KRRBI

Construction Mitigation Monitoring, Compliance, and Reporting Program

Mitigation Monitoring, Compliance, and Reporting Program

Klamath River Rural Broadband Initiative
(CPUC Resolutions T-17418, T-17690, T-17857)

3.1 Introduction

This construction mitigation monitoring, compliance, and reporting program (MMCRP) has been prepared to ensure effective implementation of the mitigation measures required for approval by the California Public Utilities Commission (CPUC, or Commission) the Resolutions T-17690 and T-17857 by the Karuk Tribe (or Applicant) for California Advanced Services Fund (CASF) funding to construct, operate, and maintain the Klamath River Rural Broadband Initiative (Project). The MMCRP includes all applicable measures proposed by the Applicant (Applicant Proposed Measures [APMs]) not superseded by mitigation measures and all mitigation measures identified by the CPUC to reduce potentially significant impacts to less-than-significant levels.

Following CPUC approval of the Project, this MMCRP will serve as a self-contained general reference for the Project that has been adopted by the Commission to ensure that all measures are included and implemented as adopted.

3.1.1 California Public Utilities Commission – MMCRP Authority

The California Public Utilities Code confers authority upon the CPUC to regulate the terms of service and the safety, practices, and equipment of utilities subject to its jurisdiction. It is the standard practice of the CPUC, pursuant to its statutory responsibility to protect the environment, to require that mitigation measures stipulated as conditions of approval be implemented properly, monitored, and reported on. In 1989, this requirement was codified statewide as Section 21081.6 of the Public Resources Code. Section 21081.6 requires a public agency to adopt a mitigation monitoring or reporting program when it approves a project and adopts a mitigated negative declaration for a project that could have potentially significant environmental effects. California Environmental Quality Act (CEQA) Guidelines Section 15097 was added in 1999 to further clarify agency requirements for mitigation monitoring and reporting.

Pursuant to NEPA, as specified by 40 CFR 1505.2(c) and in accordance with CEQ guidance, federal agencies also have responsibility to monitor mitigation (DOI, 2012). Mitigation monitoring has two basic goals to ensure implementation and effectiveness:

1. Implementation monitoring should be undertaken to ensure that actions comply with the terms, conditions, and mitigation measures.
2. Effectiveness monitoring should measure and evaluate the effects of the mitigation efforts. If the mitigation measures are not achieving their designed goals, then monitoring should provide a mechanism to adjust the mitigation measures.

The purpose of an MMCRP is to ensure that measures adopted to mitigate or avoid significant impacts of a project are implemented. The CPUC views the MMCRP as a working guide to facilitate not only the implementation of mitigation measures by the Project proponent, but also the monitoring and reporting activities of the CPUC and any monitors it may designate.

This MMCRP consolidates mitigation monitoring and reporting requirements prescribed by the CPUC as part of the CEQA record along with NEPA provisions, for the federal lead, responsible, and cooperating agencies into one document; and outlines key actions and strategies the Applicant proposes to undertake to achieve its obligations relating to monitoring and reporting compliance with the final environmental commitments (mitigation measures and applicant proposed measures) for the Project, as identified in Table 3-1 of the ISMND/EA.

3.1.2 Overview of Mitigation Requirements

The ISMND/EA presents and analyzes potential environmental impacts that would result from construction, operation, and maintenance of the approved Project, and proposes mitigation measures as appropriate. Based on the ISMND/EA, approval of the application would have no impacts or less than significant impacts in the following resource areas, assuming the implementation of Applicant Proposed Measures as detailed in Table 3-1:

- Aesthetics
- Air Quality
- Agriculture and Forestry Resources
- Energy Conservation
- Geology, Soils and Paleontological Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Socioeconomics and Environmental Justice
- Transportation and Traffic
- Utilities and Service Systems
- Wildfire

The ISMND/EA indicates that approval of the application would result in potentially significant impacts in the resource areas indicated below, and so identifies APMs and mitigation measures that have been accepted by the Applicant which, when implemented, would reduce impacts to levels below established thresholds of significance.

- Biological Resources
- Cultural Resources
- Noise and Vibration

3.1.3 Roles and Responsibilities

The CPUC will be responsible for ensuring full compliance with the provisions of this MMCRP and has primary responsibility for implementation of the monitoring program, as the CEQA lead agency. The purpose of the monitoring program is to document that the mitigation measures required by the CPUC are implemented and that mitigated environmental impacts are reduced to less than significant levels. The CPUC has the authority to halt any activity associated with the approved project if the activity is determined to be a deviation from the approved project or the adopted APM and mitigation measures.

The Commission addresses its responsibility under Public Resources Code Section 21081.6 through a decision action regarding the Karuk Tribe's application. Commission approval of the application includes adoption of this MMCRP that includes the mitigation measures as well as the APMs, implementation of which are made a condition of approval by the Commission.

Although the CPUC considers approval of the application for authority to construct and operate the proposed Project, the Applicant remains responsible for implementation of any mitigation measures governing both construction and future operation of the approved Project. Though other state and local agencies have permit and approval authority over some aspects of the Project, the CPUC acts as the state lead agency for monitoring compliance with all mitigation measures required by the ISMND/EA. As federal Lead Agency, the BIA is also responsible for monitoring implementation and effectiveness of the mitigation measures and APMs (presented in Table 3-1). All approvals and permits obtained by the Karuk Tribe would be submitted to the CPUC and BIA for mitigation compliance prior to commencing the activity for which the permits and approvals were obtained.

3.1.4 Enforcement and Responsibility

The CPUC may delegate duties and responsibilities for monitoring to other mitigation monitors or consultants as deemed necessary. The CPUC will ensure that the person(s) delegated any duties or responsibilities are qualified to monitor compliance.

The CPUC in collaboration with the BIA is responsible for enforcing the procedures for monitoring through its mitigation monitor. The mitigation monitor shall note problems with monitoring, notify appropriate agencies or individuals about any problems, and report the problems to the CPUC. The CPUC has the authority to halt construction, operation, or

maintenance activity associated with the Project if the activity is determined to be a deviation from the approved Project or adopted APMs or mitigation measures.

3.1.5 Mitigation Compliance Responsibility

The Applicant is responsible for successfully implementing all of the adopted APMs and mitigation measures in this MMCRP. The MMCRP contains criteria that define whether mitigation is successful. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Additional mitigation success thresholds will be established by applicable agencies with jurisdiction through the permit process and through the review and approval of specific plans for the implementation of mitigation measures.

The Applicant shall inform the CPUC and BIA and the designated mitigation monitor in writing of any APMs or mitigation measures that are not or cannot be successfully implemented. The CPUC in coordination with its mitigation monitor and BIA will assess whether alternative mitigation is appropriate and specify to the Applicant the subsequent actions required.

Minor Project Refinements

The CPUC, along with its mitigation monitor, will ensure that any minor project refinement process, which will be designed specifically for the approved Project, or deviation from the procedures identified under the monitoring program would be consistent with CEQA and NEPA requirements; no Project deviation will be approved by the CPUC if it creates new significant environmental impacts. As defined in this MMCRP, any deviation should be strictly limited to minor project refinements that will not trigger other permit requirements, that does not increase the severity of an impact or create a new impact, and that clearly and strictly complies with the intent of the mitigation measure. A refinement to the approved project that has the potential for creating significant environmental effects will be evaluated to determine whether supplemental CEQA and NEPA review is required. Any proposed deviation from the approved Project APMs and adopted mitigation measures, including correction of such deviation, shall be reported immediately to the CPUC and the mitigation monitor assigned to the construction for their review and CPUC approval. In some cases, a deviation may also require approval by a responsible agency.

Minor project refinements are limited to changes that do not trigger additional permit requirements (other than local government ministerial permits), do not increase the severity of an impact or create a new significant impact, and are within the geographic scope of the ISMND/EA. The CPUC, BIA, along with the CPUC CM, would evaluate any proposed changes from the approved project to determine whether they are consistent with approved CEQA and NEPA requirements. If the CPUC or BIA determined the changes to be consistent with approved CEQA or NEPA requirements, a requested change would be processed as a minor project refinement using a Minor Project Refinement Form provided by the CPUC. Requests for Minor Project Refinements must be made in writing. The CPUC PM or CM may request additional information, agency consultations, or a site visit in order to process the request.

Dispute Resolution

The MMCRP is expected to reduce or eliminate potential disputes between CPUC staff and the applicant concerning implementation of the adopted mitigation measures. Issues should first be addressed informally at the field level between the CPUC Environmental Monitoring Team and the Applicant's Environmental Compliance Team with questions that may be raised to the Applicant, EPM, PM, or Construction Manager, as necessary. Should the issue not be resolved at the field level, the following procedure will be observed for dispute resolution between CPUC staff and the Applicant:

- Disputes and complaints should be directed first to the CPUC's designated Project Manager for resolution. The Project Manager will attempt to resolve the dispute.
- Should this informal process fail, the CPUC Project Manager may initiate enforcement or compliance action to address deviations from the approved Project or MMCRP.

3.1.6 Construction Schedule and General Monitoring Procedures

Construction Schedule

In the event that situations requiring major changes pertaining to the construction schedule should occur, the Applicant will be expected to keep the CPUC environmental compliance team informed. The anticipated schedule for construction of the Project is presented in Chapter 2.

3.1.7 General Monitoring Procedures

Mitigation Monitor

Many of the monitoring procedures will be conducted during the construction phase of the Project. The CPUC and the mitigation monitor are responsible for integrating the mitigation monitoring procedures into the construction process in coordination with the Applicant. To oversee the monitoring procedures and to ensure success, the mitigation monitor assigned to the construction must be on site during that portion of construction that has the potential to create a significant environmental impact or other impact for which mitigation is required. The mitigation monitor is responsible for ensuring that all procedures specified in this MMCRP are followed.

Construction Personnel

A key feature contributing to the success of mitigation monitoring will be obtaining the full cooperation of construction personnel and supervisors. Many of the mitigation measures and APMs require action on the part of the construction supervisors or crews for successful implementation. To ensure success, the following actions, detailed in specific mitigation measures included in this MMCRP, will be taken:

- The Applicant shall require all contractors to comply with the conditions of Project approval, including all applicable APMs and mitigation measures.

- One or more pre-construction meetings will be held to inform all and train construction personnel about the requirements of the MMCRP.
- A written summary of mitigation monitoring procedures will be provided to construction supervisors for all APMs and mitigation measures requiring their attention.

General Reporting Procedures

Site visits and specified monitoring procedures performed by other individuals will be reported to the mitigation monitor assigned to the construction. A monitoring record form will be submitted to the mitigation monitor by the individual conducting the visit or procedure so that details of the visit can be recorded, and progress tracked by the mitigation monitor. A checklist will be developed and maintained by the mitigation monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The mitigation monitor will note any problems that may occur and take appropriate action to rectify the problems. The Applicant shall provide the CPUC with written bi-annual reports of the Project, which shall include progress of construction, resulting impacts, mitigation implemented, and all other noteworthy elements of the Project. Reporting shall be required as long as mitigation measures are applicable.

Public Access to Records

The public is allowed access to (non-confidential) records and reports used to track the monitoring program. Monitoring records and reports will be made available for public inspection by the CPUC on request. The CPUC and the Applicant will develop a filing and tracking system.

Condition Effectiveness Review

In order to fulfill its statutory mandates to mitigate or avoid significant effects on the environment and to design a MMCRP to ensure compliance during project implementation (Pub. Res. Code §21081.6):

- The CPUC may conduct a comprehensive review of conditions which are not effectively mitigating impacts at any time it deems appropriate, including as a result of the Dispute Resolution procedure outlined above; and
- If in either review, the CPUC determines that any conditions are not adequately mitigating significant environmental impacts caused by the project, or that recent proven technological advances could provide more effective mitigation, then the CPUC may impose additional reasonable conditions to effectively mitigate these impacts.

These reviews will be conducted in a manner consistent with the CPUC's rules and practices.

3.2 Mitigation Monitoring, Compliance, and Reporting Program

Table 3-1 presents a compilation of the APMs and mitigation measures in this ISMND/EA. The purpose of the table is to provide a single comprehensive list of impacts, mitigation measures, APMs, monitoring and reporting requirements, and timing to minimize impacts on the environment that may result from implementation of the Project. The impact analysis in this ISMND/EA assumes that the APMs listed below would be implemented as part of the Project.

TABLE 3-1
MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE KLAMATH RIVER RURAL BROADBAND INITIATIVE

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Aesthetics			
	APM VIS-1: In areas with high scenic sensitivity, such as RNP, markers indicating underground fiber optic cable will be 2 feet tall 4 x 4 inches treated wooden posts with attached dulled metal signs that are legible but not visually intrusive, or as specified by the land managing agency. In part of the RNP aboveground markers will not be used; instead, a specialized detection system will be installed in new underground splice vaults to avoid visual impacts.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM VIS-2: Where required by the land managing agency or landowner, safety markers indicating the presence of underground utilities can be omitted. Additional detection systems will be installed in the vaults and along the fiber optic cable lines.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM TRANS-3: Roads negatively affected by construction and as identified by the agencies will be returned to preconstruction condition.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction and immediately prior to operation. CPUC mitigation monitor to verify compliance.
Agriculture and Forestry Resources			
	No mitigation required.		
Air Quality			
	APM AIR-1: Fugitive dust produced during construction will be controlled with watering as needed. Watering will only settle the dust and will not create runoff	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure prior to and during construction. CPUC mitigation monitor to verify compliance.
	APM AIR-2: Trucks and heavy equipment used during construction of this Project will meet California Air Resources Board standards for air pollution control for their model year.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure prior to and during construction. CPUC mitigation monitor to verify compliance.
Biological Resources			
	APM GEN-5: Directional drilling will be used where needed and approved to avoid impacts to water, biological and cultural resources.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction activities involving directional drilling. CPUC mitigation monitor to verify compliance.
	APM GEN-9: The Construction Contractor will be required to develop and implement a Worker Environmental Awareness Program (WEAP).	The Karuk Tribe and/or its designated contractor to provide training materials to CPUC and implement measure as defined.	Training shall be provided prior to and during construction and repeated for all new construction personnel and evidence of such provided to CPUC. CPUC mitigation monitor to review training materials and verify compliance.
	APM WET-1: Wetland delineations will be performed/updated prior to construction to support CWA Section 404 permitting and to minimize Project impacts. The delineation will identify both wetland and non-wetland waters of the United States that would be affected by the project.	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined. The wetland delineation shall be provided to CPUC.	Wetland delineation to occur prior to any construction activities that could impact wetlands. CPUC mitigation monitor to review wetland delineation prior to construction.

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Biological Resources (cont.)			
	APM WET-2: Where impacts on wetlands are not avoidable, site specific crossing plans and measures to mitigate impacts will be submitted to the appropriate regulatory agency as well as the land managing agency. The Karuk Tribe will obtain all necessary permits prior to discharging dredged or fill material to the waters of the U.S. or state.	The Karuk Tribe and/or its designated contractor to implement measure as defined. Verification of permits shall be provided to CPUC.	Implement measure prior to and during any construction activities that could impact wetlands. CPUC mitigation monitor to review permits for compliance.
	APM WET-3: If trench dewatering is needed, it will be completed per the Caltrans BMP NS-2 specifications and Field Guide to Construction Site Dewatering.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM SOIL-1: Disturbance of soils and rocks and vegetation removal will be limited to the minimum area necessary for access and construction.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM WEED-1: Project personnel and their contractors will be trained on noxious and invasive weed identification to facilitate avoidance of infestations where possible or identification of new infestations.	The Karuk Tribe and/or its designated contractor to implement measure as defined. Training materials shall be provided to CPUC for review.	Implement measure prior to construction. CPUC mitigation monitor to review training materials for compliance.
	APM WEED-2: Gravel and other materials used during fiber optic cable installation on federally managed lands will come from certified weed-free sources.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM WEED-3: Project vehicles will arrive at the job site clean of all soil and herbaceous material. The Construction Contractor will ensure vehicles and equipment are free of soil and debris capable of transporting noxious weed seeds, roots, or rhizomes before the vehicles and equipment access the Project**.**	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM BIO-1: If construction will occur during nesting season for migratory birds (16 U.S.C sec.703-712, typically March – July; March), a qualified biologist will conduct a preconstruction survey for nesting birds where vegetation removal is planned (e.g. plowing, trenching, establishment of directional drilling entry and exit pits, and new pole installation). If no nests are encountered, vegetation removal may proceed. If a nest is found, that vegetation may not be removed until a biologist has determined that the nest is unoccupied, has failed, or the young have fledged.	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined. Preconstruction surveys shall be provided to CPUC	Implement measure prior to and during construction, as applicable during nesting season. CPUC qualified monitor to verify compliance.
	APM BIO-2: Seasonal restrictions for construction in old-growth forests in RNP, as specified by NPS regulations and policy, will be followed. Seasonal restrictions for construction in GDR lands will follow GDR policies and agreements.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM BIO-3: CNDDB data from 2021 show that there are no mapped NSO nests within 0.25-mile of the Project centerline. Available CNDDB data from the breeding season prior to construction would be reviewed to assure that there are no new NSO nests within 0.25-mile of the Project centerline. If a new NSO nest is recorded within 0.25-mile of the Project centerline, no construction would be allowed within 0.25-mile of the nest between February 1 and August 1, or until a qualified biologist has determined that the young are fledged, the nest abandoned, or the nest failed.	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined	Implement measure up to 30 days prior to and during construction within the nesting season. CPUC mitigation monitor to verify compliance.

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Biological Resources (cont.)			
	APM BIO-4: Directional drilling will be used in areas of old-growth redwood roots (Segment 4, Bald Hills Road) to avoid impacts to the trees. The Applicant will consult with NPS to determine the need for hand excavation to prevent damage to tree root systems.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM BIO-5: Where bridge hangs are planned, a preconstruction survey for listed species of bats will occur. If a maternal colony of a listed bat is found, construction will be deferred until the young have been weaned.	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined. [see also MM BIO-3]	Implement measure prior to construction, as applicable, where bridge hang installation methods are planned. CPUC mitigation monitor to verify compliance
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS (including Rank 1A, 1B, and 2 plant species of the CNPS Inventory).	**MM BIO-1: Avoid Impacts to Rare Plants.** A qualified biologist shall conduct a preconstruction survey of each Project site for special-status plant species with the potential to occur within the area of disturbance. The survey shall be floristic in nature and shall follow the procedures outlined in the CDFW publication *Protocols for Surveying and Evaluating Impacts to Special-status Native Plant Populations and Natural Commu*nities (CDFW, 2018). The survey shall be conducted between April and July in conjunction with the blooming seasons of those rare plants with moderate potential to occur in the Project area. If no special-status plants are observed during appropriately timed surveys by a qualified botanist, it shall be assumed that the construction activity will have no impact on special-status plants and no further action is required. If special-status plants are identified within the Project area, the individuals or populations shall be mapped and quantified and reported to the CNDDB, and the project manager shall be notified so that potential impacts on these known occurrences shall be avoided, when feasible. Coordination with CDFW and/or USFWS staff shall be conducted to establish appropriate avoidance and minimization measures if the species is federally or state listed. Avoidance and minimization measures may include: 1. No-disturbance buffers. 2. Work windows for low impact activities that are compatible with the dormant phase of a special-status plant life cycle but that may kill living plants or severely alter their ability to reproduce. 3. Silt fencing or construction fencing to prevent vehicles, equipment, and personnel from accessing the occupied habitat. 4. Erosion control BMPs such as straw wattles made of rice straw, erosion control blankets, or hydroseeding with a native plant seed mix to prevent sedimentation from upslope construction activities. 5. In consultation with, and as authorized by, CDFW or USFWS, a qualified botanist may collect and spread seeds or relocate plants to appropriate locations.	The Karuk Tribe and its designated qualified contractor to implement measure as defined.	Pre-construction survey to be conducted up to 30 days prior to construction of the project (in the blooming season). CPUC mitigation monitor to verify compliance.

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Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Biological Resources (cont.)			
Measure modified through USFWS technical assistance letter (MPR-3 approved by CPUC 4/15/2026)	**MM BIO-2: Measures to Avoid Impacts to Special-status Terrestrial Species:** To avoid and minimize direct and indirect impacts on special-status terrestrial wildlife species, following protection measures shall be implemented: 1. The name(s) and credentials of the qualified biologist(s) to act as construction monitors shall be submitted to CDFW/CPUC for approval at least 15 days before construction work begins. 2. Before the start of work, an approved biologist shall survey the active construction footprint for special-status mammal, amphibian and reptile species with the potential to be present, such as Humboldt marten, northern red-legged frog, and western pond turtle. 3. At the beginning of each workday that includes initial ground disturbance, including grading, excavation, and vegetation removal activities, the qualified biologist shall conduct on-site monitoring for the presence of these species in the area where ground disturbance or vegetation removal is planned. 4. All excavated or deep-walled holes or trenches greater than 2 feet deep shall be covered at the end of each workday using plywood, steel plates, or similar materials, or escape ramps shall be constructed of earth fill or wooden planks to allow animals to exit. Before such holes are filled, they shall be thoroughly inspected for trapped animals. 5. If a special-status species is present within the construction area, work shall cease in the vicinity of the animal, and the animal shall be allowed to relocate of its own volition unless relocation is permitted by state and/or federal regulatory agencies. 6. The contractor shall provide closed garbage containers for the disposal of all trash items (e.g., wrappers, cans, bottles, food scraps). Before work sites are closed each day, the work sites shall be cleaned of litter, and the litter shall be placed in wildlife-proof garbage receptacles. Construction personnel shall not feed or otherwise attract any wildlife. No pets, excluding service animals, shall be allowed in construction areas. 7. For Humboldt marten, a seasonal operating limitation shall be applied to identified marten core habitat which intersects the alignment in Segment 4. In this area, no ground-disturbing construction activities would be permitted during the breeding season of Humboldt marten (March 1 to July 31).	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined.	Qualification/credentials to be provided at least 15 days prior to construction. Other actions to be implemented prior to and during construction as defined in MM BIO-2. CPUC mitigation monitor to verify and document compliance prior to and during construction.

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Biological Resources (cont.)			
	MM BIO-3: Avoid Impacts to Special-status Bats: Prior to any construction, a qualified bat biologist shall conduct a pre-construction survey for roosting bats in trees to be removed or pruned and structures to be demolished. If no roosting bats are found, no further action is required. If an active bat roost is found, the following measures shall be implemented to avoid impacts on roosting bats. 1. If active maternity roosts are found in trees that shall be removed or demolished as part of construction, tree removal or demolition of that structure shall commence before maternity colonies form (generally before March 1) or after young are flying (generally by July 31). Active maternal roosts shall not be disturbed. 2. If a non-maternal roost of bats is found in a tree or structure to be removed or demolished as part of construction, the individuals shall be safely evicted, under the direction of a qualified bat biologist and with approval from CDFW. Removal of the tree or demolition of the structure should occur no sooner than two nights after the initial minor site modification (to alter airflow), under guidance of the qualified bat biologist. The modifications shall alter the bat habitat, causing bats to seek shelter elsewhere after they emerge for the night. On the following day, the tree or structure may be removed, in presence of the bat biologist. If any bat habitat is not removed, departure of bats from the construction area shall be confirmed with a follow-up survey prior to start of construction.	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined.	Implement measure prior to construction involving tree pruning or removal activities. CPUC mitigation monitor to verify compliance.
	Mitigation Measure BIO-4: Avoid Impacts to Listed Birds 1. To prevent noise and visual disturbance to nesting marbled murrelets and northern spotted owls, the Project would adhere to USFWS guidance on estimating effects of auditory and visual disturbance, and would have a seasonal operating limitation on all ground-disturbing construction activities along Bald Hills Road within the RNP in old-growth redwoods. No ground-disturbing construction activities would be permitted from March 1 through September 15, as shown in Figure 2. 2. Using the technical assistance response from the USFWS (2022), the proponent would conduct NSO protocol surveys the nesting season prior to construction where prior actionable observations1 are within or very close to the ¼-mile noise buffer along the project alignment in Segment 1. In areas where activity centers have substantial and recent survey data showing abandonment by NSO, or are more than ¼ mile from the project alignment and had no actionable observations within the ¼-mile buffer during any survey, the proponent would not conduct initial surveys. Where the proponent conducts protocol surveys, any actionable observation within ¼-mile of the construction alignment shall be identified. A no-construction buffer would be established along the project alignment of ¼-mile on either side of the identified actionable observation from February 1 to July 31 that would be applicable for the	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined.	Surveys to be conducted prior to construction, as appropriate. Implement measure as defined to limit construction in areas where seasonal operating limits are in effect.

1 An "actionable observation" is an observation of a pair (including with nesting behavior but no nest found) or a nest (including a nest with young), USFWS (2022)

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Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Biological Resources (cont.)			
	year the survey was conducted and the following year until additional surveys were conducted. If protocol-level surveys conducted the following nesting season indicate no actionable observations within ¼ mile, construction activity may proceed during the season of the survey and the following nesting season. Limited operating seasons would remain in place if actionable observations are recorded or if subsequent surveys are not conducted. **3.** Additional limited operating season areas may be identified for NSO for historically occupied activity centers where the applicant does not conduct initial protocol surveys. Those limited operating seasons, from February 1 to July 31, would be defined along the project alignment ¼ mile on either side of historic actionable observations. In those areas, the proponent would accept the limited operating season for the duration of construction or conduct protocol surveys to determine presence of NSO. If surveys are subsequently conducted and no NSO are present, the limiting operating season would not apply in the following nesting season. **4.** Where there are multiple limited operating seasons imposed in an area, the limitation would apply from the first day of the earliest restriction to the last day of the latest restriction for each of the two species.		
Cultural Resources			
Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5; disturbance of human remains; or an adverse change in the significance of a tribal cultural resource defined in PRC §21074.	**APM CR-1:** An archeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology with expertise in California archaeology (qualified archaeologist) will perform or direct all cultural resources work with trained assistants.	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined.	Implement measure prior to and during construction. Qualified monitor to document compliance CPUC to verify compliance.
	APM CR-2: Prior to any ground-disturbing activities, a qualified archaeologist, in consultation with the Yurok Tribe, Karuk Tribe, Wiyot Tribe, and the Applicant, will develop a **Cultural Resources Management Plan** (CRMP). The CRMP will include provisions for establishing Archaeologically Sensitive Areas (ASAs), specific locations where directional drilling is required in the vicinity of known archaeological sites, and an Archaeological Monitoring Plan (AMP) that provides monitoring protocols for the Project. The CRMP will also establish management guidelines for protecting archaeological sites from future impacts. The CRMP will include the following specific components: 1. Maps of known archaeological sites with a reference system so that clear boundaries are established in relation to the Project. 2. Maps with a buffer area of 100 feet around the boundaries of known sites establishing ASAs. 3. Provisions for fencing or other protective measures of ASAs. 4. Provisions for the removal of identifying markers for ASAs after construction in the area is complete.	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined.	Implement measure prior to and during construction. Qualified monitor to verify compliance. CRMP, AMP, and worker awareness training to be developed and implemented prior to and during construction involving ground disturbance. Training shall be repeated for all new construction personnel and evidence of such provided to CPUC. CPUC mitigation monitor to review training materials and logs to verify compliance.

TABLE 3-1
MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE KLAMATH RIVER RURAL BROADBAND INITIATIVE

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Cultural Resources (cont.)			
	6. The outline of a worker cultural resources awareness training program that will be provided for all personnel involved in ground-disturbing activities. The program will detail the recognition and importance of archaeological resources, and procedures to follow should archaeological resources be encountered during construction. 7. An AMP that includes provisions for monitoring during ground-disturbing activities, including the locations and duration of monitoring, the anticipated roles of monitors, and the reporting requirements. 8. An Inadvertent Discovery Plan that includes actions to follow should an archaeological resource be encountered, including stopping work within 100 feet of the find, notifying the appropriate land management agency, and continuing the stop-work order until it can be evaluated by a qualified archaeologist and a Native American representative. The Inadvertent Discovery Plan will also include a research design and treatment plan to be instituted if a resource cannot be avoided. The research design and treatment plan will be completed in consultation with Native American representatives. 9. Provisions that the California Public Utilities Commission (CPUC) and BIA, together with the appropriate land managing agency if on federal land, will determine whether avoidance is feasible in light of factors such as the nature of the inadvertent discovery, Project design, costs, and other considerations. If avoidance is not feasible, other appropriate measures (e.g., data recovery as agreed upon between CPUC, BIA, the appropriate land managing agency if on federal land, the archaeological consultant, and Native American representatives) will be instituted.		
	APM CR-3: If human remains are discovered, construction will be halted, and the coroner will be notified. If it is determined that the remains meet NAGPRA criteria, measures specified in the NAGPRA regulations will be followed on federal lands.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM CR-4: The Karuk Tribe will supply Native American Monitors in the Karuk Ancestral Territory the Yurok Tribe will supply Native American Monitors in the Yurok Ancestral Territory, and the Wiyot Tribe will supply Native American Monitors in the Wiyot Ancestral Territory. Where ancestral territories are mapped as overlapping, monitors from both tribes will work in tandem.	The Karuk Tribe and Yurok Tribe to implement measure as defined and will coordinate with the Wiyot Tribe, as applicable.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM CR-5: Where depth of archaeological resources in highly sensitive areas can be known or assumed, directional drilling may be required by land managing agencies to avoid cultural resources. Directional drilling depths should be at least two feet below known maximum depth of cultural resources. If fractured bedrock must be drilled, preventing the inadvertent release of drilling fluids (inert clays and water) cannot be guaranteed.	The Karuk Tribe and/or its designated contractor to implement measure as defined or as directed through water quality permit conditions.	Implement measure during construction involving directional drilling activities. Qualified monitor to verify compliance.

TABLE 3-1
MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE KLAMATH RIVER RURAL BROADBAND INITIATIVE

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Cultural Resources (cont.)			
	MM CUL-1: Segment 1 North The Karuk Resources Advisory Board concurred that ground disturbance in areas of anchor replacement is a minor action, however, within the three identified archaeological sites, a monitor should be used; outside of identified cultural sites, pre-inspection and post-inspection should be sufficient. A pole replacement was acknowledged to be a more ground-disturbing activity and a monitor should be present for such an operation within the APE. If a pole needs to be replaced within identified cultural site, then all attempts should be made to re-use the existing hole for placement of a new utility pole. Tribal monitoring should be coordinated through the Karuk THPO	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
	MM CUL-2: Segment 1 North Ground disturbing activities should not be done during Karuk ceremonial times. Caltrans issues encroachment permits for work on the highway, and those permits will exclude ceremony dates.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
Measure renamed and modified to align with current route, as KRRBI no longer includes this segment (MPR-1 approved by CPUC 4/15/26).	**MM CUL-3: ~~Segment 2 South~~ Yurok Tribal and NPS Archaeological Monitoring** It is recommended that a tribal monitor be afforded an opportunity to observe all ground disturbing activities within Yurok territory. For the purposes of this Project, this area extends ~~from MP 26.5 in Segment 1 downriver throughout the Klamath River corridor,~~ over Bald Hills Road, south on U.S. 101 and through industrial timberland, to the crossing of Little River. The Project route passes through and near several ethnographic villages, archaeological sites, as well as the Bald Hills Archaeological District, Lyons Ranches Historic District, and the Bald Hills Ethnographic District and the Yurok Tribe requests monitoring regardless of resource location, significance evaluations, or NHPA Section 106 findings. Tribal monitoring should be coordinated through the Yurok THPO. Redwood National Park also requests that archaeological monitoring occur within all three Districts: Bald Hills Archaeological District, Lyons Ranches Historic District, and the Bald Hills Ethnographic District and that a discovery plan of action be in place, specifically to address trenching beneath paved surfaces, where field survey was unable to be completed, and to address secondary deposits that may be encountered within the inboard ditch.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
	MM CUL-4: CA-HUM-443 This reach along Bald Hills Road, within the archaeology site appears to be cut below the historical ground surface and trenching of the inboard ditch or within the road bed would immediately enter deeper strata and the Franciscan formation bedrock. Trenching within the roadbed will be conducted at locations where the roadside ditch is either filled with vegetation or exhibits shallow topography and surface bedrock exposure is not visible. These installation methods will ensure adverse impacts to the archaeological site are avoided. The presence of archaeological monitors during trenching into the paved road surface will also allow for a phased approach of identification efforts at these locations.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.

TABLE 3-1
MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE KLAMATH RIVER RURAL BROADBAND INITIATIVE

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Cultural Resources (cont.)			
	MM CUL-5: CA-HUM-446/H The Project shall utilize the inboard ditch or trenching of the road bed and would immediately enter the Franciscan formation bedrock, thereby avoiding the archaeological site.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
	MM CUL-6: CA-HUM-448 The Project shall utilize the ditch along the eastern edge of Bald Hills Road, where it is deeply cut below the ridgeline and the archaeological site, thereby avoiding the archaeological site.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
	MM CUL-7: CA-HUM-452 The Project shall utilize the inboard ditch or trenching of the road bed and would immediately enter the Franciscan formation bedrock, thereby avoiding the archaeological site.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
	MM CUL-8: CA-HUM-625 The Project shall utilize boring through this area to ensure that installation does not impact surface strata, thereby avoiding the archaeological site**.**	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
Measure updated for consistency with regulatory approvals and MPR-3 (approved by CPUC 4/15/26)	**MM CUL-9: Lyons Ranches Historic District** The Project through the District will limit the use of above ground markers to those locations and designs approved by NPS in 2024. The historical setting and feeling of the District shall be maintained and no above ground visual intrusions other than those approved should be introduced as a way to mark the route of the underground fiber optic utility. Junction boxes or other infrastructure should also be at or below grade, and not made visible to park users.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
	MM CUL-10: P-12-002326 Trenching at this location shall only be done on the east side of the road, thereby avoiding the archaeological site.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
	MM CUL-11: CA-HUM-668 (P-12-000659) The Project shall utilize trenching beneath the site where bedrock is visible and boring underneath the ditch where depth of bedrock is unclear, thereby avoiding the archaeological site.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
	MM CUL-12: CA-HUM-669 (P-12-000660) Due to the lack of visible Franciscan outcrops and heavy vegetation, the Project will utilize directional drilling at a depth of at least 5 feet below the surface within the site boundary.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
	MM CUL-13: P-12-001877 and REDW-2009-01 The Project shall utilize trenching of the road bed, thereby avoiding the archaeological sites.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
	MM CUL-14: Staging Area #403 Staging area #403 shall not be developed on undisturbed grassland. Nearby roadside pullouts or other previously disturbed areas would be used as alternatives.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.

TABLE 3-1
MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE KLAMATH RIVER RURAL BROADBAND INITIATIVE

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Cultural Resources (cont.)			
	MM CUL-15: CRF-BHR-09 The site shall be flagged to ensure that Project equipment operates only on the immediate edge of the road	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
	MM CUL-16: Archaeological Field Markers All archaeological site boundaries shall be marked in the field (i.e. flagging) prior to Project implementation and removed after construction is completed.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. Qualified monitor to verify compliance.
Energy Conservation			
	No mitigation required.		
Geology and Soils and Paleontological Resources			
	APM GEN-1: Environmental Compliance Monitors hired by the Tribe will monitor construction activities and will report to the Tribe and to the agencies regarding construction compliance with permit terms and conditions. Monitoring activities would be structured in accordance with an Environmental Compliance Management Plan, developed by the Tribe and approved by the lead state and federal agencies prior to construction	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure prior to and during construction.
	APM GEN-3: RNP policies and regulations will apply within the RNP. Ground-disturbing activities will comply with listed seasonal constraints and other requirements.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction in RNP.CPUC mitigation monitor to verify compliance.
	APM GEN-4: As part of the Karuk Tribe's environmental compliance commitment, the Construction Contractor(s) will be contractually bound to comply with all laws, regulations, and permit requirements, including the mitigation measures and other specific stipulations and methods that are developed as part of the NEPA/CEQA process.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM GEN-5: Directional drilling will be used where needed and approved to avoid impacts to water, biological and cultural resources.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction activities involving directional drilling. CPUC mitigation monitor to verify compliance.
	APM GEN-9: The Construction Contractor will be required to develop and implement a Worker Environmental Awareness Program (WEAP).	The Karuk Tribe and/or its designated contractor to provide training materials to CPUC and implement measure as defined.	Training shall be provided prior to and during construction and repeated for all new construction personnel and evidence of such provided to CPUC. CPUC mitigation monitor to review training materials and verify compliance.
	APM SOIL-1: Disturbance of soils and rocks and vegetation removal will be limited to the minimum area necessary for access and construction.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.

TABLE 3-1
MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE KLAMATH RIVER RURAL BROADBAND INITIATIVE

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Geology and Soils and Paleontological Resources (cont.)			
	APM WET-3: If trench dewatering is needed, it will be completed per the Caltrans BMP NS-2 specifications and Field Guide to Construction Site Dewatering.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM WATER-1: The construction contractor will be required to develop and file a SWPPP and to comply with the permit conditions as issued by the State Water Resources Control Board, Region 1.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure prior to and during construction. CPUC mitigation monitor to review SWPPP and verify compliance.
	APM OM-2: The Tribe will provide crews and contractors with maps showing environmentally sensitive areas; these maps will include work zones as well as ROW areas where ground disturbance will be avoided.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure prior to and during construction. CPUC mitigation monitor to verify compliance.
Greenhouse Gas Emissions			
	No mitigation required.		
Hazards and Hazardous Materials			
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	**APM HAZ-1**: The Applicant shall prepare a Hazardous Materials Management Plan (HMMP) for approval by the CPUC. The HMMP shall be prepared and submitted for approval at least 30 days prior to the start of construction. The HMMP shall include, but not be limited to, the following requirements: 1. The Applicant's Construction Contractor shall prepare a Hazardous Substance Control and Emergency Response Plan (Plan) and implement it during construction to ensure compliance with all applicable federal, state, and local laws and guidelines regarding the handling of hazardous materials. If the Project would result in the storage or handling of a Threshold Quantity or greater of a hazardous substance as defined by the California Hazardous Materials Release Response Plan and Inventory Law, the Plan shall include preparation and implementation of a Hazardous Materials Business Plan that describes the hazardous materials usage, storage, and disposal to the appropriate Certified Unified Program Agency. The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. The Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities. The Plan shall require that the Applicant and/or its contractors shall implement construction best management practices including but not limited to the following: a. Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction. b. Avoid overtopping construction equipment fuel gas tanks. c. Use tarps and oil-absorbent pads under vehicles when refueling to contain and capture any spilled fuel. d. During routine maintenance of construction equipment, properly contain and remove grease and oils. e. Properly dispose of discarded containers of fuels and other chemicals.	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined.	The HMMP shall be provided to CPUC at least 30 days prior to construction. CPUC Mitigation Monitor to verify compliance prior to construction.

TABLE 3-1
MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE KLAMATH RIVER RURAL BROADBAND INITIATIVE

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Hazards and Hazardous Materials (cont.)			
Expose people or structures either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires	**APM FIRE-1**: Before the start of construction, the Applicant's Construction Contractor will prepare a project-specific Construction Fire Prevention Plan (CFPP) to ensure the health and safety of construction workers and the public from fire-related hazards. Local fire departments shall be consulted during plan preparation and the CFPP will include fire safety measures as recommended by these departments. The CFPP shall list fire prevention and extinguishment procedures and specific emergency response and evacuation measures that would be followed during emergency situations. The CFPP also would provide smoking and fire-related rules, storage, and parking areas, require usage of spark arrestors on construction equipment, and fire-suppression tools and equipment. The CFPP shall include, but not be limited to, the following: 1. Water tanks, water trucks, or portable water backpacks (where space or access for a water truck or water tank is limited) will be sited/available in the Project area for fire protection where fire hydrants are not available. 2. All construction vehicles shall have fire suppression equipment. 3. All construction workers shall receive training on the proper use of fire-fighting equipment and procedures to be followed in the event of a fire. 4. As construction may occur simultaneously at several locations, each construction site shall be equipped with fire extinguishers and fire-fighting equipment sufficient to extinguish small fires. 5. Construction personnel shall be required to park vehicles away from dry vegetation. 6. Prior to construction, contact and coordinate with the appropriate fire departments to determine the appropriate amounts of fire equipment to be carried on the vehicles and appropriate locations for the water tanks, water trucks, and/or water backpacks. The Applicant shall submit verification of its consultation with the appropriate fire departments to the CPUC. 7. The CFPP shall be submitted to CPUC staff for approval prior to commencement of construction activities and shall be distributed to all construction crew members prior to construction of the Project. 8. Cease work during Red Flag Warning events in areas where vegetation would be susceptible to accidental ignition by Project activities (such as welding or use of equipment that could create a spark). During Red Flag Warning events all non-emergency construction and maintenance activities will cease in affected areas.	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined.	The Fire Plan shall be provided to CPUC at least 30 days prior to construction. Training will be repeated for all new construction personnel and evidence of such provided to CPUC. CPUC Mitigation monitor to verify compliance prior to construction.
	APM TRANS-1: Traffic control measures such as traffic control personnel, warning signs, lights, and barriers will be used during construction as specified in the encroachment permits from road managers to ensure safety and to minimize traffic congestion.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Traffic control to be implemented during construction. CPUC mitigation monitor to verify compliance.

TABLE 3-1
MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE KLAMATH RIVER RURAL BROADBAND INITIATIVE

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Hydrology and Water Quality			
Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality	**APM AIR-1:** Fugitive dust produced during construction will be controlled with watering as needed. Watering will only settle dust and will not create runoff.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure prior to and during construction. CPUC mitigation monitor to verify compliance.
	APM GEN-5: Directional drilling will be used where needed and approved to avoid impacts to water, biological, and cultural resources.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction activities involving directional drilling. CPUC mitigation monitor to verify compliance.
	APM REC-1: Final Cleanup: Final cleanup will ensure that all construction areas are free of any construction debris including, but not limited to: assembly scrap metals, oil or other petroleum-based liquids, construction wood debris, and worker-generated litter. Permanent erosion control devices will be left in place.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during and immediately following construction. CPUC mitigation monitor to verify compliance.
	APM SOIL-1: Disturbance of soils and rocks, and vegetation removal will be limited to the minimum area necessary for access and construction.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM WATER-2: Construction industry standard practices and BMPs will be used for spill prevention and containment.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC monitor to verify compliance.
	APM WET-1: Wetland delineations will be performed prior to construction to support CWA Section 404 permitting and to minimize Project impacts. The delineation will identify both wetland and non-wetland waters of the United States that would be affected by the Project. The delineation will also provide sufficient information to support California permitting and will include delineation of wetland and non-wetland waters of the State of California.	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined.	Wetland delineation to occur prior to any construction activities that could impact wetlands. CPUC mitigation monitor to review wetland delineation prior to construction..
	APM WET-2: Where impacts on wetlands are not avoidable, site-specific crossing plans and measures to mitigate impacts will be submitted to the appropriate regulatory agency, as well as the land managing agency. The Karuk Tribe will obtain all necessary permits prior to discharging dredged or fill material to the waters of the United States or state.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure prior to and during any construction activities that could impact wetlands. CPUC mitigation monitor to review permits for compliance.
	APM WET-3: If trench dewatering is needed, it will be completed per the CalTrans BMP NS-2 specifications and Field Guide to Construction Site Dewatering.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM HAZ-1: See Hazards and Hazardous Materials for text of measure**.**	The Karuk Tribe and/or its designated contractor to implement measure as defined	Applicant shall provide HMMP to CPUC at least 30-days prior to start of construction. CPUC mitigation monitor to verify compliance during construction.

TABLE 3-1
MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE KLAMATH RIVER RURAL BROADBAND INITIATIVE

Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Land Use			
	APM GEN-1: Environmental Compliance Monitors hired by the Tribe will monitor construction activities and will report to the Tribe and to the agencies regarding construction compliance with permit terms and conditions. Monitoring activities will be structured in accordance with an Environmental Compliance Management Plan, developed by the Tribe and approved by the lead state and federal agencies prior to construction.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure prior to and during construction. Training shall be repeated for all new construction personnel and evidence of such provided to CPUC. CPUC mitigation monitor to review training materials and verify compliance.
	APM GEN-2: Forest Plan Standards and Guidelines (as amended) will apply on NFS lands. Ground-disturbing activities will comply with all Agency-wide, regional, and state BMPs.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM GEO-3: RNP policies and regulations will apply within the RNP. Ground-disturbing activities will comply with listed seasonal constraints and other requirements.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction in the RNP. CPUC mitigation monitor to verify compliance.
	APM GEN-4: As part of the Karuk Tribe's environmental compliance commitment, the Construction Contractor(s) will be contractually bound to comply with all laws, regulations, and permit requirements, including the mitigation measures and other specific stipulations and methods that are developed as part of the NEPA/CEQA process.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM SOIL-1: Disturbance of soils and rock and vegetation removal will be limited to the minimum area necessary for access and construction.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance..
	APM OM-1: Before beginning an operations or maintenance project, KRRBI contractors or their subcontractors will clean all equipment that will operate off-road or disturb the ground. The entire vehicle or equipment will be cleaned at an off-site location.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	CPUC mitigation monitor to verify compliance during operation and maintenance activities.
	APM OM-2: The Tribe will provide crews and contractors with maps showing environmentally sensitive areas; these maps will include work zones as well as ROW areas where ground disturbance will be avoided.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	CPUC mitigation monitor to verify compliance during construction.
Minerals			
	No mitigation required.		
Noise and Vibration			
Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards and established in the local general plan or noise ordinance, or applicable standards of other agencies.	**MM NOISE-1**: To reduce daytime noise impacts due to construction of Segment 5, the Project proponent(s) shall be required to implement the following measures: • Equipment and trucks used for project construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible). • Concrete saws shall be operated at least 30 feet from the nearest occupied residence, or shall equipped with a noise attenuating shield or shroud that blocks the line of sight between the saw and the nearest residences.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	CPUC mitigation monitor to verify compliance during construction.

TABLE 3-1
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Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Population and Housing			
	No mitigation required.		
Public Services			
	APM FIRE-1: See Hazards and Hazardous Materials for text of measure.	The Karuk Tribe and/or its designated contractor to implement measure as defined	The Fire Plan shall be provided to CPUC at least 30 days prior to construction. Training will be repeated for all new construction personnel and evidence of such provided to CPUC. CPUC Mitigation monitor to verify compliance prior to construction.
	APM TRANS-1: Traffic control measures such as traffic control personnel, warning signs, lights, and barriers will be used during construction as specified in the encroachment permits from road managers to ensure safety and to minimize traffic congestion.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Traffic control to be implemented during construction. CPUC mitigation monitor to verify
	APM TRANS-2: Emergency vehicle access to private property will be maintained during construction.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
Recreation			
	APM REC-1: Final Cleanup: Final cleanup will ensure that all construction areas are free of any construction debris including, but not limited to: assembly scrap metals, oil or other petroleum-based liquids, construction wood debris, and worker-generated litter. Permanent erosion control devices will be left in place.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	CPUC mitigation monitor to verify as soon as feasible following completion of construction.
Transportation			
	APM GEN-6: Workers will be encouraged to carpool from housing to the work site each day.	The Karuk Tribe and/or its designated contractor to implement measure as defined, pending public health social distancing considerations.	Implement measure during construction, as feasible.
	APM TRANS-1: Traffic control measures such as traffic control personnel, warning signs, lights, and barriers will be used during construction as specified in the encroachment permits from road managers to ensure safety and to minimize traffic congestion.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Traffic control to be implemented during construction. CPUC mitigation monitor to verify
	APM TRANS-2: Emergency vehicle access to private property will be maintained during construction.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM TRANS-3: Roads negatively affected by construction and as identified by the agencies will be returned to preconstruction condition.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure as soon as feasible following completion of construction. CPUC mitigation monitor to verify compliance

TABLE 3-1
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Environmental Impact	Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the ISMND/EA	Implementing Actions	Monitoring/Reporting Requirements and Timing
Socioeconomics and Environmental Justice			
	No mitigation required		
Utilities and Service Systems			
	APM REC-1: Final Cleanup: Final Cleanup will ensure that all construction areas are free of any construction debris including, but not limited to: assembly scrap metals, oil or other petroleum based liquids, construction wood debris, and worker generated litter. Permanent erosion control devices will be left in place.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance
	APM SOIL-1: Disturbance of soils and rocks and vegetation removal will be limited to the minimum area necessary for access and construction.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
	APM WATER-2: Construction industry standard practices and BMPs will be used for spill prevention and containment.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance
	APM WET-2: Where impacts on wetlands are not avoidable, site specific crossing plans and measures to mitigate impacts will be submitted to the appropriate regulatory agency, as well as the land managing agency. The Karuk Tribe will obtain all necessary permits prior to discharging dredged or fill material to the waters of the U.S. and state.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure prior to and during construction. CPUC mitigation monitor to verify compliance.
	APM WET-3: If trench dewatering is needed, it will be completed per the Caltrans BMP NS-2 specifications and Field Guide to Construction Site Dewatering.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.
Wildfire			
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	**APM FIRE-1**: See Hazards and Hazardous Materials for text of measure.	The Karuk Tribe and/or its designated qualified contractor to implement measure as defined.	The Fire Plan shall be provided to CPUC at least 30 days prior to construction. Training will be repeated for all new construction personnel and evidence of such provided to CPUC. CPUC Mitigation monitor to verify compliance prior to construction.
	APM TRANS-1: Traffic control measures such as traffic control personnel, warning signs, lights, and barriers will be used during construction as specified in the encroachment permits from road managers to ensure safety and to minimize traffic congestion.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Traffic control to be implemented during construction. CPUC mitigation monitor to verify
	APM TRANS-2: Emergency vehicle access to private property will be maintained during construction.	The Karuk Tribe and/or its designated contractor to implement measure as defined.	Implement measure during construction. CPUC mitigation monitor to verify compliance.

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