Eddy Gulch Telecommunication Cable Project

Draft Initial Study/Mitigated Negative Declaration

March 2010

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

Prepared by:
RMT Inc.
4 West Fourth Avenue, Suite 303
San Mateo, California 94402

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PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

MITIGATED NEGATIVE DECLARATION

SISKIYOU TELEPHONE COMPANY ("Siskiyou Telephone") APPLICATION

Eddy Gulch Telecommunication Cable Project

INTRODUCTION

Siskiyou Telephone Company ("Siskiyou Telephone") has filed an Application with the California Public Utilities Commission (CPUC) for the Eddy Gulch Telecommunication Cable Project ("Eddy Gulch Project") for installation of telecommunications lines in four conduits. The objective of the project is to provide telephone and broadband service to six private residences in Siskiyou County, California.

The cable route would be located within the rights-of-way of Eddy Gulch Road, a Siskiyou County-maintained road located in the Klamath National Forest, and a private roadway. The telecommunication line would begin at the intersection of Sawyers Bar Road and Eddy Gulch Road in the community of Sawyers Bar, and would extend south within the right-of-way of Eddy Gulch Road for approximately 3.0 miles. A spur of the telecommunication line would branch off from Eddy Gulch Road and extend southeast for approximately 1.4 miles on a private road. The majority of the telecommunication line would be installed underground, but some sections would be installed aboveground over three waterways.

Under the CPUC's Rules, approval of this project must comply with the California Environmental Quality Act (CEQA), including an assessment of the potential environmental impacts of the proposed project. This Mitigated Negative Declaration has been prepared based upon the assessment of potential environmental impacts outlined in the attached Initial Study.

CEQA requires that the CPUC prepare an "Initial Study" for discretionary projects, such as the proposed project, to determine whether the project may have a significant adverse effect on the environment. The CPUC would be required to prepare an Environmental Impact Report (EIR) if the proposed project would result in significant effects that cannot be mitigated. A Mitigated Negative Declaration can be adopted (Section 21080, CEQA Public Resources Code) by the CPUC if the Initial Study does not reveal any significant environmental impacts based on substantial evidence, or if the potential effects can be reduced to a level of insignificance through project revisions (Section 21080; CEQA Public Resources Code). This Mitigated Negative Declaration has been prepared based on the Initial Study prepared for the Siskiyou Telephone Eddy Gulch Project.

PROJECT DESCRIPTION

Siskiyou Telephone proposes to install a telecommunication line extending south from Sawyers Bar to serve the residents in the Eddy Gulch area. The telecommunication line would begin at the intersection of Sawyers Bar Road and Eddy Gulch Road in the community of Sawyers Bar, and would extend south within the right-of-way of Eddy Gulch Road for approximately 3.0 miles. A spur

of the telecommunication line would branch off from Eddy Gulch Road and extend southeast for approximately 1.4 miles on a private road. The majority of the telecommunication line would be installed underground, but some sections would be installed aboveground over three waterways.

Siskiyou Telephone's proposed Eddy Gulch Telecommunication Cable Project would consist of three phases. These phases include:

- Construction and installation of underground telephone lines, trench filling, and restoration of construction areas;
- Service activation; and
- Telephone line operation and maintenance.

Grant funds would be used for construction and installation of telephone lines, trench filling, and restoration of construction areas. Grant funds would not be used for service activation or telephone line maintenance. Siskiyou Telephone would obtain all necessary permits and permission from the United States Forest Service (USFS), CPUC, Siskiyou County, and private landowners prior to any construction activities.

Phase 1: Construction and Installation of Telecommunication Line

Project Components

Siskiyou Telephone proposes to use conventional landline telecommunications construction to install the proposed parallel conduits. The conduits would include one 4-inch polyvinyl chloride (PVC) conduit and three 1.5-inch high-density polyethylene (HDPE) conduits. The 4-inch PVC conduit would carry copper wire and would provide telephone service to the 6 private residences in the Eddy Gulch area. One of the 1.5-inch HDPE conduits would carry the wires necessary to provide broadband internet service to these same 6 residences. The remaining two 1.5-inch conduits would serve as a reserve for future fiber optic services to the residents, if needed.

Metal utility boxes, known as BD5 pedestals, would be placed along the telecommunication route with a maximum spacing of 1,500 feet between pedestals to provide Rural Utilities Service grounding. These utility boxes would also be placed as needed along the route to provide access points for each residential customer. A total of approximately 32 such utility boxes are proposed as part of this project. Each of the utility boxes would be approximately 12 inches square and 3 feet tall, and would be set back between 3 and 10 feet from the edge of the road surface, depending on field conditions. Several utility box locations along the route would likely require some amount of excavation into the rocky bank in order to create a clearing large enough to open and close the new utility box. If needed, a rock retaining wall would also be built around the excavated cutout in order to support any loose impediments that might fall on the utility box or into the roadway.

Construction Personnel and Equipment

Construction would use Rural Utilities Service engineering and construction standards and practices, established by the United States Department of Agriculture. Specifications of the telecommunication line would be compatible with Siskiyou Telephone's existing telecommunication network. Table MND-1 lists the equipment and personnel that would be required to install the proposed telecommunication line. Note that the construction activities are sequential, and therefore not all of the personnel listed in Table MND-1 would necessarily be present on the site at the same time.

In addition and as a precaution, fire extinguishers and shovels would be maintained onsite during construction activities for immediate fire control.

Table MND-1: Construction Personnel and Equipment

Construction Activity	Number of Personnel	Equipment
Trenching	7 to 10	3 Backhoes 3 Dump Trucks
Conduit Placement	3 to 4	1 Pickup Truck 1 Three-wheel Trailer
Backfill	8 to 10	1 Excavator (compactor) 3 Mechanical Tampers 3 Backhoes 1 Water Truck
Cable Placement	4 to 8	1 Backhoe 1 Reel Dolly 2 Pickup Trucks
Inspection	1	1 Pickup Truck

Staging Areas

Siskiyou Telephone has rented a storage yard approximately 4 miles southwest from the project site, and plans to use this site to store conduits, utility pedestals, and other equipment. The storage yard is fenced to keep out wildlife, and the property owner lives on the property and would be able to provide nighttime security for the materials in the storage yard. Construction personnel may also rent space at this storage yard to park travel trailers during construction operations.

Construction Activities

Both Eddy Gulch Road and the private road are composed of gravel and compacted dirt, and neither roadway is paved. The width of Eddy Gulch Road varies, but is generally between 14 and 16 feet wide; the private roadway tends to be narrower, with a minimum width of approximately 10 feet. All construction activities would take place within the rights-of-way of these two roadways.

Installation of underground cable involves trenching along the cable alignment. A backhoe would be used to open a trench approximately 1.5 feet wide and 3 feet deep. The trenched materials (e.g., gravel and dirt) would be loaded into a waiting dump truck and transported to the Siskiyou Telephone gravel site. The excavated materials would amount to approximately 6,949 cubic yards. All of this solid waste would be disposed of at a gravel plant on Eddy Gulch Road to be used for the reclamation of an old mining site. The gravel pit site is being used under an existing permit with Siskiyou County.

Trenches would be backfilled with a few inches of Class II base rock before the installation of the cable conduits, and then the remainder of the trench would be filled with more Class II base rock. The volume of the Class II base rock used to fill the trench would be approximately the same amount as the excavated gravel and dirt, minus the volume of the four conduits. Once the Class II base rock has been placed in the trench, the fill would be compacted in 1-foot lifts with a mechanical tamper, and the top 1 foot would be compacted with 20,000 pounds of force. Siskiyou County requires 95 percent minimum compaction of all trenches in their roadways, and the project would meet this requirement. The cables would be pulled into the conduits once the trenches have been backfilled and compacted, and the roadway repaired.

The trenching, backfill, and repair of each segment of construction would occur on the same day, minimizing disruption to the roadway itself and reducing the possibility of erosion or fugitive dust leaving the construction area.

Culvert Crossings

Several culverts would be crossed as part of the project. Where a culvert has a minimum of 4 feet of ground cover, Siskiyou Telephone would trench directly over the culvert. Where a culvert has less than 4 feet of ground cover, Siskiyou Telephone would tunnel under the culvert and place the conduit below the culvert.

Where excavation would occur beneath a culvert, special precautions would be made to ensure that the culvert is not damaged during construction. A backhoe would be used to trench on either side of the culvert, and then laborers would excavate beneath the culvert by hand. Once the conduits are in place, gravel would be placed into the trench and the tunnel beneath the culvert in 6-inch lifts and compacted with hand-operated mechanical tampers. Any damage to a culvert during construction activities would be repaired as quickly as possible. If water is present in the culvert at the time of damage, then the route would be temporarily rerouted to the next available culvert while repair activities are taking pace, and then restored back to the original flow route once repairs are complete.

Aboveground Cable

A total of approximately 392 feet of aboveground cable would be installed as part of the project. The aboveground cable would be placed at three waterway crossings along Eddy Gulch Road, including the bridge crossing of the North Fork of the Salmon River and two unnamed seasonal waterways. All aboveground cable would be black in color.

Cable would be attached to the west side of the bridge crossing the North Fork of the Salmon River, and no work would occur below the ordinary high water mark of the river. Cable for this bridge crossing would be placed in two 4-inch conduits.

For the two seasonal waterways that cross Eddy Gulch Road along the cable alignment, aboveground cable would be suspended on poles over these two waterways, and would continue underground once clear of the waterway crossings. There would be a total of 4 poles required for these two waterway crossings, with one pole located at either end of the crossing. The waterway crossings are approximately 4 to 5 feet wide, and can have up to 2 inches of water depth during times of precipitation. The poles would be placed outside of the waterways in holes that are approximately 18 inches wide and 5 feet deep. Excavated material would be used to fill and compact these holes after the poles have been erected. The 4 poles would be made of wood and approximately 25 feet tall, and the new conduits would be suspended between these poles approximately 19 to 20 feet above the waterways. Construction activities would be performed during the dry season when the two seasonal waterways are dry, and no work would take place within the ordinary high water mark of the waterways.

Traffic Management

As stated above, the width of Eddy Gulch Road varies, but is generally between 14 and 16 feet wide, while the private roadway tends to be narrower, with a minimum width of approximately 10 feet. Construction activities would occupy a 10-foot-wide pathway, which on Eddy Gulch Road would be primarily on the west side of the roadway. Eddy Gulch Road and the private roadway are used almost exclusively by the occupants of the 6 residences that would be served by the project. The applicant has confirmed that these residents are at work and away from home during the day, so traffic on these two roadways is expected to be very light during construction hours. Therefore,

flaggers would not be used during construction activities. Traffic delays of up to 30 minutes may be experienced for regular traffic, though emergency vehicles would be allowed to pass immediately as soon as the construction vehicles can clear a path. The new conduits would be laid out alongside the construction route each morning so that additional construction vehicles would not impede traffic during construction.

Vegetation Clearance

All construction activities would be conducted within the rights-of-way of Eddy Gulch Road and the private roadway. The roadbeds of both roadways are free of vegetation due to frequent use of these roadways by vehicles. Culvert crossings, poles for aboveground cables, and installation of utility boxes would occur in the shoulder of the roadways. The roadway shoulders are mostly clear of vegetation, but some small amount of vegetation removal may be required for construction activities occurring in the shoulder of the roadways.

Erosion and Sediment Control and Pollution Prevention during Construction

Sediment could be released into waters as a result of construction activities without implementation of best management practices to address erosion and sediment control. Construction activities would occur during the dry season (April through October), which would minimize the potential for erosion and sediment transport during construction activities. Siskiyou Telephone intends to prepare a Stormwater Pollution Prevention Plan (SWPPP) that outlines best management practices to address erosion and sediment control, including placement of sediment controls at culverts, such a gravel bags with filter fabric, silt fences, or fiber coir rolls (logs). Since construction would occur during the dry season, a water truck would be kept onsite in order to periodically wet down the work area and reduce the amount of fugitive dust generated during construction. Materials excavated during trenching activities would be removed from the site and new material brought in to backfill the trench. The road surface of Eddy Gulch Road would be restored to good condition on a daily basis during construction activities.

Cleanup and Post-Construction Restoration

Eddy Gulch Road would be restored to Siskiyou County specifications on a daily basis during construction activities. Disturbed areas would be restored to grade. Specifications for roadway restoration would be contained in the encroachment permit that Siskiyou Telephone would obtain from Siskiyou County prior to construction. Non-excavated solid waste generated during construction is estimated to be minimal and would be transported offsite daily to the Siskiyou Telephone Company's storage yard. The solid waste at the storage yard would be transported to Etna, California on a weekly basis to be picked up for disposal by Scott Valley Disposal.

Construction Schedule

Project construction would occur during the dry season, which extends from April through October, with the optimum time for construction extending from April 1 through September 30. There is the potential for special status wildlife species to nest adjacent to the project site, and therefore the USFS requires that the construction activities avoid the nesting season, which generally runs from February 1 through July 10. Construction activities would therefore take place between July 11 and October 31. Installation of the telecommunication cable is estimated to require between 30 and 45 days to complete, with the construction crew working up to 10 hours per day, 5 days per week.

Construction schedules would be submitted to local emergency service providers for review and comment prior to the commencement of construction activities, and the construction schedule would be updated as necessary.

Phase 2: Service Activation

Cable installation and splicing to prepare the 6 residences for telecommunication service activation would be completed within 30 days of the end of construction and roadway restoration. A Service Order would be generated by Siskiyou Telephone to connect residences to the new telecommunication line. The Service Order would include all customer data, including mailing address, house address, and other personal information. An installer would travel to the location to install the type of connection needed for the house to connect to the line. The drop that would be used would be installed at the time of project construction. Service activation would also include some type of electronic site to serve customers as they come on-line. The electronic site would be a small cabinet the size of two access pedestals. It would house a Digital Loop Carrier, which would generate the dial tone for the telephone service.

Siskiyou Telephone would work on its portion of the electronic sites in conjunction with the construction process. Other than the activities described above that would occur during project construction, there are no physical activities associated with service activation. Service activation would therefore have no impact on the environment and is not discussed further in this document.

Phase 3: Telephone Line Operation and Maintenance

Telephone line operation would not require any physical activity other than maintenance activities, described below. Routine telephone line operation would therefore have no environmental impacts and is thus not discussed further in this document.

Siskiyou Telephone would conduct routine maintenance for the new lines as needed. Maintenance would occur if there is damage to a pedestal or a report from a customer of a service problem. Siskiyou Telephone would notify all subscribers of any expected time outage due to maintenance. Subscribers would be called after restoration of service to verify that service has been restored. Maintenance of the telephone line is only analyzed under a few environmental parameters in this document as the maintenance activities would only have limited environmental effects.

PROJECT OBJECTIVE

The proposed project is needed to provide Plain Old Telephone Service (POTS) and broadband service to 6 private residences. The Eddy Gulch area is in a remote area of Siskiyou County, and residents are unable to communicate through the use of cellular phones, satellites, or radio because of their minimal effective use in the remote Eddy Gulch area. The nearest public phone for Eddy Gulch residents is located to the north in the community of Sawyers Bar. Telephone services are required for emergency use, personal use, and to report injuries or fires. Broadband services would be used for various needs, such as shopping, telemedicine, and telecommuting.

The heavily wooded nature of the Eddy Gulch area poses a serious risk of fire danger during the hot, dry summer months. The lack of mobile phone coverage throughout the Sawyers Bar exchange contributes not only to delays in reporting forest fires, but also to inefficiency in battling the frequently costly fires. Firefighters must contend with extremely rugged terrain, much of it inaccessible by road, and having landline phone service in the area would provide temporary fire camps with not only voice service, but also the dial-up service that the USFS finds indispensable in managing fire fighting operations. This same fire risk makes aboveground, pole-mounted telecommunication lines vulnerable to damage, as does heavy snow, rockslides, and falling trees. These factors have influenced Siskiyou Telephone's decision to propose that the majority of the new telecommunication line at Eddy Gulch be placed underground where it would be protected from most such hazards.

Eddy Gulch Road offers unique challenges for the traveling public. A good portion of this road is single lane (unpaved) with turnouts. Very few guard rails exist. During the winter months, this road is intermittently covered with ice and snow. Sawyers Bar, Somes Bar, and Forks of Salmon are the nearest communities where very limited emergency services are available. The nearest hospital is located in the City of Yreka, which is 2 hours driving distance away. The nearest grocery store of any size is located in the City of Etna, which is over 1 hour driving distance away. The proposed telephone service would allow for faster notification and response of emergency services to the subject area.

NEGATIVE DECLARATION MITIGATION MEASURES

The following mitigation measures are recommended to reduce project-related impacts to a less than significant level.

Aesthetics

Applicant Proposed Measure (APM) Aesthetics-1: The following measures shall be taken to minimize the visual impact of aboveground telecommunication infrastructure:

- The two conduits on the bridge crossing of the North Fork of the Salmon River shall be painted to match the color of the bridge.
- The utility boxes shall be painted olive green to blend with the surrounding vegetation. Olive green is the standard color used by the U.S. Forest Service.
- The two creek crossings shall be accomplished using wood utility poles and black cables. The dense forest would adequately shield the two seasonal stream crossings from view outside of the immediate vicinity of the crossings, and the wood poles and dark cables would blend with the surrounding vegetation

Air Quality and Greenhouse Gases

APM GHG-1: Most construction employees would likely be staying in the nearest town, Etna, which is approximately 40 miles from the construction route. Siskiyou Telephone Company shall provide company-owned vehicles to allow employees to carpool to the construction route, which would reduce the number of commute miles.

APM GHG-2: Several construction employees shall reside in camping trailers closer to the construction route in order to reduce the commute miles.

APM GHG-3: Supplies shall be delivered on larger trucks to avoid more frequent deliveries using smaller trucks.

Recommended Measure GHG-1: Idling time of construction equipment should be limited as much as possible.

Recommended Measure GHG-2: The applicant should participate as much as feasible in the CARB Statewide Portable Equipment Registration Program or meet the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, Sec. 2423(b)(1).

Recommended Measure GHG-3: The applicant should limit the hours of operation to daylight hours, so that diesel generators are not required for operation of lights.

Recommended Measure GHG-4: The applicant should replace diesel fuel with a biodiesel blend of B20 or less, if this fuel type is readily available.

Biological Resources

APM Biology-1: Construction activities shall be conducted during July 11 to January 31 to avoid the nesting season, thereby minimizing potential effect to the spotted owl and other potentially nesting birds.

APM Biology-2: All trenches shall be closed and covered by the end of each working day so that no open trenches shall be left that could trap wildlife.

APM Biology-3: The applicant shall use vehicles and equipment that are currently in use on other projects within the Klamath National Forest and near the project area. This equipment shall not be used outside of the general area prior to construction within the Eddy Gulch region.

Cultural Resources

Mitigation Measure Cultural Resources-1: Siskiyou Telephone shall perform pre-construction surveys for any project components not yet surveyed due to lack of access, or if there are any modifications in project alignment. Areas not subject to archaeological survey would be inspected prior to construction, and a supplemental archaeological survey report prepared.

Mitigation Measure Cultural Resources-2: Any areas containing historic resources shall be marked on construction plans, and construction plans shall be modified to accommodate avoidance of these locations.

Mitigation Measure Cultural Resources-3: A buffer zone around historic resources shall be established prior to construction in consultation with a qualified archaeologist, and this buffer area shall be flagged on the ground as an exclusion zone where no construction or surface disturbance shall take place, including resources within 100 feet of any project component.

Mitigation Measure Cultural Resources-4: Construction personnel shall be briefed on the nature of any cultural resources and instructed not to enter the flagged exclusion zones.

Mitigation Measure Cultural Resources-5: If the pre-construction surveys required in mitigation measure CR-1 determine that “historical resources”, “historic properties”, or “unique archaeological resources” would be affected by the proposed project, then additional impact mitigation shall be required if the project cannot be redesigned to avoid the resource. Impact mitigation may take a variety of forms depending on the nature of the site and the nature and extent of impacts, with site avoidance being the preferred mitigation measure. Final decisions regarding impact mitigation shall be made in consultation between Siskiyou Telephone, regulatory agencies, technical specialists, and other interested parties. If data recovery is the recommended mitigation, then a Cultural Resources Treatment Plan shall be prepared detailing how mitigation will be conducted, procedures for protection and avoidance for cultural resources, and curation of cultural materials collected during the project construction.

Mitigation Measure Cultural Resources-6: Siskiyou Telephone shall inform all contractors and subcontractors about the potential for archaeological discoveries during construction, and an archaeologist shall provide a brief training session to all construction personnel on the appropriate responses to such discoveries. The orientation shall include a description of the kinds of cultural resources that might be encountered during construction and the steps to be taken if such finds are unearthed.

Mitigation Measure Cultural Resources-7: If buried or concealed cultural resources are discovered during excavation, construction, or related development work, all such work shall cease in the vicinity of the find until a qualified archaeologist properly investigates the find. If the discovery is determined to be a significant historical resource that would be affected by the project, then appropriate mitigation or protective measures shall be taken.

Mitigation Measure Cultural Resources-8: Monitoring by a qualified archaeologist shall be required for ground-disturbing activities in areas where original ground surface would be exposed. Archeological monitoring shall include inspection of exposed materials to determine if artifacts are present. The monitor shall have authority to temporarily halt or divert construction away from exposed resources in order to recover specimens.

Mitigation Measure Cultural Resources-9: If a paleontological resource, such as a fossil, is discovered during construction, the recovered resource shall be examined by a qualified paleontologist. According to the paleontologist's findings, the resource shall be prepared to the point of curation, identified by qualified experts, listed in a database to allow analysis, and deposited in a designated repository.

Mitigation Measure Cultural Resources-10: If human remains are encountered during the course of excavation, all construction activities in the vicinity of the find shall cease, and the Siskiyou County Coroner shall be notified immediately. No further disturbance shall occur until the Siskiyou County Coroner has made the necessary findings as to origin and disposition pursuant to PRC 5097.98. If remains are determined to be Native American, then the Native American Heritage Commission (NAHC) shall be notified within 24 hours as required by Public Resources Code 5097. The NAHC shall then contact the most likely descendent (MLD) of the deceased Native American, who shall then serve as a consultant on how to proceed with the remains (e.g., avoidance, reburial). Work at the site shall not resume until such remains have been treated in the manner agreed upon by all interested parties.

Geology and Soils

Mitigation Measure Geology-1: Gravel-backfilled telecommunication line trenches shall have direct connectivity with all down drains crossing the road and a natural downhill drainage system. This connectivity shall be shown on project construction drawings, and shall be submitted for the review and approval of Siskiyou County engineering division staff prior to project construction.

Hazards and Hazardous Materials

APM Hazards-1: Accidents involving the release of small quantities of hazardous materials from construction equipment shall be mitigated through an emergency response training program and procedures implemented by the project construction contractors and employees. Spill clean-up kits shall be provided and kept onsite during construction. Equipment shall remain in good working order to prevent spills.

APM Hazards-2: A Stormwater Pollution Prevention Plan (SWPPP) shall be in place prior to the start of construction activities to implement best management practices for spill and pollution prevention.

Best management practices shall include, but not be limited to, the following:

- All equipment shall be maintained in good working order and equipment containing hazardous materials shall be inspected periodically for signs of spills or leakage
- Spills that occur shall be cleaned up immediately and any contaminated soil shall be containerized and disposed of and reported in accordance with applicable federal, state, and local requirements
- Emergency phone numbers shall be available onsite
- Silt fences or fiber rolls shall be used to prevent the migration of sediment offsite
- Water shall be applied to disturbed areas during construction activities or windy conditions to prevent dust emissions and erosion
- Drip pans shall be used for mobile fueling activities

Mitigation Measure Hazards-2: Contractors shall receive training regarding the proper handling and/or storage of potential fire hazards, potential ignition sources (such as smoking or sparking equipment), and appropriate types of fire protection equipment.

Mitigation Measure Hazards-3: Smoking shall be allowed only in designated areas.

Mitigation Measure Hazards-4: Construction vehicles that are onsite shall be equipped with a fire extinguisher with a minimal rating of 4A-40BC.

Noise

APM Noise-1: During construction of the proposed project, best management practices shall be implemented to minimize noise impacts as follows:

- Construction activity shall be restricted to the hours between 7 a.m. and 7 p.m. on weekdays. Work on weekends would need to be approved by the Siskiyou County Planning Department upon request
- All stationary noise-generating equipment shall be located as far as possible from nearby noise-sensitive receptors
- Construction equipment powered by gasoline or diesel engines shall have sound control devices at least as effective as those provided by the original equipment manufacturer. No equipment shall be permitted to have an unmuffled exhaust
- The construction contractor shall ensure that noise-generating mobile equipment and machinery are shut off when not in use

Transportation and Traffic

APM Traffic-1: The applicant shall prepare a Traffic Control Plan for the review and approval of Caltrans and the Siskiyou County Public Works Department. This Traffic Control Plan shall follow local, state, and federal requirements for traffic control and emergency responder access. The use of traffic control measures shall ensure that the effects of construction activity on traffic would not create an unsafe condition. As part of this Traffic Control Plan, the applicant shall inform residents within Eddy Gulch of construction activities and potential delays prior to construction.

Mitigation Measure Traffic-1: Complete closure of Eddy Gulch Road or any private roadway shall not extend beyond 30 minutes if there are vehicles waiting to pass through the construction area. If trenching is not completed during these 30 minutes, then metal plates or a similar apparatus shall be placed over the trench and any waiting motorists shall be allowed to pass.

ENVIRONMENTAL DETERMINATION

The Initial Study was prepared to identify the potential effects on the environment from the installation and construction of a telecommunications line in the rights-of-way of Eddy Gulch Road and a private roadway in Siskiyou County, and to evaluate the significance of these effects. The Initial Study was based on site visits, analysis of the environmental setting, and studies of cultural resources, biological resources, and site geology.

Based on the Initial Study, the project as proposed by Siskiyou Telephone, including the mitigation measures proposed herein, would have no significant impacts in the areas of aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, recreation, transportation and traffic, and utilities and service systems.

REVIEW PERIOD

All comments regarding the correctness, completeness, or adequacy of this Mitigated Negative Declaration must be received by the CPUC by no later than 5:00 p.m. on Wednesday, April 28, 2010.

CONTACT PERSON

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San Mateo, California 94402
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Email: eddygulch@rmtinc.com

March 29, 2010

Ken Lewis, Acting Director
Energy Division
California Public Utilities Commission

Date

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INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

1. PROJECT TITLE

Siskiyou Telephone Company, Eddy Gulch Telecommunication Cable Project
Resolution Number T-17138

2. LEAD AGENCY NAME AND ADDRESS

California Public Utilities Commission (CPUC)
Energy Division
505 Van Ness Avenue
San Francisco, California 94102

3. CONTACT PERSON AND PHONE NUMBER

Jeff Smith, Project Manager
RMT, Inc.
Project Voicemail: (650) 340-4855
Project Fax: (650) 373-1211
Email: eddygulch@rmtinc.com

4. PROJECT LOCATION

The proposed project is located within the right-of-way of Eddy Gulch Road south of Sawyers Bar, and also within the right of way of a private road leading off from Eddy Gulch Road, on the Klamath National Forest, Siskiyou County, California.

5. PROJECT SPONSOR'S NAME AND ADDRESS

Siskiyou Telephone Company
30 Telco Way
PO Box 157
Etna, California 96027

6. GENERAL PLAN DESIGNATION

The project is located in a relatively unpopulated, previously disturbed rural setting in Siskiyou County, California. Land use designations in Siskiyou County are designated by the Siskiyou County General Plan. The proposed project is located within a roadway right-of-way on the Klamath National Forest; therefore, there is no General Plan land use designation for the project route.

7. ZONING

The project is located in a relatively unpopulated, previously disturbed rural setting in Siskiyou County, California. The proposed project is located within a roadway right-of-way on the Klamath National Forest; therefore, there is no Zoning Ordinance land use designation for the project alignment.

8. DESCRIPTION OF THE PROJECT

The existing telephone system leading to the project site consists of a microwave route from Etna, to a passive repeater on Whiskey Butte, to a passive repeater at the top of Eddy Gulch, then to the Siskiyou Telephone central office, located at the community of Sawyers Bar. The system then uses a combination of underground and aboveground cable to serve the community of Sawyers Bar,

northeast to the community of Finley Camp, and southwest to the community of Forks of Salmon. The existing telephone system is powered by a United States Forest Service (USFS) generator serving the community of Sawyers Bar, with a backup generator provided by Siskiyou Telephone.

Siskiyou Telephone proposes to install a telecommunication line extending south from Sawyers Bar to serve the residents in the Eddy Gulch area. The telecommunication line would begin at the intersection of Sawyers Bar Road and Eddy Gulch Road in the community of Sawyers Bar, and would extend south within the right-of-way of Eddy Gulch Road for approximately 3.0 miles. A spur of the telecommunication line would branch off from Eddy Gulch Road and extend southeast for approximately 1.4 miles on a private road. The majority of the telecommunication line would be installed underground, but some sections would be installed aboveground over three waterways.

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Phase 1: Construction and Installation of Telecommunication Line

Project Components

Siskiyou Telephone proposes to use conventional landline telecommunications construction to install the proposed parallel conduits. The conduits would include one 4-inch polyvinyl chloride (PVC) conduit and three 1.5-inch high-density polyethylene (HDPE) conduits. The 4-inch PVC conduit would carry copper wire and would provide telephone service to the 6 private residences in the Eddy Gulch area. One of the 1.5-inch HDPE conduits would carry the wires necessary to provide broadband internet service to these same 6 residences. The remaining two 1.5-inch conduits would serve as a reserve for future fiber optic services to the residents, if needed.

Metal utility boxes, known as BD5 pedestals, would be placed along the telecommunication route with a maximum spacing of 1,500 feet between pedestals to provide Rural Utilities Service grounding. These utility boxes would also be placed as needed along the route to provide access points for each residential customer. A total of approximately 32 such utility boxes are proposed as part of this project. Each of the utility boxes would be approximately 12 inches square and 3 feet tall, and would be set back between 3 and 10 feet from the edge of the road surface, depending on field conditions. Several utility box locations along the route would likely require some amount of excavation into the rocky bank in order to create a clearing large enough to open and close the new utility box. If needed, a rock retaining wall would also be built around the excavated cutout in order to support any loose impediments that might fall on the utility box or into the roadway.

Construction Personnel and Equipment

Construction would use Rural Utilities Service engineering and construction standards and practices, established by the United States Department of Agriculture. Specifications of the telecommunication line would be compatible with Siskiyou Telephone's existing telecommunication

network. Table 1 lists the equipment and personnel that would be required to install the proposed telecommunication line. Note that the construction activities are sequential, and therefore not all of the personnel listed in Table 1 would necessarily be present on the site at the same time.

In addition and as a precaution, fire extinguishers and shovels would be maintained onsite during construction activities for immediate fire control.

Staging Areas

Siskiyou Telephone has rented a storage yard approximately 4 miles southwest from the project site, and plans to use this site to store conduits, utility pedestals, and other equipment. The storage yard is fenced to keep out wildlife, and the property owner lives on the property and would be able to provide nighttime security for the materials in the storage yard. Construction personnel may also rent space at this storage yard to park travel trailers during construction operations.

Construction Activities

Both Eddy Gulch Road and the private road are composed of gravel and compacted dirt, and neither roadway is paved. The width of Eddy Gulch Road varies, but is generally between 14 and 16 feet wide; the private roadway tends to be narrower, with a minimum width of approximately 10 feet. All construction activities would take place within the rights-of-way of these two roadways.

Installation of underground cable involves trenching along the cable alignment. A backhoe would be used to open a trench approximately 1.5 feet wide and 3 feet deep. The trenched materials (e.g., gravel and dirt) would be loaded into a waiting dump truck and transported to the Siskiyou Telephone gravel site. The excavated materials would amount to approximately 6,949 cubic yards. All of this solid waste would be disposed of at a gravel plant on Eddy Gulch Road to be used for the reclamation of an old mining site. The gravel pit site is being used under an existing permit with Siskiyou County.

Trenches would be backfilled with a few inches of Class II base rock before the installation of the cable conduits, and then the remainder of the trench would be filled with more Class II base rock.

Table 1: Construction Personnel and Equipment

Construction Activity	Number of Personnel	Equipment
Trenching	7 to 10	3 Backhoes 3 Dump Trucks
Conduit Placement	3 to 4	1 Pickup Truck 1 Three-wheel Trailer
Backfill	8 to 10	1 Excavator (compactor) 3 Mechanical Tampers 3 Backhoes 1 Water Truck
Cable Placement	4 to 8	1 Backhoe 1 Reel Dolly 2 Pickup Trucks
Inspection	1	1 Pickup Truck

The volume of the Class II base rock used to fill the trench would be approximately the same amount as the excavated gravel and dirt, minus the volume of the four conduits. Once the Class II base rock has been placed in the trench, the fill would be compacted in 1-foot lifts with a mechanical tamper, and the top 1 foot would be compacted with 20,000 pounds of force. Siskiyou County requires 95 percent minimum compaction of all trenches in their roadways, and the project would meet this requirement. The cables would be pulled into the conduits once the trenches have been backfilled and compacted, and the roadway repaired.

The trenching, backfill, and repair of each segment of construction would occur on the same day, minimizing disruption to the roadway itself and reducing the possibility of erosion or fugitive dust leaving the construction area.

Culvert Crossings

Several culverts would be crossed as part of the project. Where a culvert has a minimum of 4 feet of ground cover, Siskiyou Telephone would trench directly over the culvert. Where a culvert has less than 4 feet of ground cover, Siskiyou Telephone would tunnel under the culvert and place the conduit below the culvert.

Where excavation would occur beneath a culvert, special precautions would be made to ensure that the culvert is not damaged during construction. A backhoe would be used to trench on either side of the culvert, and then laborers would excavate beneath the culvert by hand. Once the conduits are in place, gravel would be placed into the trench and the tunnel beneath the culvert in 6-inch lifts and compacted with hand-operated mechanical tampers. Any damage to a culvert during construction activities would be repaired as quickly as possible. If water is present in the culvert at the time of damage, then the route would be temporarily rerouted to the next available culvert while repair activities are taking pace, and then restored back to the original flow route once repairs are complete.

Aboveground Cable

A total of approximately 392 feet of aboveground cable would be installed as part of the project. The aboveground cable would be placed at three waterway crossings along Eddy Gulch Road, including the bridge crossing of the North Fork of the Salmon River and two unnamed seasonal waterways. All aboveground cable would be black in color.

Cable would be attached to the west side of the bridge crossing the North Fork of the Salmon River, and no work would occur below the ordinary high water mark of the river. Cable for this bridge crossing would be placed in two 4-inch conduits.

For the two seasonal waterways that cross Eddy Gulch Road along the cable alignment, aboveground cable would be suspended on poles over these two waterways, and would continue underground once clear of the waterway crossings. There would be a total of 4 poles required for these two waterway crossings, with one pole located at either end of the crossing. The waterway crossings are approximately 4 to 5 feet wide, and can have up to 2 inches of water depth during times of precipitation. The poles would be placed outside of the waterways in holes that are approximately 18 inches wide and 5 feet deep. Excavated material would be used to fill and compact these holes after the poles have been erected. The 4 poles would be made of wood and approximately 25 feet tall, and the new conduits would be suspended between these poles approximately 19 to 20 feet above the waterways. Construction activities would be performed during the dry season when the two seasonal waterways are dry, and no work would take place within the ordinary high water mark of the waterways.

Traffic Management

As stated above, the width of Eddy Gulch Road varies, but is generally between 14 and 16 feet wide, while the private roadway tends to be narrower, with a minimum width of approximately 10 feet. Construction activities would occupy a 10-foot-wide pathway, which on Eddy Gulch Road would be primarily on the west side of the roadway. Eddy Gulch Road and the private roadway are used almost exclusively by the occupants of the 6 residences that would be served by the project. The applicant has confirmed that these residents are at work and away from home during the day, so traffic on these two roadways is expected to be very light during construction hours. Therefore, flaggers would not be used during construction activities. Traffic delays of up to 30 minutes may be experienced for regular traffic, though emergency vehicles would be allowed to pass immediately as soon as the construction vehicles can clear a path. The new conduits would be laid out alongside the construction route each morning so that additional construction vehicles would not impede traffic during construction.

Vegetation Clearance

All construction activities would be conducted within the rights-of-way of Eddy Gulch Road and the private roadway. The roadbeds of both roadways are free of vegetation due to frequent use of these roadways by vehicles. Culvert crossings, poles for aboveground cables, and installation of utility boxes would occur in the shoulder of the roadways. The roadway shoulders are mostly clear of vegetation, but some small amount of vegetation removal may be required for construction activities occurring in the shoulder of the roadways.

Erosion and Sediment Control and Pollution Prevention during Construction

Sediment could be released into waters as a result of construction activities without implementation of best management practices to address erosion and sediment control. Construction activities would occur during the dry season (April through October), which would minimize the potential for erosion and sediment transport during construction activities. Siskiyou Telephone intends to prepare a Stormwater Pollution Prevention Plan (SWPPP) that outlines best management practices to address erosion and sediment control, including placement of sediment controls at culverts, such a gravel bags with filter fabric, silt fences, or fiber coir rolls (logs). Since construction would occur during the dry season, a water truck would be kept onsite in order to periodically wet down the work area and reduce the amount of fugitive dust generated during construction. Materials excavated during trenching activities would be removed from the site and new material brought in to backfill the trench. The road surface of Eddy Gulch Road would be restored to good condition on a daily basis during construction activities.

Cleanup and Post-Construction Restoration

Eddy Gulch Road would be restored to Siskiyou County specifications on a daily basis during construction activities. Disturbed areas would be restored to grade. Specifications for roadway restoration would be contained in the encroachment permit that Siskiyou Telephone would obtain from Siskiyou County prior to construction. Non-excavated solid waste generated during construction is estimated to be minimal and would be transported offsite daily to the Siskiyou Telephone Company's storage yard. The solid waste at the storage yard would be transported to Etna, California on a weekly basis to be picked up for disposal by Scott Valley Disposal.

Construction Schedule

Project construction would occur during the dry season, which extends from April through October, with the optimum time for construction extending from April 1 through September 30. There is the potential for special status wildlife species to nest adjacent to the project site, and therefore the

USFS requires that the construction activities avoid the nesting season, which generally runs from February 1 through July 10. Construction activities would therefore take place between July 11 and October 31. Installation of the telecommunication cable is estimated to require between 30 and 45 days to complete, with the construction crew working up to 10 hours per day, 5 days per week.

Construction schedules would be submitted to local emergency service providers for review and comment prior to the commencement of construction activities, and the construction schedule would be updated as necessary.

Phase 2: Service Activation

Cable installation and splicing to prepare the 6 residences for telecommunication service activation would be completed within 30 days of the end of construction and roadway restoration. A Service Order would be generated by Siskiyou Telephone to connect residences to the new telecommunication line. The Service Order would include all customer data, including mailing address, house address, and other personal information. An installer would travel to the location to install the type of connection needed for the house to connect to the line. The drop that would be used would be installed at the time of project construction. Service activation would also include some type of electronic site to serve customers as they come on-line. The electronic site would be a small cabinet the size of two access pedestals. It would house a Digital Loop Carrier, which would generate the dial tone for the telephone service.

Siskiyou Telephone would work on its portion of the electronic sites in conjunction with the construction process. Other than the activities described above that would occur during project construction, there are no physical activities associated with service activation. Service activation would therefore have no impact on the environment and is not discussed further in this document.

Phase 3: Telephone Line Operation and Maintenance

Telephone line operation would not require any physical activity other than maintenance activities, described below. Routine telephone line operation would therefore have no environmental impacts and is thus not discussed further in this document.

Siskiyou Telephone would conduct routine maintenance for the new lines as needed. Maintenance would occur if there is damage to a pedestal or a report from a customer of a service problem. Siskiyou Telephone would notify all subscribers of any expected time outage due to maintenance. Subscribers would be called after restoration of service to verify that service has been restored. Maintenance of the telephone line is only analyzed under a few environmental parameters in this document as the maintenance activities would only have limited environmental effects.

9. SURROUNDING LAND USES AND SETTING

The proposed project route is located entirely within the Eddy Gulch Road right-of-way and a private road right-of-way. Eddy Gulch Road is a County road under the jurisdiction of Siskiyou County. The route passes over three waterways. A bridge crosses over the Salmon River; the other two crossings are seasonal waterways that wash across the Eddy Gulch Road roadway. Surrounding lands are within the Klamath National Forest and managed by the USFS and are typically used for timber harvest and recreation. There are also several residences in the project vicinity that exist as a result of long-standing mining claims. The community of Sawyers Bar is located at the northern terminus of the proposed telecommunication line.

10. OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

Siskiyou Telephone must obtain the following permits in order to construct and operate the proposed telecommunication facilities:

- Use Permit from the Siskiyou County Planning Department
- USFS Permit (for USFS lands only)
- Tier I Small Linear Underground Permit from the State Water Resource Control Board (SWRCB)

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	☐ Agricultural Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology and Soils
☒ Hazards and Hazardous Materials	☒ Hydrology and Water Quality	☐ Land Use and Planning
☐ Mineral Resources	☒ Noise	☐ Population and Housing
☒ Public Services	☐ Recreation	☒ Transportation and Traffic
☐ Utilities and Service Systems	☒ Mandatory Findings of Significance	

ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

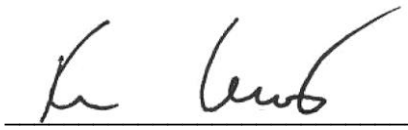
I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

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

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

I find that the Proposed Project MAY have a "potentially significant impact" or "potentially significant impact unless mitigated" 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, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An EIR is required, but it must analyze only the effects that remain to be addressed. ☐

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



Ken Lewis, Acting Director
Energy Division
California Public Utilities Commission

March 29, 2010
Date

List of Acronyms and Abbreviations

AB 32	Assembly Bill 32 (3.4)
APM	Applicant Proposed Measure (3.2)
asl	Above sea level (3.7)
B2	2% biodiesel (3.4)
B5	5% biodiesel (3.4)
B20	20% biodiesel (3.4)
B100	100% biodiesel (3.4)
BLM	Bureau of Land Management
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CDOC	California Department of Conservation (3.3)
CEQA	California Environmental Quality Act
CH_4	Methane (3.4)
CNRA	California Natural Resources Agency
CO	Carbon monoxide (3.4)
CO_2	Carbon dioxide (3.4)
CO_2eq/yr	Carbon dioxide equivalent per year
CPUC	California Public Utilities Commission
CWA	Clean Water Act (3.9)
dBA	A-weighted decibel (3.12)
DTSC	Department of Toxic Substances Control (3.8)
DWR	Department of Water Resources (3.9)
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Act (3.9)
GHG	Green House Gases (3.4)
HDPE	High-density polyethylene
LOS	Level of Service (3.16)
m^3	Cubic meter
MLD	Most likely descendent

MW	Megawatt (3.4)
NAHC	Native American Heritage Commission
N_2O	Nitrous oxide
NO_2	Nitrogen dioxide
NRCS	Natural Resources Conservation Service (3.9)
NSBP	National Scenic Byway Program
OPR	Office of Planning and Research
OSHA	Occupation Safety and Health Act (3.8)
PM_{10}	Particulate matter less than 10 microns in diameter
PM_{25}	Particulate matter less than 25 microns in diameter
POTS	Plain Old Telephone Service
ppm	Parts per million (3.4)
PRC	Public Resources Code
PVC	Polyvinyl chloride
RCRA	Resource Conservation and Recovery Act (3.8)
RWQCB	Regional Water Quality Control Board (3.9)
SCAPCD	Siskiyou County Air Pollution Control District (3.4)
SCAQMD	South Coast Air Quality Management District
SO_2	Sulfur dioxide (3.4)
SWPPP	Stormwater Pollution Prevention Plan (3.8)
SWRCB	State Water Resource Control Board (3.9)
μg	Micrograms (3.4)
UNH	University of New Hampshire (3.4)
USEPA	U.S. Environmental Protection Agency (3.4)
USFS	U.S. Forest Service

Chapter 1: Introduction

1.1 Proposed Project

Siskiyou Telephone Company (Siskiyou Telephone) has filed an Application with the California Public Utilities Commission (CPUC) for the Eddy Gulch Telecommunication Cable Project (Eddy Gulch Project) for installation of telecommunication lines in two parallel conduits. The objective of the project is to provide telephone and broadband service to 6 existing private residences in the Eddy Gulch area of Siskiyou County, California.

The majority of the cable route would be located within the right-of-way along Eddy Gulch Road, a Siskiyou County-maintained road located on the Klamath National Forest (Figure 1.1-1). The route would begin at the community of Sawyers Bay and then extend south with the Eddy Gulch Road right-of-way for approximately 3.0 miles. A spur of the cable route would branch off from the Eddy Gulch Road line and extend approximately 1.4 miles southeast within a private road right-of-way.

1.2 CEQA Lead and Responsible Agencies

1.2.1 CEQA LEAD AGENCY AND REVIEW

The CPUC is the lead state agency for review of the project under the California Environmental Quality Act (CEQA). This Initial Study/Mitigated Negative Declaration (IS/MND) includes an assessment of the potential environmental impacts of the proposed project. The Mitigated Negative Declaration has been prepared based upon the assessment of potential environmental impacts outlined in this Initial Study. This IS/MND has been prepared pursuant to CEQA, the amended State CEQA Guidelines (14 CCR 15000 et seq.), and the CPUC CEQA rules (Rules 17.1, 17.2, and 17.3).

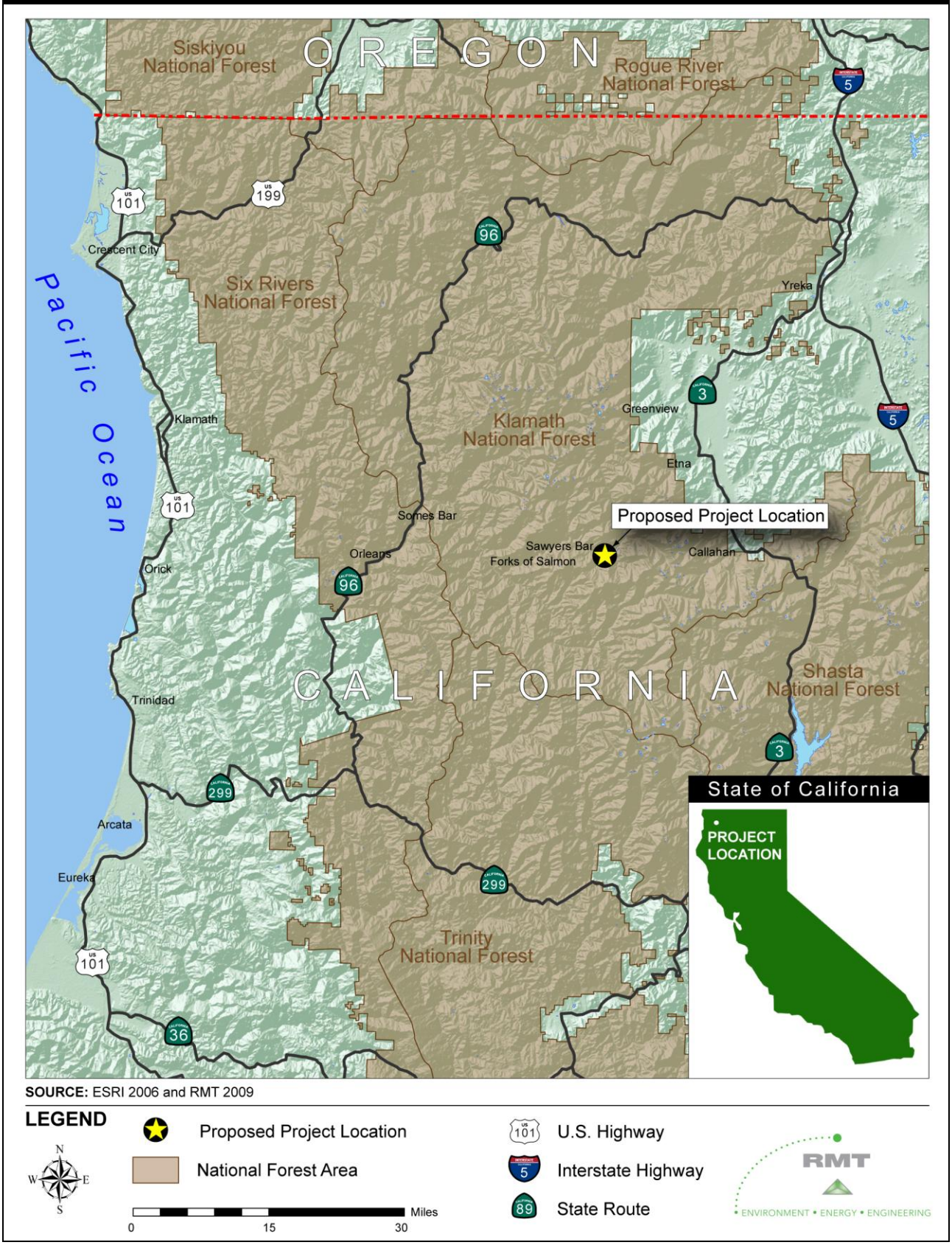
CEQA requires that the CPUC must prepare an Initial Study for discretionary projects, such as the proposed project, to determine whether the project may have a significant adverse effect on the environment based on substantial evidence. The CPUC would be required to prepare an Environmental Impact Report (EIR) if substantial evidence indicates that the proposed project may result in significant effects that cannot be mitigated. A Mitigated Negative Declaration can be adopted by the CPUC if the Initial Study does not reveal substantial evidence of significant impacts, or if the potential effects can be reduced to a level of insignificance through project revisions (Section 21080; CEQA Public Resources Code).

The Mitigated Negative Declaration has been prepared based on the assessment in the Initial Study prepared for the Siskiyou Telephone Eddy Gulch Project.

1.2.2 NEPA LEAD AGENCY AND REVIEW

The USFS has amended the Forest-wide Special Use Permit for Siskiyou Telephone's trenching and placement of conduit cable along Eddy Gulch Road and within the Siskiyou County right-of-

Figure 1.1-1: Proposed Project Location



way. The proposed project is categorically excluded under the National Environmental Policy Act (NEPA) because the amended permit is for a use that is in place and ongoing.

The environmental impact of the proposed action is minimal, and consistent with the past uses of National Forest land. No sensitive, threatened, or endangered species would be adversely impacted by the issuance of the permit or the continued use of National Forest land authorized by the permit. The activity would be of limited size, duration, and degree of disturbance based on the above information. Past actions and environmental analysis have revealed that no extraordinary circumstances exist that might cause the proposed action to have significant effects on the human environment. The authorization and amendment of permits and the use of National Forest land are consistent with the Klamath National Forest Land and Resource Management Plan (LRMP).

The action also qualifies under Forest Service Handbook provision 1909.15, 31.2 Category 3: Approval, modification or continuation of minor special uses of the National Forest Land that require fewer than five contiguous acres of land. The USFS project approval is included as Attachment 1.

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Chapter 2: Project Description

2.1 Project Objectives

The proposed project is needed to provide Plain Old Telephone Service (POTS) and broadband service to 6 private residences. The Eddy Gulch area is in a remote area of Siskiyou County, and residents are unable to communicate through the use of cellular phones, satellites, or radio because of their minimal effective use in the remote Eddy Gulch area. The nearest public phone for Eddy Gulch residents is located to the north in the community of Sawyers Bar. Telephone services are required for emergency use, personal use, and to report injuries or fires. Broadband services would be used for various needs, such as shopping, telemedicine, and telecommuting.

The heavily wooded nature of the Eddy Gulch area poses a serious risk of fire danger during the hot, dry summer months. The lack of mobile phone coverage throughout the Sawyers Bar exchange contributes not only to delays in reporting forest fires, but also to inefficiency in battling the frequently costly fires. Firefighters must contend with extremely rugged terrain, much of it inaccessible by road, and having landline phone service in the area would provide temporary fire camps with not only voice service, but also the dial-up service that the USFS finds indispensable in managing fire fighting operations. This same fire risk makes aboveground, pole-mounted telecommunication lines vulnerable to damage, as does heavy snow, rockslides, and falling trees. These factors have influenced Siskiyou Telephone's decision to propose that the majority of the new telecommunication line at Eddy Gulch be placed underground where it would be protected from most such hazards.

Eddy Gulch Road offers unique challenges for the traveling public. A good portion of this road is single lane (unpaved) with turnouts. Very few guard rails exist. During the winter months, this road is intermittently covered with ice and snow. Sawyers Bar, Somes Bar, and Forks of Salmon are the nearest communities where very limited emergency services are available. The nearest hospital is located in the City of Yreka, which is 2 hours driving distance away. The nearest grocery store of any size is located in the City of Etna, which is over 1 hour driving distance away. The proposed telephone service would allow for faster notification and response of emergency services to the subject area.

2.2 Project Description

The existing telephone system leading to the project site consists of a microwave route from Etna, to a passive repeater on Whiskey Butte, to a passive repeater at the top of Eddy Gulch, then to the Siskiyou Telephone central office, located at the community of Sawyers Bar. The system then uses a combination of underground and aboveground cable to serve the community of Sawyers Bar, northeast to the community of Finley Camp, and southwest to the community of Forks of Salmon (see Figure 1.1-1). The existing telephone system is powered by a United States Forest Service (USFS) generator serving the community of Sawyers Bar, with a backup generator provided by Siskiyou Telephone.

Siskiyou Telephone proposes to install a telecommunication line extending south from Sawyers Bar to serve the residents in the Eddy Gulch area. The telecommunication line would begin at the intersection of Sawyers Bar Road and Eddy Gulch Road in the community of Sawyers Bar, and would extend south within the right-of-way of Eddy Gulch Road for approximately 3.0 miles. A spur of the telecommunication line would branch off from Eddy Gulch Road and extend southeast for approximately 1.4 miles on a private road. The majority of the telecommunication line would be installed underground, but some sections would be installed aboveground over three waterways.

Siskiyou Telephone's proposed Eddy Gulch Telecommunication Cable Project would consist of three phases. These phases include:

- Construction and installation of underground telephone lines, trench filling, and restoration of construction areas
- Service activation
- Telephone line operation and maintenance

Grant funds would be used for construction and installation of telephone lines, trench filling, and restoration of construction areas. Grant funds would not be used for service activation or telephone line maintenance. Siskiyou Telephone would obtain all necessary permits and permission from USFS, CPUC, Siskiyou County, and private landowners prior to any construction activities.

2.2.1 PHASE 1: CONSTRUCTION AND INSTALLATION OF TELECOMMUNICATION LINE

Project Components

Siskiyou Telephone proposes to use conventional landline telecommunications construction to install the proposed parallel conduits. The conduits would include one 4-inch polyvinyl chloride (PVC) conduit and three 1.5-inch high-density polyethylene (HDPE) conduits. The 4-inch PVC conduit would carry copper wire and would provide telephone service to the 6 private residences in the Eddy Gulch area. One of the 1.5-inch HDPE conduits would carry the wires necessary to provide broadband internet service to these same 6 residences. The remaining two 1.5-inch conduits would serve as a reserve for future fiber optic services to the residents, if needed.

Metal utility boxes, known as BD5 pedestals, would be placed along the telecommunication route with a maximum spacing of 1,500 feet between pedestals to provide Rural Utilities Service grounding. These utility boxes would also be placed as needed along the route to provide access points for each residential customer. A total of approximately 32 such utility boxes are proposed as part of this project. Each of the utility boxes would be approximately 12 inches square and 3 feet tall, and would be set back between 3 and 10 feet from the edge of the road surface, depending on field conditions. Several utility box locations along the route would likely require some amount of excavation into the rocky bank in order to create a clearing large enough to open and close the new utility box. If needed, a rock retaining wall would also be built around the excavated cutout in order to support any loose impediments that might fall on the utility box or into the roadway.

Construction Personnel and Equipment

Construction would use Rural Utilities Service engineering and construction standards and practices, established by the United States Department of Agriculture. Specifications of the telecommunication line would be compatible with Siskiyou Telephone's existing telecommunication network. Table 2.2-1 lists the equipment and personnel that would be required to install the proposed telecommunication line. Note that the construction activities are sequential, and therefore not all of the personnel listed in Table 2.2-1 would necessarily be present on the site at the same time.

In addition and as a precaution, fire extinguishers and shovels would be maintained onsite during construction activities for immediate fire control.

Staging Areas

Siskiyou Telephone has rented a storage yard approximately 4 miles southwest from the project site, and plans to use this site to store conduits, utility pedestals, and other equipment. The storage yard is fenced to keep out wildlife, and the property owner lives on the property and would be able to provide nighttime security for the materials in the storage yard. Construction personnel may also rent space at this storage yard to park travel trailers during construction operations.

Construction Activities

Both Eddy Gulch Road and the private road are composed of gravel and compacted dirt, and neither roadway is paved. The width of Eddy Gulch Road varies, but is generally between 14 and

Table 2.2-1: Construction Personnel and Equipment

Construction Activity	Number of Personnel	Equipment
Trenching	7 to 10	3 Backhoes 3 Dump Trucks
Conduit Placement	3 to 4	1 Pickup Truck 1 Three-wheel Trailer
Backfill	8 to 10	1 Excavator (compactor) 3 Mechanical Tampers 3 Backhoes 1 Water Truck
Cable Placement	4 to 8	1 Backhoe 1 Reel Dolly 2 Pickup Trucks
Inspection	1	1 Pickup Truck

16 feet wide; the private roadway tends to be narrower, with a minimum width of approximately 10 feet. All construction activities would take place within the rights-of-way of these two roadways.

Installation of underground cable involves trenching along the cable alignment. A backhoe would be used to open a trench approximately 1.5 feet wide and 3 feet deep. The trenched materials (e.g., gravel and dirt) would be loaded into a waiting dump truck and transported to the Siskiyou Telephone gravel site. The excavated materials would amount to approximately 6,949 cubic yards. All of this solid waste would be disposed of at a gravel plant on Eddy Gulch Road to be used for the reclamation of an old mining site. The gravel pit site is being used under an existing permit with Siskiyou County.

Trenches would be backfilled with a few inches of Class II base rock before the installation of the cable conduits, and then the remainder of the trench would be filled with more Class II base rock. The volume of the Class II base rock used to fill the trench would be approximately the same amount as the excavated gravel and dirt, minus the volume of the four conduits. Once the Class II base rock has been placed in the trench, the fill would be compacted in 1-foot lifts with a mechanical tamper, and the top 1 foot would be compacted with 20,000 pounds of force. Siskiyou County requires 95 percent minimum compaction of all trenches in their roadways, and the project would meet this requirement. The cables would be pulled into the conduits once the trenches have been backfilled and compacted, and the roadway repaired.

The trenching, backfill, and repair of each segment of construction would occur on the same day, minimizing disruption to the roadway itself and reducing the possibility of erosion or fugitive dust leaving the construction area.

Culvert Crossings

Several culverts would be crossed as part of the project. Where a culvert has a minimum of 4 feet of ground cover, Siskiyou Telephone would trench directly over the culvert. Where a culvert has less than 4 feet of ground cover, Siskiyou Telephone would tunnel under the culvert and place the conduit below the culvert.

Where excavation would occur beneath a culvert, special precautions would be made to ensure that the culvert is not damaged during construction. A backhoe would be used to trench on either side of the culvert, and then laborers would excavate beneath the culvert by hand. Once the conduits are in place, gravel would be placed into the trench and the tunnel beneath the culvert in 6-inch lifts and compacted with hand-operated mechanical tampers. Any damage to a culvert during construction activities would be repaired as quickly as possible. If water is present in the culvert at the time of damage, then the route would be temporarily rerouted to the next available culvert while repair activities are taking pace, and then restored back to the original flow route once repairs are complete.

Aboveground Cable

A total of approximately 392 feet of aboveground cable would be installed as part of the project. The aboveground cable would be placed at three waterway crossings along Eddy Gulch Road,

including the bridge crossing of the North Fork of the Salmon River and two unnamed seasonal waterways. All aboveground cable would be black in color.

Cable would be attached to the west side of the bridge crossing the North Fork of the Salmon River, and no work would occur below the ordinary high water mark of the river. Cable for this bridge crossing would be placed in two 4-inch conduits.

For the two seasonal waterways that cross Eddy Gulch Road along the cable alignment, aboveground cable would be suspended on poles over these two waterways, and would continue underground once clear of the waterway crossings. There would be a total of 4 poles required for these two waterway crossings, with one pole located at either end of the crossing. The waterway crossings are approximately 4 to 5 feet wide, and can have up to 2 inches of water depth during times of precipitation. The poles would be placed outside of the waterways in holes that are approximately 18 inches wide and 5 feet deep. Excavated material would be used to fill and compact these holes after the poles have been erected. The 4 poles would be made of wood and approximately 25 feet tall, and the new conduits would be suspended between these poles approximately 19 to 20 feet above the waterways. Construction activities would be performed during the dry season when the two seasonal waterways are dry, and no work would take place within the ordinary high water mark of the waterways.

Traffic Management

As stated above, the width of Eddy Gulch Road varies, but is generally between 14 and 16 feet wide, while the private roadway tends to be narrower, with a minimum width of approximately 10 feet. Construction activities would occupy a 10-foot-wide pathway, which on Eddy Gulch Road would be primarily on the west side of the roadway. Eddy Gulch Road and the private roadway are used almost exclusively by the occupants of the 6 residences that would be served by the project. The applicant has confirmed that these residents are at work and away from home during the day, so traffic on these two roadways is expected to be very light during construction hours. Therefore, flaggers would not be used during construction activities. Traffic delays of up to 30 minutes may be experienced for regular traffic, though emergency vehicles would be allowed to pass immediately as soon as the construction vehicles can clear a path. The new conduits would be laid out alongside the construction route each morning so that additional construction vehicles would not impede traffic during construction.

Vegetation Clearance

All construction activities would be conducted within the rights-of-way of Eddy Gulch Road and the private roadway. The roadbeds of both roadways are free of vegetation due to frequent use of these roadways by vehicles. Culvert crossings, poles for aboveground cables, and installation of utility boxes would occur in the shoulder of the roadways. The roadway shoulders are mostly clear of vegetation, but some small amount of vegetation removal may be required for construction activities occurring in the shoulder of the roadways.

Erosion and Sediment Control and Pollution Prevention during Construction

Sediment could be released into waters as a result of construction activities without implementation of best management practices to address erosion and sediment control. Construction activities would occur during the dry season (April through October), which would minimize the potential for erosion and sediment transport during construction activities. Siskiyou Telephone intends to prepare a Stormwater Pollution Prevention Plan (SWPPP) that outlines best management practices to address erosion and sediment control, including placement of sediment controls at culverts, such a gravel bags with filter fabric, silt fences, or fiber coir rolls (logs). Since construction would occur during the dry season, a water truck would be kept onsite in order to periodically wet down the work area and reduce the amount of fugitive dust generated during construction. Materials excavated during trenching activities would be removed from the site and new material brought in to backfill the trench. The road surface of Eddy Gulch Road would be restored to good condition on a daily basis during construction activities.

Cleanup and Post-Construction Restoration

Eddy Gulch Road would be restored to Siskiyou County specifications on a daily basis during construction activities. Disturbed areas would be restored to grade. Specifications for roadway restoration would be contained in the encroachment permit that Siskiyou Telephone would obtain from Siskiyou County prior to construction. Non-excavated solid waste generated during construction is estimated to be minimal and would be transported offsite daily to the Siskiyou Telephone Company's storage yard. The solid waste at the storage yard would be transported to Etna, California on a weekly basis to be picked up for disposal by Scott Valley Disposal.

Construction Schedule

Project construction would occur during the dry season, which extends from April through October, with the optimum time for construction extending from April 1 through September 30. There is the potential for special status wildlife species to nest adjacent to the project site, and therefore the USFS requires that the construction activities avoid the nesting season, which generally runs from February 1 through July 10. Construction activities would therefore take place between July 11 and October 31. Installation of the telecommunication cable is estimated to require between 30 and 45 days to complete, with the construction crew working up to 10 hours per day, 5 days per week.

Construction schedules would be submitted to local emergency service providers for review and comment prior to the commencement of construction activities, and the construction schedule would be updated as necessary.

2.2.2 PHASE 2: SERVICE ACTIVATION

Cable installation and splicing to prepare the 6 residences for telecommunication service activation would be completed within 30 days of the end of construction and roadway restoration. A Service Order would be generated by Siskiyou Telephone to connect residences to the new telecommunication line. The Service Order would include all customer data, including mailing address, house address, and other personal information. An installer would travel to the location

to install the type of connection needed for the house to connect to the line. The drop that would be used would be installed at the time of project construction. Service activation would also include some type of electronic site to serve customers as they come on-line. The electronic site would be a small cabinet the size of two access pedestals. It would house a Digital Loop Carrier, which would generate the dial tone for the telephone service.

Siskiyou Telephone would work on its portion of the electronic sites in conjunction with the construction process. Other than the activities described above that would occur during project construction, there are no physical activities associated with service activation. Service activation would therefore have no impact on the environment and is not discussed further in this document.

2.2.3 PHASE 3: TELEPHONE LINE OPERATION AND MAINTENANCE

Telephone line operation would not require any physical activity other than maintenance activities, described below. Routine telephone line operation would therefore have no environmental impacts and is thus not discussed further in this document.

Siskiyou Telephone would conduct routine maintenance for the new lines as needed. Maintenance would occur if there is damage to a pedestal or a report from a customer of a service problem. Siskiyou Telephone would notify all subscribers of any expected time outage due to maintenance. Subscribers would be called after restoration of service to verify that service has been restored. Maintenance of the telephone line is only analyzed under a few environmental parameters in this document as the maintenance activities would only have limited environmental effects.

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Chapter 3: Evaluation of Environmental Impacts

3.1 Introduction

This Initial Study includes analyses of the 16 environmental issue areas listed below. These issue areas incorporate the topics presented in CEQA's Environmental Checklist (identified in Appendix G to the CEQA Guidelines).

3.2 Aesthetics
3.3 Agricultural Resources
3.4 Air Quality
3.5 Biological Resources
3.6 Cultural Resources
3.7 Geology and Soils
3.8 Hazards and Hazardous Materials
3.9 Hydrology and Water Quality
3.10 Land Use and Planning
3.11 Mineral Resources
3.12 Noise
3.13 Population and Housing
3.14 Public Services
3.15 Recreation
3.16 Transportation and Traffic
3.17 Utilities and Service Systems

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3.2 Aesthetics

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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) Substantially degrade the existing visual character or quality of the site and its surroundings	☐	☒	☐	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

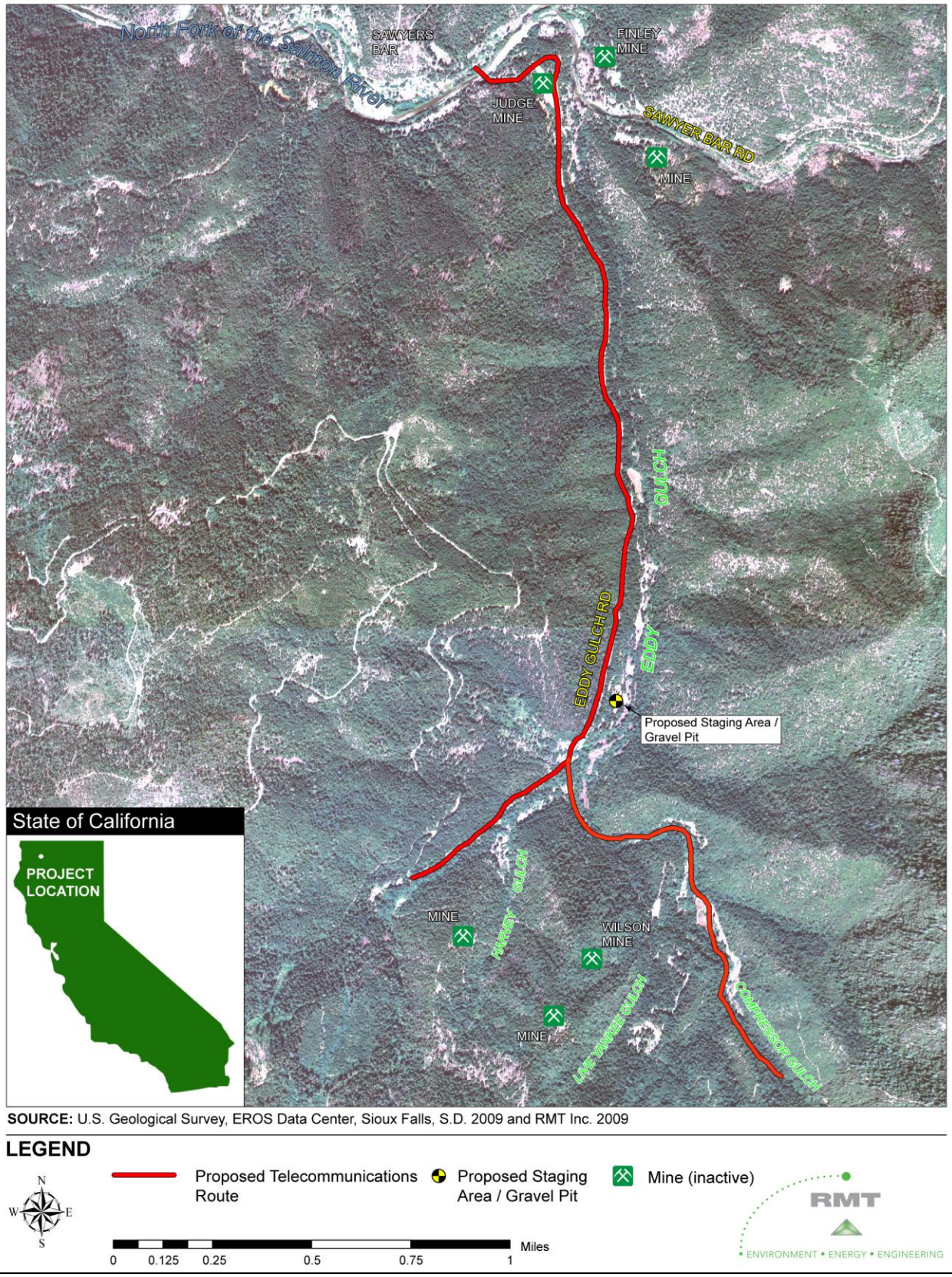
3.2.1 EXISTING CONDITIONS

The proposed project alignment occurs within the right-of-way of Eddy Gulch Road, starting at Sawyers Bar and ending approximately 3 miles south. The project also splits off onto an unnamed private road. Several conduits are to be buried underneath the road, and therefore a majority of the project elements would be underground and not visible. The proposed cables would be aboveground for three water crossings. The cables would be placed in two conduits along the west side of an unnamed tributary of the North Fork of the Salmon River bridge crossing. The other two water crossings are seasonal streams that flow across the road surface, and these two waterways would be crossed by cables strung between wood poles. In addition, at a maximum of every 1,500 feet, a BD5 pedestal (utility box) would be placed on the side of the roadway for cable access and future maintenance.

Eddy Gulch Road traverses a portion of the Klamath National Forest, an area that is utilized for timber harvesting and recreational activities such as bird watching, camping, and fishing. The existing visual character of the project area is dominated by forested slopes and mountains with scattered single-family residences. Eddy Gulch Road is bordered to the west along most of its length by a steep uphill slope and to the east by an unnamed tributary of the North Fork of the Salmon River. Eddy Gulch Road and associated private roads are dirt and gravel roadways, and their narrow shoulders are generally maintained, graded, and clear of vegetation. Figure 3.2-1 is an aerial photo showing the project alignment and surrounding forest.

Eddy Gulch Road is not a federally designated Scenic Byway or California state-designated Scenic Highway, and no federally designated Scenic Byways or state-designated Scenic Highways are located in the project area (Caltrans 2008, NSBP 2009). The Conservation Element of the Siskiyou County General Plan considers the entire county "scenic land," but does not identify Eddy Gulch Road as a Scenic Highway (Siskiyou County 1973, 1975).

Figure 3.2-1: Proposed Project Alignment with Aerial



3.2.2 IMPACTS

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

The construction activities would be apparent but would result in a temporary, less than significant impact. Soil disturbance may be apparent immediately following construction; however, this impact would be temporary as the road surface and disturbed areas would be rehabilitated following construction. Nearly all new infrastructure would be buried below ground in conduits; however, some elements of the project would be installed above ground. Permanent, aboveground elements would include:

- Two conduits on the west side of the bridge crossing of the North Fork of the Salmon River, parallel to an existing conduit
- Approximately 32 utility boxes and any necessary cuts in the roadside to accommodate them
- The two creek crossings that occur on the private section of the roadway

These aboveground features have the potential to change the scenic quality of the immediate area. Implementation of applicant proposed measure (APM) Aesthetics-1 would reduce these visual impacts to a less than significant level by using colors and materials that ensure that the aboveground telecommunication equipment blends as much as possible with the surrounding vegetation.

APM Aesthetics-1: The following measures shall be taken to minimize the visual impact of aboveground telecommunication infrastructure:

- The two conduits on the bridge crossing of the North Fork of the Salmon River shall be painted to match the color of the bridge
- The utility boxes shall be painted olive green to blend with the surrounding vegetation. Olive green is the standard color used by the U.S. Forest Service
- The two creek crossings shall be accomplished using wood utility poles and black cables. The dense forest would adequately shield the two seasonal stream crossings from view outside of the immediate vicinity of the crossings, and the wood poles and dark cables would blend with the surrounding vegetation

The installation of the proposed telecommunication system would be compatible with the aesthetic environment of the area, and with implementation of APM Aesthetics-1 would not create significant changes to any scenic vistas or scenic resources.

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

Eddy Gulch Road is not a State Scenic Highway, nor is it eligible to be designated as a State Scenic Highway. Trenching would be contained within the existing roadway and would avoid hard-rock areas. No tree removal would be required because trenching would take place along or in Eddy Gulch Road in areas that do not contain trees. No substantial damage to scenic resources would occur as a result of the proposed project.

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

During construction, trucks, equipment and personnel will temporarily degrade the predominantly natural quality of the existing route and its surroundings. Soil disturbance may be apparent immediately following construction; however, this impact would be temporary as the road surface and disturbed areas would be rehabilitated following construction. The access pedestals would be permanent, but with implementation of APM 5.1-1, would not substantially degrade the existing visual character or quality of the route and its surroundings. Impacts to the surrounding visual character would be less than significant.

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

The project would not include any new sources of light and glare. APM Aesthetics-1 would require that all aboveground telecommunication equipment be painted to blend with the surrounding vegetation. APM Noise-1 would limit construction hours to 7 a.m. to 7 p.m., eliminating the need for nighttime lighting. With the implementation of APM Aesthetics-1 and Noise-1 impacts related to light and glare as a result of the proposed project would be less than significant.

3.3 Agricultural Resources

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland, to non-agricultural use?	☐	☐	☐	☒

3.3.1 EXISTING CONDITIONS

The project is located on U.S. Forest Service (USFS) land in the Klamath National Forest. The area does not support the vegetation necessary for ranching or farming operations. The area is not currently and was not historically used for agriculture.

The project area has not been surveyed by the by the California Resource Agency and therefore does not include Prime or Unique Farmland (CDOC 2006a). No agricultural activities occur within the proposed project alignment or in the vicinity of the proposed project alignment.

Land along the Eddy Gulch Road right-of-way is not subject to a Williamson Act contract because adjacent land is USFS land. As of 2006, no private land in the vicinity has been contracted under the Williamson Act (CDOC 2006b).

3.3.2 IMPACTS

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?

There is no farmland in the right-of-way that would be affected by the proposed project.

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

The proposed project would not conflict with existing zoning for agricultural use, or agricultural activities or any area subject to the Williamson Act, as no farmland or agricultural activities occur in the project vicinity.

c) Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland, to non-agricultural use?

The proposed project does not include new construction that might convert farmland to non-agricultural uses. There would be no impacts that would individually or cumulative result in the loss of farmland to non-agricultural use.

3.4 Air Quality

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) 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 (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒
f) Increase the level of greenhouse gas emissions beyond that existing in the area before the project?	☐	☐	☒	☐

3.4.1 EXISTING CONDITIONS

Siskiyou County is located within the Northeast Plateau Air Basin. Air quality in Siskiyou County is regulated by various local, state, and federal government agencies. At the local level, the Siskiyou County Air Pollution Control District (SCAPCD) adopts and enforces regulations to control stationary source emissions.

Siskiyou County is currently designated as a non-attainment area with respect to the state 8-hour ozone standard, and is either in attainment or unclassified for the remaining state ambient air quality standards. The County is either in attainment, unclassified, or unclassified/attainment for all national ambient air quality standards. Based on current attainment status, only ozone emissions could be of concern. National standards and air quality designations for Siskiyou County are listed in Table 3.4-1. State standards and air quality designations for Siskiyou County are listed in Table 3.4-2.

3.4.2 IMPACTS

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

The proposed project does not include any permanent emission sources. Consequently, only construction and maintenance of the proposed project would result in emissions from the operation of construction equipment and support vehicles. Sources of emissions include dust (fugitive particulate matter, or PM_{10}) and combustion emissions from the use of diesel fuel. There

Table 3.4-1: National Ambient Air Quality Designations in Siskiyou County (2009)

Pollutant	Standard (Primary[1] Arithmetic Mean)	Classification (National)
Ozone	0.08 ppm (8-hour)	Unclassified/Attainment
Particulate Matter (PM_{10})	50 μg/m³ (annual); 150 μg/m³ (24-hour)	Unclassified
Particulate Matter ($PM_{2.5}$)	15 μg/m³ (annual); 65 μg/m³ (24-hour)	Unclassified/Attainment
Carbon Monoxide (CO)	9 ppm (8-hour); 35 ppm (1-hour)	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	0.053 ppm (annual)	Attainment
Sulfur Dioxide (SO_2)	0.030 ppm (annual): 0.14 ppm (24-hour)	Attainment
Lead	1.5 μg/m³ (Calendar Quarter)	Attainment

SOURCE: USEPA 2009

Table 3.4-2: CARB Air Quality Designations in Siskiyou County (2008)

Pollutant	Standard (Concentration)	Classification
Ozone	0.09 ppm (1-hour); 0.070 ppm (8-hour)	Nonattainment/Transitional
Particulate Matter (PM_{10})	20 μg/m³ (Annual Arithmetic Mean)	Attainment
Particulate Matter ($PM_{2.5}$)	12 μg/m³ (Annual Arithmetic Mean)	Unclassified
Carbon Monoxide (CO)	9.0 ppm (8-hour)	Unclassified
Nitrogen Dioxide (NO_2)	0.030 ppm (Annual Arithmetic Mean)	Attainment
Sulfur Dioxide (SO_2)	0.04 ppm (24-hour)	Attainment
Lead	1.5 μg/m³ (30-Day Average)	Attainment

SOURCE: CARB 2008a, CARB 2006

are no air quality plans for Siskiyou County; therefore, this project would not conflict with or obstruct implementation of any air quality plan. There would be no impact to air quality plans, and no mitigation would be necessary.

[1] Level of air quality necessary to protect public health with a sufficient margin of safety.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The proposed project has the potential to emit dust (including PM_{10}) from trenching for installation of the conduit, and from the use of construction and maintenance vehicles. Dust emissions can vary substantially depending on levels of activity, specific operations, and prevailing meteorological conditions. Disturbance would be caused by trenching, rock and concrete sawing operations, and transportation of construction materials. Minimal dust emissions are expected from the trenching operation as the final trench width is expected to be only 1.5 feet, and – through mobile conveyance to covered trucks – the trenching and construction process would capture most trenching materials before they are emitted as dust. Dust emissions would not violate state or federal standards or make a substantial contribution to existing or projected violations because the area is not well-developed, and dust emissions are expected to be small in scale. Impacts would be less than significant.

c) 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 (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

The project area has transitional/non-attainment status for the State 8-hour ozone ambient air quality standard. The combustion-related emissions, some of which are precursors to ozone, would be very low and have minimal impact on ambient air quality. The project construction and operation would not result in a cumulatively considerable net increase of ozone or ozone precursor emissions. The effect would be less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

Combustion emissions associated with construction and maintenance equipment include criteria pollutants. The SCAPCD does not have numerical emissions thresholds for evaluating projects under CEQA. The combustion-related emissions would be very low and have little, if any, impact on ambient air quality. Measures to avoid and/or minimize short-term construction impacts to air quality have been included as part of the project design either per regulation or per Siskiyou Telephone's standard construction and operation protocols. The residences that would be served by the project are set back from the roadway, further reducing the already less than significant impact on sensitive receptors from air pollutants.

e) Create objectionable odors affecting a substantial number of people?

Project construction, operation, and maintenance would not generate any objectionable odors.

f) Increase the level of greenhouse gas emissions beyond that existing in the area before the project?

As discussed in detail below, the proposed project would increase greenhouse gas emissions slightly beyond the level existing in the area. Based on the currently recognized significance threshold, this increase would result in a less-than-significant environmental impact.

Greenhouse Gas Regulations

The State of California adopted the Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) on September 27, 2006 to address the threat of global warming caused by the increase in greenhouse gas (GHG) emissions. Ambient global temperatures rise as atmospheric concentrations of greenhouse gases rise because less heat is able to escape the atmosphere. This rise in temperature is accompanied by climatic changes, some dramatic and some subtle, that affect how organisms live, adapt, and survive. Potential effects of an increase in global temperatures could include winter flooding, summer droughts, drier growing seasons resulting in agricultural losses, changes in fish stock and other wildlife, changes in sea level, more forest wildfires, and damage to coastlines due to severe weather events.

AB 32 requires sources within the state to reduce carbon emissions to 1990 levels by the year 2020. The 1990 carbon dioxide (CO_2) equivalent emissions are estimated to be 427 million metric tons. The California Air Resources Board (CARB) has estimated CO_2 equivalent emissions to be 596.4 million metric tons in 2020 if no actions are taken to reduce GHG emissions. Emission sources in the State would need to reduce emissions by approximately 28 percent (or 169 million tons) before 2020 to reach this goal. Based on the CARB inventory, primary sources of GHG emissions include on-road transportation, electric power generation, and industrial facilities (CARB 2008a). Projects similar to the Eddy Gulch project have not been identified as large or significant sources of GHG emissions.

The CARB recently developed mandatory reporting rules for significant sources of GHGs as a result of AB 32 (Subchapter 10, Article 1, sections 95100 to 95133, Title 17, California Code of Regulations). The CARB released a Proposed Scoping Plan in October 2008 that indicates how GHG emission reductions would be achieved from significant GHG sources, and adopted regulations to achieve maximum technologically feasible and cost-effective GHG emission reductions. The Proposed Scoping Plan has a new statewide goal of 33 percent renewable energy, rather than 20 percent as outlined in AB 32, in the State of California's energy portfolio by 2020. The CARB also outlined voluntary early actions and reductions. It is important to note that actions outlined in the Proposed Scoping Plan are recommendations, and not mandates. The recommendations to reduce GHG emissions that are relevant to the project include (CARB 2008b):

- **Low Carbon Fuel Standard:** The Low Carbon Fuel Standard would reduce the carbon intensity of transportation used in California by ten percent or more by 2020 (E.O. S-01-07). Recommended measure 4 would require the use of biofuel, which could be low-carbon, depending on its source.
- **Medium/Heavy-Duty Vehicle Standards:** These standards could include requiring heavy-duty trucks to be retrofitted to contain devices that reduce aerodynamic drag and rolling resistance, or other measures to reduce GHG emissions. Hybrid trucks would also reduce GHG emissions. Recommended measures 1 and 4 would reduce the emissions of the construction equipment and vehicles used for the proposed project.
- **Recycling and Waste:** Recycling would reduce GHG emissions by reducing the energy that would be used to acquire raw material for manufacturing of building materials.
- **Sustainable Forests:** The target for the Proposed Scoping Plan is to maintain the current sequestration capacity of forests through sustainable management practices, including

the avoidance or mitigation of land-use decisions that would reduce carbon storage capacity. The proposed project would not require the removal of trees because trenching would take place in the roadway or along the side of the roadway where there are no existing trees.

The Proposed Scoping Plan also has information regarding voluntary actions and reductions in GHG emissions. The CARB is required to draft regulations that would encourage early action in reducing GHG emissions. The regulations would also reward reductions occurring before AB 32 is fully implemented. There are also voluntary offset markets, and the CARB will adopt methodologies for quantifying voluntary reductions (CARB 2008b).

The CARB has proposed draft regulations to limit GHG emissions from electric power plants and other specific source categories. The proposed regulations do not include sources such as construction related to installation of telephone lines or other rural utilities. This type of source is also not subject to mandatory GHG emission reporting. Thus, this project is not currently subject to any requirements under the California Climate Change Regulatory Program. Nevertheless, the GHG emissions from this project were estimated and several mitigation measures were reviewed for feasibility.

Significance of Greenhouse Gas Emissions Impacts

The project would result in emissions of GHGs during construction and operation. Generally, an individual project is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008). Accordingly, the GHG emissions from a proposed project should be evaluated as to whether they would be considered a considerable contribution to the cumulative impact of global climate change. A considerable contribution to this cumulative impact would be a significant environmental impact.

Neither the State of California nor the SCAPCD, nor any other air agency, has established emission-based significance thresholds for GHG emissions recommended for use by other lead agencies. However, the State of California Natural Resources Agency (CNRA) has recently adopted – in its *Guidelines for Implementing CEQA* – guidance for determining the significance of impacts from greenhouse gas emissions (CNRA 2010). This guidance recommends that a lead agency review the following factors when determining whether project GHG emissions create a significant impact:

1. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence

> that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project (CNRA 2010).

Furthermore, the CNRA's guidelines state that, "When adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (CNRA 2010).

While many state and local agencies are working toward GHG emission thresholds, only the South Coast Air Quality Management District (SCAQMD) has adopted a quantitative threshold to date. In December 2008, the SCAQMD adopted an interim threshold of 10,000 metric tons of carbon dioxide equivalents per year (CO_2eq/yr). This threshold applies to "industrial" projects for which the SCAQMD is the lead agency. The SCAQMD is in the process of developing guidelines for projects for which other agencies are the lead agency.

To assess the significance of the proposed project's GHG emission impacts, the CPUC will apply the SCAQMD significance threshold of 10,000 metric tons CO_2eq per year, including all operational emissions and the construction emissions averaged over 30 years for this project. As authorized by 14 CCR 15064.7, the CPUC will apply a standard that has been adopted by CARB or a local air quality management district. The CPUC is using the SCAQMD threshold because CARB has yet to adopt a threshold, and the SCAQMD threshold was adopted after rigorous public vetting and, at the time of writing, it is the only air district to adopt a threshold.

The SCAQMD developed its interim significance threshold for GHGs from stationary sources through a robust stakeholder working group process, which included staff from the Office of Planning and Research (OPR), the CARB, and the Office of Attorney General. The working group provided input to staff at seven public meetings. The numerical threshold that the SCAQMD established captures 90 percent of stationary source GHG emissions. SCAQMD adopted the 90 percent emission capture rate as a reasonable cut-off point, based on staff estimates that the emissions from projects that will not exceed this threshold would account for slightly less than one percent of the future statewide GHG emissions target.

The following analysis describes the estimated emissions associated with the construction and operation of the proposed project and the significance of this impact.

Greenhouse Gas Emissions Estimate

The sources of GHG emissions for this project would include the combustion of diesel fuel used in construction equipment and the daily commute of construction workers. Emissions of GHGs are predicted to occur only during construction and maintenance of the project. The cables would be placed in conduits, which would virtually eliminate the need for maintenance once the construction is complete; therefore, no GHG emissions would occur for operation of the telephone and internet cables, unless a crew needed to travel to the site to perform maintenance on the telecommunications line.

Construction GHG emissions were estimated based on the projected number of backhoes, rock saws, dump trucks, one-ton trucks, pick-up trucks, pavers, and trench grinders that would be used onsite. The construction period was assumed to be 10 hours per day, 5 days per week, for a total duration of 9 weeks. Combustion-related emissions are overestimated as it is unlikely that every piece of equipment would be operated 10 hours each day.

Emissions due to employee commutes were based on the number of employees, commute distance to the construction area, and duration of the construction project. Using these conservative assumptions, the GHG emissions from this project are estimated to be 497 tons (CO_2 equivalent) or 451 metric tons. The emissions summary Table 3.4-3 below describes the emissions associated with construction and paving activities and incorporates the employee commutes. Table 3.4-3 shows that estimated GHG emissions from the propsed project are well below the selected significance threshold, even before amortizing construction GHG emissions over 30 years.

Table 3.4-4 compares the GHG emissions from this project to other sources of GHG emissions. The construction emissions are a fraction of the typical emissions for somewhat similar projects involving road or transmission line construction because of the limited scale and duration of the Eddy Gulch project. It is also important to note that the generation of emissions would be short term (9 weeks) in nature and there would be negligible additional emissions once the construction phase of this project is completed. Reduction or elimination of 451 metric tons of emissions associated with this project would have virtually no impact on the state's goal to reduce emissions by 169 million metric tons by the year 2020. The proposed project's cumulative impacts to global climate change due to the incremental contribution of GHGs would be undetectable and less than significant.

Table 3.4-3: GHG Emissions from Construction Activities

	CO_2 Emissions			**CH_4 Emissions**			**N_2O Emissions**		
	Off-Road	**On-Road**	**Total**	**Off-Road**	**On-Road**	**Total**	**Off-Road**	**On-Road**	**Total**
Operating Schedule	*(tons)*	*(tons)*	*(tons)*	*(tons)*	*(tons)*	*(tons)*	*(tons)*	*(tons)*	*(tons)*
Construction	365	7	**372**	0.04	0.00	**0.04**	0.4	0.00	**0.4**
CO_2-Equivalent (tons)			**372**			**0. 9**			**124**
TOTAL CO_2-Equivalent (tons)									**497**
TOTAL (metric tonnes)									**451**
Significance threshold (metric tonnes)									**10,000**

Table 3.4-4: Comparison of GHG Emissions for Various Types of Projects

Project Description	CO_2-Equivalent	
	Construction Emissions (tons)	*Operating Emissions (tons per year)*
Typical household emissions[1]	NA	27.7
Eddy Gulch Construction (Proposed project)	**497**	**0**
1 lane-mile of road construction[2]	2,600	NA
30 MW geothermal power plant	NA	24,700
Univ. NH, Durham Campus, 2003	NA	71,100
Sunrise Powerlink Project[3]	147,000	NA
300 MW coal-fired power plant	NA	2,950,000

CO_2-equivalent estimate assumes same ratio of CH_4 and N_2O to CO_2 as the current project.

[1] Based on family of 4, two cars, natural gas heat, 550 mi/week total driving, 24 mpg.

[2] Estimated 1,400 - 2,300 tons of CO_2 per lane-mile for construction only. Does not include increased traffic or road maintenance.

[3] Assumes same ratio of CH_4 and N_2O to CO_2 as the current project to estimate total CO_2-equivalent.

SOURCES: EPA 2008, Williams-Derry 2007, Bloomfield et al. 2003, PSC of Wisconsin 2008, UNH 2004, CPUC and BLM 2008, CAB 2008c

Applicant Proposed Measures for Greenhouse Gas Mitigation

The applicant has proposed several measures to reduce GHG emissions, all of which have been incorporated into the project. These measures include:

APM GHG-1: Most construction employees would likely be staying in the nearest town, Etna, which is approximately 40 miles from the construction route. Siskiyou Telephone Company shall provide company-owned vehicles to allow employees to carpool to the construction route, which would reduce the number of commute miles.

APM GHG-2: Several construction employees shall reside in camping trailers closer to the construction route in order to reduce the commute miles.

APM GHG-3: Supplies shall be delivered on larger trucks to avoid more frequent deliveries using smaller trucks.

The emission estimates above have incorporated these mitigation measures.

Recommended Measures

The GHG emissions from the proposed project would be less than significant; however, additional feasible measures are available to further reduce GHG emissions include:

Recommended Measure GHG-1: Idling time of construction equipment should be limited as much as possible.

Recommended Measure GHG-2: The applicant should participate as much as feasible in the CARB Statewide Portable Equipment Registration Program or meet the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, Sec. 2423(b)(1).

Recommended Measure GHG-3: The applicant should limit the hours of operation to daylight hours, so that diesel generators are not required for operation of lights.

Recommended Measure GHG-4: The applicant should replace diesel fuel with a biodiesel blend of B20 or less, if this fuel type is readily available.

Biofuels and biofuel blends are being used in construction equipment across the country. Compatibility of construction equipment with the use of biodiesel is dependent primarily on the blend of biodiesel. Some engines have been designed or modified to utilize 100 percent biodiesel (B100). However, B100 is not necessarily compatible with standard engines found in construction equipment. For these engines, typical blends are from 2 percent to 20 percent (B2 to B20), depending on the engine manufacturer's recommendation. Several engine manufacturers have published warranty statements or recommendations for the use of biofuels with their engines. In general, post-2007 engines built for low emissions are compatible with biodiesel up to B5 or B20. Almost all recommendations suggest consulting the manufacturer directly if planning to use anything higher than B20.

The highest blend that could be feasible for this project would be B20, as the equipment to be used for the Eddy Gulch project is not designed or modified to use B100. The owner of the equipment would need to check on the recommendation for the specific engines and how the use of biodiesel might affect any warranty. In terms of availability of biodiesel in the immediate area of the project, the closest biodiesel retailers would be in Ukiah (BioDiesel.org 2008). The use of biodiesel on this project is dependent on the availability of appropriate blends in the area (no greater than B20), and equipment that is compatible with the use of biodiesel.

Other potential mitigation measures include the use of electric or other zero emission vehicles for both employee commutes and construction; however, these types of vehicles are not yet commercially available, nor is it possible to install the telephone line without the use of construction equipment.

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3.5 Biological Resources

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities 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 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 Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐

3.5.1 EXISTING CONDITIONS

Overview

A habitat assessment survey was conducted for the proposed project in August (CH2M HILL 2008). The survey was conducted along Eddy Gulch Road, beginning at the southern end of the cable alignment and ending at the intersection of Eddy Gulch Road and Sawyers Bar Road. Portions of the proposed project located on private property were not surveyed because permission to access private property had not been granted by landowners.

A reconnaissance-level biological survey was conducted for the Eddy Gulch Road portion of the proposed project in November (RMT 2009) (Attachment 2). The survey did not include the private roadway portions of the project, as permission to access the private portions of the proposed

alignment had not been granted. The survey report describes the biological resources and impacts associated with the project and presents recommendations to minimize effects.

3.5.2 HABITAT AND VEGETATION

Habitat

General Habitat

The habitat in the project region is characterized by a steep, mixed conifer overstory with a mixed hardwood and shrub understory component. The dominant conifer species in the vicinity of the project area are Douglas fir (*Pseudotsuga menziesii*) and White fir (*Abies concolor*). Hardwood species include Pacific madrone (*Arbutus menziesii*), tanoak (*Lithocarpus densiflorus*), and big leaf maple (*Acer macrophyllum*). Shrub species include western thimbleberry (*Rubus parviflorus*) and huckleberry oak (*Quercus vaccinifolia*).

The project area is located entirely within the rights-of-way of existing dirt and gravel roads. The project area is entirely disturbed in nature and devoid of natural habitat (CH2M HILL 2008a).

Riparian Habitat

Riparian corridors are present along the banks of the North Fork of the Salmon Fiver, and in the unnamed tributary that drains Eddy Gulch. These areas provide nesting, foraging, roosting, and cover habitat for a variety of wildlife species. Riparian habitat would not be affected by the project as all construction work would be confined to roadway rights-of-way.

Wetlands

Stormwater in the project area flows from west to east in the roadside drainage ditch, either across the road or under the road via culverts, and infiltrates, evaporates, or discharges downgradient in Eddy Gulch. The proposed project would cross the North Fork of the Salmon River by attaching project components to the side of the existing bridge. The proposed project would cross two seasonal waterways by suspending project components over the crossing (CH2M HILL 2008a).

Special Status Plant Species

The project region has the potential to support special-status plants, as listed in Table 3.5-1, below. No examples of these special status species were witnessed during the reconnaissance-level biological survey of the Eddy Gulch Road right-of-way.

Wildlife

General Wildlife

The coniferous forest surrounding the project region supports a diverse assemblage of wildlife, which may cross or move along the road from time to time. Such wildlife includes:

- Black bear (*Ursus americanus*)
- Black-tailed deer (*Odocoileus hemionus*)
- Gray fox (*Urocyon cinereoargenteus*)
- Ringtail (*Bassarscus astuts*)

Table 3.5-1: Special Status Plant Species with the Potential to Occur in the Project Region

Common Name	Habitat	CNPS Listing Status
Marble Mountain companion *(Silene marmorensis)*	Broadleafed upland forests, chaparral, cismontane woodlands, and lower montane coniferous forests at elevations between 170 and 1250 meters. Blooms June-August.	**List 1B:** Rare, threatened, or endangered in CA and elsewhere
White-flowered rein orchid *(Piperia candida)*	Broadleafed upland forests, lower montane coniferous forests, and North Coast coniferous forests, sometimes on serpentinite, at elevations between 30 and 1310 meters. Blooms May-September.	**List 1B:** Rare, threatened, or endangered in CA and elsewhere
English Peak greenbriar *(Smilax jamesii)*	Marshes and swamps, broadleafed upland forests, lower and upper montane coniferous forests, and North Coast coniferous forests at elevations between 580 and 2500 meters. Blooms May-July.	**List 1B:** Rare, threatened, or endangered in CA and elsewhere

SOURCE: CH2M HILL 2008a; RMT 2009

- Long-eared myotis bat (*Myotis evotis*)
- Northern Pacific rattlesnake (*Crotalus oreganus oreganus*)
- Western fence lizard (*Sceloporus occidentalis*)
- Coastal giant salamander (*Dicamptodon tenebrosus*)
- Siskiyou Mountain salamander (*Plethodon stormi*)
- Hermit thrush (*Catharus guttatus*)
- Spotted towhee (*Pipilo maculatus*)
- Osprey (*Pandion haliaetus*)

The Northern Fork Salmon River and Eddy Gulch waters are also known to support summer run steelhead trout (CH2M HILL 2008a).

Special Status Wildlife Species

Results of a database search and communication with the USFS have identified 17 special status wildlife species that have the potential to occur in the project region. These species are presented in Table 3.5-2, below.

Table 3.5-2: Special Status Wildlife Species with the Potential to Occur in the Project Region

Common Name	Scientific Name	Listing Status	Habitat
Birds			
Northern spotted owl	*Strix occidentalis caurina*	Federal Status: FT State Status: CE	Two pairs of owls are historically known to nest in the Eddy Gulch drainage area.
Northern goshawk	*Accipiter gentilis*	Federal Status: None State Status: CSC	Eddy Gulch is designated by the Klamath National as northern goshawk management area
American peregreine falcon	*Falco perefrinus anatum*	Federal Status: None State Status: CSC	The species has been observed in the project region.
Mammals			
Humboldt marten	*Martes Americana*	Federal Status: None State Status: CSC	The species has been observed in the project region.
Pacific fisher	*Martes pennant pacifica*	Federal Status: FCS State Status: None	The species has been observed in the project region.
California Wolverine	*Gulo gulo*	Federal Status: None State Status: CT	The species has been observed in the project region.
Townsend's big-eared bat	*Plecotus townsendii townsendii*	Federal Status: USFS State Status: CSC	The species may occur in suitable roosting habitat present in the project region.
Pallid bat	*Antrozous pallidus*	Federal Status: USFS State Status: CSC	The species may occur in suitable roosting habitat present in the project region.
Amphibians			
Coastal tail frog	*Ascaphus truei*	Federal Status: None State Status: CSC	The species has been observed in nearby creeks.
Del Norte salamander	*Plethodon elongatus*	Federal Status: None State Status: CSC	The species may occur on talus slopes and under mossy rocks in the project region.
Northern red-legged frog	*Rana aurora*	Federal Status: None State Status: CSC	The species may occur in moist, forest slopes and drainages adjacent to Eddy Gulch.
Foothill yellow-legged frog	*Rana boylii*	Federal Status: None State Status: CSC	The species may occur in moist, forest slopes and drainages adjacent to Eddy Gulch.
Cascade frog	*Rana cascadae*	Federal Status: None State Status: CSC	The species may occur in moist, forest slopes and drainages adjacent to Eddy Gulch.
Northwestern pond turtle	*Actinemys [Clemmys] marmorata marmorata*	Federal Status: None State Status: CSC	The species may occur in Eddy Gulch.

Table 3.5-2 *(Continued)*: Special Status Wildlife Species with the Potential to Occur in the Project Region

Common Name	Scientific Name	Listing Status	Habitat
Insects			
Mardon skipper butterfly	*Polites mardon*	Federal Status: FCS State Status: None	The species may occur in fescue-dominated grasslands near the project region.
Franklin's bumblebee	*Bombus Franklini*	Federal Status: None State Status: CSC	The species may occur in hives in abandoned rodent burrows, or foraging on flowering forbs and shrubs with the project region.
Fish			
Summer run steelhead trout	*Oncorhynchus mykiss irideus*	Federal Status: None State Status: CSC	The species are known to occur in the waters of Eddy Gulch.

Notes: FT: Federal Threaten
FCS: Federal Candidate Species
USFS: US Forest Service Sensitive
CE: California Endangered
CT: California Threaten
CSC: California Species of Special Concern

SOURCE: CH2M HILL 2008a; RMT 2009

3.5.3 IMPACTS

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Special-status species have a low potential for occurring in the project area. Any species found in the project area would only be passing through the area as the project occurs within existing road rights-of-way and doesn't support suitable habitat. Project impacts to wildlife would be limited to the potential for indirect impact from construction noise and activities, or any inadvertent injury or death to individual animals in the roadway. Noise disturbances could cause behavioral modification during the breeding window of special status bird species. Implementation of APM Biology-1, requiring construction activities to occur during the non-nesting season, would reduce the potential for impacts to a less than significant level.

APM Biology-1: Construction activities shall be conducted during July 11 to January 31 to avoid the nesting season, thereby minimizing potential effect to the spotted owl and other potentially nesting birds.

All grading and clearing activities would be restricted to roadway rights-of-way, and no trees would be removed as part of this project.

Operation of the proposed project would not include any type of activity in the project area other than routine maintenance; therefore, the operation phase would have no direct or indirect impact to sensitive species or habitat.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

The project would not have substantial impact on riparian habitat or other sensitive natural communities. Project components would be attached to the bridge crossing the North Fork of the Salmon River, and work would be performed from the bridge deck. Construction work at all three water crossings would take place outside of the ordinary high water line of each waterway; therefore, adverse impacts to riparian habitat would be less than significant.

Erosion and sedimentation could significantly affect riparian habitat or other sensitive natural communities; however, implementation of APM Hazards-2 would reduce the impact to a less than significant level. Section 3.8 Hazards and Hazardous Materials contains a further discussion on erosion and sediment control measures. The impacts to riparian habitat or other sensitive natural community from construction would be less than significant with implementation of mitigation.

Operation of the proposed project would not include any type of activity in the project area other than routine maintenance; therefore, the operation phase would have no impact to riparian habitat or natural community.

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

The construction or operation of the proposed project would not affect wetlands. The proposed conduits would be installed beneath the roadway and above three water crossings. All construction activity in the vicinity of all three water crossings would remain above the ordinary high water line of each waterway, and would avoid impacts to these potential wetland areas. There would be no impacts to wetlands as a result.

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 wildlife nursery sites?

Construction of the proposed project includes digging trenches for the proposed conduits, which would have the potential to trap animal species migrating through the project area during non-construction hours. The applicant intends to complete each segment of construction in one day, from digging the trench to filling the trench and resurfacing the street. This construction schedule would reduce the potential for impacts to migration and movement of wildlife to a less than

significant level. If the applicant is unable to complete trench filling activities at the end of the work day, then implementation of APM Biology-2 would reduce potential impacts to migratory wildlife to a less than significant level.

> **APM Biology-2:** All trenches shall be closed and covered by the end of each working day so that no open trenches shall be left that could trap wildlife.

Operation of proposed project would have no impact to migration or movement as wildlife would easily be able to move between the aboveground poles, and the remainder of the project would be underground.

Construction and operation of the proposed project would not occur in waterways. Therefore, there is no potential for project activities to impact the movement of fish.

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

The USFS is concerned about the introduction and spread of non-native, invasive, noxious weeds to the existing habitat. Vehicles and equipment brought in from outside the general area could carry seeds of non-native, invasive, noxious weeds that could then spread in the area of the project site. APM Biology-3 would require that the vehicles and equipment used to construct the proposed project be taken from the fleet currently in use on other projects within the Klamath National Forest. Implementation of this measure would reduce the potential of spreading noxious weeds from regions outside the Klamath National Forest to a less than significant level.

> **APM Biology-3:** The applicant shall use vehicles and equipment that are currently in use on other projects within the Klamath National Forest and near the project area. This equipment shall not be used outside of the general area prior to construction within the Eddy Gulch region.

Operation of the proposed project would not include any type of activity in the project area other than routine maintenance; therefore, the operation phase would not create a conflict with any local policies or ordinances.

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

Eddy Gulch is designated by the Klamath National Forest as a northern goshawk management area. The proposed project would not result in any direct or indirect impacts to wildlife habitat in the project area, since construction is to occur within a previously disturbed area. Impacts would be limited to the potential disruption of nesting birds. Implementation of APM Biology-1 would reduce the potential for indirect impacts to nesting birds to a less than significant level.

Operation of the proposed project would not include any type of activity in the project area other than routine maintenance; therefore, the operation phase would not create a conflict with any conservation plans.

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3.6 Cultural Resources

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

3.6.1 ENVIRONMENTAL SETTING

Regional Setting

Prehistoric Background

Archaeological work in Northwest California is not as well developed as in other parts of California. Chronologies have been developed that rely to some extent on coastal and central North Coast Ranges work (e.g. Eidsness [1986], Hildebrandt [2007], Hildebrandt and Hayes [1993]).

Frederickson (1984) proposed that the project area could have been occupied as early as 10,000 years ago. Artifacts discovered in the region include projectile points of the Borax Lake Wide-stemmed series and millingstones. Later projectile point types include the Mendocino Series, Houx Stemmed, and Gunther Barbed. Multiple sites yielded artifacts suggestive of long term occupation from the Pleistocene-Holocene transition through the Early, Middle, and the Late Holocene, although the earlier period is not well represented in the Klamath Mountains.

Hildebrandt (2007) recently acknowledged that the chronological framework for Northwest California can be discussed in terms of northern and southern sequences. The northern sequence included Del Norte, Siskiyou, Humboldt, and Trinity Counties (Hildebrandt 2007). Hildebrandt's research presents updated periods and temporal spans within the context of geological and paleoecological time periods. The broad time periods include the following:

- Pleistocene-Holocene Transition (11,500 to 8000 cal B.C)
- Early Holocene (8000 to 5000 cal B.C.)
- Middle Holocene (5000 to 2000 cal B.C.)
- Late Holocene (Post-2000 cal B.C.)

Northwest California's cultural chronology is organized by particular artifact assemblages in which basic traits have been identified and are shared by separate cultures over time and space.

These assemblages are called Patterns. For the Northern California counties, the earliest period (Post Pattern, 11,500 to 8000 cal B.C.) is poorly understood. Identifiable patterns include the Borax Lake Pattern (8000 to 2500 cal B.C.), Mendocino Pattern (3000 cal B.C. to cal A.D. 500), and Gunther Pattern (post cal A.D. 500).

Historic Background

Although early fur trappers, including Peter Skene Ogden, may have traveled through Siskiyou County in the late 1820s, the history of the county is tied to the California Gold Rush (Hoover et al. 1990).

The California Gold Rush of 1848 began with James Marshall's 1848 discovery at the American River, but soon new discoveries were made across California's mountains as prospectors spread out in search of gold. Upon hearing of Marshall's discovery, Pierson Reading recognized that the mountains near his rancho in Shasta County might also contain the precious metal. Upon investigation, Reading found the first gold in Shasta County in the summer of 1848 at the mouth of Clear Creek, south of present day Redding (Hoover et al. 1990:485), and along the Trinity River. In Siskiyou County, gold was first discovered near Yreka on the Shasta River in 1850, which led to the establishment of that town. Siskiyou County was created in 1852 from the northern portion of Shasta County and portions of Klamath County. Yreka became the county seat (Hoover et al. 1990).

Gold prospectors from the Trinity River region came northward into the Salmon River area as early as 1850. By 1851, a hotel was built at Forks of Salmon, the confluence of the north and south forks of the Salmon River. It soon became a supply center for local miners and provided a saw mill, a two-story hotel, bars, and a store (Fiorini-Jenner and Hall 2002).

To the northeast of Forks of Salmon was Scott Valley, named for John Scott who discovered gold at Scott Bar in 1850. Many gold camps were quickly established in the region, including French Bar, Johnson's Bar, Poorman's Bar, Lytle's Bar, Slapjack Bar, Michigan's Bar, and Junction Bar (Hoover 1990:459).

Sawyers Bar, along the North Fork of the Salmon River, was established around 1850 when gold was discovered by a group of miners from the Etna Mountain area (Marble Mountain Properties 2009). It became a small community near the center of the Salmon River Gold District, which supported mining in Eddy Gulch. In 1880, Sawyers Bar had a population of 88, mostly of males sixteen and older.

Rollin, a townsite in Eddy Gulch, was established in the mid-1800s and was occupied well into the 1900s. In 1991, Rollin was the location of the Liberty Mining Company operations. Ten archaeological features, including a stamp mill and arrastra[1], were recorded at the townsite by Gray in 1991 (Gray 1994).

Etna, originally called Rough and Ready Mills, was established in 1856 and economically tied to the flour milling industry of two competing flour mills in the region. In 1863, the town was

[1] A crude drag-stone mill for pulverizing ores.

renamed Etna Mills after a nearby flour mill, because the new post office needed a name distinctive from Rough and Ready, Nevada (Hoover, et al. 1990:459-460).

The Salmon River proved to be part of a rich gold bearing region and numerous placer and hydraulic mining claims sprang up along the river and its tributaries. In 1906, the region was still producing hydraulic and placer gold. The Department of the Interior (1906:183) reported that "gravel mines yielding over $5,000 per annum each are the Salmon River, at Cecilville; the Siskiyou, at Elliotts Creek; the Bennett Company, the Knudson, the Crapo, and the Nordheimer at Forks of Salmon" among others. By 1914, most of the mines along the North Fork of the Salmon River had become idle due to lack of sufficient water to carry on hydraulic and placer mining (California State Mining Bureau 1914). In 1919, there were 63 mines operating in Siskiyou County (Loughlin 1922).

Widespread economic hardship during the Great Depression brought about a "second Gold Rush" in California and the West (Miller 1998). Gold mining became more lucrative and turned around what had been a slump in mining from 1916 to 1929 (Costello et al. 2007:18). The Depression saw a dramatic increase in small-scale placer mining operations that started a 15-year spike in production from the increased output of dredging equipment, large lode mines, and hydraulic mining. In 1940, California saw the greatest amount of gold mining activity that had occurred in the state since the 1856 (Clark 1970).

Eddy Gulch is located within the Salmon River Gold District. In the 1890s, it contained numerous mining claims of various types including placer, quartz, hydraulic, and drift claims. These claims were mostly owned by local Sawyers Bar miners. By 1915, the quartz and placer claims were idle, although there were still several hydraulic claims operating in the area (Brown 1915:81-116). Placer, hydraulic, and quartz mining claims in the vicinity of the Eddy Gulch project area include Ampback or Humpback (Fagundez) Mine, the Anderson Mine, Bostetter Mine, Casey Mine, Frank Mine, Gold Hill Mine, Live Yankee Mine, Klamath Mine, Union Mine, Liberty Mine, Gold Ball Mine, Kaper Mine, and the Anna Johnson Mine.

Ethnographic Native American Background

The upper reaches of the north, east, and south forks of the Salmon River are thought to have been occupied by the Konomihu group of "Shastan". The Shastan peoples comprise four Hokan speaking Northern California groups that occupied portions of interior Northwest California and southern Oregon (Silver 1978). Shasta settlements occupied large parts of Oregon's Jackson and Klamath Counties in addition to most of Siskiyou County. The Shasta were nutritionally well supplied by plentiful resources including mammals of all sizes (especially deer), fish, fowl, grasses, seeds, and roots in their riverine habitat.

The Shasta lived in rectangular or conical houses during the winter, which often contained one or more families. Temporary round or oval brush or bark houses were used during the summer. Large villages generally contained a dance and/or sweathouse.

The political unit of the Shasta was the tribe or tribelet within a single village or several settlements. Most Shasta villages and Shasta divisions had a headman who mediated inter- and intragroup disputes, although no headmen were recorded for the Konomihu (Silver 1978). If it was

an unusual situation, disputes were settled by the Oregon Shasta chief whose authority was hereditary. Disputes sometimes were settled with payment.

Mining along the Salmon River in the early 1850s contributed to the demise of the Konomihu population as traditional lifeways were interrupted and the miner population introduced European diseases. Kroeber and Heizer (1970) estimated in 1955 there were approximately five living persons who could trace their ancestry to the Konomihu.

Local Setting

Archeological and Historic Resources

A cultural resources study has been completed for the Eddy Gulch Road segment of the project (Harmon and Farber 2008). The study was undertaken to document cultural resources within the right-of-way for the proposed approximately 3-mile-long conduit alignment along Eddy Gulch Road. The study included:

- An archival review of relevant literature
- A record search at the Northeast Information Center of the California Historical Resources Information System at Chico
- A consultation with Native American stakeholders
- A pedestrian survey of the Eddy Gulch Road segment of the project

The majority of the project area had not been the subject of a previous cultural resources study, although several large studies had been completed within 0.5 miles of the project area. The area around Sawyers Bar has been recorded as CA-SIS-557 (Gray 1994). The southern edge of the Eddy Gulch alignment has been surveyed (Vann 2008) with negative results for cultural resources. In addition to the cultural resources found by Gray in the region of Sawyers Bar, a log bear trap and a ditch were noted by Harmon and Farber (2008) outside of the Eddy Gulch portion of the project.

A pedestrian survey of the Eddy Gulch alignment was undertaken on October 27, 2009 and encompassed the direct impact area, which is defined as a 10-foot-wide corridor along the western edge of Eddy Gulch Road. No cultural resources were noted during the survey within or immediately adjacent to the Eddy Road Gulch project area, although several features associated with mining were noted outside of the roadway corridor.

A resurvey of the private road segment was not undertaken by CH2M Hill or Pacific Legacy due to the lack of permission from the property owners to enter the private property. A record search conducted for the private property portion of the conduit alignment revealed that approximately 50 percent of the alignment has been subject to a cultural resources survey at some point in the past. The area surveyed includes the roadway crossing at Live Yankee Gulch, southerly crossing the East Fork of Eddy Gulch, and portions of Compressor Gulch. Several sites lie outside and adjacent to the roadway corridor, generally associated with the town of Rollin and various mine holdings in the area. Sixteen historic sites lie within 0.5 miles of the project area. Five historic archaeological sites are reported adjacent to the private roadway conduit alignment. These five archaeological sites include:

- P-47-000559, the Rollins townsite
- P-47-004371, the remains of a small cabin with associated outbuildings, mill stamp, and evidence of mining
- P-47-004378, the Mt. Laurel Mine with associated trash dumps and evidence of mining
- P-47-004380, the remnants of a 1920s truck cab
- P-47-004382, a glass bottle feature

The five sites were recorded by Cascade Research (Gray 1994) for the Liberty Consolidated Mines in 1991. The northern portion of the roadway conduit alignment from Live Yankee Gulch to the Eddy Gulch road has not been subject to archaeological survey.

Native American Concerns

The Native American Heritage Commission (NAHC) was contacted in August 2008 by CH2M Hill in order to perform a sacred lands inventory review for the project. No sacred lands on file with the NAHC were documented within or adjacent to the project area. The NAHC provided a list of potential Native American stakeholders who were contacted via letter by CH2M Hill on August 25, 2008. Contacts included:

- Athena Calico of the Shasta Nation in Dorris
- Rebeka Sluss, Ron Lincoln, and Evette Lewis of the Quartz Valley Indian Community
- Mary Carpelan of the Shasta Nation in Yreka
- David Taylor of the Klamath Tribe

Stakeholders were given 15 calendar days to respond. No responses were received.

The Native American Heritage Commission (NAHC) was contacted by Pacific Legacy on January 3, 2010 and asked to perform a sacred lands inventory review for the project. A reply was received on January 13, 2010 indicating that no sacred lands were identified within the project area. The NAHC provided a list of potential Native American stakeholders who were contacted via letter on January 22, 2010 by Pacific Legacy. This list included:

- Ron Lincoln, Evette Lewis, and Rebecca Sluss of the Quartz Valley Indian Community
- Athena Calico of the Shasta Nation in Dorris
- David Taylor of the Klamath Tribe
- Mary Carpelan and Roy Hall of the Shasta Nation in Yreka

No replies have been received from any of these contacts.

3.6.2 REGULATORY SETTING

Federal

National Historic Preservation Act

Federal legislation requires that federal agencies consider environmental effects to historical and cultural resources prior to authorizing any activity. The National Historic Preservation Act of 1966

(NHPA) specifies that environmental evaluations of proposed projects consider historic and cultural resource effects. This review process is referred to as "Section 106 review." The Advisory Council on Historic Preservation (ACHP) is responsible for administering the Section 106 review process. The NRHP provides a method for preserving and maintaining cultural resources that meet certain eligibility criteria. The President's Executive Order No. 11593 (1971) requires that all Federal agencies initiate procedures to preserve and maintain cultural resources by nomination and inclusion on the NRHP.

The National Historic Preservation Act of 1966, Section 106 (16 USC 470, as amended). Section 106 of the NHPA directs federal agencies to consider the effects of their actions including approval, permitting, and technical assistance on properties that are eligible for, or included on, the National Register of Historic Places (NHRP). Historical sites, objects, districts, historic structures, and cultural landscapes that are eligible for listing on the NRHP are known as historic properties. Section 106 also requires the federal agency to afford the Advisory Council on Historic Preservation and the State Historic Preservation Officer (SHPO) an opportunity to comment on the agency's efforts to consider historic properties and the assessment of effects by the undertaking. The implementing regulations for Section 106, found at 36 CFR 800, describe a process of inventory, evaluation, and consultation that satisfies the federal agency's requirements.

A cultural resource must retain the quality of integrity to be considered as a historic property and/or a historical resource. The concept of integrity is usually interpreted to mean "intactness" of physical characteristics, but in terms of the NRHP and the California Register of Historical Resources (CRHR), integrity is a measure of the degree to which a property retains or is able to convey the essential characteristics defined under one of the four eligibility criteria. These characteristics may be expressed through integrity of location, design, setting, materials, workmanship, feeling, and association of a property. An archaeological property may retain sufficient integrity to qualify it for the NRHP or CRHR if the property retains the ability to yield information important to an understanding of history or prehistory. It must be demonstrated to have the potential, or to have previously yielded, data that can be used to address important research questions.

The standard for integrity for NRHP eligible properties is more stringent than that for CRHR eligible resources. It should be noted that a property found to not retain sufficient integrity to be NRHP eligible may be found to possess sufficient integrity to be CRHR eligible.

Federal significance criteria would apply to this project because the proposed project constitutes a Federal undertaking that requires compliance with Section 106 of the NHPA. Cultural resource significance is evaluated in terms of eligibility for listing on the NRHP. NRHP criteria for eligibility are defined as follows:

> The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association, and that:
>
> a. Are associated with events that have made a contribution to the broad pattern of our history

b. Are associated with the lives of people significant in our past

c. Embody the distinct characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction

d. Have yielded, or are likely to yield, information important in prehistory or history (36 CFR Part 60.4)

The Archaeological Resources Protection Act of 1979 (ARPA; 16 USC 470aa-470ll). ARPA prohibits unauthorized excavation of archaeological sites on federal land, as well as other acts involving cultural resources, and implements a permitting process for excavation of archaeological sites on federal or Indian lands (see regulations at 43 CFR 7). ARPA also provides civil and criminal penalties for removal of, or damage to, archaeological and cultural resources.

The Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001 et seq.; see regulations at 43 CFR 10). The Native American Graves Protection and Repatriation Act (NAGPRA) provides for the protection and repatriation of Native American human remains and cultural items and requires notification of the relevant Native American tribe upon accidental discovery of cultural items.

The American Indian Religious Freedom Act of 1979 (AIRFA; 42 USC 1996). AIRFA preserves for Native Americans and other indigenous groups the right to express traditional religious practices, including access to sites under federal jurisdiction. Regulatory guidance for AIRFA is lacking, although most land managing federal agencies have developed internal procedures to comply with AIRFA.

Executive Order No. 13007: Indian Sacred Sites. Executive Order 13007 directs federal agencies with statutory or administrative responsibility for the management of Federal lands, to the extent practicable, permitted by law to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites.

State

State legislation requires the protection of historical and cultural resources. The Governor's Executive Order No. B-64-80 (1980) requires that state agencies inventory all "significant historic and cultural sites, structures, and objects under their jurisdiction that are over 50 years of age and that may qualify for listing on the National Register of Historic Places."

CEQA Guidelines §15064.5 are used to determine the significance of impacts to archeological and historical resources. The guidelines state that a substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired (CEQA Deskbook 1999).

An historical resource still may be considered significant in the absence of a Federal, State, or local listing if substantial evidence demonstrates its significance (discretionary significance). This

historical resource may include any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Generally, a resource shall be historically significant if it:

1. Is associated with events which made a significant contribution to the broad patterns of California's history and cultural heritage
2. Is associated with the lives of people important in our past
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values
4. Has yielded or may be likely to yield information important in prehistory or history

The Guidelines state that CEQA applies to effects on archaeological sites and directs that, when a project would impact an archaeological site, the lead agency should first determine whether the site is an historic resource as defined immediately above or whether it meets the definition of a "unique archaeological resource" contained in Section 21083.2 of the Public Resources Code. "Unique archaeological resource" refers to an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability it:

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

3.6.3 ENVIRONMENTAL IMPACTS

a) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5

The construction of the proposed project would include ground disturbing activities that could result in the loss of integrity of cultural deposits, the loss of information, and the alteration of site setting to a cultural or historical resource. Degradation of the cultural resource would be considered a significant impact if the resource is considered eligible for the CRHR or NRHP.

Eddy Gulch Road Alignment

No prehistoric or historic archaeological, historic, or ethnographic resources were noted within the Eddy Gulch Road project area. No impacts to known cultural resources are anticipated within the Eddy Gulch Road area of direct impact. While the survey of Eddy Gulch Road did not result in the recordation of any cultural resources, ground disturbing activities could result in the inadvertent discovery of buried cultural resources. Degradation of a cultural resource would be considered a potentially significant impact.

Private Roadway Alignment

A cultural resource survey of the approximately 0.6 miles of the 1.2-mile conduit alignment within roadways held by private landowners has not yet been performed. Five historic sites associated with mining activities have been recorded adjacent to the conduit alignment (Gray 1994). The locations of the resources in relation to the proposed project have not been field checked. It is therefore unknown if cultural resources are present within the 1.2-mile private road corridor. Ground disturbing and construction activities for the private roadway component of the project could adversely affect previously documented, unknown and potentially important cultural resources, resulting in a potentially significant impact.

Implementation of mitigation measures Cultural Resources-1 through Cultural Resources-7 would reduce cultural resource impacts on both the Eddy Gulch Road and private roadway alignments to a less than significant level.

Mitigation Measure Cultural Resources-1: Siskiyou Telephone shall perform pre-construction surveys for any project components not yet surveyed due to lack of access, or if there are any modifications in project alignment. Areas not subject to archaeological survey would be inspected prior to construction, and a supplemental archaeological survey report prepared.

Mitigation Measure Cultural Resources-2: Any areas containing historic resources shall be marked on construction plans, and construction plans shall be modified to accommodate avoidance of these locations.

Mitigation Measure Cultural Resources-3: A buffer zone around historic resources shall be established prior to construction in consultation with a qualified archaeologist, and this buffer area shall be flagged on the ground as an exclusion zone where no construction or surface disturbance shall take place, including resources within 100 feet of any project component.

Mitigation Measure Cultural Resources-4: Construction personnel shall be briefed on the nature of any cultural resources and instructed not to enter the flagged exclusion zones.

Mitigation Measure Cultural Resources-5: If the pre-construction surveys required in mitigation measure CR-1 determine that "historical resources", "historic properties", or "unique archaeological resources" would be affected by the proposed project, then additional impact mitigation shall be required if the project cannot be redesigned to avoid the resource. Impact mitigation may take a variety of forms depending on the nature of the site and the nature and extent of impacts, with site avoidance being the preferred mitigation measure. Final decisions regarding impact mitigation shall be made in consultation between Siskiyou Telephone, regulatory agencies, technical specialists, and other interested parties. If data recovery is the recommended mitigation, then a Cultural Resources Treatment Plan shall be prepared detailing how mitigation will be conducted, procedures for protection and avoidance for cultural resources, and curation of cultural materials collected during the project construction.

Mitigation Measure Cultural Resources-6: Siskiyou Telephone shall inform all contractors and subcontractors about the potential for archaeological discoveries during construction, and an archaeologist shall provide a brief training session to all construction personnel on the appropriate responses to such discoveries. The orientation shall include a description of the

kinds of cultural resources that might be encountered during construction and the steps to be taken if such finds are unearthed.

Mitigation Measure Cultural Resources-7: If buried or concealed cultural resources are discovered during excavation, construction, or related development work, all such work shall cease in the vicinity of the find until a qualified archaeologist properly investigates the find. If the discovery is determined to be a significant historical resource that would be affected by the project, then appropriate mitigation or protective measures shall be taken.

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

Project activities that involve ground disturbance in the roadway could affect undiscovered cultural resources obscured by the roadway, which could result in the loss of integrity of cultural deposits, the loss of information, and the alteration of site. Mitigation measure Cultural Resources-8 would require monitoring by a qualified archaeologist in flat areas where the original ground surface would be exposed.

Mitigation Measure Cultural Resources-8: Monitoring by a qualified archaeologist shall be required for ground-disturbing activities in areas where original ground surface would be exposed. Archeological monitoring shall include inspection of exposed materials to determine if artifacts are present. The monitor shall have authority to temporarily halt or divert construction away from exposed resources in order to recover specimens.

Impacts to significant archaeological resources would otherwise be the same as those indicated for historical resources above. Implementation of mitigation measures CR-1 through CR-8 would reduce impacts to archeological resources to a less than significant level.

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

No known paleontological resources exist in the project right-of-way. However, there is a possibility of locating undiscovered paleontological resources, such as fossils, during construction. Should a paleontological resource be located during project activities, mitigation measure Cultural Resources-9 would require that a qualified paleontologist examine the specimen and ensure that it is prepared to the point of curation, identified by qualified experts, listed in a database to allow analysis, and deposited in a designated repository. There are no unique geologic features within the project alignment. With implementation of mitigation, impacts to paleontological resources would be less than significant.

Mitigation Measure Cultural Resources-9: If a paleontological resource, such as a fossil, is discovered during construction, the recovered resource shall be examined by a qualified paleontologist. According to the paleontologist's findings, the resource shall be prepared to the point of curation, identified by qualified experts, listed in a database to allow analysis, and deposited in a designated repository.

d) Disturb any human remains, including those interred outside of formal cemeteries

Human burials, in addition to being potential historical resources, have specific treatment requirements found in the California Public Resources Code (PRC) Section 5097 and California Health and Safety Code Sections 7050.5, 7051, and 7054. Disturbing human remains could violate these provisions, which would be considered a potentially significant impact.

While no known human remains have been documented within the project area, the possibility cannot be precluded that human remains are present below the ground surface and could be damaged during land alteration activities. Construction of the conduit line would include ground disturbing activities that have the potential to uncover human remains. Implementation of mitigation measure Cultural Resources-10 would reduce impacts from the discovery of human remains to a less than significant level.

> **Mitigation Measure Cultural Resources-10:** If human remains are encountered during the course of excavation, all construction activities in the vicinity of the find shall cease, and the Siskiyou County Coroner shall be notified immediately. No further disturbance shall occur until the Siskiyou County Coroner has made the necessary findings as to origin and disposition pursuant to PRC 5097.98. If remains are determined to be Native American, then the NAHC shall be notified within 24 hours as required by Public Resources Code 5097. The NAHC shall then contact the most likely descendent (MLD) of the deceased Native American, who shall then serve as a consultant on how to proceed with the remains (e.g., avoidance, reburial). Work at the site shall not resume until such remains have been treated in the manner agreed upon by all interested parties.

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3.7 Geology and Soils

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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?	☐	☐	☒	☐
b) Result in substantial soil erosion or loss of topsoil?	☐	☐	☒	☐
c) Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial 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?	☐	☐	☐	☒

3.7.1 EXISTING CONDITIONS

Geology

RMT conducted a preliminary geological evaluation on October 28, 2009, and the results of this evaluation are included in Attachment 3. The proposed project route is located in the Coast Range system in the Klamath Mountains geomorphic province of California. The area is characterized by rugged topography with prominent peaks and ridges reaching 6,000-8,000 feet above sea level (asl) (CGS 2002). Elevations in the project route vicinity range between 2,000 and 3,000 feet asl. The entire alignment is on highly weathered Pre-Cretaceous age, meta-sedimentary rocks. Most of the proposed alignment is through weathered to deeply weathered sandstone and shale (Franks 2009).

The geomorphology of the project area is characterized by steep, mountainous terrain and drainages that flow toward the North Fork of the Salmon River (See Figure 3.7-1). The project area

consists of Eddy Gulch Road and a private roadway, both of which are dirt and gravel roadways. Soils on these roadways are compacted as a result of vehicle traffic (CH2M Hill 2008b).

There are a few sections of roadway along the project alignment that contain unweathered bedrock, either at the surface of the roadway or at a shallow depth. It may be necessary to saw through the unweathered bedrock in these areas to make the required trench depth.

Soils

There are six soil types present in the project area, as shown in Table 3.7-1.

Faulting and Seismicity

The closest fault is the Grogan Fault, which is 42 miles to the west of the project area (USGS 2006). The closest Alquist-Priolo Earthquake Fault Zone is the Mad River Fault Zone, which is 53 miles to the southwest of the project area (USGS 2006). Available data suggest that the recurrence interval for earthquakes in the Mad River Fault Zone is between 3,000 and 5,000 years. The maximum magnitude for the Little Salmon Fault, which is part of the Mad River Fault Zone, is estimated between 7.0 and 7.3 (Humboldt County 2000). The potential source of a larger earthquake is the Cascadia Subduction Zone, which extends from Cape Mendocino in California to British Columbia in Canada. The Cascadia Subduction Zone could produce up to a magnitude 9.5 earthquake. The most recent event on the Cascadia Subduction Zone occurred approximately 300 years ago, and earthquakes are estimated to occur at intervals of approximately 600 years (Humboldt County 2000, Goldfinger et al. 2003). No active faults have been mapped within the proposed project route.

3.7.2 IMPACTS

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?

There is a potential for earthquakes to occur on the Mad River Fault Zone and the Cascadia Subduction Zone; however, there is a less than significant potential for ground rupture in the area because of its distance from the fault zone.

ii. Strong seismic ground shaking?

The potential for strong ground shaking is less than significant because of the distance from the nearest fault zone to the project area, and the relatively long time between earthquakes.

iii. Seismic-related ground failure, including liquefaction?

The soils on which construction would occur are all well-drained; no construction would take place on the Riverwash soil type. Soil must retain water for liquefaction to occur; therefore, liquefaction and other forms of ground failure would not be expected to occur as a result of the project.

Figure 3.7-1: Proposed Project Alignment and Topography

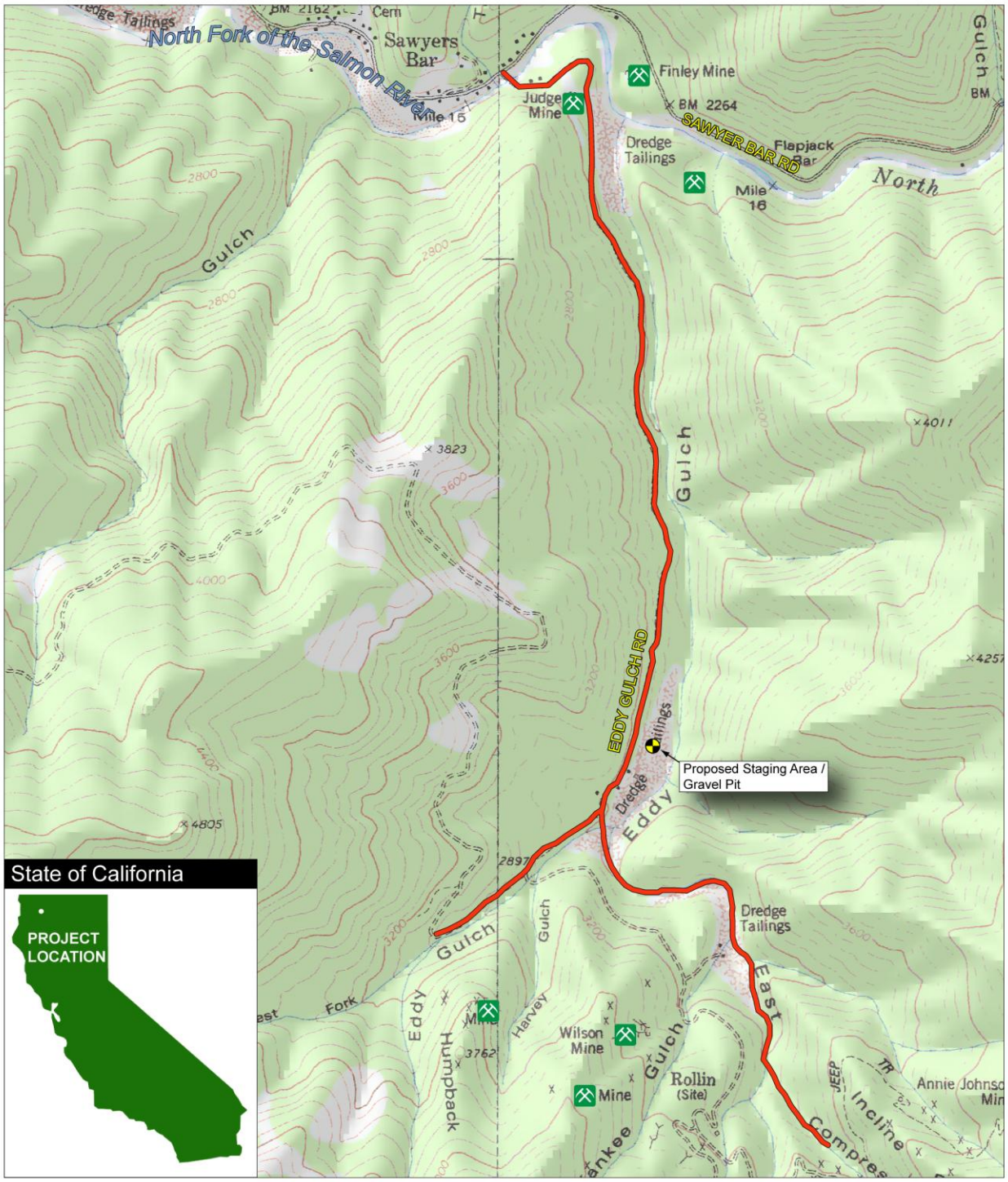

Table 3.7-1: Soil Type Characteristics

Soil Types	Characteristics
Clallam, deep-Deadwood families association	The Clallam, deep and Deadwood families association consist of residuum weathered from metamorphic rock. The Clallam and Deadwood families are well-drained and not prone to flooding. The Clallam family soils are very gravelly loam, very gravelly clay loam, and extremely gravelly loam on top of bedrock. The Deadwood family is extremely gravelly loam on top of unweathered bedrock.
Clallam family, very deep-Riverwash association	The Clallam family, very deep consists of residuum weathered from metamorphic rock. The Clallam family, very deep is well-drained and not prone to flooding. The Riverwash consists of alluvial flats. The Riverwash is excessively drained and prone to frequent flooding. The Clallam family is gravelly sandy loam, very gravelly sandy loam, and extremely gravelly sandy loam. The Riverwash is sandy and gravelly alluvium.
Deadwood-Clallam, deep families association	The Deadwood-Clallam deep families association consists of residuum weathered from metamorphic rock. The Deadwood and Clallam, deep families are well-drained and not prone to flooding. The Deadwood family is extremely gravelly loam on top of unweathered bedrock. The Clallam, deep family is very gravelly clay loam, very gravelly loam, and extremely gravelly loam on top of bedrock.
Deadwood family-Rock outcrop association	The Deadwood family consists of residuum weathered from metamorphic rock. The Deadwood family is well-drained and not prone to flooding. The Deadwood family is extremely gravelly loam on top of bedrock.
Holland-Clallam, deep-Coboc families associations	The Holland-Clallam, deep-Coboc families associations consist of residuum weathered from igneous and metamorphic rock. The Holland, Clallam, deep, and Coboc families associations are well-drained and not prone to flooding. The Holland family is gravelly loam, gravelly clay loam, and gravelly sandy clay loam on top of unweathered bedrock. The Clallam family, deep is very gravelly loam, very gravelly clay loam, and extremely gravelly loam on top of unweathered bedrock. The Coboc family is gravelly loam, gravelly clay loam, and gravelly clay.
Holland-Skalan families association	The Holland family consists of residuum weathered from igneous and metamorphic rock. The Skalan family consists of residuum weathered from gabbro. The Holland and Skalan families are well drained and not prone to flooding. The Holland family is gravelly loam, gravelly clay loam, and gravelly sandy clay loam on top of unweathered bedrock. The Skalan family is very gravelly loam, very gravelly clay loam, and very gravelly sandy loam on top of unweathered bedrock.

SOURCE: USDA 2009

iv. Landslides?

No areas of potential landslides were observed in the project area. There was a small near-surface landslide identified along Eddy Gulch road during a recent site visit; however, this instability was likely caused from construction of the existing roadway and has since stabilized (Franks 2009).

b) Result in substantial erosion or loss of topsoil?

All construction would occur in the road right-of-way, where soils have been previously graded and compacted. Most of the project would be constructed by trenching into road fill material or into the weathered portions of the Pre-Cretaceous metamorphic rocks. Where possible, the hard rock areas would be avoided by working in the ditch or shoulder of the road. Avoiding trenching in hard-rock areas would reduce production of loose sediment and reduce erosion caused by the project. Excavation of the weathered rock would not have an effect on the environment as long as the policy of hauling away the removed materials in the excavation process to make a buried cable system is followed. Some of the access pedestals may require cuts to be made in the rocky road bank. If needed, a rock retaining wall will be built around the cutout to support any loose material. Therefore, these project elements would not affect the stability or the erosion potential of the hillsides.

Surface restoration activities are included in the project design. The goal of the restoration is to return the project route to its pre-construction condition. Restoration would include filling the trench with Class II base rock and backfilling with compacted native soil. This restoration would help reduce erosion to disturbed areas. Erosion impacts would be less than significant.

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

Trenches for the telecommunication lines would not be dug to a depth that would trigger new land slides or activate existing landslides. Trenches would be backfilled with a few inches of Class II Base Rock before the installation of the cable conduits. After installation of the conduits, the trenches would be backfilled to near surface with more Class II Base Rock, and then backfilled with native soil to pre-construction conditions. The gravel used in this backfill would provide a conduit for collection and transport of ground and percolating surface water that could otherwise cause slope stability problems. This underground gravel conduit could result in the buildup of a groundwater head in the trench, particularly after a heavy storm event, which could result in erosion and soil instability. Mitigation measure Geology-1 would reduce this potential impact to a less than significant level by requiring the design of outlets to the existing stream crossing that would ensure that there is no collection of water in the backfilled trench.

Mitigation Measure Geology-1: Gravel-backfilled telecommunication line trenches shall have direct connectivity with all down drains crossing the road and a natural downhill drainage system. This connectivity shall be shown on project construction drawings, and shall be submitted for the review and approval of Siskiyou County engineering division staff prior to project construction.

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?

The project would not be located on expansive soils. No impacts due to expansive soils are expected to occur.

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

No septic tanks are included as part of the proposed project. Portable toilets would be used during the construction phase of the project, and all wastewater would be removed from the project site and treated remotely. There would be no impact to geology or soils as a result of a septic tank or wastewater disposal.

3.8 Hazards and Hazardous Materials

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	☐	☒	☐	☐
c) Produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter 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 Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
h) Expose people or structures to the risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒	☐	☐

3.8.1 EXISTING CONDITIONS

The proposed project route is located entirely within roadway rights-of-way. The project route includes Eddy Gulch Road and a private roadway, both of which are dirt and gravel roadways.

Hazardous Sites

The California Department of Toxic Substances Control (DTSC) compiles and updates a list of hazardous material sites pursuant of Government Code Section 65962.5. A search of the DTSC website listed one federal Superfund site and one voluntary cleanup site in the project region. Both of these sites are located over 40 miles east of the project site, and therefore will not be affected by the proposed project (DTSC 2009).

Fire Hazards

Fire hazards can result from specific environmental conditions, such as dry climates or high winds. Fire hazards can also result from human activities, including use of petroleum fuels and products and the combustion of natural gas and wood for heating. The project area is located in a high fire hazard zone according to the USFS. The natural forest is dry and prone to wildfires caused by natural phenomena, such as lightning strikes, as well as human sources, such as electric fires, cigarette smoking, and sparks from motor vehicles. The majority of Siskiyou County is located in the moderate to high fire hazards zone because of areas of steep slopes with wildland areas of heavy brush and timber. Although the project area is in the Klamath National Forest, the construction area is limited to the roadways and shoulders of Eddy Gulch Road and a private roadway, which support limited vegetation. Areas adjacent to the project area contain shrubs and trees, and fuels management practices are evident.

Emergency Access

Logging operations in the Klamath National Forest help to thin the heavily forested area and reduce the fuel load capacity. Nevertheless, fire hazards in the project area remain high during the dry season, and emergency fire crews are often dispatched to battle these fires.

In addition, though the project region is mostly wilderness, there are scattered residences in the area. The six residences that would be served by the proposed project are accessed via Sawyers Bar Road and Eddy Gulch Road from the north and via Eddy Gulch Road from the south. Eddy Gulch Road also connects via a series of dirt roads to the communities of Cecilville, Forks of Salmon, and Six Mile, though access to these communities via the dirt roads in Eddy Gulch is seasonal. The USFS provides fire protection and police services to the project area. The Northern Division of the California Highway Patrol provides traffic enforcement of all roadways in the unincorporated areas of Siskiyou County (CHP 2009).

Airports and Airstrips

There are no airports or airstrips located in the project area. The nearest commercial airstrip is the Scott Valley Airport, which is located approximately 23 miles northeast from the proposed project area. There are no private airstrips in the project region (Hickel pers. comm. 2009).

Schools

There are no schools located in the project area. The nearest school is the Forks of Salmon Elementary School, which is located approximately 11 miles west of the proposed project area.

3.8.2 IMPACTS

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

During construction, hazardous materials, such as fuels and oils, would be transported on public roads to and from the project area. All transport activities would follow federal, state, and local regulations. All hazardous waste also would be handled according to applicable regulations. Waste oils and other wastes considered hazardous by the State of California would be transported

to a Resource Conservation and Recovery Act (RCRA)-certified treatment, storage, and disposal facility and disposed of at a Class I hazardous waste landfill. Implementation of APM Hazards-1 and APM Hazards-2 would reduce the potential for impacts from the use, transport, and disposal of hazardous materials to a less than significant level.

APM Hazards-1: Accidents involving the release of small quantities of hazardous materials from construction equipment shall be mitigated through an emergency response training program and procedures implemented by the project construction contractors and employees. Spill clean-up kits shall be provided and kept onsite during construction. Equipment shall remain in good working order to prevent spills.

APM Hazards-2: A Stormwater Pollution Prevention Plan (SWPPP) shall be in place prior to the start of construction activities to implement best management practices for spill and pollution prevention.

Best management practices shall include, but not be limited to, the following:

- All equipment shall be maintained in good working order and equipment containing hazardous materials shall be inspected periodically for signs of spills or leakage
- Spills that occur shall be cleaned up immediately and any contaminated soil shall be containerized and disposed of and reported in accordance with applicable federal, state, and local requirements
- Emergency phone numbers shall be available onsite
- Silt fences or fiber rolls shall be used to prevent the migration of sediment offsite
- Water shall be applied to disturbed areas during construction activities or windy conditions to prevent dust emissions and erosion
- Drip pans shall be used for mobile fueling activities

Once construction is complete, no hazardous materials would be associated with the proposed project. The proposed project would have no impact on hazardous materials during operation.

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?

An oil or hazardous materials release from trenching, boring, or improper handling; vehicle collisions; fires; damage to existing utility lines and poles; or the general risks associated with the telecommunication equipment installation could occur as a result of the project. Accidents or improper handling or containment of hazardous materials stored on-site during construction could result in spills. Should a spill occur, all hazardous waste generated would be disposed of according to appropriate state and federal regulations, including Occupation Safety and Health Act (OSHA) regulations. The appropriate disposal method would depend on the type of waste generated. The risk of exposure of people to construction-associated hazardous materials would be reduced to less than significant levels with the implementation of APM Hazards-1 and APM Hazards-2.

Once construction is complete, no hazardous materials would be associated with the proposed project. The proposed project would have no impact on hazardous materials during operation.

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

There are no school sites within one-quarter mile of the proposed project alignment. Hazardous materials would be transported on public roads to and from the project area. Transportation routes would pass by public schools, such as Forks of Salmon Elementary School in Forks of Salmon, California. All transport activities would follow federal, state, and local regulations. Hazardous materials impacts on schools would be less than significant and mitigation would not be required.

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

There are no listed hazardous materials sites within the project alignment. There would be no impacts to listed hazardous materials sites associated with the proposed project.

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

The project is not located within two miles of a public airport. There would be no impacts to public airports or airport land use plans associated with the proposed project.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

There are no private airstrips in the vicinity of the project alignment. There would be no public safety impacts regarding private airstrips associated with the proposed project.

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

Access for emergency vehicles and evacuation from nearby areas in case of wildfire could be hindered by construction. Mitigation measure Hazards-1 would require that access along Eddy Gulch Road be maintained as much as possible, and that emergency vehicles be allowed through the construction area as quickly as possible. Metal plates would be kept nearby to cover trenches in case an emergency vehicle needs to pass through the construction area when complete road closure is necessary. Impacts to emergency vehicle access would be less than significant with implementation of this mitigation measure.

> **Mitigation Measure Hazards-1:** The construction area shall be set up so that access through Eddy Gulch Road and the private road would be maintained as much as possible. Metal plates shall be kept nearby to cover trenches in case an emergency vehicle needs to pass through the construction area, or in case of evacuation.

Operation of the proposed project would not physically interfere with any emergency response plans. The proposed project would have no impacts on emergency access during operation.

h) Expose people or structures to 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?

The majority of the proposed project is surrounded by undeveloped, forested land. The natural vegetation increases risks for wildfire. There is a possibility that project construction activities could result in a fire. The most likely cause of fire would be workers smoking and disposing of cigarettes off the road in dry grass, or vehicles parked over tall grass. Mitigation measure Hazards-2 would require training of construction crews in fire prevention measures. Mitigation measure Hazards-3 would allow smoking only in designated areas. Mitigation measure Hazards-4 would require all on-site construction vehicles to be equipped with a fire extinguisher. Implementation of mitigation measures Hazards-2, -3, and -4 would reduce impacts associated with wildfires to a less than significant level.

> **Mitigation Measure Hazards-2:** Contractors shall receive training regarding the proper handling and/or storage of potential fire hazards, potential ignition sources (such as smoking or sparking equipment), and appropriate types of fire protection equipment.
>
> **Mitigation Measure Hazards-3:** Smoking shall be allowed only in designated areas.
>
> **Mitigation Measure Hazards-4:** Construction vehicles that are onsite shall be equipped with a fire extinguisher with a minimal rating of 4A-40BC.

Operation of the proposed project would not include activities that would have the potential to exposed people or structures to wildland fires. The proposed project would have no impacts on fire hazards during operation.

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3.9 Hydrology and Water Quality

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
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 (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
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 that would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems to provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood plain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other hazard delineation map?	☐	☐	☐	☒
h) Place within 100-year flood plain structures that would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

3.9.1 EXISTING CONDITIONS

Eddy Gulch Road is bordered to the west by a steep slope and to the east by a roadside drainage ditch. Eddy Gulch Road is a gravel roadway and its roadsides are maintained, graded, and generally clear of vegetation. The private roadways that are part of the project alignment are also

graded roadways; however, the specific characteristics of the private roadways, such as steepness and adjacent conditions, cannot be described at this time as permission to access the private roadways was not granted at the time of this report.

Surface Water

Stormwater on Eddy Gulch Road flows from west to east into the roadside drainage ditch, either across the road surface or under the road via culverts, and infiltrates, evaporates, or discharges downgradient into Eddy Gulch. The proposed project would cross over an unnamed tributary of the North Fork of the Salmon River and two seasonal waterways, and either over or under the culverts along Eddy Gulch Road depending on the depth of the culvert. Stormwater drainage in the vicinity of the private roadways cannot be determined at this time, as permission to access the private roadways was not granted at the time of this report.

The project area is located in the Lower Klamath Basin of the greater Klamath Basin. The Lower Klamath Basin is approximately 4.9 million acres. The Lower Klamath Basin includes the mouth of the Klamath River in the northwest coast region of California (NRCS 2009).

Flooding

The project area is not located within a 100-year flood zone as mapped on the Flood Insurance Rate Map, with the exception of the area near the bridge crossing of the unnamed tributary of the North Fork of the Salmon River (FEMA 2008). All project elements would be well above the 100-year flood level in the vicinity of this bridge crossing.

Groundwater

Groundwater basins in the project area have not been identified or mapped by the California Department of Water Resources. The closest known groundwater basin to the project area is the Scott River Valley Groundwater Basin located approximately 20 northeast of the project area (DWR 2009).

Water Quality

The waters of the Salmon River provide excellent habitat for fish and play a vital role in restoration efforts of the Klamath River fishery. The Salmon River watershed has no dams, diversions, or urban areas, and it is mostly comprised of public land. Mining, logging, wildfires, road-building, and grazing have historically had an adverse impact on the Salmon River. The same pressures continue to do so, as do the stressors of noxious weeds and high summer water temperatures (SRRC 2009).

Water quality impacts on the North Fork of the Salmon River are attributed to a combination of disturbances by human activity, such as dredging for minerals in Eddy Gulch and timber fuel management efforts in the Klamath National Forest, as well as floods and wildfires.

The Salmon River, including the North Fork of the Salmon River, is not listed on the Clean Water Act (CWA) 303(d) list of impaired Water Quality Limited Segments (SWRCB 2006).

3.9.2 IMPACTS

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

Construction activities would include ground disturbing activities; however, these activities would during the dry season (April – October), which would reduce the potential for erosion and sedimentation impacts. The applicant would submit a Notice of Intent with the State Water Resource Control Board (SWRCB) and a Linear Construction Activity Notification with the Regional Water Quality Control Board (RWQCB) prior to the start of construction to comply with the SWRCB's linear underground permit's requirements.

There is also a small potential for risk of a hazardous materials spill associated with construction equipment and vehicles to migrate into receiving waters. Implementation of APM Hazards-2 as described in Section 3.8 would require the preparation of a SWPPP.

No changes in waste discharge requirements are anticipated during construction and operation of the project.

Implementation of APM Hazards-2 would reduce impacts to water quality to a less than significant level.

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 pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

The proposed project route is not located on or in proximity to any known source of groundwater nor would groundwater resources be used for construction. The difference in elevation between the project area and Eddy Gulch is at least 30 feet; therefore, trenching to the proposed depth of 3 feet would not affect ground water supplies or recharge.

The proposed project includes the use of aboveground utility boxes. These boxes would create approximately 144 square feet of impervious area (approximately 4.5 square feet per utility box) to post the box, which is less than one hundredth of an acre. This very small increase in impervious area would have a less than significant impact on groundwater recharge.

The operation of the project would have no impact to groundwater recharge and would not cause a net deficit in aquifer volume or a lowering of the local groundwater table level.

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 off-site?

Project construction and operation would allow stormwater to continue to flow from west to east into the roadside drainage ditch, either across or under the road via culverts, and infiltrate, evaporate, or discharge downgradient into Eddy Gulch. After installation of the conduits, the proposed trenches would be backfilled to near surface with more Class II Base Rock, and then

backfilled with native soil to pre-construction conditions. The gravel used in this backfill would provide a conduit for collection and transport of ground and percolating surface water that could otherwise cause slope stability problems. This underground gravel conduit could result in the buildup of a groundwater head in the trench, particularly after a heavy storm event, which could result in erosion, soil instability, and changes in drainage patterns. Implementation of mitigation measure Geology-1 would reduce this potential impact to a less than significant level by requiring the design of outlets to the existing stream crossing that would ensure that there is no collection of water in the backfilled trench. No additional mitigation would be necessary.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Project construction or operation would not affect the project area's existing stormwater drainage pattern. Disturbed areas would be restored to grade and would not alter or increase the rate or volume of surface runoff or result in flooding on- or offsite; therefore, the project would have no impact on surface drainage patterns.

e) 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?

Construction involved with the proposed project would occur during the dry season. Runoff volumes are not anticipated to be substantial; therefore, water volume would not exceed the capacity of natural storm water drainage paths. There are no constructed storm water drainage systems on Eddy Gulch Road or the private roadway. All excavation activities would take place within existing dirt and gravel roadways and unpaved areas adjacent to the roadways. The project would not lead to increased runoff after construction activities are complete because disturbed areas would be restored to grade. The proposed project would have no impact on runoff volumes.

f) Otherwise substantially degrade water quality?

Construction activities have a small potential to result in the transport of sediments from trenching and excavating activities. There is also a small potential for risk of a hazardous materials spill, which could potentially cause contamination of the North Fork of the Salmon River. APM Hazards-2 would require the implementation of best management practices to reduce the potential for sediment and hazardous materials to degrade water quality. The implementation of APM Hazards-2 would reduce impacts to water quality to a less than significant level.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The proposed project does not include the development of housing nor does it include the alteration of existing drainage which could have the potential of flooding existing housing. The proposed project would cause no impact to housing from flooding.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

The only portion of the project area located within a 100-year flood zone as mapped on the Flood Insurance Rate Map is the area near the North Fork of the Salmon River bridge crossing. Construction activities in that area would be performed from the bridge deck and would include attaching aboveground project components to the bridge. The construction work at bridge crossing would take place above and outside of the ordinary high water line of the Salmon River; therefore, impacts to flood flows would be less than significant.

i) Expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The proposed project would not impact levees or dams, nor would it create any new water retaining or impeding features. No impacts related to flooding due to dam or levee failure would occur as a result of the proposed project.

j) Inundation by seiche, tsunami, or mudflow?

The project is not at risk of inundation by seiche, tsunami, or mudflow because it is not located in an area where these threats and hazards exist. Impacts would not occur and mitigation would not be necessary.

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3.10 Land Use and Planning

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

3.10.1 EXISTING CONDITIONS

The proposed project alignment lies entirely within the right-of-way of Eddy Gulch Road and a 1.4-mile section of a private road. Eddy Gulch Road is a County road under the jurisdiction of Siskiyou County. The project site has been previously disturbed and is currently used for transportation purposes. The route passes over three waterways. A bridge crosses over the North Fork of the Salmon River, while the other two crossings are seasonal waterways that wash across the Eddy Gulch Road roadway.

Most of the surrounding lands are within the Klamath National Forest, which are managed by the USFS. These USFS lands are typically used for timber harvest and recreation. There are also several residences in the project vicinity that exist as a result of long-standing mining claims. Figure 3.10-1 shows land ownership in the project area. The community of Sawyers Bar is located at the northern terminus of the proposed telecommunication line.

3.10.2 IMPACTS

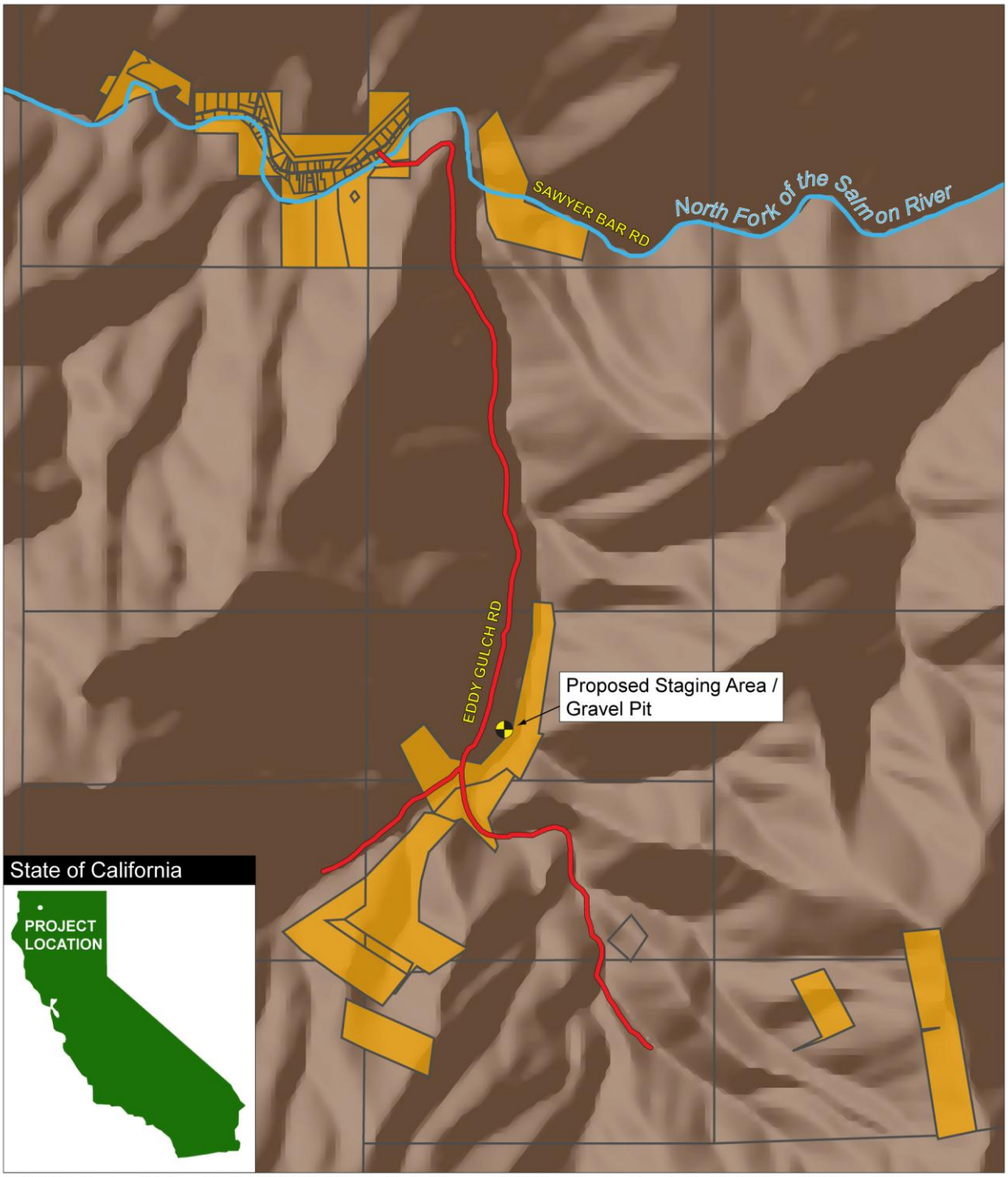
a) Physically divide an established community?

Construction and maintenance of the proposed project would not cause the physical division of an established community. The road is an existing feature in the region. No impacts to established communities are expected as a result of the proposed project.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Construction and maintenance of the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed project. The use of

Figure 3.10-1: Proposed Project Alignment and Land Ownership



this project alignment for telecommunication lines is consistent with the current use of the project area. The Siskiyou County General Plan contains a Housing Element (2004). One of the goals within the Housing Element is to provide adequate sites and services to accommodate the Regional Housing Needs and satisfy existing demand (Siskiyou County 2004).The Klamath National Forest Land and Resource Management Plan contains guidance for land use management around Wild and Scenic Rivers. One of the goals is to restrict new facilities or additional facilities, such as telecommunications lines, to existing rights-of-way (USFS 1995). The proposed project would comply with these management goals. No impacts with adopted land use plans and policies are expected as a result of the proposed project.

c) Conflict with an applicable habitat conservation plan or natural community conservation plan?

The proposed project would not conflict with any habitat conservation plans or natural community conservation plans. There are no natural community conservation plans in Siskiyou County other than those authored by the USFS. An Environmental Impact Statement is being prepared for the proposed Fruit Growers Supply Company's Multispecies Habitat Conservation Plan, but the plan would only apply to Fruit Growers Supply lands, located approximately 30 miles to the north-east between the towns of Etna and Yreka (CH2M Hill 2009). No impacts to habitat conservation plans are expected as a result of the proposed project.

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3.11 Mineral Resources

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Result in the loss of availability of a known mineral resource that would be of value to the region and 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?	☐	☐	☐	☒

3.11.1 EXISTING CONDITIONS

Since the early 1800s, the placer mines in Eddy Gulch have been mined for gold. Currently, there are patented lode claims actively mined near the project area (Eddy Gulch Gold Mines 2009). There are no mining claims within the project alignment, and there are no known mineral resources within the project alignment.

3.11.2 IMPACTS

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

No impacts to known mineral resources are expected as a result of the proposed project.

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 impacts to locally-important mineral resources are expected as a result of the proposed project.

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3.12 Noise

Would the project result in:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

3.12.1 EXISTING CONDITIONS

The proposed project alignment is located within the right-of-way of Eddy Gulch Road and a private roadway. Noise in the project area is normally caused by vehicular traffic along Sawyers Bar Road and Eddy Gulch Road. No major manmade sources of constant noise (such as industrial facilities) currently exist in the vicinity of the proposed action.

The noise level in quiet rural areas is typically around 30 decibels (dBA), while the noise level in wilderness areas is typically around 20 dBA (Caltrans 1998). Noise levels of vehicles traveling about 30 miles per hour tend to range between 62 and 81 dBA depending on the type, age, and condition of the vehicle (Caltrans 1995).

The Siskiyou County General Plan recommends that peak noise levels generated from construction activities should be no louder than between 75 and 80 dBA. The Noise Element also states that the criteria for construction equipment are relatively lenient as such activities are temporary and difficult to avoid (Siskiyou County 1978).

There are no noise ordinances or established noise limits in Siskiyou County, and the Siskiyou County General Plan Noise Element contains no standards or regulations for construction-generated noise beyond the noise limit recommendation stated above. The project area is not within city or town limits; therefore, there are no local standards regarding noise levels.

3.12.1 IMPACTS

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?

Equipment operation is the primary noise source associated with construction activities. Noise levels are dependent on several factors, including the number of machines operating within an area at a given time and the distance between the sources(s) and receiving properties or receptors. Typically, noise generated from construction activities ranges between 80 and 90 dBA at a distance of 50 feet from the active construction area. This construction noise is comparable to noise levels of very loud shouting at 4 feet, or shouting at 2 feet, and can begin to contribute to hearing impairment (Siskiyou County 1978). Nearby residences and people driving by the construction area or using the area for recreation purposes could be temporarily exposed to heightened noise levels, particularly during rock sawing and compacting (tamping) activities. Potential construction noise impacts would be reduced to a less than significant level with the implementation of APM Noise-1, which would limit construction activities to weekdays between the hours of 7 a.m. and 7 p.m.

APM Noise-1: During construction of the proposed project, best management practices shall be implemented to minimize noise impacts as follows:

- Construction activity shall be restricted to the hours between 7 a.m. and 7 p.m. on weekdays. Work on weekends would need to be approved by the Siskiyou County Planning Department upon request.
- All stationary noise-generating equipment shall be located as far as possible from nearby noise-sensitive receptors.
- Construction equipment powered by gasoline or diesel engines shall have sound control devices at least as effective as those provided by the original equipment manufacturer. No equipment shall be permitted to have an unmuffled exhaust.
- The construction contractor shall ensure that noise-generating mobile equipment and machinery are shut off when not in use.

Operation of the telecommunication equipment would result in no noise impacts other than potential temporary noise impacts from periodic maintenance activities.

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

Trenching may cause temporary ground borne vibration; however, trenching would generally avoid hard-rock areas as the majority of the roadway is constructed over engineered terrain. None of the six residences to be served by the project are located alongside the project alignment, and are set back significantly from the roadway. This avoidance of hard-rock areas and the distance to the nearest residences would reduce ground borne vibration to a less than significant level.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The proposed telecommunication infrastructure would not emit noise. Periodic maintenance may introduce noise from maintenance crew activity, but such noise would be temporary. No permanent increase in ambient noise is expected, and there would be no impact.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

The proposed construction equipment and the associated noise levels are listed below in Table 3.12-1. The limited number of residents in the area, as well as some recreationists at the Klamath Forest area, may find the temporary construction noise levels intrusive and annoying. Individual residences would only be exposed to high noise levels for 2 to 4 days as the work moves along the roadway. Idlewild Campground is the nearest recreational facility to the project. It is 5 miles north of the community of Sawyers Bar, and because of its distance from the project site, would not be affected by noise from project construction.

To ensure that the lowest level of noise is generated, all equipment used would have the appropriate mufflers and noise abatement equipment installed, per APM Noise-1.

It is likely that construction noise would be audible from the nearby residences that are accessed from Eddy Gulch Road and the private roadway. Two residences are located approximately 50 feet from the project alignment; the remaining residences are greater than 50 feet away from the construction activities. Forest exists between the Eddy Gulch Road corridor and most of these residences, providing a natural noise buffer. For the residences that are less than 50 feet away, noise levels could be above Siskiyou County's recommended construction noise level limit of

Table 3.12-1: Noise Levels from Construction Equipment

Equipment	Noise Level at 50 feet (dBA)
Construction Operations	
Backhoe	78
Dump truck	76
Rock saw	90
One-ton truck (flatbed)	74
Pickup truck	75
Water truck	80
Compactor	90

SOURCE: FHA 2008, Nietzel 2005, Beacon Solar LLC 2008

80 dBA, especially during rock sawing activities. Impacts due to noise would be temporary because construction would occur along only one portion of the road at a time. Even though noise impacts would be temporary in duration and would not affect any one sensitive noise receptor for an extended period of time, noise impacts could still be significant if construction activities occurred during evening and nighttime hours, or on weekends. APM Noise-1 sets time limits on construction, requires stationary sources of noise to be located as far as possible from noise-sensitive receptors, requires effective sound control devices, and requires the contractor to shut off noise-generating equipment when not in use. Implementation of APM Noise-1 would reduce impacts from the temporary increase of ambient noise levels to a less than significant level.

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

There are no public airports or in the vicinity of the project, nor is the project located within an airport land use plan. No impacts associated with the project would be expected to occur in regard to public airports or airport land use plans.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

There are no private airstrips in the vicinity of the project. No impacts associated with the project would be expected to occur in regard to private airstrips.

3.13 Population and Housing

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.13.1 EXISTING CONDITIONS

The project is located in a rural residential area consisting of 6 residences located along the project route. The construction of the proposed project is intended to provide telecommunication services to these residences. The project route does not contain any housing structures.

3.13.2 IMPACTS

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

The proposed project is not anticipated to induce population growth. The project would provide current residents with telecommunication service. Though the proposed conduits would provide capacity for future telecommunication service growth, there is unlikely to be significant residential expansion in the future as the bulk of the lands surrounding the project area are owned and managed by the USFS. The project does not include infrastructure that can induce population growth. Construction workers would not permanently relocate to the project area. There would be no impacts related to population growth due to the proposed project.

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

The proposed project would not displace existing housing, and would not necessitate relocation and/or construction of replacement housing elsewhere. Construction workers would not permanently relocate to the area. The proposed project would have no impact on housing resources.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The proposed project would not displace existing population, and would not necessitate relocation and/or construction of replacement housing elsewhere. The proposed project would have no impact on housing resources related to population.

3.14 Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Fire protection?	☐	☒	☐	☐
b) Police protection?	☐	☒	☐	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☐	☒

3.14.1 EXISTING CONDITIONS

Fire services to the project area are provided by the USFS. The USFS also dispatches a volunteer ambulance crew. The Etna Fire Department is the next closest resource for firefighting, located approximately 20 miles to the northeast of the project area.

The USFS provides police protection for the project area. The Northern Division of the California Highway Patrol provides traffic enforcement of all roadways in the unincorporated areas of Siskiyou County (CHP 2009).

There are no schools located in the immediate project area. The nearest school is the Forks of Salmon Elementary School, which is located approximately 11 miles west of the proposed project.

The project area is located within the Klamath National Forest. There are no other parks or public facilities in the project vicinity.

3.14.2 IMPACTS

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

i) Fire protection?

The proposed project would not require additional fire services in the area. There would be no impact requiring further construction or expansion of services, and the proposed project would not impact fire protection and fire suppression objectives.

Access for emergency vehicles could be hindered by construction activities in the roadway. Implementation of mitigation measure Hazards-1, as discussed in Section 3.8 Hazards and Hazardous Materials, would require that the construction area to be set up so that access through Eddy Gulch Road and the private road be maintained as much as possible, and that metal plates be kept nearby to cover trenches in case an emergency vehicle needs to pass through the construction area. Impacts to fire protection would be less than significant with implementation of mitigation.

ii) Police protection?

The proposed project would not require additional police services in the area. There would be no impact requiring further construction or expansion of services, and the proposed project would not impact police objectives.

Access for emergency vehicles could be hindered by construction activities in the roadway. Implementation of mitigation measure Hazards-1, as discussed in Section 3.8 Hazards and Hazardous Materials, would require that the construction area to be set up so that access through Eddy Gulch Road and the private road be maintained as much as possible, and that metal plates be kept nearby to cover trenches in case an emergency vehicle needs to pass through the construction area. Impacts to police protection would be less than significant with implementation of mitigation.

iii) Schools?

The proposed project alignment would not be constructed adjacent to or near any public schools. The proposed project would not create a need for new schools. There would be no impact to schools associated with the proposed project.

iv) Parks?

During project construction, visitors to the Klamath National Forest may notice construction equipment or increased noise levels if they are close to Eddy Gulch Road or the private road. However, these impacts to parks and recreational resources would be temporary and less than significant.

v) Other public facilities?

There are no public facilities located in the project vicinity. The proposed project would not create the need for any public facilities. There would be no impact to public facilities associated with the proposed project.

3.15 Recreation

Would or Does the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreation facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.15.1 EXISTING CONDITIONS

The proposed project would be within the right-of-way of Eddy Gulch Road and a private roadway. Land surrounding these roads is part of the Klamath National Forest, except for small scattered parcels of land that are privately owned through long-standing mining claims.

Idlewild Campground is the nearest established recreational facility to the project area. It is located off of Sawyers Bar Road about 5 miles to the northeast of the intersection of Eddy Gulch Road and Sawyers Bar Road. The campground is run by the USFS and has 15 campsites. The campground is open from May to mid-October (USFS 2009). The campground already has telephone service.

3.15.2 IMPACTS

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?

Telephone service is already present at Idlewild Campground. The addition of telecommunication service to the private residences on Eddy Gulch Road and the private road would not lead to increased levels of use of the campground that would lead to significant deterioration of campground facilities. The project would have no effect on existing recreational facilities.

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?

The proposed project does not include recreational facilities, nor would the project require the construction or expansion of existing recreational facilities. The project would have no effect on recreational facilities.

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3.16 Transportation and Traffic

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	☐	☒	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☒	☐	☐
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

3.16.1 EXISTING CONDITIONS

The proposed project route is located in Siskiyou County. The project would be constructed within the rights-of-way of Eddy Gulch Road and a private roadway. Both of these roadways are dirt and gravel roads, and for most of their length are only wide enough for a single lane of traffic. Eddy Gulch Road provides access to the communities of Cecilville, Forks of Salmon, and Six Mile. Traffic on these roadways is extremely light and does not experience delays under average conditions. The majority of the traffic is generated by local residents and visitors to the Klamath National Forest.

3.16.2 IMPACTS

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ration on roads, or congestion at intersections)?

Construction crews would use a staging site approximately 4 miles from the construction area for commute vehicles and for most construction materials. Some crew members would carpool to the construction area from the staging area using diesel crew cab pickups, and the remaining crew members would carpool from nearby towns in Siskiyou County. The diesel crew cab pickups would also be used to transport fuel for equipment.

Each day, workers would trench, lay the conduit, backfill, and compact one segment of the project route. The segment of roadway would be restored to operating condition at the end of each working day, and all construction equipment would be removed from the roadways.

Specific traffic control measures would be outlined in a Traffic Control Plan, per APM Traffic-1, which would be submitted to Caltrans and the Siskiyou County Public Works Road Department for their review and approval.

During construction, motorists may be held from passing through the construction area during trenching activities across the roadway when it is not possible to keep the roadway open. Traffic delays during construction activities could create a lengthy wait for vehicles traveling on Eddy Gulch Road. Mitigation measure Traffic-1 would require that any stoppage of traffic not exceed 30 minutes in length to reduce the potential impacts of road closure. A traffic control person would control the flow of traffic and allow cars to pass the construction area safely during road closures.

The increase in traffic and congestion would be reduced to a less than significant level with the implementation of APM Traffic-1 and mitigation measure Traffic-1.

> **APM Traffic-1:** The applicant shall prepare a Traffic Control Plan for the review and approval of Caltrans and the Siskiyou County Public Works Department. This Traffic Control Plan shall follow local, state, and federal requirements for traffic control and emergency responder access. The use of traffic control measures shall ensure that the effects of construction activity on traffic would not create an unsafe condition. As part of this Traffic Control Plan, the applicant shall inform residents within Eddy Gulch of construction activities and potential delays prior to construction.
>
> **Mitigation Measure Traffic-1:** Complete closure of Eddy Gulch Road or any private roadway shall not extend beyond 30 minutes if there are vehicles waiting to pass through the construction area. If trenching is not completed during these 30 minutes, then metal plates or a similar apparatus shall be placed over the trench and any waiting motorists shall be allowed to pass.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

The majority of traffic during construction activities would be generated from trucks removing trench spoils and returning with fill gravel. The gravel site is located along Eddy Gulch Road, approximately 2 miles south from the intersection of Eddy Gulch Road and Sawyers Bar. A maximum of 14 truck trips between the project site and the gravel site would occur per day (Eastlick pers. comm. 2009).The short travel distance (less than 2 miles) and limited number of daily trips would ensure that the level of service (LOS) standard for Eddy Gulch Road would not be exceeded. Traffic on Eddy Gulch Road is limited mainly to residents, recreational visitors, and maintenance vehicles. Traffic on Eddy Gulch Road is therefore extremely light, and there would be a limited and temporary addition of vehicles due to construction and maintenance activities. There would be no permanent impact to, or exceedance of, LOS standards.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

There would be no impact to air traffic patterns as a result of the proposed project.

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

No design features of Eddy Gulch Road or the private road would be changed and the project area would be restored to its original condition upon completion of project construction, including backfilling of trenches and recontouring the trench surface. No impacts due to change in design features would occur as a result of the proposed project.

e) Result in inadequate emergency access?

Access by emergency vehicles and access for the purposes of evacuation from nearby areas in case of wildfire could be hindered by construction. As outlined in mitigation measure Hazards-1, metal plates would be kept nearby to cover trenches in case an emergency vehicle needs to pass through the construction area or in case an evacuation takes place and keeping one lane open at all times is infeasible. Impacts to emergency vehicle access would be less than significant with incorporation of this mitigation measure.

f) Result in inadequate parking capacity?

As stated above, for the duration of construction, equipment used for construction activities would be removed from the site at the end of each day. Eddy Gulch Road and the private roadway are not typically used for parking by local residents, recreational visitors, or others; there would be no impact to parking as a result of the proposed project.

g) Conflict with adopted policies, plans, or programs supporting alternate transportation (e.g., bus turnouts, bicycle racks)?

There is no public transportation along Eddy Gulch Road or the private road, and there are no bus stops or bicycle paths. There would be no impacts related to adopted policies, plans, or programs supporting alternate transportation.

3.17 Utilities and Service Systems

Would the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) 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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

3.17.1 EXISTING CONDITIONS

The project area does not contain public water-supply or sanitary sewer collection facilities. The 6 adjacent residences to the project area are served by private water and wastewater systems. There are no existing utilities present in the project area. Residents in the area provide their own power with the use of propane, solar panels, and/or generators. Eddy Gulch Road has a drainage ditch and culverts for the transport of stormwater. The drainage system of the private roadway is unknown at this time, as permission was not granted to access this roadway prior to preparation of this document.

The proposed project solid waste disposal needs would be served by Scott Valley Disposal. Siskiyou Telephone Company is the local telephone service provider in the project region.

3.17.2 IMPACTS

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The project would result in the generation of wastewater only during construction activities. Portable toilets would be used during construction, and the contents removed from the site for treatment and disposal elsewhere; therefore, the project would not exceed wastewater treatment requirements of the RWQCB. The project would have a less than significant impact on wastewater treatment requirements.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts?

The proposed project would not require nor result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. The project would have no impact on such facilities.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Project construction and operation would allow stormwater to continue to flow from west to east into the roadside drainage ditch, either across the roadway or under the road via culverts. Stormwater would continue to infiltrate, evaporate, or discharge down-gradient into Eddy Gulch. Implementation of mitigation measure Geology-1 would require that all gravel-backfilled telecommunication line trenches have direct connectivity with all down drains crossing the road and a natural downhill drainage system in order to prevent the buildup of a groundwater head in the trench. This alteration to the drainage system beneath the roadway would have a less than significant impact on the project area's existing stormwater drainage pattern, and would not otherwise result in the construction of new or expanded stormwater drainage facilities. No mitigation is required.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Potable water would be used for drinking water purposes during project construction and would be brought to the construction site by the construction crews. The project would not require new or expanded water entitlements. The project would have a less than significant impact on water supplies.

e) 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?

The proposed project would have no effect on the current capacity of the local wastewater treatment provider because the wastewater generated during construction activities would be

treated and disposed of elsewhere. There would be no impacts related to local wastewater capacity.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Waste generated by the proposed project would primarily consist of excavated materials from trenching activities during construction. This type of solid waste would be transported offsite daily to be disposed of at Siskiyou Telephone Company's existing gravel site. Other solid waste generated during construction is estimated to be minimal and would be transported offsite daily to the Siskiyou Telephone Company's storage yard. All solid waste from the storage yard would be transported to Etna, California on a weekly basis to be picked up for disposal by Scott Valley Disposal. The proposed project would have a less than significant impact on landfill capacity.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

The project would produce solid waste during construction and would comply with all statutes and regulations related to solid waste. Impacts in regard to solid waste would be less than significant, and mitigation would not be required.

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3.18 Mandatory Findings of Significance

Does the project:	*Potentially Significant Impact*	*Potentially Significant Unless Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a) 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?	☐	☒	☐	☐
b) 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) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

3.18.1 IMPACTS

a) 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?

The proposed project has the potential to impact special status plant species, riparian habitat, and movement of wildlife. Potential impacts associated with the proposed project would be mitigated to less than significant levels with the implementation of APMs Biology-1, -2, and -3. The project would not eliminate important examples of the major periods of California history or prehistory.

b) 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)?

There are several past, current and probable future projects scheduled for the Sawyers Bar/Eddy Gulch area of Klamath National Forest that could potentially have cumulatively considerable impacts (Attachment 4). The proposed project would not contribute impacts that would be considered cumulatively considerable, however, because impacts from the project would be

limited to the construction phase and would be temporary. Mitigation measures would minimize or eliminate all potentially significant impacts; therefore, the proposed project would have a less than significant cumulative impact.

c) Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Project-related environmental impacts have been identified for the following resource areas with potential to cause direct or indirect impacts upon human beings:

- Aesthetics
- Air Quality/Greenhouse Gases
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Public Services
- Transportation and Traffic

Implementation of all mitigation measures and APMs in this document, in addition to adherence to all applicable regulations, would reduce these potential impacts to less than significant levels.

The project would have a beneficial effect on residents in the area by providing telecommunication services.

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Chapter 5: List of Preparers and Agencies/Persons Contacted

5.1 Lead Agency

This section lists those individuals who either prepared or participated in the preparation of this IS/MND. The CPUC is serving as the CEQA lead agency for preparation of this IS/MND. The following individuals from the CPUC were involved in the preparation of the document.

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This IS/MND was prepared for and under direction of the CPUC by RMT, Inc., located in San Mateo, California. The following RMT, Inc. staff contributed to this report:

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5.3 Agencies and Persons Contacted

The following agencies and persons were contacted during the preparation of this document:

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SISKIYOU TELEPHONE COMPANY

Carl Eastlick *Engineer*

ATTACHMENT 1:
USFS PROJECT APPROVAL

Authorization ID: **OAK57**
Contact ID: **SISKIYOU TELE-4**
Use Code: **822, 823**

FS-2700-23 (03/06)
OMB 0596-0082

U.S. DEPARTMENT OF AGRICULTURE
Forest Service
AMENDMENT
FOR
SPECIAL USE AUTHORIZATION
AMENDMENT NUMBER: 1

This amendment is attached to and made a part of the special use authorization (identified above) issued to T **SISKIYOU TELEPHONE COMPANY** on **10/24/2008** which is hereby amended as follows:

Holder authorized to install and maintain underground telephone lines along the Eddy Gulch (County) Road. facilities will be placed within the roadway or adjoining ditch. The excavation will begin at the Salmon Ri Bridge at Sawyers Bar and end approximately 3.5 miles up Eddy Gulch. The project is located in Sections 4 a 5, T39N, R11W, and Sections 28 and 33, T40N, R11W, Mt. Diablo Meridian. Refer to maps attached her (Exhibits A, B and C) and made a part thereof.

This Amendment is accepted subject to the conditions set forth herein, and to conditions N/A to N/A attached hereto a made a part of this Amendment.

THE SISKIYOU TELEPHONE COMPANY

TITLE: O.S.P. ENGINEER

Date: 01/09/09

PATRICIA A. GRANTHAM

Forest Supervisor, Klamath National Forest

Date: 1.22.09

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collectio information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. The required to complete this information collection is estimated to average 1 hour per response, including the time for reviewing instructions, searc existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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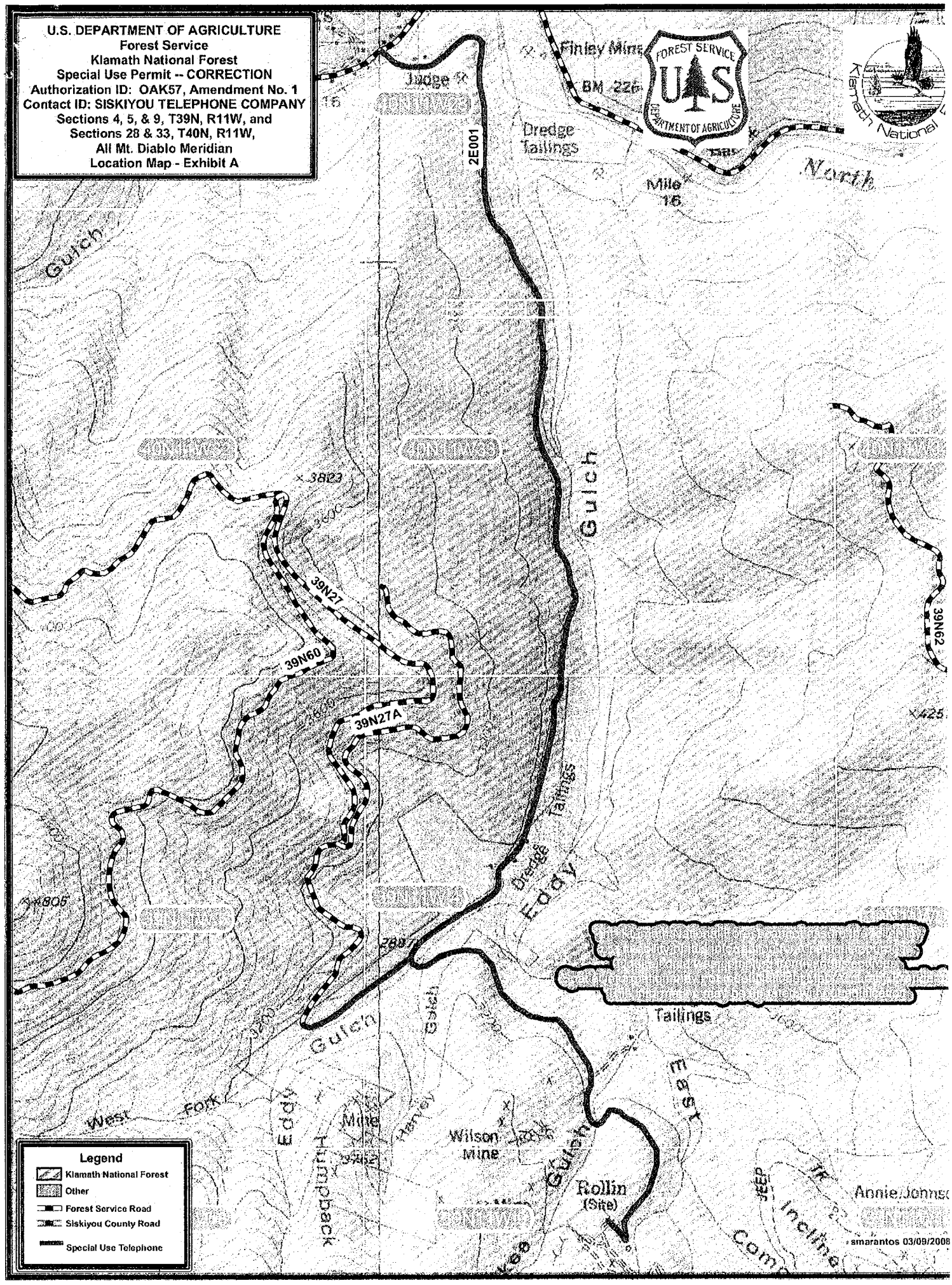
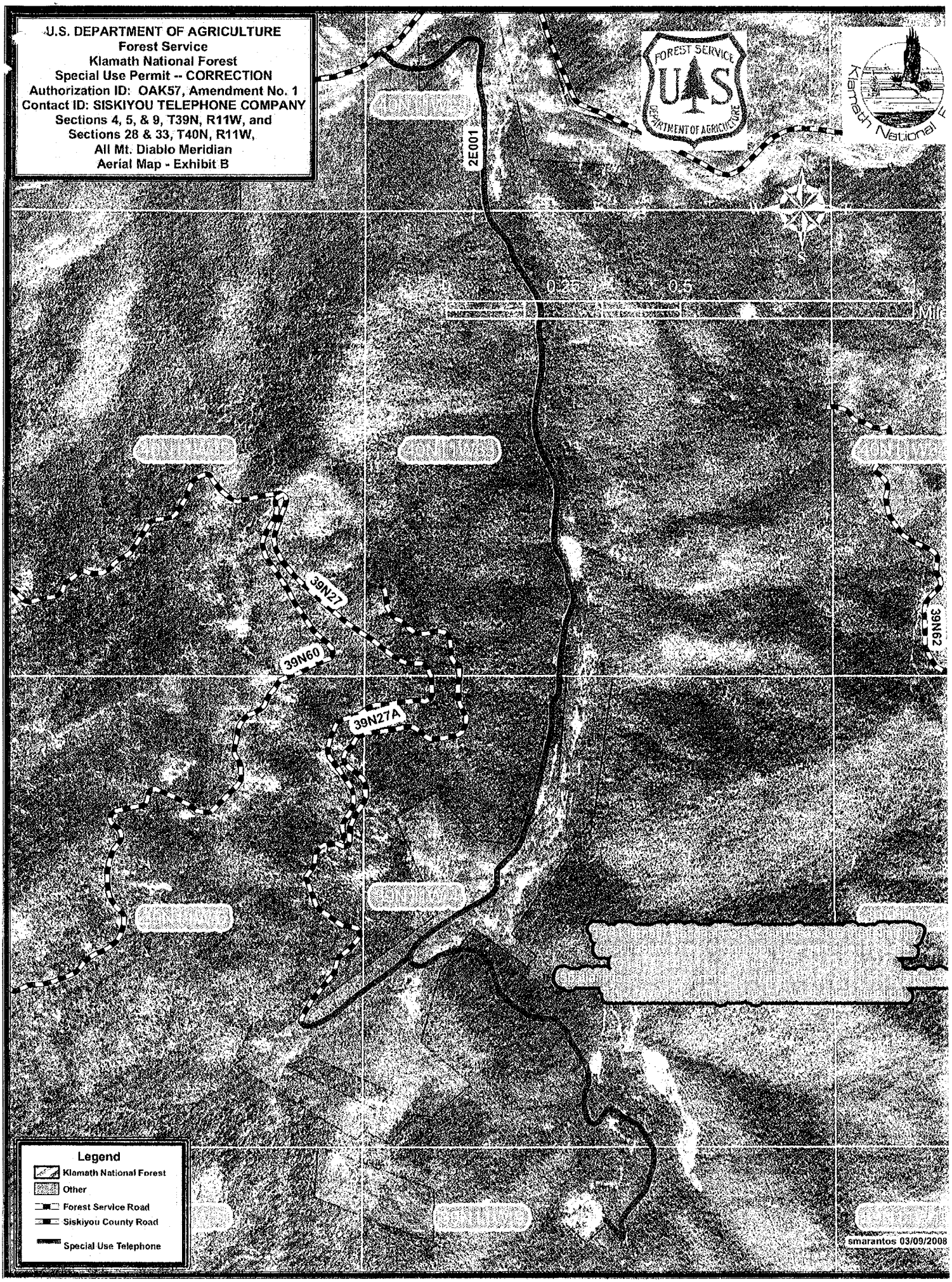

U.S. DEPARTMENT OF AGRICULTURE
Forest Service
Klamath National Forest
Special Use Permit -- CORRECTION
Authorization ID: OAK57, Amendment No. 1
Contact ID: SISKIYOU TELEPHONE COMPANY
Sections 4, 5, & 9, T39N, R11W, and
Sections 28 & 33, T40N, R11W,
All Mt. Diablo Meridian
Location Map - Exhibit A
Finley Mine
BM 2226
Dredge Tailings
Mile 16
North
Judge
2E001
Gulch
39N21
39N60
39N27A
39N62
Eddy Gulch
Tailings
West Fork
Humpback
Wilson Mine
Rollin (Site)
Legend
Klamath National Forest
Other
Forest Service Road
Siskiyou County Road
Special Use Telephone
smarantos 03/09/2008


U.S. DEPARTMENT OF AGRICULTURE
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Sections 4, 5, & 9, T39N, R11W, and
Sections 28 & 33, T40N, R11W,
All Mt. Diablo Meridian
Aerial Map - Exhibit B
FOREST SERVICE
DEPARTMENT OF AGRICULTURE
Klamath National
2E001
39N27
39N60
39N27A
39N62
Legend
Klamath National Forest
Other
Forest Service Road
Siskiyou County Road
Special Use Telephone
smarantos 03/09/2008

U.S. DEPARTMENT OF AGRICULTURE
Forest Service
Klamath National Forest
Special Use Permit - CORRECTION
Authorization ID: OAK57, Amendment No. 1
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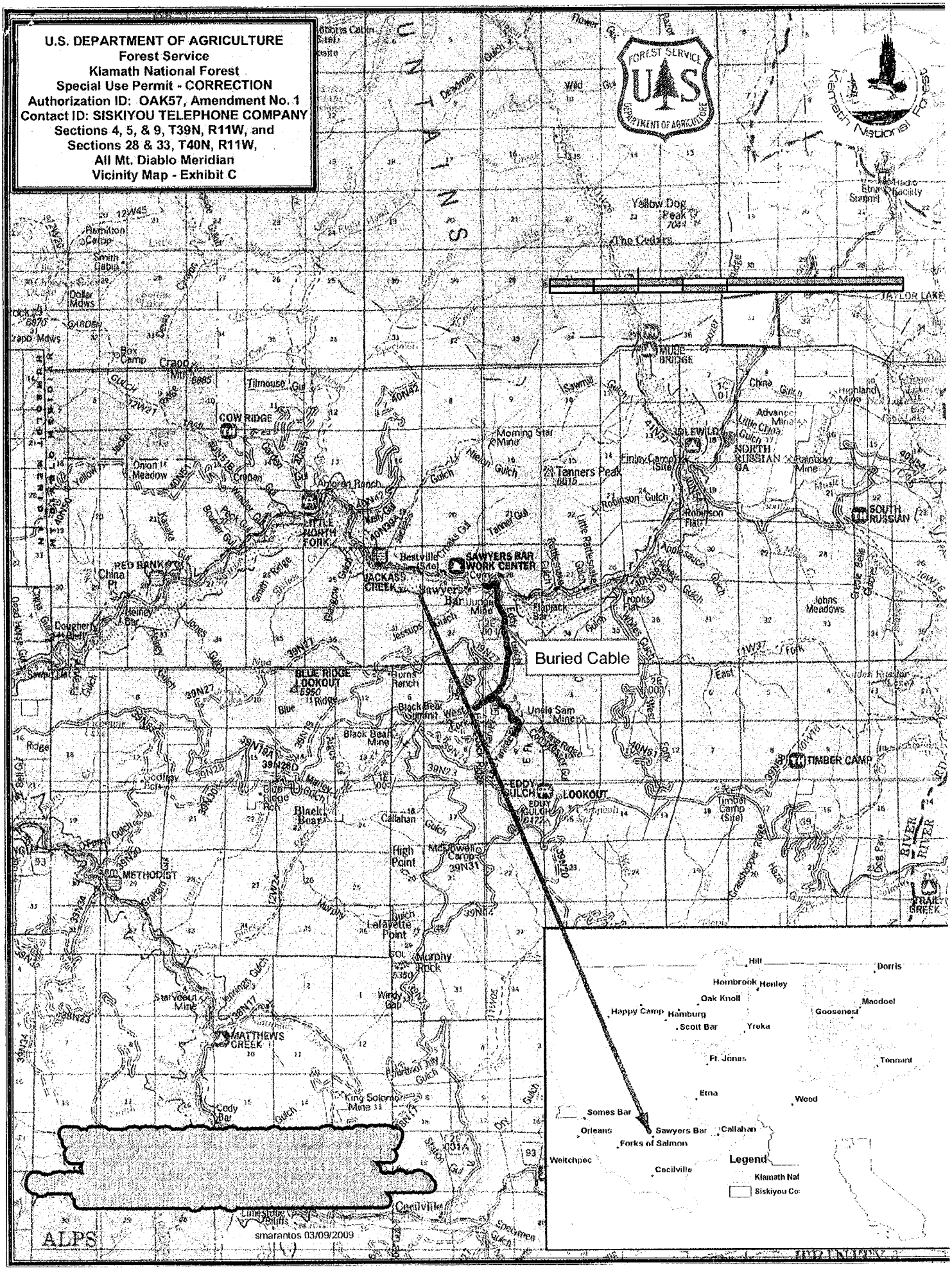
Sections 4, 5, & 9, T39N, R11W, and
Sections 28 & 33, T40N, R11W,
All Mt. Diablo Meridian
Vicinity Map - Exhibit C



ATTACHMENT 2:
EDDY GULCH BIOLOGICAL EVALUATION

Eddy Gulch

Biological Evaluation

November 2009

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Chapter 1: Introduction

RMT, Inc. has prepared this Biological Evaluation for the site of the Siskiyou Telephone Company Eddy Gulch Telecommunication Cable project (project). This report describes the biological resources found in the area, the relevant resource protection policies that determine levels of significance under the California Environmental Policy Act (CEQA), and the potential for impacts to those biological resources. The report concludes with an analysis of those potential impacts and how they may be reduced with appropriate mitigation measures.

The objectives of this report are to:

- Summarize all site-specific information related to existing biological resources
- Draw reasonable conclusions about the biological resources that could occur onsite based on habitat suitability and the proximity of the site to a species' known range
- Summarize all local, state, and federal natural resource protection laws that may be relevant to the proposed project
- Identify and discuss the potential impacts to biological resources from the project likely to occur on and near the site within the context of CEQA or any other state or federal laws
- Identify avoidance and mitigation measures that would reduce impacts to a less-than-significant level as identified by CEQA and that are generally consistent with recommendations of the resource agencies for affected biological resources

1.1 Project Site

The project site is located approximately 40 miles southwest of the Town of Etna, California, in Siskiyou County. It occupies portions of the *Tanners Peak, California* and *Sawyers Bar, California* 7.5 minute quadrangles and is located in Townships 39 North and 40 North, Range 11 West.

The project site is located along Eddy Gulch Road from the intersection of Sawyers Bar Road and Eddy Gulch Road to the north to a point approximately 3 miles south. Eddy Gulch Road is within a Siskiyou County maintenance right of way and is surrounded by the Klamath National Forest. The northern end of the project is near the banks of the North Fork of the Salmon River.

Land use in the surrounding Klamath National Forest is primarily timber management and recreation. Private lands located near the project site are used for private residences and both past and current mining activities. Land along the entire cable alignment has been either logged or mined during the last century.

1.2 Project Description

The purpose of the project is to provide telephone and broadband service to 6 individual residences currently residing in the Eddy Gulch area. The proposed project would require placement of 4-inch and 1.5-inch conduit in Eddy Gulch Road and placement of approximately 32 utility boxes at regular intervals along the route. Several locations along the route would

require excavation within the roadway shoulder to create a clearing large enough so that the utility box can be opened and closed easily. This clearing and excavation may include construction of retaining walls to provide stability (CH2MHill 2008).

At two locations along the telecommunications cable route, the cable will be suspended from poles to cross seasonal creeks. Both the poles and the cable will be placed outside of the Ordinary High Water Mark (OHWM). The cable will also be suspended from the bridge that crosses the North Fork of the Salmon River. The reminder of the cable will be installed underground, including either over or under existing culverts. The length of cable to be installed underground is approximately 24,000 feet.

A staging area approximately 4 miles from the project site will be used for storing conduit, pedestals, and equipment. Dump trucks will haul trench spoils to the Siskiyou Telephone gravel pit site on Eddy Gulch Road and backfill the trenches with Class II base rock from the gravel pit site. Construction will occur during dry conditions and crossing of the waterways will only occur when no water is present. No new access roads or vegetation clearance will be required.

Chapter 2: Existing Conditions

2.1 Soils, Topography, and Climate

2.1.1 SOILS

Soils found in the immediate vicinity of the project site are of the Clallam, Deadwood, and Holland series (NRCS 2009a). A summary of these soils is found in Table 1 below. With the exception of the locations of utility boxes, the majority of the project will be located in the bed of the unpaved road and not in native soils. These soils associations are not generally considered hydric, but may have hydric inclusions. None of the soils are considered serpentine or alkaline (Alvin Franks, personal communication), and are unlikely to support special status plant species that are adapted to those edaphic conditions.

2.1.2 TOPOGRAPHY

Topography in the vicinity of the site ranges from rolling to very steep. The steepest grade of the route is approximately 24 percent. Elevations of the project site range from approximately 2,150 feet to 3,450 feet (655 meters to 1,050 meters) above mean sea level.

2.1.3 CLIMATE

Siskiyou County has a Mediterranean climate with hot, dry summers and cold, wet winters. Annual precipitation in the general vicinity of the site averages approximately 45 inches, most of which falls between October and April in the form of rain or snow (WRCC 2008). Stormwater readily infiltrates the soils and also runs rapidly off the steep terrain and rock outcrops surrounding the site.

Table 1. Soils Occurring on the Eddy Gulch Project Site

Soil Series/Soil	Map Symbol	Parent Material	Drainage Class	Hardpan/ Duripan	% Hydric
CLALLAM AND DEADWOOD SERIES Clallam family, very deep-Riverwash association, 0 to 15% slopes	115	Sandy and gravely alluvium	Excessively drained	No	35
DEADWOOD SERIES Deadwood-Clallam, deep families association, 50 to 90% slopes	118	Residuum weathered from metamorphic rock	Well-drained	No	0
HOLLAND SERIES Holland-Clallam, deep-Coboc families associations, 15 to 70% slopes	141	Residuum weathered from igneous and metamorphic rock	Well-drained	No	0

SOURCE: NRCS 2009a, NRCS 2009b

2.2 Habitats

2.2.1 PROJECT REGION

The lands immediately surrounding the site are part of Klamath National Forest. The habitats adjacent to the project site are primarily mixed conifer series, dominated by Douglas-fir (*Pseudostuga menziesii*), Pacific madrone (*Arbutus menziesii*), bigleaf maple (*Acer macrophyllum*), vine maple (*Acer circinatum*), and black oak (*Quercus kellogii*). Also present are cascara (*Rhamnus purshiana*), limber pine (*Pinus flexilis*), ponderosa pine (*Pinus ponderosa*), mountain dogwood (*Cornus nuttallii*), incense cedar (*Calocedrus decurrens*), Himalayan blackberry (*Rubus discolor*), California hazel (*Corylus cornuta*), thimbleberry (*Rubus parviflorus*), poison oak (*Toxicodendron diversilobum*), and white alder (*Alnus rhombifolia*).

The surrounding coniferous forest provides habitats for a wide range of wildlife, which may cross or move along the road from time to time. Amphibians and reptiles such as the ensatina (*Ensatina eschscholtzii*), western fence lizard (*Sceloporus occidentalis*), western skink (*Eumeces skiltonianus*), and gopher snake (*Pituophis catenifer*), are expected to occur in the forest where sufficient cover in the form of logs and dense leaf litter exists.

Coniferous forests also provide habitats for a number of resident and migratory birds. Birds that could occur over the site include the northern goshawk (*Accipiter gentiles*), chestnut-backed chickadee (*Poecile rufescens*), northern flicker (*Colaptes auratus*), pileated woodpecker (*Dryocopus pileatus*), northern spotted owl (*Strix occidentalis caurina*), and winter wren (*Troglodytes troglodytes*). These and other birds may nest, forage, or hunt in habitats adjacent to the site.

The understory vegetation in coniferous forests provides potential foraging habitat and cover for several mammal species. Brush rabbits (*Sylvilagus bachmani*) primarily feed on forbs and grasses, while deer mice (*Peromyscus maniculatus*) prefer insects and seeds. A mixture of over- and understory vegetation provides abundant leaf litter and a variety of flowers, leaves, and berries for the dusky-footed woodrat (*Neotoma fuscipes*). The western gray squirrel (*Sciurus griseus*) forages on a broad variety of fruits and green foliage both in trees and on the ground. The abundance of small mammals also potentially attracts larger mammalian predators known to occur in the region, including coyotes (*Canis latrans*), gray foxes (*Urocyon cinereoargenteus*), and mountain lions (*Puma concolor*).

Eddy Gulch, the North Fork of the Salmon River, nearby creeks and seasonal drainages, ridgelines, and valleys serve as wildlife movement corridors. These corridors facilitate the movement of wildlife, particularly mammals and birds. The North Fork of the Salmon River, Eddy Gulch, and their tributaries provide passage for fish and amphibian species. The staging area is also adjacent to important salmonid habitat.

2.2.2 PROJECT SITE AND VICINITY

Eddy Gulch Road is hard packed gravel and has no habitat value for plants. Wildlife may cross the road to access other habitats, but the road has no habitat value for wildlife. No plant or animal species were observed on the unpaved road. Routes along private driveways were not examined in detail since access was not available.

Summer run steelhead trout (*Oncorhynchus mykiss irideus*) habitats are found in the North Fork of the Salmon River and its tributaries. The proposed telecommunication cables would be placed within conduits and installed along the side of the existing bridge crossing of the North Fork of the Salmon River. Crossings of the two unnamed tributaries will be overhead via telephone poles. Although these streams are important habitats for salmonids and other aquatic organisms, they are not directly impacted by this proposed project.

The gravel pit will be the source of crushed rock and the sidecast will be disposed of in this area. The gravel pit area has several species of weeds growing in it. These weeds include ripgut brome (*Bromus diandrus*), mullein (*Verbascum thapsus*), prickly lettuce (*Lactuca serriola*), Klamath weed (*Hypericum perforatum*), and pearly everlasting (*Anaphalis margaritacea*). The only habitat value of the gravel pit area is its proximity to Eddy Gulch Creek and the associated riparian habitat.

The staging area (Robert Will site) is a fenced pasture that will be used for storing materials and equipment. The ground was bare and vegetation could not be identified during late October when the site was visited. It has been used for similar activities in the past and does not provide any significant habitat value. The only habitat value of the staging area is its proximity to Little North Fork Creek and the associated riparian habitat.

The pedestal and vault locations found along Eddy Gulch Road were examined, but not the areas of proposed locations found on private land. These areas along Eddy Gulch Road are typically vegetated and may provide habitats for special status plant species, amphibians, or small mammals. Important habitat features such as large rotting logs, stumps, wetlands, streams, overly mature trees, or cavities such as mines and caves were absent from these areas. One small burrow was noted in the road cut, but it is not in a proposed location for installation of a vault or pedestal.

Scree slopes that may provide habitat for amphibians are found at two locations near the lower and upper ends of the route along Eddy Gulch Road. A few seeps were observed along the road cut, but no project activities are proposed for these areas.

A small amount of California fescue was observed near the landing, adjacent to Eddy Gulch Road. This area is disturbed and invasive plants are present, such as yellow star thistle (*Centaurea solstitialis*), and does not provide potential habitat for the Marden skipper butterfly (*Polites mardon*).

2.3 Special Status Species

A wide variety of taxa native to the state of California have low populations, limited distributions, or are otherwise vulnerable to extinction or extirpation with the state. Although they may include Ecologically Significant Units and sub-species as well as species, these taxa are collectively referred to as "special status species." The reasons these flora and fauna may be vulnerable to extirpation include the growth of the state's human population, the conversion of these species' habitats to agricultural and urban uses, and other impacts such as climate change or wildfires.

As described below in Section 3.2, state and federal laws have provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with the responsibility for conserving and protecting the diversity of plant and animal species native to the state. Because of the diversity of habitats within the state, a relatively large number of native plants and animals

have been formally designated as "threatened" or "endangered" under state and federal endangered species legislation. Others have been designated as candidates for such listing. Still others have been designated as "species of special concern" by the CDFG. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered (CNPS 2001).

A number of special status plants and animals have the potential to occur in the site's vicinity, as determined by a review of the California Natural Diversity Data Base (CNDDB). It is important to note that the CNDDB is a volunteer database, and it may not contain all known or unpublished records.

These species and the likelihood of their occurrence in the study area are listed in Table 2, found below. Sources of information for this table included *California's Wildlife, Volumes I, II, and III* (Zeiner et. al 1988), *California Natural Diversity Data Base* (CDFG 2008), and *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001). This information was used to evaluate the potential for special status plant and animal species to occur on and near the site.

A search of published accounts for all relevant special status plant and animal species was conducted within five miles of the project site using the CNDDB Rarefind (CDFG 2009). All species listed in the Proponent's Environmental Assessment (CH2MHill 2008) and the study conducted for the nearby Nordheimer Flat telecommunications project (Live Oak Associates 2008) were also reviewed for their potential to occur on this project site.

Table 2. List of Special Status Species That Could Occur In The Project Vicinity

Species	Status	Habitat	*Occurrence in the Study Area
Plant Species			
Shasta chaenactis (*Chaenactis suffrutescens*)	CNPS 1B	Lower and upper montane coniferous forests on sandy soils or serpentinite at elevations between 760 and 2800 meters. Blooms May-September.	**Unlikely.** Only marginally suitable soils for this species occur in the project area.
Henderson's fawn lily (*Erythronium hendersonii*)	CNPS 2	Lower montane coniferous forests at elevations between 300 and 1600 meters. Blooms April-July.	**Unlikely.** Potentially suitable habitat for this species is present near the site. However, the last documented occurrence of this species in the region is from 1929.

Table 2 *(Continued)*. List of Special Status Species That Could Occur In The Project Vicinity

Species	Status	Habitat	*Occurrence in the Study Area
White-flowered rein orchid (*Piperia candida*)	CNPS 1B	Broadleafed upland forests, lower montane coniferous forests, and North Coast coniferous forests, sometimes on serpentinite, at elevations between 30 and 1310 meters. Blooms May-September.	**Possible.** Potentially suitable habitat for this species is present on the site. The nearest documented occurrence of this species is approximately three miles northwest of the site.
Marble Mountain campion (*Silene marmorensis*)	CNPS 1B	Broadleafed upland forests, chaparral, cismontane woodlands, and lower montane coniferous forests at elevations between 170 and 1250 meters. Blooms June-August.	**Possible.** Potentially suitable habitat is present on the site. This species has been documented several times within five miles of the site.
English Peak greenbriar (*Smilax jamesii*)	CNPS 1B	Marshes and swamps, broadleafed upland forests, lower and upper montane coniferous forests, and North Coast coniferous forests at elevations between 580 and 2500 meters. Blooms May-July.	**Possible.** Potentially suitable habitat is present on the site. This species has been documented within five miles of the site.
Avian Species			
Peregrine falcon (*Falco peregrinus anatum*)	CE	Individuals breed on cliffs in the Sierra or in coastal habitats; occurs in many habitats of the state during migration and winter.	**Possible.** Peregrine falcons may occur incidentally on the site if they forage over adjacent areas. Suitable nesting habitat is absent from the site.
Northern spotted owl (*Strix occidentalis caurina*)	FT	Dense, old-growth, multi-layered mixed conifer, redwood, and Douglas-fir forests from sea level to 2300 meters. Occasionally nests in second growth forests.	**Likely.** Two pairs are known to have nested in Eddy Gulch in the past. Old growth habitat does not occur on the project site.
Northern goshawk (*Accipiter gentilis*)	CSC, USFS	Coniferous forests, usually nesting in large trees on north slopes near water.	**Likely.** Eddy Gulch is designated by the Klamath NF as a northern goshawk management area. Suitable habitat for this species is present in the form of large trees bordering and in the vicinity of the site.

Table 2 *(Continued)*. List of Special Status Species That Could Occur In The Project Vicinity

Species	Status	Habitat	*Occurrence in the Study Area
Mammal Species			
California wolverine (*Gulo gulo*)	CT	A variety of high elevation habitats in the North Coast mountains and Sierra Nevada. Uses caves, logs, burrows for cover and denning.	**Unlikely.** This species may occur incidentally on the site if they den or forage in the surrounding habitat. Suitable denning and foraging habitat is absent from the site itself. The most recent recorded observations for the area are at least 20 years old.
Humboldt marten (*Martes americana humboldtensis*)	CSC, USFS	Late-successional coniferous forests with low overhead cover from the Oregon border to Sonoma County. Uses cavities for denning.	**Unlikely.** Suitable denning and foraging habitat is absent from the site itself but is potentially present in the surrounding landscape. Therefore, this species may occur incidentally on the site. The last recorded observation near the site was 1972.
Pacific fisher (*Martes pennanti* (*pacifica*) DPS)	FC	Uses cavities, snags, and logs for cover and denning. Needs large areas of mature, dense forest.	**Unlikely.** Pacific fishers may occur incidentally on the site if they den or forage in the surrounding habitat. Suitable denning and foraging habitat is absent from the site itself. The last recorded observation on the site was 1969.
Townsend's big-eared bat (*Plecotus townsendii townsendii*)	CSC, USFS	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats in the state.	**Possible.** Suitable roosting habitat is absent from the site itself but is potentially present in the surrounding landscape and this species may forage over the north fork of the Salmon River. Therefore, this species may occur incidentally over the site.
Pallid bat (*Antrozous pallidus*)	CSC, USFS	Grasslands, chaparral, woodlands, and forests of California; most common in dry rocky open areas that provide roosting opportunities. May roost in caves, crevices, mines, and occasionally trees or buildings.	**Possible.** Suitable roosting habitat is absent from the site itself but is potentially present in the surrounding landscape and this species may forage over the north fork of the Salmon River. Therefore, this species may occur incidentally over the site.
Herptile Species			
Del Norte salamander	CSC, USFS	Old-growth mixed conifer/hardwood forests.	**Possible.** Suitable habitat is absent from the site, but may be found in the vicinity.

Table 2 *(Continued)*. List of Special Status Species That Could Occur In The Project Vicinity

Species	Status	Habitat	*Occurrence in the Study Area
(*Plethodon elongates*)		Cool, moist, stable microclimate with deep litter layer in closed, multi-storied canopy. Also known to utilize scree slopes.	The nearest documented occurrences of this species are from 1989, more than five miles from the site.
Foothill yellow-legged frog (*Rana boylii*)	CSC, USFS	Frequents partly shaded, shallow, swiftly-flowing streams and riffles with rocky substrate in a variety of habitats. Typically near permanent water.	**Possible.** The north fork Salmon River and Eddy Gulch are the only potentially suitable habitats for this species on or near the site, and it may be found in the vicinity. The nearest documented occurrence of this species is from 1985, more than five miles from the site.
Red-legged frog (*Rana aurora*)	CSC, FT	Frequents partly shaded, shallow, swiftly-flowing streams and riffles with rocky substrate in a variety of habitats. Prefers shorelines with extensive vegetation, and permanent or nearly permanent pools 1 meter or more in depth.	**Possible.** The north fork Salmon River and Eddy Gulch are the only potentially suitable habitats for this species on or near the site, and it may be found in the vicinity. The nearest documented occurrence of this species is more than five miles from the site.
Cascades frog (*Rana cascadae*)	CSC, USFS	Mountain lakes, small streams, and ponds in meadows or open coniferous forests.	**Possible.** Suitable habitat for this species is absent from the site, but may be found in the vicinity. The nearest documented occurrence of this species is more than five miles from the site.
Northwestern pond turtle (*Actinemys marmorata marmorata*)	CSC, USFS	Intermittent and permanent waterways including streams, marshes, rivers, ponds and lakes, from sea level to 1800 meters.	**Possible.** Suitable habitat for this species is found on the site. The nearest documented occurrence of this species is more than five miles from the site.
Western tailed frog (*Ascaphus truei*)	CSC, USFS	Perennial streams of montane hardwood-conifer, redwood, Douglas-fir, and ponderosa pine habitats, from sea level to 2560 meters.	**Possible.** Suitable habitat for this species is found on the site. The nearest documented occurrence of this species is less than five miles from the site on a tributary of the north fork of the Salmon River.
Fish Species			
Summer-run steelhead trout (*Oncorhynchus*	CSC, USFS	Northern California coastal streams south to Middle Fork Eel river. Needs cool, swift,	**Present.** Suitable habitat for this species is present, and it is known to occur in the north fork Salmon River and in Eddy

Table 2 *(Continued)*. List of Special Status Species That Could Occur In The Project Vicinity

Species	Status	Habitat	*Occurrence in the Study Area
mykiss irideus)		shallow water with loose gravel for spawning and large pools to spend the summer.	Gulch.
Invertebrate Species			
Mardon skipper butterfly (*Polites mardon*)	FC	Grasslands at low elevations in the Cascades; the alpine, especially on serpentine soil. This butterfly is considered a prairie obligate.	**Absent.** It is not known to occur in the project vicinity. No suitable habitat found in the project area.
Franklin's bumblebee (*Bombus Franklini*)	CSC	Hives in abandonded rodent burrows. Ranges from 162 to 2340 meters. Feeds on nectar of lupine, poppy, and other plants.	**Absent.** It is known to have occurred in Siskiyou County, but it is not known to occur in the project vicinity and is possibly extinct. No suitable habitat is found in the project area, and no suitable rodent burrows or host vegetation was observed on or near the site.

***Explanation of Occurrence Designations and Status Codes**

Present: Species observed on the sites at time of field surveys or during recent past.
Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible: Species not observed on the sites, but it could occur there from time to time.
Unlikely: Species not observed on the sites, and would not be expected to occur there except, perhaps, as a transient.
Absent: Species not observed on the sites, and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPE	Federally Endangered (Proposed)	CR	California Rare
FC	Federal Candidate	CP	California Protected
USFS	U.S. Forest Service Sensitive	CSC	California Species of Special Concern

CNPS California Native Plant Society Listing
1A Plants Presumed Extinct in California
1B Plants Rare, Threatened, or Endangered in California and elsewhere
2 Plants Rare, Threatened, or Endangered in California, but more common elsewhere
3 Plants about which we need more information – a review list
4 Plants of limited distribution – a watch list

SOURCES: CNDDB 2009; CH2MHill 2008, CNPS 2001.

2.4 Jurisdictional Waters

Jurisdictional waters are defined by the laws that protect them, including the federal Clean Water Act (CWA) and the California Fish and Game Code, Sections 1601 through 1603 (Section 1600).

The CWA regulates waters of the U.S., which typically includes rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Waters of the U.S. may also include lakes, ponds, reservoirs, and wetlands, if these waters have a significant nexus with a Traditional Navigable Water.

Creeks, rivers, lakes, and their associated riparian areas may be subject to regulation by the CDFG under Section 1600, and the California Regional Water Quality Control Board (RWQCB) may take jurisdiction over all waters of the state. Waters of the state are defined as all surface and groundwater within the state of California. See Section 3.2 of this report for additional information.

Jurisdictional waters found on the site include the North Fork of the Salmon River, Eddy Gulch, and various unnamed tributaries. Small wetlands are found in the immediate vicinity of the site, and these features may also be jurisdictional.

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Chapter 3: Potential Impacts and Mitigation Measures

3.1 Significance Criteria

Approval of general plans, area plans, and permits for specific projects is subject to the provisions of CEQA. The purpose of CEQA is to assess the potential for environmental impacts from proposed projects before they are carried out. However, not all potential impacts are considered significant, and consequently, "significance" is defined within the law. To prevent and avoid potentially significant environmental impacts, CEQA mandates public agencies to require project proponents to include measures that would allow the avoidance and minimization of environmental impacts by implementing practical alternatives or mitigation measures.

According to Section 15382 of the CEQA Guidelines, a significant effect on the environment means a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest."

Specific project impacts to biological resources may be considered "significant" if they would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service
- 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 California Department of Fish and Game or U.S. Fish and Wildlife Service
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- 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
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make "mandatory findings of significance" if the project has 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, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory.

3.2 Relevant Goals, Policies, and Laws

3.2.1 THREATENED AND ENDANGERED SPECIES

State and federal "endangered species" legislation has provided the CDFG and the USFWS with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal endangered species acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the CNPS are collectively referred to as "species of special status." Permits may be required from both the CDFG and USFWS if activities associated with a proposed project will result in the "take" of a listed species. "Take" is defined by the state of California as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFG and the USFWS are responding agencies under CEQA. Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.2 MIGRATORY BIRDS

State and federal laws also protect most birds. The Federal Migratory Bird Treaty Act (16 U.S.C., scc. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

3.2.3 BIRDS OF PREY

Birds of prey are also protected in California under provisions of the State Fish and Game Code, Section 3503.5, which states that it is "unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFG.

3.2.4 WETLANDS AND OTHER JURISDICTIONAL WATERS

Natural drainage channels and adjacent wetlands may be considered "Waters of the United States" (hereafter referred to as "jurisdictional waters") subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE). The extent of jurisdiction has been defined in the Code of Federal Regulations but has also been subject to interpretation of the federal courts. Jurisdictional waters generally include:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide
- All interstate waters including interstate wetlands
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce
- All impoundments of waters otherwise defined as waters of the United States under the definition
- Tributaries of waters identified in paragraphs (a)(1)-(4) (i.e. the bulleted items above)

As recently determined by the United States Supreme Court in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (the SWANCC decision), channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds. However, the U.S. Supreme Court decisions *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers* (referred together as the *Rapanos* decision) impose a "significant nexus" test for federal jurisdiction over wetlands. In June 2007, the USACE and Environmental Protection Agency (EPA) established guidelines for applying the significant nexus standard. This standard includes 1) a case-by-case analysis of the flow characteristics and functions of the tributary or wetland to determine if they significantly affect the chemical, physical, and biological integrity of downstream navigable waters, and 2) consideration of hydrologic and ecologic factors (EPA and USACE 2007).

The USACE regulates the filling or grading of such waters under the authority of Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by “ordinary high water marks” on channel banks.

Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated intermittently or permanently saturated by water), and wetland hydrology according to methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987).Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes that show a higher likelihood of occurrence in these conditions.

All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE (Wetland Training Institute, Inc. 1991). Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued until the RWQCB issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The filling of isolated wetlands, over which the USACE has disclaimed jurisdiction under the SWANCC decision, is regulated by the RWQCB. It is unlawful to fill isolated wetlands without filing a Notice of Intent with the RWQCB. The RWQCB is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit. All projects requiring federal money must also comply with Executive Order 11990 (Protection of Wetlands).

The CDFG has jurisdiction over the bed and bank of natural drainages and their associated riparian habitats according to provisions of Section 1601 and 1602 of the California Fish and Game Code (2008). Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented which protect the habitat values of the drainage in question.

3.2.5 LOCAL ORDINANCES, POLICIES, AND HABITAT CONSERVATION PLANS

No local ordinances, policies, or habitat conservation plans are known to be in effect for the region. No grading permit or other permits are required by Siskiyou County for the installation of utilities (Rolland Hickel, County Planner, personal communication October 21, 2009).

3.3 Project Specific Impacts and Mitigation Measures

The proposed project is the installation of approximately 24,000 linear feet of a telecommunications cable within Eddy Gulch Road in order to provide land line telephone and dial-up internet service to six families in the Eddy Gulch community. For the purposes of this analysis, it is assumed that any future proposal by the applicant will be consistent with the general locations of the site as currently represented in the plans provided by Siskiyou Telephone (CH2MHill 2008). Any appreciable difference in either scope or general location of the proposed project would require an additional impact assessment to ensure that unanticipated impacts to biotic resources are not likely to occur.

3.3.1 APPLICANT PROPOSED MEASURES

The applicant has proposed three mitigation measures to reduce the potential for impacts to biological resources. An additional mitigation measure has been proposed to reduce the potential for impacts to water quality (CH2MHill 2008).

Applicant Proposed Measures[1]

APM 5.4-1: Work would be conducted outside of the nesting season, July 11 – January 31, to minimize potential effects to spotted owls and nesting birds.

APM 5.4-2: The trench will be closed by the end of each working day, so not op0en trenches will be left that could trap wildlife.

APM 5.4-3: The equipment Siskiyou Telephone would use to construct the proposed project is currently in use on other projects within the Klamath National Forest, near the project area. The equipment would not be used outside of the general area prior to construction within Eddy Gulch.

APM 5.8-2: Prior to construction, Siskiyou Telephone would submit a Notice of Intent with the State Water Resources Control Board (SWRCB) and a Linear Construction Activity Notification with the Regional Water Quality Control Board (RWQCB) to comply with the LUP General Permit. Construction of the proposed project would occur during the dry season (April –

[1] The numbering convention for the APNs reflects the numbering used in the applicant's proposal, and not the numbering used in the Draft IS/MND.

October), thereby minimizing the potential for erosion and sediment transport during construction activities. Siskiyou Telephone would have the contractor prepare a Storm Water Pollution Prevention Plan (SWPPP) that outlines best management practices to address erosion and sediment control, wind erosion control, source controls, and waste management. Siskiyou Telephone would ensure that eth SWPPP requirements are implemented at the project site and that water quality standards are maintained.

Best management practices would be modified, as necessary, to ensure that an adequate combination of erosion controls is implemented. Examples of best management practices include: use of silt fence or fiber rolls to prevent the migration of sediment offsite, applicaiton of water to disturbed areas during working or windy conditions to prevent dust and erosion, and use of drip pans for mobile fueling (CH2MHill 2008).

3.3.2 LOSS OF HABITAT FOR SPECIAL STATUS PLANTS

Potential Impacts. Of the 5 special status plant species potentially occurring within the project vicinity, only Marble Mountain campion, white-flowered rein orchid, and English Peak greenbriar have the potential to occur on the site (Table 2).

The extent to which these species may be present on the site is not currently known. Focused surveys within and in the vicinity of any future proposed construction activities within plant communities should be conducted to determine these species' presence on, or absence from, the site. These focused special status plant surveys should be conducted prior to ground disturbance and should occur during the appropriate blooming season for the species. Surveys conducted in June or July should be sufficient to confirm the presence or absence of these species.

All three of these species are considered a CNPS 1B list species ("Plants rare, threatened or endangered in California and elsewhere"). As CNPS 1B plants with no federal or state listings, impacts to these plant species may be considered significant under CEQA. If detected on the site, a determination would need to be made as to whether or not these sensitive plants can be avoided. If they cannot be avoided, a determination would need to be made regarding the significance of impacts to individuals of these species. The determination of the significance of impacts would be based on, but not limited to, criteria such as the temporary nature of the habitat impacts, extent of the species' range, relative abundance of regional populations of the species in its range, and the number of plant populations on the site.

If focused rare plant surveys determine that these species are absent from areas impacted by future development, then there would be no impact to habitat for these species, and mitigation would not be warranted.

Mitigation. Should one or more populations of Marble Mountain campion, white-flowered rein orchid, or English Peak greenbriar be detected within the project footprint, and should their loss be considered significant under CEQA, then mitigation measures would be required to offset impacts to these plant populations. If the project cannot be redesigned to avoid impacts to the identified species, then compensation measures should include development of an onsite restoration plan for these species. At a minimum, the plan should contain the following elements:

- Location of restoration areas

- Propagation and planting techniques to be employed for the restoration effort
- Timetable for implementation
- Monitoring plan and performance criteria
- Adaptive management techniques
- Site maintenance plan

The plan would need to be approved by the lead agency prior to the start of project construction and, because disturbances and impacts to the site would be temporary, should occur in the immediate vicinity of the identified population(s). The objective of this mitigation measure would be to replace the special status plants lost during construction activities. This and any other compensation for anticipated impacts should be consistent with local policies and ordinances, and any other federal or state regulations protecting these plant communities.

Implementation of the above measures is expected to reduce project impacts to a less-than-significant level to any special status plant species that may occur on the site.

3.3.3 LOSS OF HABITAT FOR SPECIAL STATUS ANIMALS

Potential Impacts. Seventeen special status or sensitive animal species may occur, or once occurred, regionally (Table 2). With the exception of the northern goshawk, northern spotted owl, peregrine falcon, Townsend's big-eared bat, pallid bat, Del Norte salamander, foothill yellow-legged frog, red-legged frog, Cascades frog, northwestern pond turtle, western tailed frog, and summer-run steelhead trout, all of these species would be absent from or unlikely to occur on the site due to unsuitable habitat conditions. Proposed construction activities would have no effect on these species because there is little or no likelihood that they would be present at the time of construction.

The remaining special status animal species listed above may occur on or near the site incidental to home range and migratory movements, thus using the site infrequently, or may forage near the site year-round or during migration. Project buildout would have no effect on the breeding success of these species and would not result in the loss of foraging, nesting, and/or roosting habitat that is abundantly available regionally. Therefore, the loss of habitat for these species would be considered less than significant.

Mitigation. Mitigation measures are not warranted.

3.3.4 IMPACTS TO NESTING MIGRATORY BIRDS

Potential Impacts. Although no stick nests were observed in trees along Eddy Gulch Road, near the gravel pit, or near the staging area, a conclusive investigation of nesting birds was not conducted. Trees in the mixed coniferous forest habitat adjacent to the site provide suitable nesting habitat for migratory birds, including tree-nesting raptors. If a migratory bird, regardless of its federal or state status, were to nest in trees near the site prior to or during proposed construction activities, such activities could result in the abandonment of active nests or direct mortality to these birds. Construction activities that adversely affect the nesting success of special-status or non-special-status migratory birds, including tree-nesting raptors, or result in mortality of

individual birds constitute a violation of state and federal laws (see Section 3.2.3) and would be considered a significant impact under CEQA.

Mitigation. Applicant proposed measure 5.4-1 requires that work be conducted outside of the breeding season for birds. Construction activities conducted during the non-breeding season (July 11 through January 31) would minimize the potential for impacts to nesting birds, including northern spotted owls and other raptors. Implementation of the above measure would mitigate impacts to migratory birds, including tree-nesting raptors, to a less-than-significant level.

3.3.5 IMPACTS TO JURISDICTIONAL WATERS

Potential Impacts. No jurisdictional waters would be directly impacted by the proposed project. Therefore, state and federal regulations protecting jurisdictional waters are not relevant to project-related activities. For areas where lower order tributaries cross under the road via culverts, the laying of cables will occur either beneath or above the culverts without removing the culverts. The project would also have no direct effect on riparian habitats because they would be avoided by installing conduits above riparian areas to be crossed, including the bridge across the North Fork of the Salmon River.

Mitigation. Mitigation measures are not warranted.

3.3.6 IMPACTS TO WILDLIFE HABITAT

Potential Impacts. The project site consists of unpaved road surfaces along Eddy Gulch Road, private unpaved roads, the bridge across the North Fork of the Salmon River, and an existing gravel pit and equipment staging area. These areas are routinely disturbed by on-going activities, including traffic along Eddy Gulch Road, and generally provide very low quality habitat for wildlife species.

One potential exception is the possible use of the bridge over the North Fork of the Salmon River for roosting by bats. Townsend's big-eared bats are known to use bridges as night roosts (Fellers and Pierson 2002) and pallid bats may also roost under bridges (Pierson and Rainey 1998).

Any project-related impacts to these marginal habitats would be temporary. Due to the small amount of low quality habitat that would be temporarily impacted by project development, the loss of habitat for native wildlife resulting from the proposed project would constitute a less-than-significant impact.

Mitigation. Mitigation measures are not warranted.

3.3.7 INTERFERENCE WITH MOVEMENT OF NATIVE WILDLIFE

Potential Impacts. Although the Salmon River runs under the north end of the site at the bottom of a steep slope and facilitates the movement of wildlife through the region, the project site itself provides minimal dispersal habitat for native wildlife and does not function as a significant movement corridor for native wildlife. Proposed construction activities are not expected to have a significant effect on home range and dispersal movements of native wildlife that may occur in the region. The proposed construction activities may result in a temporary disruption of local wildlife movements and would be expected to do so only during daylight hours. These activities are not expected to result in any permanent or substantial changes in use or movement patterns once

construction is complete. Wildlife species presently utilizing this area as a corridor are expected to continue moving through it after project buildout. Therefore, the proposed project would have a less-than-significant impact on corridor-type movements of native wildlife within the region.

Mitigation. Mitigation measures are not warranted.

3.3.8 DEGRADATION OF SURFACE WATER QUALITY

Potential Impacts. Proposed construction activities would result in a small amount of soils left barren in the construction footprint. Additionally, extensive grading often leaves the soils of construction zones barren of vegetation and, therefore, vulnerable to sheet, rill, or gully erosion. Furthermore, runoff is often polluted with grease, oil, pesticide and herbicide residues, heavy metals, etc. These pollutants may eventually be carried to sensitive wetland habitats used by a diversity of native wildlife species.

The applicant is expected to comply with the provisions of a County grading permit, including standard erosion control measures that employ best management practices. Projects involving the grading of large tracts of land must also be in compliance with provisions of a General Construction permit (a type of NPDES permit) available from the RWQCB. Compliance with the above permit(s) should result in no significant impact to water quality in seasonal creeks, reservoirs, and downstream waters from the proposed project and should not result in the deposition of pollutants and sediments in sensitive riparian and wetland habitats.

Mitigation. Mitigation measures are not warranted.

3.3.9 LOCAL ORDINANCES OR HABITAT CONSERVATION PLANS

Potential Impacts. No local ordinances or habitat conservation plans are known to be in effect for this project. Therefore, the proposed project would not impact any local policies related to biological resources.

Mitigation. Mitigation measures are not warranted.

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ATTACHMENT 3:
EDDY GULCH GEOLOGICAL FIELD INSPECTION

GEOLOGY OF EDDY GULCH
TELECON PROJECT

Introduction:

The California Public Utility Commission requires that an EIR be prepared to show that the installation of the required underground and above ground cable system proposed by the Siskiyou Telephone Company will not have adverse effects **on water quality, slope stability and other geologic features**.

This report only covers the items related to Geology and related matters. The items concerning wild life; plant life; etc. are not required to be covered in this report unless they are related to the geologic environment.

Basic Geology:

The entire alignment is on highly weathered Pre-Cretaceous age, meta-sedimentary rocks (Calif. Division of Mines and Geology published map of area). A field inspection of the area was made on October 28, 2009. The following is a description of the geologic features and the effect they may have on water quality and slope stability.

Groundwater

It is noted on the plans that the trench will be backfilled with gravel to protect the pipe. This gravel will provide a conduit for collection and transport of ground and percolating surface water that could cause slope stability problems. It is suggested in the design that outlets to the existing stream crossing be made so the there is no collection of water in the backfilled trench. This will prevent the build up of a groundwater head in the trench.

Slope Stability

From the bridge crossing the North Fork Salmon River and the road cuts etc. to the south of Eddy Gulch to about Station 9+50 the material is weathered sandstones and shale that would not have effect the environment as long as the policy of hauling away the removed materials in the excavation process to make a buried cable system is followed. There is a small near surface landslide along the curve in the alignment a few feet upstream from station 9+50 and part way around the curve. This unstable condition was caused by construction of the existing roadway and is stable at this time. The trees that were affected are now growing straight up indicating that is was a shallow stability problem with the shallow two or three feet thick weathered zone and not in bedrock.

This same condition was observed at two other locations and will not be described, since they pose no construction or stability problem. Most of the proposed alignment is through weathered to deeply weathered sandstone and shale. The upper watershed above all of the weathered rocks– Station 131 to end of the project inspected should be considered soil and not rock.

The alignment up to about Station 41+16 is through highly weathered sandstone and shale and poses no construction problem. At this point and upstream for a few tens of feet the bedrock is not deeply weathered and it may be necessary to saw the rock to make the required trench depth, if the cable is to be installed on the uphill side of the road. This condition is found at a few other locations but should not pose a problem if the saw is made available on the project. It was noted at a few of these locations, that there is solid unweathered bedrock with no gravel cover to about the center of the roadway.

Conclusions and Recommendations.

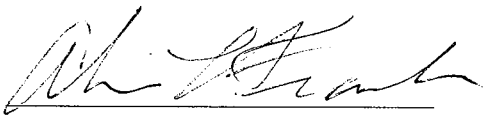
There are no geologic conditions, such as landslides, unstable ground, etc., that would adversely effect the environment, if the digging and backfilling of the trench is done as proposed. That is:

A Remove all excavated material to storage prior to laying the cable.

B. Place a protective gravel base for the cable to lie on and then place gravel over the cable.

C. Backfill with compacted soil and providing room for storm runoff in the ditch.

D. Provide drainage from the gravel in the trench to natural stream beds to prevent build up of a hydraulic head that could cause instability of the roadway.



Alvin L. Franks, Ph.D.

CHG #1, CEG #88, PG #152

ATTACHMENT 4:
CUMULATIVE PROJECT LIST

Attachment 4: Cumulative Projects

EDDY GULCH LATE SUCCESSIONAL RESERVE FUELS/HABITAT PROTECTION PROJECT

The U.S. Forest Service (USFS) is preparing environment document for the Eddy Gulch Late-Successional Reserve (LSR) Fuels/ Habitat Protection Project. The purpose of the project is to protect late-successional habitat used by the northern spotted owl and other late-successional-dependent species, to protect communities, and create safer emergency access routes. The project is needed to reduce excessive fuel hazards, where recent surveys for this project determined that 73 percent of the entire LSR would support active or passive crown fires.

The USFS proposes to treat 25,969 acres of landscape-level treatments in the Eddy Gulch LSR Project Assessment Area to protect late-successional habitat and communities. Of the 25,696 acres proposed for treatment, 8,291 acres would be in Fuel Reduction Zones (FRZs); 17,524 acres would be in Prescribed Burn Units (Rx Units); and 154 acres would be in Roadside (RS) treatments along emergency access routes that do not pass through an FRZ or Rx Unit (USFS 2009).

WHITE GULCH DAM REMOVAL PROJECT

The White Gulch Dam is located on the Salmon River, a tributary of the Klamath River, in Siskiyou County, California, not far from the Oregon border. Whites Gulch sits in the middle of thick vegetation and tree-lined streams, ideal for spawning salmon. The original dam was constructed on the river in the late 1800s; it was replaced by the current dam in the 1980s. The river was originally home to a large salmon population, supporting a salmon cannery and sportfishing, but now the dam blocks salmon from reaching their upstream spawning habitat, and populations are dwindling.

NOAA partnered with the FishAmerica Foundation, Salmon River Restoration Council, California Department of Fish and Game, USFS, Americorps Watershed Stewards Project, 5 Counties Salmonid Conservation Program and the Local Salmon River Landowners and Contractors to remove the two barriers on the river (USFS 2009).

The removal of these two dams, in combination with the removal of another barrier downstream later this year, will open up 1.5 miles of spawning and rearing habitat for spring Chinook salmon and threatened coho salmon and steelhead trout. The project will provide benefits to native riverine fish and wildlife, and improve safety for nearby communities. The upper dam was removed on October 1, 2009 using powerful explosives. A nearby dam will be removed in early 2010 by the landowner, using heavy equipment.

GODFREY RANCH LINE EXTENSION GRANT PROJECT

The Godfrey Ranch Project will provide telephone service to 6 private residences, 5 miles east of Forks of Salmon. The distance between residences is less than a quarter mile. The entire Sawyers Bar Exchange is located in extremely rugged and mountainous terrain served by narrow paved

and gravel roads. The construction of the Godfrey Ranch Project will consist of the following three parts:

- Project Material Purchase
- Telephone Line Construction
- Trench Paving and Road Surface Chip Seal

Project construction is estimated to take eight weeks, weather permitting.

Due to the constraints imposed by the terrain, cellular and satellite technology based solutions are not feasible and are cost prohibitive. Siskiyou Telephone proposes to utilize conventional landline telecommunications construction consisting of copper and fiber facilities, and will utilize Rural Utilities Service standards and specifications to be compatible with Siskiyou Telephone's existing telecommunications network.

KNOB TIMBER SALE

The USFS issued a Final Decision and a Finding of No Significant Impacts in October of 2002 regarding the Knob Timber Sale project (USFS 2009). The purpose of this project is to maintain stand health and resilience, foster a condition where stands can provide a sustained yield of wood products, and reduce risk of potential catastrophic fire. The Knob Timber Sale involves harvesting timber from approximately 578 acres at various locations in the North and South Forks of the Salmon River Watershed, Salmon River Ranger District.

ON-GOING MINING AND DREDGING OPERATIONS IN EDDY GULCH

Dredging for minerals, at times with the use of small gas-powered dredging equipment, occurs throughout the year in Eddy Gulch. There are active gold mines in the area (Hughes 2008). Cumulative impacts were analyzed within the context of potential concurrent development of the project and dredging activities (CH2M Hill 2008).

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