be modified or degraded as a result of Project activities. There is no potential for direct injury or mortality to NSO; however, work during the nesting season may disturb nearby nesting birds. A substantial increase in noise and vibration above existing (ambient) levels created by heavy equipment during construction may lead to harassment of NSO. Like MAMU, harassment of nesting NSO due to noise disturbance may occur to a distance of 0.25 mile in areas where ambient, existing background sound levels are less than 50 dB. NSO can also be sensitive to visual disturbance; however, the Project area is not within the line of sight of previously documented nests. In suitable and relatively undisturbed habitat, foraging individuals may be directly affected by brief human presence which may temporarily cause an individual to avoid areas during construction that may otherwise serve as foraging habitat (USFWS 2011).

The avoidance measures found at the end of this section require that noise-generating work will not occur within 0.25 mile of suitable NSO nesting habitat between February 1 and July 9. If work is necessary during this period, USFWS guidance will be used by the Project biologist to prescribe work buffers within

0.25 mile of unsurveyed nesting/roosting habitat. These work buffers would consider existing (ambient) pre-Project sound levels and anticipated action-generated sound levels. Measures in **Appendix G** also require that vegetation removal (trees) at discrete locations be limited to less than 6 inches DBH and an area less than 0.1 acre in size. Impacts to NSO would be less than significant and would be further minimized by the implementation of these measures.

Analysis of Project Impacts to Nesting Birds

Long-term ecological changes (e.g., quality of habitat, extent of habitat loss) to nesting bird habitat would not occur due to the Project. To avoid and minimize adverse effects to nesting birds, the avoidance measures at the end of this section will be implemented; these measures require a nesting bird survey be completed within 7 days prior to any work occurring during the nesting bird season (February 15 and August 31). If an active nest is encountered in or adjacent to a work area, a no-equipment/no-activity buffer will be implemented around the nest, or the nest will be monitored by a biological monitor for disturbance. To avoid and minimize adverse effects to nesting bald and golden eagles, if work will occur between January 1 and August 31 within a specific segment within which they are known to nest, crews will obtain updated nesting information for bald eagle from Six Rivers National Forest prior to the start of work. Nesting bird surveys will include searching for eagle nests within 2,640 feet of work between January 1 and August 31 in potentially suitable habitat on all lands. Impacts to nesting birds would be less than significant and would be further minimized by the implementation of these measures.

Analysis of Project Impacts to Special-Status Mammals

Work occurring during twilight hours has the potential to disrupt foraging behavior of special-status mammals that may be present in the Project area (generally nocturnal or crepuscular species). The Project would not remove or alter important habitat elements; however, indirect impacts to individual mammals are possible due to noise during construction, as described below.

Construction in areas with friable soils could directly impact occupied American badger dens located within or adjacent to the Project area. Ground vibration from heavy equipment and machinery, particularly trenching machines or rock saws, could disturb natal dens located outside the ROW, possibly causing den collapse or prompting removal of young to another den or burrow. Avoidance measures (detailed below) require pre-disturbance denning mammal surveys during the denning mammal natal season and temporarily halting work if present. Impacts to American badgers would be less than significant and would be further minimized by the implementation of these measures.

Since work would not occur at night, sensitive bats are unlikely to be encountered during normal work hours. The Project would not modify or remove suitable roosting, hibernation, or foraging habitat for bats. Minimal vegetation removal may occur, and no large trees or snags suitable for roosting would be removed (no trees greater than 6 inches DBH). It is expected that individual adult bats in day or night roosts would flee the area during construction and not be injured; however, adult individuals may be adversely affected by disruptions to hibernation, and adult bats may abandon maternity colonies. The measures below require pre-construction surveys of bridges for the presence of bats during maternity or hibernation seasons. If bats are observed, work will not proceed without consultation with CDFW. Impacts to bats would be less than significant and would be further minimized by these measures.

The Project would be located in previously disturbed, existing road ROWs or utility easements, and no large trees, logs, snags, or brush piles suitable for Pacific fisher or ring-tailed cat would be removed. During natal denning seasons, noise from construction equipment and the presence of humans in the Project area could disrupt Pacific fisher or ring-tailed cat foraging behavior or prompt change of denning sites, possibly impacting reproductive success. Implementation of the below avoidance measures which require pre-disturbance denning mammal surveys during the denning mammal natal season and temporarily halting work if present will further minimize impacts.
Similar to the mammals described above, the Project would not modify or remove suitable nesting or foraging habitat for the Sonoma tree vole, an arboreal species. Direct effects to individuals are not expected because work would occur during the day, and Sonoma tree voles are active at night. Impacts to this species would be less than significant.

Analysis of Project Impacts to Special-Status Reptiles

California mountain kingsnake and western pond turtle (WPT) are analyzed together because potential impacts to these species are expected to be similar. While California mountain kingsnake is a habitat generalist and may be found along much of the Project alignment, WPT is typically found in or within 650 feet of perennial waters. Since much of the Project would be constructed along disturbed shoulders of major roads away from suitable habitat for these species, impacts are expected to be minimal; however, there is potential for impacts along the more remote segments of the alignment, particularly those segments along narrow dirt roads that are often immediately adjacent to suitable habitat for both species.

Direct mortality to individuals could occur as a result of construction activities. During construction, individuals could be crushed by heavy machinery and vehicles, trampled by personnel, or buried during soil-disturbing activities. Since work is not occurring within any perennial aquatic resources, direct impacts to WPT could only occur in upland habitats within 650 feet of perennial waters where WPT nests could be found or where nesting females may travel. California mountain kingsnake could be present in upland habitats much farther from water. WPTs can be sensitive to environmental contaminants, and effects may occur from unintentional chemical spills (e.g., fuel, lubricants, etc.) in or near aquatic habitats during construction activities (Rosenberg et al. 2009).

The Project does not include aboveground infrastructure that would modify or degrade suitable habitat for special-status reptiles. Long-term ecological changes (e.g., quality, extent) to these reptile habitats or changes in land use are not anticipated as a result of the Project. The end-of-section avoidance measures include training all construction crews on how to avoid and minimize direct and indirect effects to protected species in and around the Project area, including a provision informing participants that no snakes or other reptiles shall be harmed or harassed. In addition, measures at the end of this section minimize the potential for stormwater runoff and accidental spill or pollutant discharge into waters or wetlands used by WPT. Impacts to WPT would be less than significant.

Analysis of Project Impacts to Special-Status Amphibians

Impacts to special-status amphibians (frogs, salamanders, and toads) are expected to be minimal because much of the Project would be constructed along disturbed shoulders of major roads away from suitable habitat for these species; however, there is the potential for impacts along the more remote segments of the alignment, particularly those segments along or adjacent to narrow dirt roads that run through late-successional forest habitats and intersect suitable aquatic habitats. Trenching, HDD, and other ground-disturbing activities along these roads have the potential to impact habitats and any amphibians that reside therein.

During construction, amphibians may be crushed by heavy machinery and vehicles, trampled by personnel, or buried during soil-disturbing activities. If construction occurs during sensitive breeding seasons, noise and ground vibration from construction activities may result in physiological stress to breeding individuals, hampering their ability to find mates and reproduce (Megela et al. 2018). Soil disturbance during construction could result in sedimentation of nearby waters, lowering water quality through increased turbidity. This increase in sediment has the potential to affect special-status amphibians by reducing overall abundance of eggs and larva as well as altering their overall growth and development rates (Wood and Richardson 2009). Indirect effects to special-status amphibians may also occur from Project-related activities in areas deemed suitable habitat from ground disturbance and other construction activities through the possible introduction of non-native, invasive species (e.g., other amphibians, pathogens) that may displace or predate native amphibians. Amphibians can also be sensitive to environmental contaminants, and indirect effects may occur from unintentional chemical spills (e.g., fuel, lubricants, etc.) during construction activities (Mahaney 1994). Sedimentation from ground-disturbing activities also has the potential to cause indirect effects to amphibians by altering water chemistry (increased pH), increasing water temperatures, and lowering macroinvertebrate productivity.

These avoidance measures include **AMM BIO-15**, which calls for pre-construction surveys for special-status amphibians when ground-disturbing work may occur near waterways; special-status amphibians will be moved away from work areas if necessary to prevent direct impacts. **AMMs BIO 4-7** (Intermittent Waterways and Ephemeral Drainages, Wetlands, Riparian Areas, and Riparian Reserves), the Restoration Plan, and Stormwater Pollution Prevention Plan (SWPPP) will further avoid impacts to

special-status amphibians and their habitats. Impacts to amphibians would be less than significant and would be further minimized by the implementation of these avoidance measures.

Analysis of Project Impacts to Special-Status Fish

No work is anticipated to occur below the ordinary high water mark of any rivers, coastal lagoons, or perennial waterways; however, work has potential to decrease water quality and to change channel substrate, which can result in direct and indirect effects to both special-status fish and their critical habitat. Special-status fishes with suitable habitat in the Project area include Chinook and coho salmon, coastal cutthroat trout, hardhead, Klamath River lamprey, longfin smelt, Pacific eulachon, Pacific lamprey, riffle sculpin, river lamprey, steelhead, tidewater goby, and western brook lamprey (see **Table 7** of the EA). Critical habitat exists for Chinook salmon (California Coastal Evolutionarily Significant Unit [ESU] and Central Valley Spring-run ESU), Coho salmon (Southern Oregon/Northern California ESU), green sturgeon (Southern Distinct Population Segment [DPS]), steelhead (Central Valley DPS and Northern California DPS), Pacific eulachon (Southern DPS), and tidewater goby within the Project area.

If sediment or pollutants enter the waterway at the time of construction, direct effects to fish and critical habitat may occur (USFWS and NMFS 1998). A change in sediment levels or texture can decrease suitability for anadromous fish spawning, rearing, and/or migration at and downstream of the work area. Depending upon the composition of the sediment and the flow and turbidity of the waterway, sediment could fall out of the water column immediately or may be carried some distance and impact downstream species. Hence, sediment deposition at the time of construction can be considered both a direct and an indirect impact to fish and fish habitat. Similarly, contamination by petroleum products or other pollutants (e.g., frac-out of bentonite) could cause direct affects to any individual fish present in the waterway at the time of the work and could also cause decreases in water quality downstream of the work. Respiration and other physiological processes may be negatively affected by such actions both directly and indirectly.

The Project would not result in any permanent aboveground infrastructure in aquatic habitats. Long-term ecological changes (e.g., quality, extent) would not occur to fish habitat. Impacts to fishes would be less than significant and further minimized with the implementation of the following avoidance measures. **AMM BIO-14** details avoidance measures to aquatic resources and fisheries. These include avoiding disruptions of natural hydrologic flow paths, timing work and carrying out construction activities to avoid sedimentation at waterways, restricting trench/plow in perennial waterways, coordinating with USFS fisheries biologists where when work occurs within ephemeral and intermittent aquatic habitats or delineated wetlands, restrict ground disturbance and sidecasting where required, and a limited operating period (LOP) for Upper Klamath/Trinity spring-run Chinook salmon. **AMMs BIO 4-7** (Intermittent Waterways and Ephemeral Drainages, Wetlands, Riparian Areas, and Riparian Reserves), the Restoration Plan, and SWPP will further avoid impacts to special-status fish and aquatic habitats.

Analysis of Project Impacts to Special-Status Mollusks

Impacts to special-status mollusks are expected to be minimal since the majority of the Project would be constructed along disturbed roadsides and other unvegetated areas where leaf litter is limited. Risks for impacts are greater along the more remote segments of the alignment, particularly along or adjacent to narrow dirt roads that run through late-successional forest habitats and intersect suitable aquatic habitat. Given mollusks' small size and inherently limited mobility, direct mortality of individuals could occur as a result of Project-related construction activities in areas within suitable habitat. During construction, direct impacts include possible crushing of individuals by heavy machinery and vehicles, trampling by personnel, or burying during soil-disturbing activities. Indirect effects to special-status mollusks may occur via the possible introduction of non-native, invasive species (e.g., other mollusks, pathogens) that may displace or predate native mollusks. Both terrestrial and aquatic mollusks can also be sensitive to environmental contaminants, and indirect effects may occur from unintentional chemical spills (e.g., fuel, lubricants, etc.) during construction activities. Ground-disturbing activities in or adjacent to waterways intersecting the Project alignment may result in increased sedimentation that could indirectly affect aquatic mollusks by reducing downstream water quality.

The Project would not result in any permanent aboveground infrastructure within suitable mollusk habitat. The measures at the end of this section preventing impacts to special-status mollusks include surveys for Big Bar hesperian, blue-gray taildropper and Trinity bristle snail; work in vegetated habitats will be

restricted to a limited operating period (LOP) (June 16 through October 15) when Trinity bristle snail will not be present. Impacts to mollusks would be less than significant and would be further minimized by the implementation of these measures.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

Less Than Significant with Mitigation Incorporated:
The primary impacts to vegetation within the proposed Project area would ~~result from the~~be temporary impacts associated with excavating bore pits or trenching conduit into road shoulders or ROWs where barren, ruderal, annual grassland, shrubland, or vegetated areas may exist. However, direct and significant impacts to up to 0.18 acres of riparian habitat may occur if Vero trenches through up to 402 dry waterways. Specifically, individual plants could be inadvertently removed, crushed, or buried by machinery and vehicles or trampled by personnel. If dry waterways are trenched, mitigation measures described in the Restoration Plan (**AMM BIO-3**) will reduce any unavoidable impacts to a less than significant level by restoring any disturbed riparian vegetation to pre-disturbance levels (i.e., at least 80 percent of the total pre-construction percent cover), stabilizing banks and soils, and minimizing the introduction or spread of invasive plants (i.e., to comprise less than 15 percent of total cover). Specifically, the impacted areas will be revegetated with a native seed mix; all exposed or disturbed areas (i.e., waterways and vegetated areas) within the construction corridor will be returned to pre-existing contours and conditions; and impacted areas will be monitored and maintained for a minimum of three years to ensure bank stabilization, regeneration of wanted species, accessibility, and compliance with annual and final performance standards, thereby reducing any impacts to less than significant.

In practice, despite the existence of mitigation measures, significant impacts to riparian and other sensitive habitats are expected to be avoided and minimized by the riparian flagging and avoidance measures described in **AMM BIO-6**, the preconstruction surveys described in **AMM BIO-3**, and the special-status plant clearance surveys described in **AMM BIO-8**. Per **AMM BIO-3,** if sensitive natural communities are found in work areas or overland access routes during pre-construction surveys, those work and access areas will be repositioned where possible to avoid direct and significant impacts to sensitive habitat. Per **AMM BIO-6**, equipment staging and placement of manholes, handholes, and bore pits will not occur within flagged riparian resources, and Vero will obtain and comply with all necessary USACE, State Water Resources Control Board, CDFW, and California Coastal Commission permits.

Willow thickets (an S3 ranked sensitive natural community) occur at several locations immediately adjacent to the alignment, often immediately abutting the road in some coastal locations. **AMM BIO-5** requires the Proponent to use HDD to bore under and fully avoid willow thickets (see full biological measures below). Bore pits and access vaults would not be placed in or adjacent to these sensitive communities. Thus, neither permanent nor temporary impacts are expected to willow thickets. Ground-disturbing activities during construction may cause indirect effects to willow thicket communities, including increased erosion and the potential introduction of non-native invasive species~~; however, **AMM BIO-3** requires implementation of a Restoration Plan which outlines implementation measures, monitoring, and success criteria to ensure disturbed vegetated areas and waterways are returned to pre-construction conditions~~.

Although four other CDFW-defined sensitive natural communities (beach pine, redwood–Douglas-fir, ceanothus chaparral, and pickleweed-cordgrass communities) occur within the Project area, direct effects to these communities are not expected. These communities are not within the immediate Project alignment and would not be directly affected.

~~Impacts to riparian habitats will largely be avoided with the implementation of **AMM BIO-6**, which is designed to minimize impacts to riparian vegetation. Temporary impacts to riparian vegetation (up to approximately 0.18 total acres of the entire alignment) associated with open trenching across intermittent waterways may potentially occur; if impacts to riparian habitat do occur, agencies would be contacted and measures in the Restoration Plan would be implemented. Impacts from trenching through dry waterways will be mitigated and restored according to the Digital 299 Restoration Plan.~~

Direct impacts to perennial and some intermittent waterways will be avoided by either employing HDD construction methods to bore under these waterways, attaching conduit to bridges (if present), or

trenching/plowing above culverts conveying these waterways; however, if it is not feasible to employ HDD, bridge attachments, or trenching above culverts, it may be necessary to trench/plow through some of the ephemeral drainages and intermittent waterways, Therefore, temporary impacts of up to 0.07 acre of ephemeral drainages and 0.11 acre of intermittent waterways identified within the construction corridor may occur during construction; however, the trenching method would only be used if there was no water present in the waterway and no precipitation was expected while work was being conducted. In addition, AMMs and BMPs (including the implementation of a SWPPP, Spill Prevention and Pollution Plan [SPPP], HDD Contingency Plan, and Restoration Plan) would minimize any effects to waterways. Impacts resulting from trenching through dry streambeds are anticipated to be direct, but short term and minor.

Because with mitigation, the Project would not ~~destroy~~ have significant impacts to a population of federally or state-protected plants or fungi and would not replace native plant communities with noxious weeds, impacts to vegetation communities, sensitive communities, and Environmentally Sensitive Habitat Areas are expected to be direct, short term, and minor. Impacts will be further minimized with the implementation of AMMs and BMPs listed below, which require a clearance survey for special-status plants and communities prior to construction in appropriate habitat and a re-route of the alignment to avoid direct impacts, if necessary. If Vero trenches through dry waterways or places bore pits in vegetated areas, impacts to special-status species, waterways, and sensitive habitats could occur. Mitigation measures described in the Restoration Plan will contribute to reducing impacts to a less than significant level.

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

Less Than Significant Impact: Permanent and/or direct impacts to wetlands are not anticipated. HDD would be used to bore under and fully avoid wetlands and coastal willow thickets. Bore pits and access vaults would not be placed in or adjacent to wetlands or coastal willow thickets. Neither permanent nor temporary impacts are expected to wetlands or coastal willow thickets.

The Project would not result in the loss of any federally or state-protected wetlands. Proposed Project impacts to federally protected wetlands as defined by Section 404 of the Clean Water Act are determined to be less than significant and would be further minimized by the implementation of measures below. **AMM BIO-5** states that ground disturbing or other construction activity will not occur within the flagged boundaries of wetlands, and that HDD will be utilized to bore under wetlands to avoid impacts.

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

Less Than Significant Impact: Disturbance and impedance to any resident or migratory wildlife species at specific sites would be temporary and minimal. No element of the Project is anticipated to interfere with the movement or migration of fish or wildlife. Impacts are determined to be less than significant.

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

No impact: The Project would not conflict with any local policies or ordinances protecting biological resources, including any tree preservation policies or ordinances.

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

No impact: The Project would not conflict with the provisions of any Habitat Conservation Plans; Natural Community Conservation Plan; or other local, regional, or state habitat conservation plans.

Biological Resources Protection Measures

- **AMM BIO-1.** *Biological Monitoring Requirements.* The Applicant shall designate one or more Project biologists. Project biologist refers to the qualified person assigned to ensure Project-wide biological measures identified in this document are followed and to document compliance with these measures. The Project biologist will also oversee other biologists and/or biological monitors. Biological monitor refers to a qualified person assigned to ensure biological measures are being implemented during construction activities.

  Project biologist(s) or biological monitor(s) shall be on-site as needed according to AMMs. Project biologists and biological monitors shall be familiar with sensitive species and resources and the minimization measures for this Proposed Project. The Project biologist(s) shall be responsible for overseeing and training biological monitors; advising the applicant and contractor on compliance with biological measures; notifying the applicant of noncompliance with biological resources conditions; responding directly to inquiries of the lead agencies or resource agencies regarding biological resource issues; maintaining records of tasks related to compliance and reporting for biological resource measures; preparing monthly, annual, and final compliance reports; establishing and enforcing speed limits at Project work areas; and maintaining the ability for regular, direct communication with representatives of the CDFW, USFWS, BLM, USFS, and NPS, including notifying these agencies of dead or injured special-status species and reporting special-status species observations.

  Daily logs—When on-site, the Project biologist(s) and/or biological monitor(s) shall maintain electronic records of daily activities, observations, and communications with the applicant or construction personnel. These records shall be made available for review to the lead agencies at any time during or following Project implementation.

  Stop Work Authority—The Project biologist(s) and biological monitor(s) shall have written authority to require a halt to activities in any area when determined that there would be an unauthorized adverse impact to biological resources if the activities continued.

  Applicability: Project wide, where and when a monitor is needed.

- **AMM BIO-2.** *Environmental Awareness Training.* Key personnel (e.g., crew leads, foremen) will complete an environmental awareness training on the protected species in and around the Project route and on required environmental protection measures. Training shall explain the need for and implementation of minimization measures. The training shall include supporting written material and electronic media, including photographs of protected species; providing information regarding the locations and types of sensitive biological resources within the Project alignment and adjacent areas as well as explaining the reasons for protecting these resources; informing participants that no snakes, other reptiles, bats, or any other wildlife shall be harmed or harassed, with special emphasis on special-status species; and information on physical characteristics, distribution, behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures; identifying the Project biologist(s) and biological monitor(s) for contact or further comments and questions about the material discussed in the program; educating crews on noxious plants known to occur near the Project alignment; directing trainees to report all observations of listed species and their sign to the Project biologist for inclusion in the compliance reports; a discussion of the Project biologists' and biological monitors' stop work authority; and a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines.

  Applicability: Project wide.

- **AMM BIO-3.** *Restoration Plan.* During final Project design, a Restoration Plan will be developed that provides detailed plans for the restoration of temporarily disturbed waterways and vegetated areas. The plan will outline restoration and conservation activities, locations, monitoring requirements, and criteria to measure mitigation success. Restoration shall include seeding with locally sourced native species, erosion control measures, non-native plant control, and site monitoring of the restoration of temporarily disturbed waterways and vegetated areas, including

riparian habitat, if impacted. This plan shall also be submitted to and approved by the U.S. Army Corps of Engineers (USACE), USFWS, and CDFW prior to initiating any mitigation activities.

- **AMM BIO-4.** *Intermittent Waterways & Ephemeral Drainages.* No trenching will occur in intermittent waterways or ephemeral drainages where water is present in these features. Following trenching, intermittent waterways and ephemeral drainages will be restored to their original condition and contours per the guidelines outlined in the Restoration Plan.

  Applicability: Suitable habitat (will be mapped for construction crews).

- **AMM BIO-5.** *Wetlands.* Prior to construction, a qualified biologist will flag the boundaries of wetland resources delineated in the Preliminary Jurisdictional Delineation Report (Appendix F of the EA). Project infrastructure will be designed to avoid these resources, including coastal willow thickets. Where willow thickets and wetlands have been identified, construction of the alignment via the HDD method is required. During construction, crews will stage construction outside of the flagged areas. Manholes, handholes, and boring pits will be placed outside the flagged areas, at least 50 feet from wetland boundaries.

  Applicability: Project wide.

- **AMM BIO-6.** *Riparian Areas.* Prior to construction, a qualified biologist will flag the boundaries of riparian resources delineated in the Preliminary Jurisdictional Delineation Report (Transcon 2021). Project infrastructure will be designed to avoid these resources to the greatest extent practicable. During construction, crews will limit construction activities to the extent practicable. Equipment staging and placement of manholes, handholes, and boring pits will all occur outside of flagged riparian resources. If construction activities fill or disturb riparian areas, then Vero will do the following:
  - Vero will obtain and comply with all necessary USACE, State Water Resources Control Board, CDFW, and California Coastal Commission permits.
  - Impacted wetlands and/or riparian areas will be restored to pre-construction condition and monitored during and after disturbance. Restoration of temporarily impacted wetlands and riparian areas will be addressed in the Restoration Plan (AMM BIO-3).

  Applicability: Project wide.

- **AMM BIO-7.** *Riparian Reserves (federal lands only).* The following AMMs pertain to Riparian Reserves (defined as 320 feet either side of the channel or the outer edge of the 100-year floodplain or from the edge of the active channel to the top of the inner gorge, whichever is greater) areas on USFS and BLM lands:
  - No equipment or vehicles will be permitted to operate where soils are saturated or within the wetted perimeter within the Riparian Reserves unless staged on existing roads and turnout areas in adherence to all BMPs pertaining to containment and prevention of hazardous spills from reaching water bodies (e.g., absorbent pads, drip pans, and containment trays). Servicing of equipment will occur at existing staging areas located more than 25 feet from springs and wet areas. Drainage of existing staging areas will be directed and dispersed so that rainfall flows away from streams and prevents direct delivery.
  - The use of existing staging areas located outside Riparian Reserve buffer may require surface shaping and drainage structures if needed to direct and disperse flow away from Riparian Reserves and prevent direct delivery to waterbodies. All heavy equipment operations require approved erosion control plans when working outside of the normal operating season.
  - Splice boxes and barrel vaults will be designed, constructed, and operated outside Riparian Reserves to eliminate adverse effects that retard or prevent attainment of objectives from the Aquatic Conservation Strategy.

  Applicability: Suitable habitat on federal land (will be mapped for construction crews).

- **AMM BIO-8.** *Special-Status Plants.* The Project biologist shall conduct a clearance survey for special-status plant species immediately prior to construction in appropriate habitat. In areas affected by recent wildfire, surveys will be particularly thorough where occurrences of sensitive plants are mapped due to the elevated potential for dormant plant populations to reappear following burns. If planned construction activities may result in an impact to special-status plant species, the following measures will be taken: 1) a minor re- route of the alignment would be made to avoid the plant(s) and a suitable buffer area to prevent root damage or other incidental damage; or 2) in areas that cannot be avoided by a minor re-route, the Project biologist will contact the appropriate agency to discuss~~ the potential for salvaging the affected plants~~. A biological monitor shall be responsible for designating an appropriate buffer area or bore depth to minimize potential adverse impacts to the plants and their roots. If re-alignment shall occur on BLM, USFS, or Whiskeytown National Recreation Area (NRA)-managed lands, the agency botanist must be contacted prior to work.

  Applicability: Suitable habitat (will be mapped for construction crews). (Biology ID: AMM BIO-7)

- **AMM BIO-9.** *Invasive Species Prevention.* Contractor vehicles, equipment, tools, boots, and clothing will be cleaned inside and out prior to mobilization of Project segments ~~on federal lands or California Department of Transportation ROW~~ to limit the introduction on non-native species and pathogens (e.g., Port Orford cedar root fungus) on the Project corridor, including in areas potentially affected by recent wildfire. Cleaning will occur prior to mobilization of the Project and when a work crew will move between project segments.

  The additional measures below will be applied on federal lands at the following locations:

  - Segment 7 between Berry Summit and the mouth of Willow Creek
  - Segment 8 between Mayfair Street and Brannan Mountain Road
  - Segments 11 and 12 between South Fork and Henessey Roads
  - Segments 14, 15, 15A, and 16 between Underwood Mountain and Corral Bottom Roads
  - Segments 14A and 17 between Underwood Mountain and East Fork Roads
  - Segment 18A1 between Valdor and Canyon Creek Roads
  - Segment 18 between East Fork Road and Highway 299
  - Segment 21 between Little Browns and Browns Mountain Roads
  - Segments 22, 23, and 24 between Deadwood and Trinity Mountain Roads
  - Segment 25 on SR 299 through Whiskeytown NRA

  Exterior cleaning will consist of washing vehicles and equipment at an off-site location, with attention paid to the tracks, feet, and/or tires and on the undercarriage and with special emphasis on axles, frame, cross members, motor mounts, and on and underneath steps, running boards, and front bumper/brush guard assemblies. Vehicle cabs will be swept out, and refuse will be disposed of in waste receptacles to be disposed of at an approved off-site location. Hand tools and boots will be washed and clothing laundered. The Contractor will inspect vehicles, equipment, tools, boots, and clothing to ensure that they are free of soil and debris capable of transporting non-native vegetation seeds, roots, or rhizomes. Seeds and plant parts that result from the cleaning will be collected and bagged for disposal at an approved off-site location. If noxious or invasive weeds are within the construction corridor, vehicles will be cleaned before moving on to areas that are weed free or any location affected by wildfire.

  Contractors will avoid or minimize all types of off-road travel that may result in the collection and dispersion of non-native vegetation by construction vehicles and equipment.

  Activity boundaries, including equipment staging and parking areas, shall avoid known noxious plant infestation. If unavoidable, prior to implementation of operations where invasive plants are present, invasive plant-infestations shall be bladed away from equipment and access routes before operations start. Removed invasive plants or shrubs should be located on the edge of the clearing out of the way of operations to avoid retrieval on equipment. Equipment/machinery shall

be cleaned prior to leaving the infested area to operate in another non-contiguous area. Activity boundaries shall avoid areas recently burned by wildfire to the extent possible.

Prior to construction occurring at staging areas and where ground disturbing activities will take place on USFS lands, a botanist will consult invasive plant spatial data (i.e., Natural Resource Information System, California Invasive Plant Council/Calfora invasive plant layers), survey for invasive plants, document invasive species present, and prescribe site-specific measures.

Rock, sand, or any material used for soil erosion control shall originate from a certified weed-free source if available. Rock source shall be inspected by staff trained in invasive plant identification. Permittee shall provide documentation that material is weed free. (see https://www.cal-ipc.org/solutions/prevention/weedfreeforage/ and https://www.cal-ipc.org/solutions/prevention/
weedfreegravel/ for more information about weed-free erosion control and aggregate sources).

Applicability: Project wide.

- **AMM BIO-10.** *Marbled Murrelet.* The following measures will be observed between March 24 and August 5 per the USFWS Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to NSOs and MAMUs in Northwestern California (USFWS 2006):
  At work areas adjacent to SR 299 (which has high ambient noise levels):
    - Within 500 feet of suitable MAMU habitat (see the BE and Appendix I of the EA), no work activities will take place that generate sound levels 20 or more dB above ambient sound levels OR that generate maximum sound levels (ambient sound level plus activity-generated sound level) above 90 dB (excluding vehicle back-up alarms).
    - The LOP may be lifted at a particular segment if a field survey determines that suitable MAMU habitat is not present within 0.25 mile of it.

  At work areas NOT adjacent to SR 299:
    - Within 0.25 mile of suitable MAMU nesting\roosting habitat (see the BE and Appendix I of the EA), no work activities will take place that generate sound levels 20 or more dB above ambient sound levels OR that generate maximum sound levels (ambient sound level plus activity-generated sound level) above 90 dB (excluding vehicle back-up alarms).
    - The LOP may be lifted at a particular segment if a field survey determines that suitable MAMU habitat is not present within 0.25 mile of it.

  Applicability: Suitable habitat (will be mapped for construction crews).

- **AMM BIO-11.** *Northern Spotted Owl.* The following measures will be observed between February 1 and July 9 per the USFWS Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to NSOs and MAMUs in Northwestern California (USFWS 2006):

  At work areas adjacent to SR 299 (which has high ambient noise levels):
    - Within 500 feet of suitable NSO nesting\roosting habitat (see the BE and Appendix I of the EA), no work activities will take place that generate sound levels 20 or more dB above ambient sound levels OR that generate maximum sound levels (ambient sound level plus activity-generated sound level) above 90 dB (excluding vehicle back-up alarms).
    - The LOP may be lifted if disturbance-only USFWS protocol-level surveys are conducted and determine that no NSO is nesting within 500 feet.
    - This LOP may be lifted at a particular segment if a field survey determines that suitable NSO habitat is not present within 500 feet of it.
    - If an active nest is identified within 500 feet of work, the LOP will be extended through September 15.

At work areas NOT adjacent to SR 299:

- Within 0.25 mile of suitable NSO nesting\roosting habitat (see the BE and Appendix I of the EA), no work activities will take place that generate sound levels 20 or more dB above ambient sound levels OR that generate maximum sound levels (ambient sound level plus activity-generated sound level) above 90 dB (excluding vehicle back-up alarms).
- The LOP may be lifted if disturbance-only USFWS protocol-level surveys are conducted and determine that no NSO is nesting within 0.25 mile.
- This LOP may be lifted at a particular segment if a field survey determines that suitable NSO habitat is not present within 0.25 mile of it.
- If an active nest is identified within 500 feet of work, the LOP will be extended through September 15.

Applicability: Suitable habitat (will be mapped for construction crews).

- **AMM BIO-12.** *Northern Spotted Owl.* At each discrete location in which vegetation is removed, removal is limited to 6-inch DBH trees and an area less than 0.1 acre in size.

  Applicability: Suitable habitat (will be mapped for construction crews).
- **AMM BIO-13.** *Nesting Birds.* To avoid and minimize adverse effects to nesting birds, the following measures shall be implemented:

  If work will occur during the nesting bird season (February 15 until August 31 OR January 1 until August 31 where there is potential for nesting eagles or other early nesting raptors)), nesting bird surveys will be conducted within 7 days prior to the onset of construction by a Project biologist or biological monitor familiar with the species that may nest in the Action Area with standard nest-locating techniques. Surveys will occur to a distance of 100 feet (for passerines) or 300 feet (for raptors) from the proposed work, access routes, and staging areas. In areas within 0.5 mile of suitable bald or golden eagle nesting habitat, nesting season begins January 1 and surveys will be performed within 2,640 feet of work. If an active nest is encountered in or adjacent to a work area, a no equipment/no activity buffer will be implemented around the nest (the size of which will be determined by the Project biologist and shall depend on the species' tolerance to human activity, location of the nest relative to the work area, any vegetation or other materials that may screen the nest from noise and view of work, the nature of the work, and other pertinent information), OR the active nest will be continuously monitored by a Project biologist or biological monitor for disturbance. If the monitoring biologist determines nesting may fail as a result of work activities, all work shall cease (except access along existing roadways) within the recommended avoidance area until the biologist determines the adults and young are no longer reliant on the nest site. If an active nest of a listed bird is found, a 500-foot buffer will be established around the nest. If construction activities are delayed or suspended for more than 1 week after the completion of the nesting surveys, surveys will be performed again.

  If active nests are identified on bridges or associated structures by a Project biologist or biological monitor during the nesting season (February 15 to August 31), work will not occur unless a biological monitor is present to monitor for disturbance. If active nests are identified on Caltrans bridges, Caltrans Environmental will be contacted.

  If work will occur on Segment 8 between January 1 and August 31, crews will contact a Six Rivers National Forest ~~Biologist~~ biologist ~~Bryan Yost~~ 2 weeks prior to the start of work to get updated nesting information for bald eagle.

  Applicability: Project wide.

- **AMM BIO-14.** *Aquatic Resources / Fisheries.* To avoid and minimize adverse effects to federally-listed and special-status fish and wildlife, the following measures shall be implemented:

  - Avoid disruption of natural hydrologic flow paths, including diversion of streamflow and interception of surface and subsurface flow.

- Conduct operations at water source developments in such a manner and timing as to avoid and minimize adverse effects to aquatic species and habitat from sedimentation.
- No trenching or plowing activities are proposed to occur within perennial aquatic habitats. Perennial waterways will be crossed via one of three methods: 1) conduit attachment to existing bridge, 2) trenching to place conduit above a deep culvert, or 3) HDD.
- For all trenching or plowing in intermittent and ephemeral streams, ground disturbance and sidecasting of excavated material will be done in a manner that will minimize potential for off-site sediment input into stream channels. In addition, these waterways will be restored and maintained in accordance with the SWPPP, Restoration Plan, and any applicable agency permit requirements which aim to minimize any loose material from entering and remove any loose material that does enter dry channels.
- On USFS lands, coordinate with USFS fisheries biologists to restrict ground disturbance and sidecasting of excavated material to minimize potential for off-site sediment input into stream channels. Work within ephemeral and intermittent aquatic habitat or delineated wetlands will be coordinated with USFS fisheries biologists.
- To avoid potential impacts to Upper Klamath/Trinity spring-run Chinook salmon, work will only occur during a LOP from November through April at all intermittent and perennial waterway crossings within the range of this population. This LOP applies to HDD work, not aerial or bridge crossings, and will be in effect at the following locations:

  Primary alignment: Segments 7, 9, 11A, 13, 14A, 17, 18, 19, 20, 21, 22
  Alternative segments: Segments 11, 14, 15, 15A, 15Alt, 16, 18A1, 18A2

- From May through October, HDD may cross intermittent waterways only if no water is present in the channel within 100 feet of the crossing, as the lack of aquatic habitat will ensure that Upper Klamath/Trinity spring-run Chinook salmon will not be present and not susceptible to disturbance. A biologist will survey the crossing within 48 hours prior to work to verify the channel is dry. Perennial waterways are anticipated to hold water year-round and may only be crossed during the November-April LOP.

Applicability: Suitable habitat (will be mapped for construction crews).

- **AMM BIO-15.** *Special-Status Amphibians.* When ground-disturbing work is occurring within ~~25 to 50~~ 100 feet of waterways that have water present and that are suitable habitat for special-status amphibians, a qualified biologist will conduct a pre-disturbance survey for special-status amphibians (adults, subadults, tadpoles, or egg masses). The survey area will include suitable habitat within ~~50~~ 100 feet of perennial and intermittent waterways, within 25 feet of ephemeral drainages, and at least ~~50~~ 100 feet upstream and downstream of the work area. The biologist will conduct surveys for special-status amphibians prior to the start of ground-disturbing activities. If no special-status amphibians are detected, work may resume for 3 to 5 days before new surveys need to be conducted.

  If a special-status amphibian is confirmed to be present, then a qualified biologist will move the individual to a suitable off-site location within the same waterway.

  Applicability: Suitable habitat (will be mapped for construction crews).

- **AMM BIO-16.** *Special-Status Bats.* To avoid and minimize adverse effects to bats, the following measures shall be implemented:
  - When work will occur during bat maternity (April 1 to September 15) or hibernation (November 1 to February 28) seasons, suitable habitat (mines, caves, tunnels, buildings, other manmade structures, and trees with a DBH of 45 inches or larger) within 100 feet of work areas will be a surveyed by a qualified biologist for suitable roost locations and signs of roosting bat colonies. If suitable roost locations, roosting bat colonies, or sign are detected within 100 feet of a work area, the Project biologist will contact the CDFW

(or relevant agency) to determine the best course of action. Surveys must occur a minimum of 7 days prior to construction.

- Prior to initiating conduit installation on any bridge, the Project biologist will conduct pre-disturbance bat roost surveys at the bridge site. If roosting bats may be present, then the Project biologist shall identify the species and contact the CDFW to determine the best course of action. Where bridges may serve as maternity roosts, Project construction will be delayed until conclusion of the maternity season.

Applicability: All bridges and suitable habitat (will be mapped for construction crews).

- **AMM BIO-17.** *Special-Status Mammals.* To avoid and minimize adverse effects to mammals, the following measures shall be implemented:
  - If work is being conducted in suitable denning habitat during the denning mammal natal season (February 1 to July 15), the Project biologist or biological monitor will conduct pre-disturbance denning mammal surveys at den sites within the construction corridor in addition to a 50-foot buffer area. If any potentially active dens are detected, a no-work buffer will be established within 150 feet of the potential den until the Project biologist determines that the den is not active or that denning season is over. Denning mammal surveys will focus on American badger, fisher, and ring-tailed cat with an emphasis on searching for tree cavities and burrows of appropriate size for these species in potentially suitable habitat. Methodology of covering the survey area will generally be via multiple transects within the Construction Corridor and buffer area, but this may vary depending on terrain, vegetation density, and visibility within the survey area. Surveys will focus on potentially high-disturbance locations along the alignment such as staging areas, excavations, and where construction will be done via trench/plow rather than HDD.
  - If a special-status denning mammal species is detected or directly observed within 150 feet of a construction area, the biological monitor will be notified immediately. Any work that may result in direct disturbance to the animal will be temporarily halted until the mammal leaves. If it does not leave on its own, the biological monitor would contact the appropriate agency to determine the best course of action.
  - Work within 0.25 mile of a known fisher den or unsurveyed dens will not occur between the fisher denning season (February 1 to July 15) unless surveys determine the site to be unoccupied.
  - Prior to the commencement of work in suitable habitat, the Project biologist will coordinate with the CDFW to obtain up-to-date information regarding wolf activity.

Applicability: Suitable habitat (will be mapped for construction crews).

- **AMM BIO-18.** *Big Bar Hesperian.* Pre-disturbance surveys for Big Bar hesperian will be performed at work areas in riparian habitat at elevations below 3,000 feet. With USFS approval, the Project biologist may deem surveys unnecessary if work will only occur in dry areas on the upper two-thirds of a slope away from moist riparian vegetation. If the species is found during surveys, the Project biologist will contact the Shasta-Trinity National Forest biologist to determine the best course of action.

  Applicability: Only within 100 feet of perennial waters (year-round) or within 100 feet of all waterways during the rainy season. Within range on USFS land only (will be mapped for construction crews).

- **AMM BIO-19.** *Blue-gray taildropper.* Pre-disturbance surveys for blue-gray taildropper will be performed at work areas in suitable habitat. Surveys will be conducted in accordance with the Mollusk Survey Protocol described in Duncan et. al 2003. With USFS approval, the Project biologist may deem surveys unnecessary if work will only occur in dry areas on the upper two-thirds of a slope away from moist riparian vegetation. If the species is found during surveys, the Project biologist will contact the appropriate agency biologist to determine the best course of action.

Applicability: Only within 100 feet of perennial waters (year-round) or within 100 feet of all waterways during the rainy season. Within range on USFS land only (will be mapped for construction crews).

- **AMM BIO-20.** *Trinity bristle snail.* To the extent possible, all entry and exit vault locations and staging areas ("work locations") will be located in unvegetated or paved areas (e.g., habitat considered not suitable for trinity bristle snail [TBS]).
    - For work locations and associated foot traffic (e.g., pedestrian monitoring of the HDD alignment for frac-outs) that must occur in vegetated work areas:
        - A qualified biologist will conduct a pre-construction survey to flag areas that are suitable habitat for TBS (e.g., moist but well-drained, well-shaded canyons or streamside benches covered with a layer of leaf litter at least four inches deep) for avoidance; and
        - Work will be conducted during a LOP of June 16 through the start of the rainy season, October 15, when TBS will not be present
    - All HDD at water crossings within 25 feet of suitable TBS habitat will be at a minimum depth of 15 feet below the bed of the stream

  In the event of frac-out during HDD construction, a qualified biologist will conduct a survey to identify TBS microhabitats/potential cover objects for avoidance prior to spill cleanup or equipment retrieval activities. The biologist will have authority to stop work and designate activity-free buffers if there are potential impacts to TBS. Recovery activities will avoid impacting these areas and CDFW will be contacted.

  In the event of an equipment failure or the boring drill breaks sub surface during HDD, the equipment will be backed out of the pilot hole to minimize ground disturbance. No additional excavations may occur to retrieve equipment within a bore. If retrieval of drill components via this method is not possible, equipment shall be left within the bore and agencies that have jurisdiction at that location shall be notified.

  Applicability: Suitable habitat (will be mapped for construction crews).

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

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

Less Than Significant Impact: For a cultural resource to be considered a historical resource (i.e., eligible for listing in the California Register of Historical Resources [CRHR]), it generally must be 50 years or older. Under CEQA, historical resources can include precontact (i.e., Native American) archaeological deposits, Historic-period archaeological deposits, historic buildings, and historic districts.

Identification of historical resources in and adjacent to the Project included the following tasks: 1) records searches were conducted at the Northwest Information Center and Northeast Information Center of the California Historical Resources Information System, 2) geologic and historical maps and information were reviewed to assess the potential for Historic-period and precontact Native American archaeological deposits, and 3) qualified archaeologists surveyed the Project corridor to identify surface cultural resources.

The tasks described above identified a total of 251 cultural resources, including one Traditional Cultural Property (TCP). This includes resources that are listed in, determined, or recommended eligible for the National Register of Historic Places (NRHP)/CRHR as well as those unevaluated and treated as eligible for the NRHP/CRHR for the purposes of this Project. The resources include prehistoric Native American sites; Historic-period trash dumps; Historic-period bridges and road segments; Historic-period mining remains and historic districts; a heritage tree of historical significance; and state historic landmarks, including Helena Townsite and Shasta State Historic Park.

On August 12, 2022, the Caltrans Cultural Studies Office (CSO) concurred with a Finding of No Adverse Effect to historic properties within the Caltrans fee-owned ROW, as detailed in a set of Caltrans-specific cultural resource documentation including a Historical Resources Compliance Report (HRCR), Archaeological Survey Report (ASR), Finding of Effect (FOE), and Post-Review Discovery Plan (PRDP). In the absence of a lead federal agency for NEPA or NHPA Section 106 compliance, Caltrans District 2 consulted with the CSO pursuant to Public Resources Code Section 5024 and the Governor's Executive Order W-26-92 and pursuant to the 2014 Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92, Amended 2019 (PRC 5024 MOU). This PRC 5024 consultation was completed in tandem with the federal agencies' NHPA Section 106 consultation with the California State Historic Preservation Officer (SHPO), in which each agency consulted separately on findings for historic properties under its own jurisdiction.

To protect and limit impacts to historical resources in the Project corridor, including those that are assumed eligible for listing in the CRHR, BMPs and site-specific measures will be employed during construction. These include cultural resource awareness training for all construction crews prior to construction activities (**CR-1**), applicability of cultural resources guiding principles (**CR-2**), implementation of cultural resource protection measures included in the Cultural Resources Inventory Report with respect to known cultural environmentally sensitive areas (**CR-3**), application of BMPs during deviation from proposed construction methods and placement within the area of potential effect (APE) (**CR-4**), and avoidance of eligible or unevaluated cultural resources (**CR-5**). In addition, Inadvertent Discovery

Protocols of cultural resources (**CR-6**) and human remains (**CR-7** and **CR-8**) requiring work to stop and the discovery to be flagged and assessed must be implemented as well. Resource protection measures requiring cultural avoidance measures be included in ILA building siting (**CR-9**) and construction (**CR-10**) are included as well.

These measures are prescribed project wide, or at specific sites along the Project, as described in Loftus et al. 2021 to avoid and limit impacts to cultural resources. Impacts to cultural resources resulting from unanticipated discovery—including their potential demolition, destruction, relocation, or alteration—would be less than significant and would be further minimized by the implementation of these measures.

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

Less Than Significant Impact: According to the CEQA Guidelines, "When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource" (CEQA Guidelines Section 15064.5[c][1]). Those archaeological sites that do not qualify as historical resources shall be assessed to determine if these qualify as "unique archaeological resources" (CPRC Section 21083.2). Archaeological deposits identified during project construction shall be treated by the agency—in consultation with a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology—in accordance with the measures referenced under subsection a).

Project impacts will be less than significant and would be further minimized by the implementation of the below avoidance measures. The Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.

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

Less Than Significant Impact: To avoid or minimize impacts to potential inadvertent discovery of human remains, the Project resource protection measures include unanticipated discovery protocols (**CR-7** and **CR-8**). These measures will ensure that if previously unknown human remains are discovered, including any interred within or outside of dedicated cemeteries, the protocols provided in CPRC Section 5097.98 and any other implementing federal protocol of the BLM, USFS, and/or NPS would be followed. Impacts are considered less than significant and would be further minimized by the implementation of CR-7 and CR-8.

Cultural and Tribal Resources Protection Measures

- **CR-1.** *Cultural Resources Awareness Training.* Prior to ground- and non-ground-disturbing construction activities, all construction crew personnel will complete Cultural Resource Awareness Training (CRAT). The CRAT will educate the construction crew and personnel about Environmentally Sensitive Areas (ESAs), measures, BMPs, Cultural Resource Protection Measures (CRPMs), Inadvertent Discovery Protocols, types of resources to be aware of in the field (e.g., prehistoric, historic, human remains), and how to flag unanticipated discoveries. Additionally, the construction crew(s) will be educated on the federal and state regulations that provide for protection of cultural and tribal resources, such as the Archaeological Resources Protection Act (ARPA), as well as the penalties that result from violations. Similar CRAT will be provided to the cultural resources team of professionals responsible for the protection and preservation of cultural and tribal resources. This will ensure successful execution of the Project in compliance with Section 106 of the National Historic Preservation Act and CEQA. Implementation of the BMPs, CRPMs, Inadvertent Discovery Protocols, and CRAT will be overseen by the principal investigator and cultural lead. The CRAT must be repeated annually and as needed for new construction personnel and cultural resources personnel. All participants must sign an agreement stating they have completed the training.

  Applicability: Project wide, duration of Project.

- **CR-2.** *Guiding Principles—CRPMs, BMPs, and IDP for Cultural and Tribal Resources*. The guiding principles cultural resource protection are an amalgamation of the guidance documents provided by each federal and state agency, to include:
    - State Protocol Agreement Among the California State Director of the BLM and the California State Historic Preservation Officer and the Nevada Station Historic Preservation Officer regarding the Manner in Which the BLM Will Meet its Responsibilities under the National Historic Preservation Act and the National Programmatic Agreement among the BLM, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers
    - Nationwide Programmatic Agreement among the NPS, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers for Compliance with Section 106 of the National Historic Preservation Act
    - Native American Graves Protection and Repatriation Act (NAGPRA) of 1990
    - Bureau of Reclamation Protocol for NAGPRA Inadvertent Discoveries on Federal Land, California-Great Basin Region
    - Manual 8100-The Foundations for Managing Cultural Resources
    - Manual 8110-Identifying and Evaluating Cultural Resources
    - Manual 8140-Protecting Cultural Resources
    - Manual 8150-Permitting Uses of Cultural Resources
    - Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92
    - Standard Environmental Reference-Volume 2, Chapter 2

  Applicability: Project wide, duration of Project.

- **CR-3.** *Cultural Resource and ESA Avoidance and Management.* Vero shall implement the CRPMs with respect to known cultural resources and ESAs, as described in the Cultural Resources Inventory Report (Loftus et al. 2019).

  Applicability: Project wide, duration of Project.

- **CR-4.** *Best Management Practice.* Prior to deviation for existing proposed construction method and cable placement location outside of the studied APE, Vero shall notify the appropriate jurisdictional authority to consult regarding the potential effects from the revised cable placement location to historical resources and historic properties.

  Applicability: Project wide, duration of Project.

- **CR-5.** *Best Management Practice.* Vero shall avoid cultural resources, eligible or unevaluated for the NRHP/California Register of Historic Resources.

  Applicability: Project wide, duration of Project.

- **CR-6.** *Inadvertent Discovery Protocol.* Should inadvertent discovery of cultural resources occur, Vero shall halt all ground-disturbing construction activity and flag the discovery for avoidance by 200 feet as an ESA, and a qualified archaeologist will be contacted for implementation of CRPMs, Treatment Plans, and potential mitigation measures in coordination with the jurisdictional agency and/or Tribal authority.

  Applicability: Project wide, duration of Project.

- **CR-7.** *Inadvertent Discovery Protocol.* In the event that historic properties are inadvertently encountered, the vicinity of discovery will be flagged for avoidance from construction activities within 200 feet. Vero will be responsible for notifying the appropriate jurisdictional authority, and the agency shall notify the State Historic Preservation Officer (SHPO)/Tribal Historic

Preservation Officer (THPO), federally recognized Indian Tribe(s) within 48 hours, or as soon as reasonably possible. The agency, in consultation with the SHPO/THPO, Indian Tribe(s), and Vero, will make reasonable efforts to avoid, minimize, or mitigate adverse effects on those historic properties. If human remains or other cultural material that may fall under the provisions of NAGPRA are present, the agency will comply with NAGPRA and ARPA. The agency will ensure that any human remains are left in situ, are not exposed, and remain protected while compliance with NAGPRA, ARPA, or other applicable federal, state, and/or local laws and procedures is undertaken.

Applicability: Project wide, duration of Project.

- **CR-8.** *ILA Building Location.* ILA buildings will not be sited in areas of known sensitive cultural or tribal resources. Resource protection measures listed in this appendix will be followed during construction of ILA buildings.
  Applicability: During ILA building siting.

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

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

No impact: There would be no environmental impact due to wasteful, inefficient, or unnecessary consumption of energy either during proposed Project construction or operation. Typical volumes of fuel would be utilized to operate machinery and vehicles, and Project operations require a negligible amount of energy consumption at ILA locations. There is no aspect of the Project that could potentially result in a waste of resources.

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

No impact: The proposed Project does not conflict with any renewable energy or energy efficiency plans.

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

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?

Less Than Significant Impact: The analysis area includes a few mapped faults identified on the current Alquist-Priolo Earthquake Fault Zoning Maps as covered under the Alquist-Priolo Earthquake Fault Zoning Act. The Project alignment crosses the Fickle Hill Fault, the McKinleyville Fault, the Mad River Fault, and the Trinidad Fault (CGS 2019a). Several active Holocene (rupture in the last 11,000 years) faults are mapped along the Project alignment near Arcata and McKinleyville. Two potentially active Quaternary faults are mapped southeast of Arcata Bay crossing the Project alignment (CGS 2010). Two additional faults, the Grogan Fault and Bald Mountain Fault (Quaternary and Late Quaternary), are mapped between Redwood Creek and the coast (CGS 2010). The design peak ground acceleration in the vicinity of the site, in accordance with Section 1803.5.11 of the 2016 California Building Code, is 0.186g (CGS 2007).

The Project involves the construction of a buried conduit and fiber line that is at minimal risk due to rupture of an earthquake fault and does not represent a risk of injury or death due to fault rupture or strong seismic ground shaking.

The primary geologic hazard for the Project is the risk of landslide. Some of the Project is located along road alignments that are cut into steep slopes where the risk of landslide ranges from low to high. The

Project alignment passes through areas of mapped landslides ranging from active and historic (recent movement or records of past movement) to dormant (CGS 2019b). Liquefaction risk is present in areas of alluvial fill near rivers and around bays. Considering the nature of the Project facilities (i.e., their location poses no risk to human life), these risks are considered less than significant. People and structures would not be exposed to additional risk, as the insertion of a thin band of conduit within a an already cut and filled roadbed is not anticipated to increase the risk of landslides or other geologic hazards.

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

Less Than Significant Impact: Typical Project construction involves the removal and replacement of a minimal amount of topsoil. These impacts are short term and minor and do not represent an appreciable potential loss of topsoil or a substantial risk of additional erosion. Soil would be removed, stored temporarily, and generally used to backfill the open trench. Although soil would be disturbed, the potential for soil erosion and loss of topsoil is less than significant. Erosion control BMPs will be placed according to the measures in **Appendix G** and the Project's Restoration Plan.

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

Less Than Significant Impact: Project facilities would be located on some soils that are at risk of landslide or liquefaction; however, Project construction would not add any additional risk of instability and would occur within an already cut and filled roadbed. Project construction includes the opening and backfilling of a narrow, shallow trench that has a negligible potential to result in on- or off-site landslide, subsidence, or collapse. While Project facilities are at risk of landslide, there is no risk to life; impacts would be less than significant.

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

No Impact: Potentially expansive, high-plasticity clays were not encountered near the surface at the Project area. Based on the plasticity index test results, the upper 5 feet of soil underlying the site generally have a low to moderate potential for shrink-swell behavior. These will have no impact on the Project.

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

No impact: The Project does not propose any wastewater infrastructure or require the use of underground septic systems that would have an impact on soil resources.

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

Less Than Significant Impact: The San Diego Natural History Museum prepared a Paleontological Resource Technical Report and found that the Project area intersects a region of complex Coast Ranges Geomorphic Province, the Klamath Mountains Geomorphic Province, and the Great Valley Geomorphic Province. Utilizing the USFS and BLM Potential Fossil Yield Classification System (PFYC), 29 geologic units within the geomorphic provinces were identified. Six are considered High Potential (PFYC 4) consisting of Pleistocene-age marine and non-marine deposits. Four are considered Moderate Potential (PFYC 3) consisting of Pleistocene-age and non-marine terrace deposits. Ground disturbance (bore pits) would occur in PFYC 3 and 4. The SDNHM determined that earthwork along certain segments of the alignment will almost certainly disturb geologic units assigned a PFYC ranking of 3 or 4, and thus may negatively impact paleontological resources.

A Paleontological Monitoring and Discovery Plan (PMDP) was developed to establish monitoring and discovery measures for unknown paleontological resources. The PMDP requires paleontological monitoring in PFYC 3 and 4, as described in the PMDP in **Appendix L**. Specifically, monitoring is recommended for construction in areas underlain by paleontologically sensitive geologic units (i.e.,

nonmarine terrace deposits, marine and nonmarine overlap deposits, and the Falor, Modesto, Riverbank, Red Bluff, Tehama, Weaverville, Galice, and Bragdon formations) and will involve earthwork that can be feasibly monitored (e.g., trenching; excavation of access vaults, bore pits, and bridge attachments; grading for node buildings). Impacts to paleontological resources and unique geological features would be less than significant and would be further minimized by monitoring and discovery measures outlined in the PMDP.

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

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

Less than significant Impact: The proposed Project would emit greenhouse gases from the operation of vehicles and equipment during Project construction. The emissions are quantified in the EA. An estimated total of 14,500 metric tons of greenhouse gas as carbon dioxide (CO_2) equivalent would be generated by the proposed Project over multiple years of construction. Neither the North Coast Unified Air Quality Management District nor the Shasta County Air Quality Management District have greenhouse gas CEQA thresholds or reporting thresholds for mobile source emissions. The stationary source emissions are not applicable to Project construction activities. While all greenhouse gases added to the atmosphere contribute incrementally to environmental effects, emission levels from Project construction are well under the minimum reporting thresholds. Emissions from on-going operations are negligible. Impacts are considered less than significant.

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

No impact: Project construction and operation does not exceed the thresholds established for reporting greenhouse gas emissions, nor is it a category required to report. There is no conflict with an applicable plan, policy, or regulation.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public/environment through routine transport/use/disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk, loss, injury, or death involving wildland fires?	☐	☐	☒	☐

a) Create significant hazard to the public/environment through routine transport/use/disposal of hazardous materials?

Less than significant impact: During construction, gasoline, diesel fuels, and hydraulic fluid used in construction equipment would be present on the Project site. Resource protection measures **HZ-1** and **BIO-23** require the development of a SPPP and hazardous substance control and emergency response plan which are to be implemented for the duration of construction. The SPPP, further described in measure **BIO-23**, will include, at a minimum:

- Measures to ensure petroleum products are not discharged into drainages or bodies of water;
- A description of potentially hazardous and nonhazardous materials that could accidentally be spilled during construction (e.g., fuels, equipment lubricant, human waste and chemical toilets, and bentonite), potential spill sources, potential spill causes, proper storage and transport methods, spill containment, spill recovery, agency notification, and responsible parties;
- Proper hazardous material storage procedures in staging areas (i.e., hazardous materials shall be stored in staging areas that are located at least 100 feet from ephemeral and intermittent streams and 300 feet from perennial streams, lakes, and wetlands);
- Proper refueling and vehicle maintenance procedures near waters or wetlands (i.e., these types of activities shall be performed at least 100 feet from ephemeral and intermittent streams and 300 feet from perennial streams, lakes, and wetlands); and
- Other BMPs that will protect waters and wetlands from accidental spills (e.g., sedimentation fences, certified weed-free hay bales, sand bags, water bars, and baffles).

Additionally, in work areas where soils are underlain by ultramafic rock (see Section 3.2.4.1 of the EA), construction crews will implement AMMs to minimize the spread of dust and thereby minimize worker and public exposure to naturally occurring asbestos. These AMMs will include limiting construction vehicle speed within the work site to 15 mph or less; installing temporary wind barriers around the work site and/or limiting excavation to periods of calm or low winds; using water to moisten excavation sites prior to and during ground disturbance; and minimizing dust from piles of excavated spoils by moistening with water, applying chemical dust suppressant, or covering when not in use.

The transport, use, and disposal of these materials poses minimal risk or hazard to the surrounding environment. No other hazardous materials would be transported, used, or disposed of during construction or operation. Hazardous material-related impacts to the public and the environment are determined to be less than significant and would be further minimized by the measures described above.

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

Less Than Significant Impact: During construction, gasoline, diesel fuels, and hydraulic fluid used in construction equipment would be present on the Project site. Spills from construction equipment would be unlikely and minimal in volume; the overall risk is low. While there is a risk of these materials leaking or spilling into the environment, resource protection measures **HZ-1** and **BIO-23** include the development of a SPPP and hazardous substance control and emergency response plan which are to be implemented for the duration of construction. Both of these plans will include details on how to address hazardous materials spills and clean up surface contamination.

Impacts to the public and the environment are anticipated to be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

Less Than Significant Impact: Construction of the proposed Project would take place within 0.25 mile of a few schools along the Project alignment. Construction equipment would emit typical air pollutants into the atmosphere. This data is quantified in the EA. However, these pollutants would not be acute but rather would be emitted for 2 to 3 days, as Project construction proceeds linearly. Pollutants are not considered hazardous at the minimal levels at which they would be emitted. The fuels used in construction equipment would be properly managed by the SPPP and BMPs. Impacts are considered less than significant.

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

No impact: Two superfund sites are located within 5 miles of the proposed Project: the Copper Bluff Mine in Hoopa and the Iron Mountain Mine near Redding. The Project is not located directly on these sites, nor does the proposed alignment pass through any other listed hazardous materials sites. There would be no impact.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No impact: Construction of the proposed Project would take place within 2 miles of several public or public use airports; however, the Project would have no impact on these facilities. Vehicle traffic control plans and other BMPs would be implemented to manage traffic flow, and construction activities would pose no safety hazards for people residing or working near the Project area. The noise analysis in the EA (Section 3.8) shows that noise impacts from construction would be temporary and minor. The Project would not result in safety hazards or excessive noise for people residing or working in the Project area.

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

Less than significant impact: During the operational phase, the Project would not impair implementation or interfere with an adopted emergency response plan. During construction, traffic control plans and other BMPs listed in the EA would be implemented to manage traffic flow, including giving emergency vehicles immediate passage around and/or through construction sites. Impacts are considered less than significant.

g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less than significant impact: The proposed Project poses a risk of wildfire only during construction from potential equipment sparks. Wildfire risks would be limited by implementing construction BMPs and applicable agency wildfire restrictions described in the Digital 299 Fire Prevention Plan, including that crews observe all fire alert warnings while working in areas prone to wildfires, keep all fire equipment (e.g., extinguishers, shovels, etc.) accessible at all times, and follow all other BMPs to respond to wildfires that could be caused by ignitions from sparks on vehicles and/or equipment. Workers would be trained on basic firefighting, and the availability of tools and training would allow construction crews to help control or extinguish fires they may come upon.

Back-up generators at ILA buildings could pose a wildfire risk. ILA buildings will be sited and constructed consistent with local building codes and standards, including vegetation breaks to allow for potential sparks. After a power outage, Vero will inspect the site for safety risks and to evaluate the state of equipment.

Once in place, the Project would increase communication capabilities allowing the public to have a better knowledge of wildfires and hazards. The Project would not expose significant risk, injury, or death related to wildfires; impacts would be less than significant.

Hazards and Hazardous Materials Protection Measures

- **HZ-1.** *Spill Prevention*. Vero and the construction contractor will develop the following plans prior to construction:
    - Spill Prevention Plan, as described in measure BIO-23, to minimize potential for accidental spill or pollutant discharge
    - Hazardous Substance Control and Emergency Response Plan to provide protocol for managing hazardous substances during construction (e.g., refueling), and for responding to potential emergencies encountered in the field related to hazardous material.

  Applicability: SWPPP and spill prevention plan will be employed Project wide.

- **HZ-2.** *ILA Building Construction.* The SWPPP and spill prevention plan will be followed during construction of ILA buildings.

  Applicability: During ILA building construction.

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

a) Violate any water quality standards or waste discharge requirements?

Less than significant impact: The proposed Project could result in both direct and indirect, short-term, minor impacts to surface waters near the Project area. During construction activities, runoff from site improvements could result in a slight increase in turbidity and erosion due to runoff over disturbed soils. A number of resource protection measures are included that address these concerns, including the development and implementation of an SWPPP (**BIO-22** and **HYD-1**), implementation of erosion BMPs (**HYD-5**), and the development and implementation of an SPPP (**BIO-23** and **HZ-1**). Furthermore, measure **HZ-2** stipulates that the measures in the SWPPP and SPPP will be followed during construction of ILA buildings.

All applicable Clean Water Act Section 404 permits and Section 401 water quality certifications would be obtained prior to the commencement of construction activities, and the measures described above would ensure that water quality standards and waste discharge requirements would not be violated.

Waterway Crossings

The Proponent has designed the Project to limit impacts to waterways by using the HDD construction method under every waterway that is holding water during the time of construction and attaching conduit to bridges when possible. Major waterways that would be bored under are listed below; the HDD depth under these waterways would be 15 to 20 feet below the bed of the waterway.

- McDaniel Slough
- Lindsay Creek
- Windy Creek
- East Fork Willow Creek
- Big French Creek
- Unnamed
- Trinity River
- French Gulch
- Canyon Hallow Creek
- Oregon Gulch
- Anderson Cottonwood Canal
- Olney Creek
- Spring Gulch
- Anderson Creek
- North Fork Mad River

- East Weaver Creek

Frac-out Risk

Frac-outs may occur when the pressure of the clay/water mixture is greater than the pressure of the surrounding ground/rock or when a pathway or crack opens in the ground that allows the mixture to seep out of the bore hole. Frac-out risk depends on a variety of factors, including ground conditions (e.g., soil type, erosion) and project design features (e.g., bore size and depth). Frac-outs are mostly likely to occur within 200 feet of the entry and exit pits, and in areas where ground has already been disturbed (Skonberg et al. 2008). This risk can be minimized or avoided by using proper tools and drilling practices, including monitoring drilling and pullback rates, monitoring returns into the entrance pit, and identifying any underground obstacles prior to construction (Tabesh et al. 2019).

Resource protection measures **HYD-2** and **BIO-24** require the Proponent to develop and implement an HDD Contingency Frac-Out Plan designating procedures, responsibilities, and reporting to be implemented in the event of a "frac-out" involving drilling fluid release when boring under perennial waterways. The Contingency Frac-Out Plan would include overarching BMPs as well as site-specific plans and designs for the above major waterways. Geotechnical studies involving the testing of soil and bore pits on either side of major HDD crossings would inform the slurry mix, further minimizing frac-out risk. General BMPs include but are not limited to keeping a vacuum and spill kit on-site, installing temporary sediment barriers, and storing spoils away from riparian boundaries when boring under waterways. Additionally, as described in the Plan, the HDD operation would be continually monitored for pressure changes or visual observations of seepage. Monitoring devices allow the crews to track the exact location of the drill bit, including depth, and detects pressure changes which may indicate a frac-out risk or occurrence. The Contingency Frac-Out Plan would incorporate agency input prior to the issuance of permits. The Plan will include the following:

- Monitoring procedures during drilling operations, (i.e., the bore path and waterways will be visually inspected at all times during drilling operations in the event of frac-outs);
- Clean-up and containment procedures in the event of accidental drilling fluid spills;
- Detailed reporting procedures in the event of a drilling fluid release; and/or
- Specific response procedures in the event of a drilling fluid release.

Related measures require the inspection of the HDD drill path at all times (**HYD-3**) and the post-construction restoration of any areas disturbed due to drilling or any other construction operation (**HYD-4**).

Overall, impacts to surface or groundwater quality are less than significant and would be further minimized by the implementation of measures described above.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

No impact: The proposed Project would not remove groundwater or affect groundwater recharge. There would be no impact.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or offsite?

Less than significant impact: The proposed Project would not alter the existing drainage pattern of the area in any manner. Although conduit and fiber optic cable would be placed within 100-year flood zone areas, the facilities would not impede or redirect flood flows in any manner. The Project is not expected to alter the course of a stream or river or add any impervious surfaces. Adherence to the erosion and

stormwater BMPs during construction of the conduit and ILA buildings would prevent substantial erosion and siltation from occurring on- and off-site. Any impacts would be less than significant.

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

No impact: The majority of the proposed Project alignment is not within any flood hazard, tsunami, or seiche zones. In the areas that are within these zones, inundation would not risk release of pollutants in these areas. There would be no impacts.

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

No impact: The proposed Project would not conflict with or obstruct implementation of a water quality control or sustainable groundwater management plan once all applicable permits are obtained. There would be no impact.

Hydrology and Water Quality Protection Measures

- **HYD-1.** *Spill Prevention.* A Spill Prevention Plan will be developed and implemented during construction, as described under BIO-23. The plan will contain spill prevention measures such as operation of equipment near water bodies, refueling operations, inspection of construction equipment for leaks, specific response procedures in the event of a spill, etc.

- **HYD-2.** *HDD Contingency Frac-Out Plan.* An HDD Contingency Frac-Out Plan will be developed and implemented during construction, as described under BIO-24. The Plan will designate procedures, responsibilities, and reporting in the event of a drilling fluid release.

- **HYD-3.** *HDD Inspection.* During HDD drilling, visual inspection along the bore path of the alignment shall take place at all times—i.e., a crew member should be watching closely for potential issues such as a spill or frac-out. At stream crossings with flowing water, the stream shall be monitored upstream and downstream of the crossing.

- **HYD-4.** *Restoration.* A Restoration Plan will be developed and implemented during construction, as described under BIO-3. The Plan will detail restoration of temporarily disturbed natural areas, including stream banks disturbed by construction. Pre-construction surveys will document conditions prior to construction. Exposed or disturbed areas, including channels and stream banks, shall be returned to pre-existing contours and conditions. Native seed mixes will be applied to disturbed areas and subsequent monitoring of sites requiring restoration will occur.

- **HYD-5.** *Erosion BMPs.* Runoff control structures, roadside diversion ditches, erosion-control structures, and energy dissipaters will be cleaned, maintained, repaired, and replaced to meet the standards set by applicable permits and the SWPPP.

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

a) Physically divide an established community?

No impact: The Project is located in established utility and transportation corridors and would not divide an established community. There would be no impact.

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

No impact: The Project does not conflict with any land use plan, policy, or regulation, as conditioned by agency permits. There would be no impact.

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

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

No impact: The Project would have no effect on mineral resources.

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

No impact: The Project would have no effect on mineral resources.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?

Less than significant impact: Construction of the proposed Project would require the use of large equipment to install the conduit, fiber optic line, vaults, and ILA buildings, resulting in temporary noise impacts. Noise impacts from these activities would typically last no longer than 2 to 3 days at a single location and would be restricted to daytime hours. Construction noise modeling shows that all construction methods would generate noise of 88 A-weighted dB or less at 50 feet. Construction noise from these activities would drop off substantially at 200 feet and would be indistinguishable from background noise at a distance of less than 0.25 mile near populated areas. Because of the greater nuisance noise poses during nighttime hours, a resource protection measure has been added requiring the contractor to avoid construction during nighttime hours (**NOI-3**). To limit noise impacts further, resource protection measures have been added that the manufacturer's recommended noise abatement measures (e.g., mufflers, engine enclosures, etc.) are properly installed and in good condition (**NOI-1**). Additionally, equipment that is not imminently needed must be turned off to limit both noise and air quality impacts (**NOI-2**).

Due to the brevity of the impact limited to daylight hours, the noise would not be in excess of typical standards that apply to both long-term and "nuisance" noise. Short-term noise impacts are considered to be temporary, minor, and less than significant and would be further minimized by the implementation of the avoidance measures below.

The long-term operation of the Project is not anticipated to result in any substantial noise impacts. The fiber line itself is not a noise source, and the ILA buildings contain generators as backup power sources that would be run intermittently for maintenance. Any noise impact would be short term, minor, and would not exceed noise standards. Long-term noise impacts are considered to be less than significant.

b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

Less than significant impact: Construction of the Project would result in a minimal amount of ground-borne vibration due to trenching and rock sawing; however, these impacts would be temporary and localized and are not considered excessive. The long-term operation of the Project would not result in any ground-borne vibration. Impacts are considered less than significant.

c) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No impact: Construction of the proposed fiber optic line would take place within 2 miles of several public or public use airports. No long-term noise impacts that would affect airport land use of surrounding areas

would result from the Project, and noise levels would not approach those of an operational airport. There would be no impact.

Noise Protection Measures

- **NOI-1.** *Equipment Noise Abatement Maintenance.* Ensure that all construction equipment has the manufacturers' recommended noise abatement measures, such as mufflers and engine enclosures, and is intact, in good condition, and operational.

  Applicability: Project wide, for the duration of construction.

- **NOI-2.** *Equipment Idling.* Turn off idling equipment that isn't imminently needed.

  Applicability: Project wide, for the duration of construction.

- **NOI-3.** *Construction Timing.* Avoid construction during evening and nighttime hours (7:00 p.m. to 7:00 a.m.) and on weekends.

  Applicability: Project-wide, for the duration of construction.

- **NOI-4.** *ILA Building Construction.* Noise related Resource Protection Measures listed in Appendix G will be followed during construction of ILA buildings.

  Applicability: During ILA building construction.

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

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

Less than significant impact: The proposed Project involves installation of a fiber optic cable to serve underserved areas and key "anchor" institutions. The Project responds to current need for underserved residents as well as planned growth under city and county plans. The Project addresses a gap in service and is not anticipated to induce substantial unplanned growth in any of the areas it would serve. Impacts are considered less than significant.

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

No impact: The proposed Project would not displace any existing people or housing. No additional housing as a result of the fiber optic cable would be necessary. There would be no impacts.

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

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services?

No impact: The proposed Project would provide a new broadband utility service and would improve delivery of emergency services for police, fire, and emergency medical response by increasing access to internet services. The Project would also improve delivery of internet and communications services to schools, parks, and other public facilities. Overall impacts would be beneficial. There would be no adverse impacts.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

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

No impact: The proposed Project would not create any additional recreational capacity and would not cause any increase in the usage of the recreational areas and facilities near it. Use of existing recreational facilities would not increase as a result of this Project, nor would there be any substantial physical deterioration of recreational facilities. There would be no impact.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less than significant impact: The Project would install conduit immediately adjacent or within/under about 5.4 miles of the Hammond Trail, a coastal foot and bike path in Humboldt County. Most of the trail can be left open during construction with equipment operating and safely barricaded along one half of the trail, allowing pedestrians and cycles to safely pass and use the trail.

There is a narrow, approximately 1.6-mile portion along the cliffs between Airport Road and Central Avenue that would need to be closed during construction for 16 to 20 days; however, closures would only occur Monday through Friday, and the trail would be opened during this time for public use on weekends. In order to lessen construction impacts along the trail, resource protection measures have been added that require the Proponent to restore the Hammond Trail to previous conditions and to work with the County to display appropriate signage for trail users and to provide safety cones and barricades to keep trail users safe. Impacts to recreation and the environment are considered less than significant and would be further minimized by the implementation of these measures.

Recreation Protection Measures

- **RC-1.** *Hammond Trail.* If construction encroaches onto the pathway of Hammond Trail, the trail will be restored to previous conditions.

  Applicability: During and after construction along Hammond Trail.

- **RC-2.** *Hammond Trail.* Appropriate signage will be used to alert recreation users of any closures limiting the use of Hammond Trail.

  Applicability: Prior to and during construction along Hammond Trail.

- **RC-3.** *ILA Buildings.* ILA buildings will not be sited within the viewshed of designated recreation use areas.

  Applicability: During ILA building siting.

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

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

Less than significant impact: The installation of the fiber optic cable would not conflict with any program, plan, ordinance, or policy concerning traffic circulation systems. During construction, there may be brief periods when roads are subject to one-way controlled traffic, particularly on unpaved or single-lane roads in rural areas. The construction contractor would be required to follow all requirements and regulations from approved permits and traffic control plans and provide standard signage, flaggers, and pilot cars where indicated on state and county roadways. With typical construction traffic control measures in place, impacts would be less than significant.

The Project would install conduit immediately adjacent or within/under about 5.4 miles of the Hammond Trail, a coastal foot and bike path in Humboldt County. Most of the trail can be left open during construction with equipment operating and safely barricaded along one half of the trail, allowing pedestrians and cycles to safely pass and use the trail.

There is a narrow, approximately 1.6-mile portion along the cliffs between Airport Road and Central Avenue that would need to be closed during construction for 16 to 20 days; however, closures would only occur Monday through Friday, and the trail would be opened during this time for public use on weekends. In order to lessen construction impacts along the trail, resource protection measures have been added that require the Proponent to restore the Hammond Trail to previous conditions and to work with the County to display appropriate signage for trail users and provide safety cones and barricades to keep trail users safe (see Recreation protection measures).

Impacts are considered less than significant and would be further minimized by the implementation of Recreation resource protection measures above in the Recreation section as well as traffic control plans employed during construction.

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

No impact: The proposed Project is not expected to substantially increase vehicular travel. There may be a slight increase in vehicle miles travelled during construction, but the long-term impact of the Project would not increase the total miles travelled. The Project would not conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).

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

Less than significant impact: The proposed Project does not include any design features or uses that would increase vehicular hazards. The presence of construction equipment and vehicles during construction is expected to result in increased traffic on unpaved or single-lane roads in rural areas;

however, the construction contractor would be required to follow all requirements and regulations from approved permits and traffic control plans and provide standard signage, flaggers, and pilot cars where indicated on state and county roadways. Impacts from construction would be less than significant, and there would be no long-term impacts.

d) Result in inadequate emergency access?

No impact: The Project would in no way block or impede emergency vehicles or personnel from fulfilling their purpose. Emergency vehicles would be given priority to access and/or cross construction sites at all times. Operation of the proposed Project would not result in any impacts on emergency access.

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

a) Would the project cause a substantial adverse change in the significance of a Tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: i) Listed or eligible for listing in the CRHR or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Less than significant impact: The cultural resources inventory of the proposed Project identified 132 previously recorded (of which 11 were unable to be relocated within the APE, 3 were formally recorded, 2 were combined, and 13 were outside the APE but added by an agency as sensitive) and 72 new tribal cultural sites (3 of which were subsumed into previously recorded sites). One previously recorded site is listed on the NRHP, 9 are previously determined Eligible, and 10 are previously recommended Eligible. Thirty-three of the 214 historic resources, including 11 bridges, have been previously determined Ineligible, and 57 have been previously recommended as part of the cultural resources inventory as Ineligible. The remaining 114 resources are unevaluated but would be treated as Eligible. Based on the evaluation and location of the resources as well as the nature of the Project, including alternative segments and the implementation of BMPs and site-specific protection measures and monitoring, no adverse effects to cultural or Tribal resources, including TCPs, are anticipated for the APE-Direct Effects. (Loftus et al. 2021).

However, precautionary cultural resource protection measures have been included to reduce the potential for impact. A Comprehensive Cultural Resource Awareness Training program would be implemented as a requirement for all construction personnel prior to the start of ground-disturbing construction activities (**CR-1**). The training would be repeated annually and as-needed for new construction and cultural resource personnel working on the Project.

Cultural resource guiding principles would be applied during Project construction (**CR-2**), and known cultural resources that are unevaluated and treated as eligible, recommended eligible, and determined eligible, including Tribal cultural resources, would be avoided and managed via Recommended Actions included in the EA (**CR-3**, **CR-4**, and **CR-5**). Cultural resource protection measures shall be implemented and include avoidance via shifting cable placement to the opposite side of the road; hugging the edge of the road pavement to stay within the disturbed soils of the prism, thereby avoiding nearby resources; boring under cultural resources (e.g., culverts or railroad grades); siting vaults and bore pits outside of known resource boundaries; erecting temporary barricades and flagging resources for avoidance; and limiting use of machinery that has vibratory effects that might damage resources such as historic rock

walls. Archaeological and tribal cultural monitoring of construction would be implemented at sensitive resource locations. Construction activities near TCPs, sacred sites, and seasonally important or ceremonial sites would only occur during acceptable times identified during ongoing Tribal consultation conducted for the Project.

The Project has the potential to disturb unknown resources, so resource protection measures have been included to address the impacts of inadvertent discovery (**CR-6**, **CR-7**, and **CR-8**). Impacts to unknown resources are unpredictable and would be reported and evaluated as much as is possible during construction. The five ILA buildings would not be sited within known unevaluated, recommended eligible, or determined eligible cultural or tribal resources. None of the 60 proposed staging or laydown areas are sited within known unevaluated, recommended eligible, or determined eligible cultural or tribal resources. BMPs and Inadvertent Discovery Protocols would be implemented for the duration of the Project to minimize adverse impacts to unknown archaeological and Tribal resources.

Given the no adverse effects finding, precautionary measures employed during construction, and the absence of new visual elements to viewsheds, impacts would be less than significant.

Cultural and Tribal Resources Protection Measures

- **CR-1.** *Cultural Resources Awareness Training.* Prior to ground- and non-ground-disturbing construction activities, all construction crew personnel will complete Cultural Resource Awareness Training (CRAT). The CRAT will educate the construction crew and personnel about Environmentally Sensitive Areas (ESAs), measures, BMPs, Cultural Resource Protection Measures (CRPMs), Inadvertent Discovery Protocols, types of resources to be aware of in the field (e.g., prehistoric, historic, human remains), and how to flag unanticipated discoveries. Additionally, the construction crew(s) will be educated on the federal and state regulations that provide for protection of cultural and tribal resources, such as the Archaeological Resources Protection Act (ARPA), as well as the penalties that result from violations. Similar CRAT will be provided to the cultural resources team of professionals responsible for the protection and preservation of cultural and tribal resources. This will ensure successful execution of the Project in compliance with Section 106 of the National Historic Preservation Act and CEQA. Implementation of the BMPs, CRPMs, Inadvertent Discovery Protocols, and CRAT will be overseen by the principal investigator and cultural lead. The CRAT must be repeated annually and as needed for new construction personnel and cultural resources personnel. All participants must sign an agreement stating they have completed the training.

  Applicability: Project wide, duration of Project.

- **CR-2.** *Guiding Principles—CRPMs, BMPs, and IDP for Cultural and Tribal Resources*. The guiding principles cultural resource protection are an amalgamation of the guidance documents provided by each federal and state agency, to include:
  - State Protocol Agreement Among the California State Director of the BLM and the California State Historic Preservation Officer and the Nevada Station Historic Preservation Officer regarding the Manner in Which the BLM Will Meet its Responsibilities under the National Historic Preservation Act and the National Programmatic Agreement among the BLM, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers
  - Nationwide Programmatic Agreement among the NPS, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers for Compliance with Section 106 of the National Historic Preservation Act
  - Native American Graves Protection and Repatriation Act (NAGPRA) of 1990
  - Bureau of Reclamation Protocol for NAGPRA Inadvertent Discoveries on Federal Land, California-Great Basin Region
  - Manual 8100-The Foundations for Managing Cultural Resources
  - Manual 8110-Identifying and Evaluating Cultural Resources
  - Manual 8140-Protecting Cultural Resources
  - Manual 8150-Permitting Uses of Cultural Resources

- Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92
- Standard Environmental Reference-Volume 2, Chapter 2

Applicability: Project wide, duration of Project.

- **CR-3.** *Cultural Resource and ESA Avoidance and Management.* Vero shall implement the CRPMs with respect to known cultural resources and ESAs, as described in the Cultural Resources Inventory Report (Loftus et al. 2019).

  Applicability: Project wide, duration of Project.

- **CR-4.** *Best Management Practice.* Prior to deviation for existing proposed construction method and cable placement location outside of the studied APE, Vero shall notify the appropriate jurisdictional authority to consult regarding the potential effects from the revised cable placement location to historical resources and historic properties.

  Applicability: Project wide, duration of Project.

- **CR-5.** *Best Management Practice.* Vero shall avoid cultural resources, eligible or unevaluated for the NRHP/California Register of Historic Resources.

  Applicability: Project wide, duration of Project.

- **CR-6.** *Inadvertent Discovery Protocol.* Should inadvertent discovery of cultural resources occur, Vero shall halt all ground-disturbing construction activity and flag the discovery for avoidance by 200 feet as an ESA, and a qualified archaeologist will be contacted for implementation of CRPMs, Treatment Plans, and potential mitigation measures in coordination with the jurisdictional agency and/or Tribal authority.

  Applicability: Project wide, duration of Project.

- **CR-7.** *Inadvertent Discovery Protocol.* In the event that historic properties are inadvertently encountered, the vicinity of discovery will be flagged for avoidance from construction activities within 200 feet. Vero will be responsible for notifying the appropriate jurisdictional authority, and the agency shall notify the State Historic Preservation Officer (SHPO)/Tribal Historic Preservation Officer (THPO), federally recognized Indian Tribe(s) within 48 hours, or as soon as reasonably possible. The agency, in consultation with the SHPO/THPO, Indian Tribe(s), and Vero, will make reasonable efforts to avoid, minimize, or mitigate adverse effects on those historic properties. If human remains or other cultural material that may fall under the provisions of NAGPRA are present, the agency will comply with NAGPRA and ARPA. The agency will ensure that any human remains are left in situ, are not exposed, and remain protected while compliance with NAGPRA, ARPA, or other applicable federal, state, and/or local laws and procedures is undertaken.

  Applicability: Project wide, duration of Project.

- **CR-8.** *ILA Building Location.* ILA buildings will not be sited in areas of known sensitive cultural or tribal resources. Resource protection measures listed in this appendix will be followed during construction of ILA buildings.

  Applicability: During ILA building siting.

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

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

Less Than Significant: The proposed Project includes the development of a new telecommunications fiber line to serve underserved areas. Environmental effects of this development are analyzed in the Project EA and this IS and are not expected to be significant. The Project would not require the location or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, or natural gas. Impacts would be less than significant.

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

No impact: The proposed Project would require a negligible amount of water during construction and would not have any impact on water supplies.

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

No impact: The proposed Project would not generate wastewater or result in additional wastewater treatment needs. No additional demands for wastewater treatment would occur during construction or operation of the fiber optic line. There would be no impact.

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

No impact: The proposed Project would not generate solid waste in excess of state or local standards. Waste and/or debris generated by construction activities would be properly managed and disposed of. The Project would not result in waste in excess of local standards and would not impair solid waste reduction goals. There would be no impact.

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

No impact: Construction waste would be managed and disposed of at regional landfills. No solid waste would result from the long-term operation of the fiber optic line. To this end, all federal, state, and local solid waste management and reduction statutes and regulations would be adhered to throughout the Project. There would be no impact regarding solid waste reduction standards.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX.WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or on-going impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

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

No impact: The proposed Project would not substantially impair or impede emergency services from carrying out emergency response and/or evacuation plans. Emergency vehicles would be given priority to enter or cross construction sites at all times. There would be no impacts.

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

Less than significant impact: The proposed Project involves constructing a 300-mile fiber optic cable underground within already developed utility and transportation corridors. Vehicle or equipment sparks pose a minor risk of wildfire. To address fire risk, resource protection measures require Vero to develop a Fire Prevention Plan that includes training personnel about fire danger and the measures to take in the event of a fire as well as equipping all motor vehicles with fire prevention equipment, including shovels, water, and fire extinguishers. Construction crews would observe all fire alert warnings while working in areas prone to wildfires, would keep fire equipment accessible at all times, and would follow the Fire Prevention Plan. Impacts to fire risk would be less than significant and would be further minimized by the implementation of avoidance measures in below and the Fire Prevention Plan.

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

No impact: Fiber optic cables do not carry electricity and are not a source of heat or combustion. The proposed Project would not require the installation or maintenance of any infrastructure that would be expected to start a fire. Aerial conduit would be attached to existing utility poles for several last-mile segments; however, pole loads would be tested prior to construction, and if the poles are overloaded, Vero would work with the utility/pole owner to install a new pole. The utility/pole owner is responsible for maintaining their utility corridor for wildfire risk. Thus, there would be no impact.

Back-up generators at ILA buildings could pose a wildfire risk. ILA buildings will be sited and constructed consistent with local building codes and standards, including vegetation breaks to allow for potential sparks. After a power outage, Vero will inspect the site for safety risks and to evaluate the state of equipment.

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

No impact: The Project would be built within already developed transportation and utility corridors. Construction would not require any large-scale changes to slopes and roads that would result in additional instability and increase risk. There would be no impact.

Public Health and Safety Protection Measures

- **PH-1.** *Fire Prevention.* Vero and the construction contractor shall develop and implement a Fire Prevention Plan, which will include a training program for all personnel about the measures to take in the event of a fire including fire dangers, locations of extinguishers and equipment, emergency response, and individual responsibilities for fire prevention and suppression.

  Applicability: Project wide, for the duration of construction.

- **PH-2.** *Fire Prevention.* All motor vehicles used during construction will carry specified fire prevention equipment including shovels, water, and fire extinguishers.

  Applicability: Project wide, for the duration of construction.

- **PH-3.** *ILA Building Construction.* The Fire Prevention Plan will be implemented during construction of ILA buildings.

  Applicability: During ILA building construction.

- **PH-4.** *Naturally Occurring Asbestos.* In work areas where soils are underlain by ultramafic rock (see Section 3.2.4.1 of the EA), construction crews will implement the following AMMs to minimize the spread of dust and thereby minimize worker and public exposure to naturally occurring asbestos (NOA):
  - Construction vehicle speed within the work site will be limited to 15 mph or less.
  - Construction crews will install temporary wind barriers around the work site and/or limit excavation to periods of calm or low winds.
  - Construction crews will use water to moisten excavation sites prior to ground disturbance and will keep those areas continually moist to minimize the spread of dust.
  - Storage piles of excavated soil or rock will be wetted, treated with a chemical dust suppressant, or covered when not in use in order to minimize dust.

  Applicability: During construction in areas underlain by ultramafic rock.

- **PH-5.** *ILA Building Generators.* ILA buildings will be equipped with generators to provide back-up energy for system regeneration in the event of a power outages. ILA buildings will be sited, designed, and maintained free from vegetation and brush that could spark fires from generator use. After power outage or other major weather events, Vero will inspect ILA buildings for safety or equipment issues.

  Applicability: During ILA building construction and throughout ongoing operations and maintenance.

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

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

Less than significant with mitigation incorporated: The Project would not significantly degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory (see BE and Biological Assessment). Where habitat may be adversely impacted by trenching through dry waterways, the work sites would be mitigated and restored according to the Restoration Pan. Impacts would be less than significant with mitigation incorporated.

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

Less than significant impact: The proposed Project would not have any individually limited but cumulatively considerable impacts. Any impacts would be less than significant. See Section 3.11 of the EA for a full analysis of cumulative impacts.

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

Less than significant impact: The proposed Project would not have any substantially adverse environmental effects on human beings, either directly or indirectly, that would jeopardize human health or quality of life. Any impacts would be less than significant.

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