

**Siskiyou Telephone Company's  
Happy Camp to Somes Bar  
Fiber Connectivity Project**  
(Commission Resolution T-17539)

**FINAL  
MONITORING REPORT**

Prepared for  
**California Public Utilities Commission**



Prepared by:



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# 1. Introduction and Project Overview

This Final Construction Completion Report has been prepared to summarize the construction and monitoring activities conducted for the Happy Camp to Somes Bar Fiber Connectivity Project. The Happy Camp Fiber Connectivity Project included the construction of fiber optic broadband facility cable within a conduit for approximately 17 miles within or adjacent to State Highway 96 in Siskiyou County, California (see Figure 1). The California Public Utilities Commission (CPUC), as the Lead Agency for the project, conducted the environmental review process and granted final approval of the Project. The CPUC voted on August 9, 2018, to approve Siskiyou Telephone Happy Camp to Somes Bar Fiber Connectivity Project (Resolution T-17623) and a Notice of Determination was submitted to the State Clearinghouse (SCH# 2018032045). The Mitigated Negative Declaration (MND) was prepared by Aspen Environmental Group under contract to the CPUC in accordance with the California Environmental Quality Act (CEQA) to inform the public and to meet the needs of local, State, and federal permitting agencies in considering the project proposed by Siskiyou Telephone. Aspen Environmental Group implemented the Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) to ensure compliance with the Project mitigation measures, compliance plans, and permit conditions during all phases of construction.

Section 1, Introduction and Project Overview, provides a brief overview of the Happy Camp to Somes Bar Fiber Connectivity Project and project approvals granted by the CPUC and other agencies. In addition, Section 1 outlines the role and responsibility undertaken by Aspen Environmental Group as the mitigation monitoring team, including preconstruction compliance review and any changes to the project description or mitigation implementation and extra workspace requirements.

Section 2, Project Construction and Compliance, provides an overview of construction and compliance activities for the Happy Camp Fiber Connectivity Project, including preconstruction compliance activities. Main construction of the Happy Camp Fiber Connectivity Project took place between March 2019 and November 2019. Additional backfill paving around tie-in boxes will occur in Spring 2020.



Figure 1. Highway 96 in Siskiyou County

## 1.1 Overview of the Happy Camp to Somes Bar Fiber Connectivity Project

Siskiyou Telephone constructed and will operate and maintain the fiber optic cable, and related facilities listed below, known as the Happy Camp to Somes Bar Fiber Connectivity Project which includes the following components:

- **Fiber Optic Broadband Facility Cable.** Construction of a new fiber optic broadband facility cable within a 1.5-inch high-density polyethylene conduit for approximately 17 miles. The total length was an estimated 88,282 feet of underground fiber optic cable, including drops to subscribers.

- **Tie-In Utility Boxes.** Forty concrete hand hole utility boxes were installed as access points for subscriber drop, splice points, and grounding locations (see Figure 2). Boxes were placed at 2,500-foot minimum spacing to provide rural utilities service grounding. Additional boxes were also placed as needed along the route to provide access points for each residential subscriber, or fiber optic line splices.



Figure 2. Crew installing tie-in box at MP 24.08 (July 10, 2019)

The Project was divided into three Phases; Phase 1 was located from mile post (MP) 32.41 to MP 24.0; Phase 2 was located from MP 24.0 to MP 14.36; and Phase 3 was located from MP 14.36 to MP 12.15. The Project's construction began at Phase 1, and subsequently continued to Phase 2 and Phase 3. The horizontal directional drilling for the fiber optic cable was performed first and was followed by the installation of tie-in utility boxes.

## 1.2 Role of Aspen Monitoring Team

The Aspen Monitoring Team was composed of the Monitoring Manager (Vida Strong), MND Project Manager (Hedy Koczwarra), and Environmental Monitors (Jody Fessler, Amanda Wild, and Grace Weeks).

Aspen's Monitoring Manager, Vida Strong, supervised Aspen's Environmental Monitors, determined the appropriate inspection frequency, and was responsible for monitoring report preparation. The Monitoring Manager also served as the main point of contact with the CPUC Project Manager (CPUC PM) for reporting and major compliance matters.

Aspen's MND Project Manager, Hedy Koczwarra, provided historical context on possible impacts identified in the MND.

Aspen's CPUC Environmental Monitors (CPUC EMs), Jody Fessler, Amanda Wild, and Grace Weeks, conducted spot-check monitoring and were the primary points of contact with in-field agency and Project personnel. The CPUC EMs stayed apprised of construction activities and schedule changes and monitored construction activities for compliance with approved project mitigation measures (MMs), Applicant-proposed measures (APMs), compliance plans, and permit conditions. The CPUC EMs documented compliance through monitoring logs and provided input for the Monitoring Reports. The CPUC EMs noted any issues or problems with implementation of mitigation/APM/permit conditions, notified the appropriate designated project members, and reported problems to the Aspen Monitoring Manager. All other issues were brought to the attention of the Siskiyou Telephone field representatives to address appropriately.

### 1.3 Pre- and During-construction Compliance

In February 2019, a Mitigation Monitoring, Compliance and Reporting Plan (MMCRP) was developed collectively between the CPUC, Aspen, and Siskiyou Telephone Co. The MMCRP provides guidelines and procedures for environmental compliance on the Project. In addition, several specific compliance plans and reports were submitted to satisfy State and local agency requirements, including:

- Biological and Cultural Worker Environmental Awareness Program (WEAP)
- Unanticipated Cultural Discovery Protocols (as part of the WEAP)
- Storm Water Pollution Prevention Plan (SWPPP)
- Fire Management Plan
- Hazardous Materials and Waste Management Plan
- Geotechnical/Geological Surveys
- Dust Mitigation Plan
- Wildlife Surveys
- Bird Nesting Surveys
- Horizontal Directional Drilling (HDD) Frac-Out Contingency Plan

As required by Project mitigation measures, these compliance plans were reviewed by Aspen prior to the start of construction to ensure that appropriate environmental protection would take place. In addition, Aspen tracked the necessary permitting requirements to ensure that all the applicable agency permits and approvals had been issued prior to construction. Permits and approvals issued for the project are summarized in Table 1 and described further in Sections 2.1 and 2.3.

**Table 1. Permit, Approval, and Consultation Requirements**

Permit Type/Name	Issuing Agency	Jurisdiction/Purpose
<b>Federal/State Agencies</b>		
Permit to Construct	CPUC	Overall Project approval and CEQA review.
Special Use Authorization	U.S. Forest Service	CEQA and a special use permit for construction
Lake and Streambed Alteration Agreement (LSAA; 1602 Permit)	California Department of Fish and Wildlife (CDFW)	Manage fish, wildlife, plant resources and habitats California ESA, California Native Plant Protection Act, California Fish and Game Code Section 1600-1616 (streams and riparian zones)
Encroachment Permit	California Department of Transportation (Caltrans)	Highway 96
National Pollution Discharge Elimination System (NPDES) General Permit for Disturbance Associated with Construction and Land Activities	State Water Resources Control Board (SWRCB) – Division of Water Quality	Waters of the State Clean Water Act
<b>Local Agencies</b>		
Submittal of Notice of Intent (NOI) to Regional Board to comply with terms of the general permit and preparation of SWPPP	Regional Water Quality Control Board (RWQCB) – North Coast Region (Region 1)	National Pollution Discharge Elimination System, General Construction Storm Water Pollution Prevention Plan (SWPPP)
Approval of dust mitigation plan for naturally occurring asbestos	Siskiyou County Air Pollution Control District (APCD)	Obtain approval of a dust mitigation plan for naturally occurring asbestos

MMs and APMs were included in the MND to reduce impacts to less than significant levels in the areas of air quality, biological resources, cultural resources, geologic and soil resources, greenhouse gas emissions, hydrologic and water quality resources, hazards and hazardous materials, land use and planning, noise, public services, traffic/transportation, and utilities and service systems. As required by MM B-1, all employees working on the Project were required to attend a Worker Environmental Awareness Program (WEAP) before they could begin work. Siskiyou Telephone’s compliance with these requirements is presented in Section 2.3.

## 1.4 Notice to Proceed

The CPUC issued three Notice to Proceeds (NTP) authorizing the start of construction of Phases 1, 2, and 3 of the Project as summarized in Table 2.

**Table 2. NTPs Issued**

NTP	Description	Issue Date
1	Phase 1 construction from mile post (MP) 32.41 to MP 24.0	February 20, 2019
2	Phase 2 construction from MP 24.0 to MP 14.36	June 19, 2019
3	Phase 3 construction from MP 14.36 to MP 12.15	September 9, 2019

In general, the NTP requests included the following:

- A description of the work.
- Detailed description of the location.
- Verification that all mitigation measures, permit conditions or requirements, APMs, project parameters, or other project stipulations had been met, applied, or did not apply to the work covered by the NTP request.
- In a case where some outstanding requirements could not be met prior to issuance of the NTP, an outline of outstanding submittals and how they would be met prior to construction.
- Up-to-date resources surveys or a commitment to conduct surveys and submit results prior to construction.
- Cultural resource surveys or verification that no cultural resources would be significantly impacted.
- Copies of permits issued by other agencies, including requirements. All the NTPs included conditions that needed to be implemented by Siskiyou Telephone and its contractor(s) prior to and during construction (see Section 2.1 and 2.3).

Aspen reviewed the NTP requests and the applicable pre-construction requirements to ensure that all the information required to process and approve the NTP was included. If additional information or clarification was needed, it was requested from Siskiyou Telephone. Aspen prepared the recommended NTPs for CPUC review and issuance.

## 1.5 Minor Project Changes

No Minor Project Changes were requested by Siskiyou Telephone for the Happy Camp to Somes Bar Fiber Connectivity Project.

## 1.6 Compliance Monitoring

Monitoring by the CPUC EMs was conducted to chronicle and document Siskiyou Telephone's construction activities and compliance with project MMs, APMs, compliance plans, and agency permit conditions. The intent of compliance monitoring was to minimize or eliminate potential significant impacts and to protect environmental resources. A Non-Compliance is defined as any deviation from applicable MMs, APMs and project parameters, permit conditions or requirements, and approved plans. A Project Memorandum is a written warning of a non-compliance activity. A Non-Compliance Report is issued when chronic non-compliance activity occurs or a blatant disregard for project mitigation measures, compliance plans, or permit conditions is demonstrated. Verbal warnings are typically given prior to any written Project Memoranda or Non-Compliance Reports. The compliance record for the Happy Camp to Somes Bar Fiber Connectivity Project is discussed in Section 2.3.

## 1.7 Coordination and Communications

In-field communications were conducted by the CPUC EMs with Siskiyou Telephone's Environmental Inspectors (EIs) and other Project personnel in accordance with the MMCRP. Verbal warnings and written communications (emails and photographs) were utilized to notify Siskiyou Telephone and its contractors of non-compliance activities. Field observations were logged by the CPUC EMs for every site visit. Monitoring Reports were submitted to the CPUC documenting compliance and construction progress.

The CPUC Project web site was regularly updated to reflect ongoing Project construction activities (<https://www.cpuc.ca.gov/environment/info/aspen/siskiyoutelco/siskiyoutelco.htm>). The MND, MMCRP, NTPs, and Monitoring Reports were made available via the web site. In addition, as required by MM B-1, Siskiyou Telephone provided daily and weekly reports documenting construction and compliance activities. As needed calls were also held between CPUC/Aspen and Siskiyou Telephone, and their contractors, to discuss construction and compliance activities.

## 2. Construction & Compliance

### 2.1 Pre-Construction Compliance

As presented in Section 1.4, all three NTPs included conditions that needed to be implemented by Siskiyou Telephone and their contractor(s) prior to and during construction. Pre-construction compliance activities are discussed here. Other permitting, including permitting changes, and during construction compliance activities are discussed in Section 2.3. Pre-construction compliance activities included the following:

**Air Quality:** Based on past literature and a Caltrans sponsored survey, construction activities were expected to encounter rock containing naturally occurring asbestos. Siskiyou Telephone submitted a Naturally Occurring Asbestos (NOA) Dust Mitigation Plan to the Siskiyou County Air Pollution Control District. This was approved and subsequently submitted to the CPUC.

**Biological Resources:** The following surveys were conducted prior to construction as required by Project APMs and MMs:

- **APM Bio-1/MMB-4.** To minimize the likelihood of potential adverse effects on nesting birds and raptors, preconstruction nesting surveys were conducted during the January 31 through August 31 bird nesting season.
- **APM Bio-2/MM B-1.** To minimize the likelihood of potential adverse effects on wildlife near the 10 stream crossings, preconstruction wildlife surveys were conducted. In addition, a qualified biologist (approved by the CPUC) was retained to monitor construction during directional boring activities.
- **MM B-2.** Prior to the onset of construction activities, a qualified biologist (approved by the CPUC) delineated any wetland or water features within the right-of-way as environmentally sensitive areas using clear markers.

Additionally, Siskiyou Telephone prepared a Frac-Out Contingency Plan, as required by APM BIO-8, to address the identification and cleanup of an inadvertent release of drilling mud from HDD activities.

**Cultural and Paleontological Resources (APM CUL-1):** There are no known historical or unique archaeological resources in the Project area. Sediments that are highly sensitive for paleontological resources were identified within the Project area. Although these sediments have been disturbed by previous construction efforts, previously buried resources could be discovered, damaged, or destroyed during ground disturbing work. As required by APM CUL-1, the Worker Environmental Awareness Program (WEAP) that was developed for the Project, included protocols to halt construction in the event of an unanticipated cultural, Native American, or paleontological discovery.

**Geological Resources (MM GS-1).** Although the Project is located within and along the flat, graded State Highway 96 roadway and shoulder, geologic mapping of the Project area indicates numerous landslides along the steep slopes on either side of State Highway 96 and the Project alignment (USGS, 1987). Several of these mapped landslides appear to infringe upon State Highway 96 and the Project alignment. Siskiyou Telephone provided a letter from Caltrans dated January 8, 2019, in reference to MM GS-1, which discussed slope stability and worker safety. Siskiyou Telephone also submitted maps of the Project alignment showing the landslide areas, proposed design/mitigation for each area (i.e. relocate line, directional drill, implementation of safety measures, etc.), and applicable safety guidelines. The provided information was reviewed by Aspen, and subsequently approved on February 1, 2019.

**Hazards and Hazardous Materials (MM H-2/MM H-3/APM HAZ-3/MM B-3).** A Hazardous Materials and Waste Management Plan for the construction phase of the Project was prepared to reduce or avoid the



use of potentially hazardous materials for the purposes of worker safety; protection from soil, ground-water, and surface water contamination; and proper disposal of hazardous materials. This Plan included a Spill Prevention and Response Program, Spill Plan Addition, and Bore Plan and Frac-Out Contingency Plan.

Soil along the shoulder of State Highway 96 where Project-related ground disturbance occurred was sampled and tested for aerielly deposited lead, prior to construction, to determine the proper handling and disposal methods.

The Project area is classified as a Very High Fire Hazard Severity Zone by CALFIRE. A Fire Management Plan was prepared, as required by APM HAZ-3, in accordance with the modified special use permit from the U.S. Forest Service (USFS). This Plan established standards and practices that would minimize the risk of fire danger and, in the case of fire, provide immediate suppression and notification.

**Stormwater Pollution and Prevention Plan (SWPPP) (State regulatory) (APM GEO-1/APM HAZ-2/APM HYDRO-2).** Construction activities could potentially affect water quality due to the improper storage and handling of various construction related hazardous materials, as well as by causing soil erosion or sedimentation. A SWPPP was prepared that identified Best Management Practices (BMPs) to protect overall water quality during construction activities, including limiting construction to the dry season, March to October. On August 27, 2018, the State approved Project SWPPP was submitted to the CPUC. With the implementation of the Best Management Practices (BMPs) and/or other treatments outlined in the SWPPP, the potential for the transport of contaminants or sediment to receiving waters was minimized. As presented in Section 2.3, the SWPPP was implemented during construction.

**APM LU-1.** This APM required the acquisition of necessary permits. Siskiyou Telephone obtained permits to construct from USFS, Caltrans, and the CPUC.

**APM PS-1.** This APM required the notification of emergency service providers of Project activities. Construction schedules were submitted to local emergency service providers for review and comment.

**Worker Training (MM B-1/APM CUL-1/MM H-1).** Siskiyou Telephone developed and implemented a WEAP for the Project which included the following: (1) the potential presence of listed species and their habitats; (2) the requirements and boundaries of the project (e.g., areas delineated on maps and by flags or fencing); (3) the importance of complying with avoidance and minimization measures; (4) environmentally responsible construction practices; (5) identification of sensitive resource areas in the field; and (6) problem reporting and resolution methods. In addition, as required by APM CUL-1, Unanticipated Discovery Protocols were communicated to project workers as part of the contractor education program, including cessation of construction work in the event of any unanticipated cultural find until a Secretary of the Interior qualified archaeologist and tribal representative assess the significance of the resource. WEAP trainings were held immediately prior to the start of construction and as new crew members were added. Through the duration of the Project, 86 construction personnel received the required environmental awareness training.

**Other Permitting.** No construction occurred until the following permits were issued for applicable work areas:

- Caltrans issued three encroachment permits for Phases 1, 2, and 3 in October 2018, June 2019, and May 2019, respectively.
- CDFW issued three Final Lake or Streambed Alteration Agreements for Phases 1, 2, and 3 in August 2018.
- The Klamath National Forest Service (NFS) issued a Special-Use Authorization for Phases 1 and 2 in June 2018. Six Rivers NFS issued a Special-Use Authorization for Phase 3 in August 2019.
- In February 2019, the SWRCB approved revised start and completion dates for construction from April 16 and October 15, 2017 to March 11 and October 15, 2019.

## 2.2 Construction

As noted in Section 1.4, NTPs 1-3 allowed for the construction of the entirety of the Happy Camp to Somes Bar Fiber Connectivity Project. The following describes construction activities by construction component.

**Fiber Optic Broadband Facility Cable Conduit.** Horizontal directional drilling (HDD) and construction activities of the new fiber optic broadband facility cable began on March 18, 2019, at milepost (MP) 32.5. HDD construction activities were conducted by Downing Diversified and Henkels & McCoy. All traffic controls were in place prior to the start of construction. All equipment, with the exception of the HDD units, were staged within the road during work hours (Figure 3). HDD equipment were placed within the shoulder of the road, outside of all sensitive habitat and wetland areas.

The majority of the fiber optic conduit placement was completed using HDDs. Bore holes were drilled with the HDD drill bits, the drill bit would surface, and the conduit was then attached to the drill bit so it could be pulled back through the bore hole. In some areas, boring was not feasible, and trenches were dug to allow for conduit placement (Figure 4).

Highway 96 crosses two bridges within the Project area: Clear Creek Bridge and Klamath River Bridge. Conduit was hung underneath these bridges using a bridge-hanging truck (Figure 5) to provide worker access to the underside of the bridge. All bridge hanging was completed the week of October 6th.

Drilling was nearly completed on October 22, 2019, and two crews demobilized from the Project. One small section at MP 15.0 needed to be re-drilled on October 28, 2019, at which time all drilling for the Project was completed.

**Tie-In Boxes.** Tie-in Construction activities were also conducted by Downing Diversified and Henkels & McCoy. Excavation and setting of tie-in boxes began the week of July 7th. Paving around these boxes was completed from July to October 2019 for Phase 1. At the time of the CPUC EM Final Inspection, paving of Phases 2 and 3 had not been completed because temperatures were too low. Paving



Figure 3. Crew boring south of Swillup Creek at MP 23.25 (July 24, 2019)



Figure 4. Crew trenching in conduit at MP 28.5 (July 24, 2019)



Figure 5. Bridge handling operations at Clear Creek Bridge (October 9, 2019)

is expected to be completed at the beginning of the 2020 construction season. Until paving is completed, the edges of the unpaved tie-in boxes have been backfilled with gravel.

Tie-in digging was completed on November 5, 2019.

**Fiber Optic Blow-In.** Fiber Optic Blow-In began the week of November 10, 2019 and was completed the week of December 1, 2019.

**Drop-In Connections.** Drop-in connections to subscribers began the week of November 3, 2019. Drop-ins consisted of trenching and laying conduit in the middle of the subscriber's driveway. Trenching was 24 inches deep and ranged from 30 to 600 feet in length. All trenching was back filled with native materials and topped with gravel. A total of six connections were completed as of November 15, 2019, with one remaining tie-in awaiting approval from USFS.

## 2.3 Compliance During Construction

Siskiyou Telephone provided an Environmental Inspector(s) (EI) to oversee the implementation of contractor construction compliance activities, in addition to required biological resource monitoring, as discussed below. Full-time monitoring was conducted by Siskiyou EI/Monitors when HDD activities occurred near sensitive resources, including active bird nests and creeks and when work was conducted during light rain. Spot checking was conducted when nesting season was over or when construction activities were slow. Siskiyou provided weekly reports documenting construction and compliance activities.

The CPUC EMs conducted bi-weekly site visits to ensure compliance with all the Project MMs, APMs, per condition, and plan requirements. The CPUC EM maintained regular contact with Project representatives and reviewed Project reporting. One non-compliance was issued to Siskiyou Telephone on October 23, 2019. The report was issued due to multiple violations of MM B-3, which requires immediate notification to the CPUC EM of a frac-out or spill into a sensitive resource. Immediate notification was not provided for three frac-outs into sensitive resources.

Compliance requirements during construction included the following:

**Biological Monitoring and Reporting (APM BIO-2/MM B-1).** As required by APM BIO-1 and MM B-1, Siskiyou Telephone provided a biological monitor to monitor work during the construction phase and inspect the Project site on a daily basis. The special-status species observed during Project construction included bald eagles and osprey.

As required by MM B-1, Siskiyou Telephone provided daily and weekly reports documenting construction and compliance activities. As needed calls were also held between CPUC/Aspen and Siskiyou Telephone and their contractors to discuss construction and compliance activities.

**Nesting Surveys (APM BIO-1/MM B-4).** Nest surveys were conducted on the Project site by a qualified biologist prior to the initiation of construction in Phases 1 and 2, and daily during the 2019 nesting seasons (January 31st and August 31st). In general, on site nesting activity was very limited; however, two nest buffers were in place during construction. The first buffer was implemented for cliff swallows that were observed nesting during the week of May 19th. The nest was observed for disturbance and did not appear to be disturbed by the nearby drilling and construction activities. Historic Osprey Nest #3 was given a "no-work zone" buffer between MP 30.0 and MP 29.65 (more than 0.25 mile) during the week of June 2nd. During the week of June 9th, the Historic Osprey Nest #3 was expanded from 1,000 to 3,000 feet in anticipation of work immediately upstream of the buffer. All Limited Operating Periods (LOP) for osprey were lifted on August 15, 2019, per the Klamath NFS Special-Use Authorization. However, the nest

was still active the week of August 18th, so the buffer was maintained, and the nest was monitored for activity throughout the week. Nest #3 was no longer active the week of August 25th, and the buffer was removed, and work resumed within this area. Siskiyou Telephone’s biologist required that equipment be staged as far from the nest as possible as an extra measure of protection.

**Wetland, Riparian Zone, and Stream Crossing Monitoring (APM Bio-2/MM B-2) and Frac-Out Contingency Plan.** A qualified biologist was onsite during all wetland, riparian zone, and stream crossing drilling and construction operations. The biologist ensured flagging remained intact and visible to construction crews and discussed sensitive areas with the construction supervisor prior to work beginning. Several frac-outs occurred into sensitive habitats, but no significant impacts occurred. Frac-outs into sensitive habitats are listed in Table 3.

**Table 3. Frac-outs into Sensitive Habitats**

Approximate Location	Date of Frac-Out	Status
MP 31.79	March 26, 2019	HDD activities under roadway approximately 15 ft. from a wetland caused a frac-out into the wetland with some flowing water. Drilling ceased and immediate cleanup occurred. Drill slurry extended approximately 40 ft. downstream before it was contained. Cleanup was completed in two hours.
MP 31.51	March 28, 2019	Drill slurry observed coming out of a culvert outfall. HDD activities ceased, a pit was excavated, and the slurry was vacuumed up. Slurry dissipated at the outfall and clear water was observed.
MP 31.00	June 25, 2019	Drill slurry observed in unnamed drainage. HDD activities ceased and immediate cleanup occurred.
Kennedy Creek	September 30, 2019	Cloudy water observed in pool within the channel of Kennedy Creek. HDD activities ceased upon identification and a worker was lowered down the hill embankment to assess the conditions. The location of the frac-out could not be identified. No visible plumes were observed at or near the confluence of Kennedy Creek and the Klamath River.
MP 14.05	October 15, 2019	Occurred overnight, while no HDD activities occurred, into an unnamed drainage with water present but no flow or connection to the Klamath River. Upon discovery the next morning, crews cleaned and flushed the area.
MP 13.90	October 17, 2019	HDD activities ceased upon identification and immediate cleanup occurred. The area was isolated, vacuumed, and flushed with water to clean.
MP 14.15	October 21, 2019	HDD activities ceased upon identification and immediate cleanup occurred. No drill slurry reached the unnamed drainage at 14.11 with connection to the Klamath River.

The construction crews responded quickly to frac-outs of bentonite slurry to avoid impacting resources. Frac-outs were monitored by the Siskiyou Telephone’s Environmental Inspector (EI). A frac-out on March 28th, into a culvert outfall (Figure 6), spurred the EI to instruct HDD operators to drill deeper than 15 feet to prevent future frac-outs. Frac-outs were contained with sandbags and a vac-truck. Cleanup consisted of using a backhoe (Figure 7) to dig a pit at the site of the frac-out and a vac-truck to vacuum up the bentonite fluid (Figure 8).

**Cultural and Tribal Resource Monitoring (CUL-5) and Unanticipated Discoveries (APM CUL-2/APM CUL-3/APM CUL-4).** Tribal monitors began monitoring Project activities the week of June 10th and continued until the week of October 28th. No unanticipated cultural resource discoveries, paleontological resources, or human remains were identified during construction.



Figure 6. Frac-out at MP 31.51 into a culvert outfall (March 28, 2019)



Figure 7. Crew excavating a pit to clean up a frac-out at MP 29.8 (August 28, 2019)



Figure 8. Vac truck placed in position to clean up frac-out at MP 29.8 (August 28, 2019)

**Adherence to SWPPP (APM HAZ-2/APM HYDRO-1/APM HYDRO-2).** BMP installation occurred throughout Project construction (Figure 9) prior to work at any site, and BMPs were maintained for the duration of construction. Absorbent pads were placed underneath staged equipment (Figure 10). Any contaminated soils from leaks/spills/frac-outs were removed from the Project site.

The State approved SWPPP limited construction activities from March 11 through October 15, 2019. A work period extension from October 15, 2019, to October 30, 2019, was granted by the SWRCB in October 2019. A second work period extension from October 31, 2019, to November 15, 2019, for Phase 3 was also approved by the SWRCB in October 2019.

**Construction Traffic Control Plan (APM TRF-1).** Construction typically required the closure of one lane of Highway 96. During construction, the Construction Traffic Control Plan was implemented. Traffic control was installed prior to construction every morning and flaggers were present to direct vehicles to wait for the pilot car to lead them through the construction work area. No traffic safety incidents occurred during construction.



Figure 9. Fiber roll in place for sediment control in drainage at MP 28.75 (July 24, 2019)

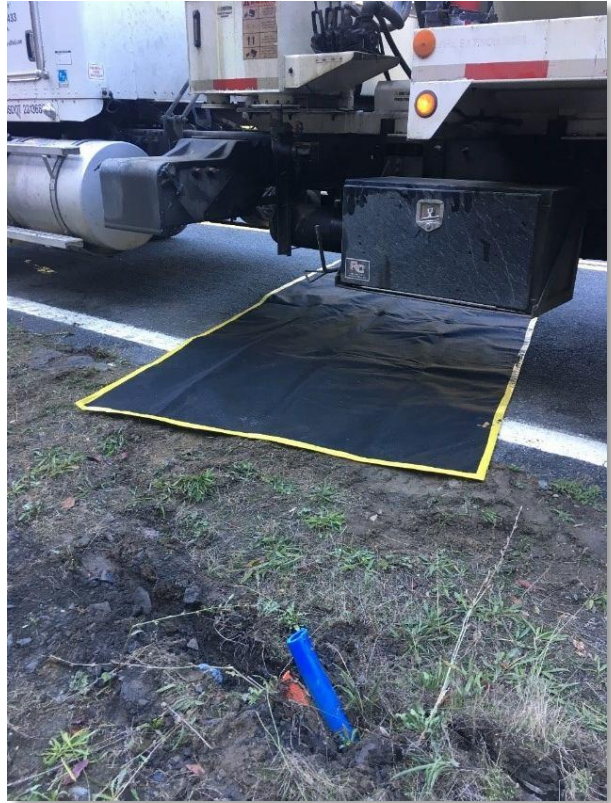


Figure 10. Absorbent placed under equipment to contain spills (September 25, 2019)

## 2.4 Final Inspection

The CPUC EM conducted a final inspection of the Happy Camp to Somes Bar Project sites on October 31, 2019. The CPUC EM observed that the sites were neat and clean with minimal disturbance (Figures 11 and 12). At that time, remaining work included tie-in connections to residential users, fiber optic cable blow-in, and paving underground tie-in boxes in Phases 2 and 3.



Figure 11. Clean drill and tie-in location in Phase 1 (October 31, 2019)



Figure 12. Clean drill and tie-in location with minimal disturbance in Phase 1 (October 31, 2019)