

PROPONENT'S ENVIRONMENTAL ASSESSMENT – ZAYO PRINEVILLE-TO-RENO FIBER OPTIC PROJECT

Hydrology and Water Quality

5.10 HYDROLOGY AND WATER QUALITY

This section describes existing conditions and potential impacts to hydrological resources, water quality, and flood control as a result of construction, operation, and maintenance of the project. Information on surface water and groundwater in the project area was obtained from published studies prepared by state, county, and local water and related agencies. The applicant would comply with all applicable federal, state, and local regulatory requirements that protect surface water and groundwater. The following analysis concludes that impacts would be less than significant.

5.10.1 Environmental Setting

The project area is located within the North Lahontan and Sacramento River Hydrologic Regions, which cover approximately 4 million and 17 million acres, respectively, within Modoc, Lassen, and Sierra Counties. The North Lahontan and Sacramento River Hydrologic Regions receive water through precipitation, stormwater, runoff, and groundwater.

The project area elevation averages approximately 4,658 feet above mean sea level and ranges from approximately 4,006 feet above mean sea level near Honey Lake to 5,568 feet above mean sea level near Madeline, California. The surface topography within the project site is relatively flat and surrounded by high mountains with a maximum slope of 5.3 percent. The majority of the project area consists of high desert lands with some agricultural and isolated rural residential areas.

The project area is located in a warm-summer Mediterranean climate zone typical of the north-eastern reaches of California. The zone is characterized by warm, dry summers and cool winters. The average annual precipitation in this region is approximately 70 inches, with 95 percent of all rain falling between the months of October and April. Periods of abundant rainfall and prolonged droughts are frequent in the historical record.

5.10.1.1 Water Bodies

Ephemeral, intermittent, and perennial streams; fresh emergent wetlands; riparian fresh emergent wetland complexes; riparian wetlands; seasonal wetlands; wetland seep springs; wetland swales; irrigation canals; non-vegetated ditches; and vegetated ditches cross or are adjacent to the proposed running line as described below. For a description of wetlands in the project area, refer to Section 5.4, Biological Resources. Table 5.10-1 shows the type of water body crossed by the right-of-way and running line. Appendix H includes waterbody type by milepost.



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Table 5.10-1: Number of Surface Water Body Crossings

| Surface Water Body Type | Right-of-Way Crossings | Running Line Crossings |
|-------------------------|------------------------|------------------------|
| Ephemeral streams | 86 | 32 |
| Intermittent streams | 33 | 10 |
| Perennial streams | 42 | 17 |
| Irrigation canals | 13 | 2 |
| Non-vegetated ditches | 11 | 3 |
| Vegetated ditches | 4 | 3 |

Source: Stantec 2020

5.10.1.2 Water Quality

Section 303(d) of the federal Clean Water Act and 40 CFR 130.7 require states to identify water bodies that do not meet water quality standards and are not supporting their beneficial uses. These waters are placed on the Section 303(d) List of Water Quality Limited Segments (303[d] List), also known as the 303(d) List of Impaired Waterbodies. The 303(d) List identifies the pollutant or stressor causing impairment and establishes a schedule for developing a control plan to address the impairment. Placement on the 303(d) List generally triggers development of a pollution control plan called a Total Maximum Daily Load (TMDL) for each water body and associated pollutant and stressor on the 303(d) List. The following water bodies are on the state 303(d) List and are downstream of the project area.

Pit River. The State of California has listed the North and South Fork of the Pit River in Modoc County, which combined are approximately 55 miles in length, as a 303(d) listed water for pH and salinity levels outside the allowable frequency. The Pit River's beneficial uses include municipal and domestic supply as well as cold freshwater habitat. TMDLs would be adopted in 2021 according to the 303(d) List report.

Susan River. The upper and lower reaches of the Susan River, approximately 23 miles in length, in Lassen County, is also included on the 303(d) List for mercury, total dissolved solids, and turbidity from agriculture and other natural sources. TMDLs would be adopted for the Susan River in 2021 according to the 303(d) List report.

Honey Lake. The 665-acre Honey Lake Wildfowl Management Ponds and 57,700-acre Honey Lake are also included on the 303(d) List within Lassen County. Primary water quality concerns in these water bodies include arsenic, salinity, total dissolved solids, chlorides, and trace metals, primarily originating from nearby agriculture and geothermal developments, sediment resuspension, and other natural sources. Beneficial uses of the Honey Lake and Honey Lake Wildfowl Management Ponds are cold freshwater habitat, warm freshwater habitat, water contact recreation, and agricultural supply. TMDLs were established for these two water bodies in 2019.



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5.10.1.3 Groundwater Basins

The Sustainable Groundwater Management Act categorizes groundwater basins as very low, low, medium and high priority, which is based on a technical process involving eight components that are identified in the California Water Code Section 10933(b). The project area is located within eight different groundwater basins identified by EPA and California Department of Water Resources (DWR). Other than localized areas of perched groundwater, particularly in the vicinity of streams, irrigation canals, and reservoirs, groundwater is expected to be relatively deep, greater than 50 feet. On the other hand, depth to groundwater has the potential to be relatively shallow in the vicinity of surface water bodies such as Honey Lake and the Fork Pit River. Table 5.10-2 indicates the groundwater basins and their associated groundwater depths near the project area within each county.

Table 5.10-2: Groundwater Basins

| County | Groundwater Basins (Recent Groundwater Levels – ft bgs) |
|-----------------|---|
| Modoc | Goose Lake – Fandango Valley (10-25), Goose Lake – Goose Valley (70 – 80), Joseph Creek (unknown), Alturas Area – South Fork Pit River (5 – 10) |
| Lassen | Madeline Plains (50 – 60), Secret Valley (80 – 100), Honey Lake Valley (5 – 50) |
| Lassen & Sierra | Long Valley (50 – 80) |

Source: DWR 2020b

5.10.1.4 Groundwater Wells and Springs

Publicly available data for groundwater well locations were accessed through the DWR Well Completion Report Portal (DWR 2020a). Accuracy of this data is limited to the centroid of the section in the section/range/township map where the water supply wells lie. Stantec identified a potential of 67 water supply wells in Modoc County, 208 in Lassen County, and 7 in Sierra County that lie within the sections overlapping the project running line. ~~Four different springs were identified discovered within 150 feet of the proposed project site which that cumulatively cover approximately 1.75 acres. Refer to the *Delineation of Potential Waters of the U.S.* report for area coverage and locations of the wetland seep springs. No springs were found within 150 feet of the proposed site. The closest spring to the proposed project site is the Seven Lakes Spring near Dry Valley Road in Nevada near the southern end of Lassen County, approximately 2 miles from the proposed project site.~~

5.10.1.5 Groundwater Management

All groundwater basins identified in Section 5.10.1.3, Groundwater Basins, are considered low or very low priority, are not adjudicated, and are not critically overdrafted (DWR 2020c). Because of the low and very low priority of these basins, formation of Groundwater Sustainability Agencies (GSAs) and preparation of Groundwater Sustainability Plans (GSPs) are not yet required by the Sustainable Groundwater Management Act.



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5.10.1.6 Special Flood Hazard Areas

The project right-of-way ~~does not cross~~ ~~crosses~~ ~~a~~ ~~the~~ FEMA 100-year floodplain ~~four~~ ~~4~~-times, constituting approximately 790 acres within Lassen County, ~~and 19 times, constituting approximately 220 acres within Lassen and Modoc Counties, respectively.~~ No long-term project staging or laydown areas are proposed. Short-term staging areas would be established within or immediately adjacent to the right-of-way, which would be restored following completion of construction, except for areas retained at the request of the landowner.

5.10.2 Regulatory Setting

5.10.2.1 Federal

Clean Water Act Section 404

Section 404 of the CWA (33 USC Section 1251 *et seq.*) requires a permit from the USACE for the discharge of dredged or fill material into “waters of the United States,” which include rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas “that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3 7b).

National Flood Insurance Program

The Federal Emergency Management Act (FEMA) is responsible for determining flood elevations and floodplain boundaries based on USACE studies. FEMA is also responsible for distributing the Flood Insurance Rate Maps (FIRMs) (FEMA 2019) used in the National Flood Insurance Program (NFIP) (42 USC Ch 50, Section 4102).

FIRM identify the locations of special flood hazard areas, including 100-year floodplains. FEMA allows non-residential development in the floodplain but include criteria to “constrict the development of land which is exposed to flood damage where appropriate,” and “guide the development of proposed construction away from locations which are threatened by flood hazards.” Federal regulations governing development in a floodplain are set forth in Title 44 CFR Part 60, enabling FEMA to require municipalities that participate in NFIP to adopt certain flood hazard reduction standards for construction and development in 100-year floodplains.

Section 10 of the Rivers and Harbors Appropriation Act of 1899

Section 10 of the Rivers and Harbors Act of 1899 requires authorization through USACE for the construction of any structure in or over any navigable waters of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. Section 10 permits are required for work on facilities within navigable waters, including transmission towers and boardwalks, as well as for work on power lines that cross over navigable waters.



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5.10.2.2 State

Clean Water Act Section 303(d)

CWA Section 303(d) (33 USC Section 1313) requires states, territories, and authorized Tribes to develop a list of waters within its boundaries that do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The law further requires that these jurisdictions establish priority rankings for water on the lists and develop action plans, called TMDLs, to improve water quality. RWQCBs and SWRCB implement this federal regulation in California.

Clean Water Act Section 401

CWA Section 401 (33 USC Section 1251 et seq.) requires states to certify whether projects subject to federal permits meet state water quality standards. In California, RWQCBs and SWRCB issue such certifications. The project is under the jurisdiction of the Central Valley and Lahontan RWQCB. If the project requires a federal Water Quality Certification, it would need to be obtained from USACE.

Clean Water Act Section 402

Under CWA Section 402 (33 USC Section 1251 et seq.), NPDES controls water pollution by regulating point sources of pollution to waters of the U.S. SWRCB administers the NPDES permit program in California. Projects that disturb 1 or more acres of soil are required to obtain coverage under the state NPDES General Permit for Discharges of Storm Water Associated with Construction Activity. A SWPPP must be developed and implemented for each project covered by the general permit. The SWPPP must include BMPs that are designed to reduce potential impacts to surface water quality during project construction and operation.

Porter-Cologne Water Quality Control Act (California Water Code, Division 7)

Under the Porter-Cologne Act, SWRCB has authority over state waters and water quality. "Waters of the state" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code Section 13050[e]). Examples include but are not limited to rivers, streams, lakes, bays, marshes, mudflats, unvegetated and seasonally ponded areas, drainage swales, sloughs, wet meadows, natural ponds, vernal pools, diked baylands, seasonal wetlands, and riparian woodlands. The RWQCBs have local and regional authority. The Central Valley and Lahontan RWQCB has authority in the project area. The RWQCBs prepare and periodically update Basin Plans (water quality control plans), which establish beneficial uses of water designated for each protected water body, water quality standards for both surface water and groundwater, and actions necessary to maintain these water quality standards.

Projects that would discharge waste to waters of the state must file a report of waste discharge with the appropriate RWQCB if the discharge could affect the quality of waters of the state (Article 4, Section 13260). The RWQCB would issue waste discharge requirements or a waiver of the waste discharge requirements for the project. The requirements would implement any relevant water quality control plans



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that have been adopted and must take into consideration the beneficial uses to be protected and the water quality objectives reasonably required for that purpose (Article 4, Section 13263).

Fish and Game Code Section 1602

This section of California law protects the natural flow, bed, channel, and bank of any river, stream, or lake under the jurisdiction of CDFW. Notification to CDFW is required for activities that would do the following:

- substantially divert or obstruct the natural flow of a jurisdictional river, stream, or lake
- substantially change or use material from the bed, channel, or bank of a jurisdictional river, stream, or lake
- deposit or dispose of debris, waste, or other material containing crumbed, flaked, or ground pavement where it can flow into a river, stream, or lake

CDFW reviews the notification and determines if the activity may substantially adversely affect fish and wildlife resources. If so, CDFW would issue a Streambed Alteration Agreement for the activity.

Fish and Game Code Section 5650

This section of California law makes it unlawful to deposit in, permit to pass into, or place where it can pass into waters of the state specific pollutants or any substance or material deleterious to fish, plant life, mammals, or bird life.

5.10.2.3 Local

CPUC has exclusive discretionary authority over this project's siting, design, and construction. However, a summary of local goals and policies relevant to the project are provided for informational purposes and to assist with the CEQA review process.

Modoc County General Plan

The Conservation and Open Space Element of the Modoc County 1998 General Plan includes policies related to the protection of water resources. However, none of these policies are relevant to the project.

Lassen County General Plan

The Natural Resources Element of the 2000 Lassen County General Plan includes the following goals and policies related to water resources:

Goal N-3: Water supplies of sufficient quality and quantity to serve the needs of Lassen County, now and in the future.

NR 13 Policy: The County recognizes the critical importance and future value of its water resources and shall support the conservation of water supplies and protection of water quality.



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Sierra County General Plan

The Water Resources Element of the Sierra County 2012 General Plan contains the following goals and policies:

Goal 1: It is the County's goal to protect and maintain its water resources for the benefit of County residents and natural habitats and to assure protection of its watersheds as a primary land use constraint.

Policy 14: Cooperate with State and federal agencies In the requirement of reasonable Best Management Practices (BMPs).

Policy 22: Protect natural swales and wetlands, plus a buffer from those features, for water quality protection.

Policy 31: Preserve the integrity of water courses throughout the County.

5.10.3 Impact Questions

| Would the project: | Potentially Significant Impact | Less-than-Significant Impact with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|--|--------------------------------|---|-------------------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (i) result in substantial erosion or siltation on- or off-site; | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (iv) impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |



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| Would the project: | Potentially Significant Impact | Less-than-Significant Impact with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|---|--------------------------------|---|-------------------------------------|--------------------------|
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

5.10.4 Impact Analysis

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. Impacts on water quality may occur as a result of construction-related activities through the use of fuels or other hazardous materials near waters and increased erosion caused by grading or vegetation clearing that leads to increased sedimentation. It is anticipated that staging of equipment on disturbed ground within the right-of-way may be needed at secure sites and staging areas would not be cleared of vegetation, flattened, graded, or stripped of topsoil for cable installation. In some instances, minor surface contouring may be needed to improve staging areas or existing access roads. Project work areas and access routes have been sited to avoid streams and wetlands wherever possible; however, wetlands and small streams may need to be crossed in a few locations via bridge hanging or directional boring. Where the Project work For passing For For cable installation passing beneath water bodies, the directional boring depth will be a minimum of 6-4 to 10 feet, below and but up to 15 feet, below the water body bed depending on soil type. Bores beneath culverts would average 2 to 3 feet below the bed or approximately 4 feet below the water’s surface, the water body bed which complies with the regulatory standard of a minimum of 4 feet of cover for a 2- to 6-inch diameter borehole (Caltrans 2018).

Directional boring activities would use a nontoxic bentonite clay drill slurry, or “mud,” which would lubricate the passage of the drill, would and cool and insulate the electronics in the drill head and rods. The drill slurry, would also support the walls of the bore to prevent collapse, and would capture and transport excess soil (“cuttings”) to the exit pits. Entry and exit pits would catch drill slurry, groundwater ingress, and any rainfall that may occur during drilling. Straw wattles or equivalent containment measures would be installed around the entry pit as secondary containment, and a vacuum truck and/or tank would be available onsite for clearing the pits post-bore. Following the installation of the conduits, the bore pits would be filled and compacted or converted to vaults. This work would be performed in accordance with the requirements of federal and state permits under CWA Sections 404 and 401, the Porter-Cologne Act, and the Fish and Game Code Section 1602, as applicable. With these activities, the project has the potential to temporarily adversely affect water quality temporarily as a result of erosion and subsequent sedimentation, as well as the frac-out from the use of directional boring equipment. In general, these activities would be dispersed over a broad area along the project alignment and would be limited in scope and duration at any given location. APM HAZ-3: Accidental Release Prevention Plan details measures to minimize potential impacts associated with frac-out, and APM HYDRO-1, Prepare and Implement a



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Stormwater Pollution Prevention Plan (SWPPP), would specify BMPs for each activity with the potential to degrade surrounding water quality through erosion, sediment runoff, and the presence of other pollutants.

Zayo would assess the risk to water quality based on site-specific soil characteristics, slope, and the construction schedule and would develop a SWPPP that addresses potential water quality concerns, as described in Section 5.10.1.5, Groundwater Management. The SWPPP would specify measures for each activity that has the potential to degrade surrounding water quality through erosion, sediment runoff, and the presence of other pollutants. These measures would be implemented and monitored throughout the project by a Qualified Stormwater Pollution Prevention Plan Practitioner (QSP).

During construction, Zayo would minimize or avoid impacts on wetlands and other waters, which would help to minimize impacts to water quality.

Accidental releases of hazardous materials that are used during construction, such as diesel fuel, hydraulic fluid, or oils and grease, would have the potential to occur. This potential impact would be avoided and minimized by implementing the SWPPP described in Section 5.10.1.5: Groundwater Management and APM HAZ-1: Prepare and Implement a Hazardous Material Release Prevention Plan and a Spill Prevention, Countermeasure, and Controls Plan and APM HAZ-3: Accidental Release Prevention Plan within Section 5.9: Hazards, Hazardous Materials, and Public Safety. Due to the proposed construction methods and activities as well as the preparation of the SWPPP and APMs, the project would not violate any water quality standards or waste discharge requirements, have no observable impact on nearby groundwater wells and springs, and impacts on water quality would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. A water truck would be available to support project construction activities and dust suppression. The water is expected to be obtained from local municipal sources, which are typically supplied through surface water reservoirs, not groundwater. Based on DWR data, other than localized areas of perched groundwater, particularly in the vicinity of streams, irrigation canals, and reservoirs, groundwater is expected to be relatively deep (greater than 50 feet) and installation of the conduit should have no impact on the groundwater outside the vicinity of surface water bodies. On the other hand, depth to groundwater has the potential to be relatively shallow in the vicinity of surface water bodies where directional boring construction methods could be used. Construction activities associated with directional boring will alter a small volume of sediment and will not substantially alter groundwater flow or groundwater quality. However, in the event of leakage of machine fluids during construction, groundwater quality has the potential to be impacted. To further reduce this impact, appropriate measures would be implemented, per the SWPPP as described in Section 5.10.1.5, Groundwater Management and APM HAZ-1: Prepare and Implement a Hazardous Material Release Prevention Plan and a Spill Prevention, Countermeasure, and Controls Plan and APM HAZ-3: Accidental Release Prevention Plan within Section 5.9: Hazards, Hazardous Materials, and Public Safety. The project also would not result in an increase in impervious surfaces or other areas that could substantially interfere with groundwater



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recharge. The project's negligible water use during construction would not deplete or interfere with groundwater supply or recharge. Therefore, the impact would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

(i) result in substantial erosion or siltation on- or off-site;

Less Than Significant Impact. The project would not alter the course of a stream or river or substantially alter the drainage pattern of the project area. Directional boring is anticipated for some surface water body crossings because it ~~allows for minimal~~ avoids direct disturbance to the water body, ~~and Bores beneath water bodies will~~ would be a minimum of 4 to 10 feet, and but up to 15 feet, below the water body bed. Bores beneath culverts would average 2 to 3 feet below the bed or approximately 4 feet below the water's surface. ~~6 to 10 feet below the water body bed.~~ Minor surface contouring may be needed in select locations to improve project access or to establish work areas that would accommodate equipment; however, it would be limited in scope and duration and would not substantially alter site drainage or result in substantially increased erosion or siltation. Therefore, the impact would be less than significant.

To further reduce this impact, appropriate measures would be implemented, per the SWPPP as described in Section 5.10.1.5, Groundwater Management and APM HAZ-1: Prepare and Implement a Hazardous Material Release Prevention Plan and a Spill Prevention, Countermeasure, and Controls Plan and APM HAZ-3: Accidental Release Prevention Plan within Section 5.9: Hazards, Hazardous Materials, and Public Safety. After project construction is completed, disturbed areas would be recontoured to approximate pre-project conditions, unless otherwise requested by the landowner. Through project design and implementation of the SWPPP, the temporary and short-term effects of erosion or siltation from site runoff would be further reduced.

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

No Impact. Because the majority of project infrastructure would be underground, the project would not substantially alter existing drainage patterns, increase impervious surfaces, or otherwise cause increased surface water runoff rates, or require substantial modification of any upland sites that would increase the potential for any on- or offsite flooding. Therefore, under this criterion, no impact would occur.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less Than Significant Impact. Construction activities would include plowing, trenching, directional boring, vault box installation, and temporary use of staging and materials storage yards. These activities are not anticipated to substantially alter existing drainage patterns within the project area because they would be temporary, confined to a small footprint, and would leave few aboveground or impervious components.



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Much of the project area is located within rural or undeveloped parcels where municipal or otherwise-developed stormwater collection systems are not established. The stormwater conveyance systems that are present along US 395 generally consist of open stormwater ditches and waterways along the route. The project would not substantially increase the amount of impervious surfaces, nor would it substantially modify the grade or runoff conditions along the project route; therefore, the project would not create or contribute additional runoff that could exceed the capacity of existing stormwater systems. To further reduce the potential impacts during construction, appropriate BMPs would be implemented in accordance with the SWPPP. This could include BMPs that would address potential non-stormwater discharges and sources of polluted runoff, such as spills and leaks, as described in Section 5.10.1.5, Groundwater Management and the APM HAZ-1: Prepare and Implement a Hazardous Material Release Prevention Plan and a Spill Prevention, Countermeasure, and Controls Plan and APM HAZ-3: Accidental Release Prevention Plan within Section 5.9: Hazards, Hazardous Materials, and Public Safety. Accordingly, the impact would be less than significant.

(iv) impede or redirect flood flows?

Less Than Significant Impact. The project ~~right-of-way does not cross~~ ~~cross~~ a FEMA 100-year floodplain ~~four 4-times constituting approximately 790 acres within Lassen County, and 19 times constituting approximately 220 acres within Lassen and Modoc Counties, respectively.~~ No long-term project staging or laydown areas are proposed. Short-term staging areas would be established within or immediately adjacent to the right-of-way, which would be restored following completion of construction, except for areas retained at the request of the landowner. No impedance or redirection of flood flows are anticipated as a result of the project. In addition, temporary work areas would not impede or redirect flood flows. Therefore, the project impact on flood flows would be less than significant.



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Table 5-10.3 Special Flood Hazard Area (SFHA) and Associated Streams Crossed by the Project Area of Direct Impact (ADI)

| County | 100-yr Flood Zone | Floodplain Area ID | Area of Floodplain Crossed by ADI (acres) | Associated Stream Name | |
|------------|-------------------|----------------------|---|------------------------|----------------------|
| Lassen | A | 06035C_2624 | 2.96 | Deep Creek | |
| | | | | Secret Creek | |
| | | 06035C_33 | 16.30 | | -- |
| | | | | | Baxter Creek |
| | | | | | Dill Slough |
| | | | | | Fish Slough |
| | | | | | Long Valley Creek |
| | | | | | Susan River |
| | | | | | Woodstock Canal |
| | | 06035C_3384 | 4.10 | -- | |
| 06035C_624 | 40.65 | -- | | | |
| | Sub-Total | 64.01 | | | |
| Modoc | A | 06049C_127 | 0.01 | Parker Creek | |
| | | 06049C_203 | 0.02 | -- | |
| | | 06049C_210 | 0.04 | -- | |
| | | 06049C_275 | 1.63 | | Big Juniper Creek |
| | | | | | Dry Creek |
| | | | | | Fitzhugh Creek |
| | | | | | Little Juniper Creek |
| | | | | | Romero Creek |
| | | | | | South Fork Pit River |
| | | 06049C_284 | 1.43 | -- | |
| | | | Joseph Creek | | |
| | | 06049C_317 | 2.16 | -- | |
| | | | South Fork Pit River | | |
| | | 06049C_54 | 1.41 | Davis Creek | |
| | | Willow Creek | | | |
| 06049C_57 | 0.00 | Thoms Creek | | | |
| 06049C_88 | 0.17 | North Fork Pit River | | | |
| 06049C_95 | 0.05 | -- | | | |
| | Sub-Total | 6.92 | | | |
| AE | 06049C_269 | 0.04 | North Fork Pit River | | |



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| County | 100-yr Flood Zone | Floodplain Area ID | Area of Floodplain Crossed by ADI (acres) | Associated Stream Name | |
|--------|-------------------|--------------------|---|------------------------|--|
| | | 06049C_270 | 0.02 | South Fork Pit River | |
| | | Sub-Total | 0.06 | | |
| | AO | 06049C_252 | 0.64 | -- | |
| | | 06049C_314 | 0.99 | North Fork Pit River | |
| | | 06049C_315 | 0.42 | -- | |
| | | Sub-Total | 2.05 | | |
| | | | Total | 73.04 | |

Source: FEMA 2020

~~Source: FEMA 2020~~

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

No Impact. The project is not located in flood hazard, tsunami, or seiche zones and would not risk release of pollutants due to inundation. Therefore, no impact would occur.

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

Less Than Significant Impact. The project area is located within the Goose Lake–Fandango Valley, Goose Lake–Goose Valley, Joseph Creek, Alturas Area–South Fork Pit River Basin, Madeline Plains, Secret Valley, Honey Lake Valley, and Long Valley groundwater basins, which are managed under the water quality control plans for the Central Valley and Lahontan RWQCBs (RWQCB 2018). The project description does not include any deliberate waste discharges that would conflict with the water quality control plans. Activities associated with project construction would not result in substantial additional sources of polluted runoff due to the low impact and shallow construction methods. A SWPPP would be prepared and implemented to further reduce any impacts. The project’s negligible water use during construction would not deplete or interfere with groundwater supply or recharge. Therefore, the project would not conflict with or obstruct the water quality control plan or a sustainable groundwater management plan, and the potential impacts would be less than significant.

5.10.5 Draft Environmental Measures

Applicant Proposed Measures

APM HYDRO-1: Prepare and Implement a Stormwater Pollution Prevention Plan (SWPPP)

The applicant will prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) to prevent construction-related erosion, sediment runoff, and discharge of other pollutants into adjacent waterways and onto neighboring properties. Because project activities would result in ground disturbance of more



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than one (1) acre, the applicant will obtain coverage under the State Water Resources Control Board General Permit for Storm Water Discharges Associated with Construction Activity Order No. 2009-0009-DWQ (and as amended by 2010-0014-DWQ and 2012-006-DWQ). To obtain coverage under the permit, the applicant will develop and submit permit registration documents—including a Notice of Intent, SWPPP, risk assessment, site map, construction drawings, certification by a Legally Responsible Person, contractor contact information, and annual fee—to the State of California's Storm Water Multiple Application and Report Tracking System (SMARTS) database and obtain a Waste Discharger Identification (WDID) number prior to initiating construction activities.

The SWPPP shall outline implementation of best management practices (BMPs) for each activity that has the potential to impact neighboring properties or degrade surrounding water quality through erosion, sediment runoff, dewatering, and discharge of other pollutants. BMPs to be part of the project-specific SWPPP may include but are not limited to the following control measures.

- Implementing temporary erosion control measures (such as silt fences, staked straw bales and wattles, silt and sediment basins and traps, check dams, geofabric, sandbag dikes, grass buffer strips, high-infiltration substrates, grassy swales, and temporary revegetation or other ground cover) to control erosion from disturbed areas.
- Protecting drainage facilities in downstream offsite areas from sediment using BMPs acceptable to Modoc, Lassen, and Sierra counties and the Lahontan and Central Valley Regional Water Quality Control Boards (RWQCBs).
- Protecting the quality of surface water from non-stormwater discharges such as equipment leaks, hazardous materials spills, and discharge of groundwater from dewatering operations.
- Restoring disturbed areas, after project construction is completed, unless otherwise requested by the landowner in agricultural land use areas.

Requirements of the SWPPP shall be coordinated with the requirements of any Section 401 Water Quality Certification issued for the project under the Clean Water Act and/or Streambed Alteration Agreement issued under Fish and Game Code Section 1602, as applicable.

