

Table S-1. Summary of Impacts and Mitigation Measures for the Point Arena to Robbins Project Route

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
AESTHETICS			
Possible Temporary Minor Changes in Landscape from Trenching Operations	LTS	None required	LTS
Possible Temporary Minor Changes in the Existing Visual Character or Quality of a Site	LTS	None required	LTS
Possible Minimal Visual Effect Resulting from Construction of Regenerator/OP-AMP Stations	S	Mitigation Measure A-1: Design Regenerator/OP-AMP Stations to Be Unobtrusive	LTS
AGRICULTURAL RESOURCES			
Conversion of Prime Farmland to a Non-Agricultural Use	LTS	None required	LTS
AIR QUALITY			
Increased Levels of Air Pollutants during Construction Exceeding Air District Thresholds	S	Mitigation Measure AQ-1: Implement Construction Best Management Practices	LTS
Potential Operational Emissions Exceeding Limits from Backup Generators	LTS	None required	LTS
Temporary Generation of Odors from Diesel Exhaust during Construction and from Diesel Backup Generators at Regenerator/OP-AMP Stations	LTS	None required	LTS
BIOLOGICAL RESOURCES			
Possible Disturbance of Special-Status Plant Populations	S	Mitigation Measure B-1: Avoid Impacts on Coast Lily and Other Threatened, Endangered, and Candidate Species by Establishing and Observing Exclusion Zones Mitigation Measure B-2: Avoid Impacts on CNPS Lists 2 and 4 Special-Status Plant Populations by Implementing Specific Measures	LTS
Possible Introduction of New Noxious Weeds or Spread of Existing Noxious Weed Infestations	S	Mitigation Measure B-3: Avoid the Dispersal of Noxious Weeds in the Fiber Optic Cable and Associated Facility Rights-of-Way	LTS

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Construction Activities Near Areas that are Habitat for the Valley Elderberry Longhorn Beetle	S	Mitigation Measure B-4: Avoid Disturbance to Elderberry Shrubs by Establishing and Observing Exclusion Zones	LTS
Possible Mortality and Temporary Habitat Disturbance of Giant Garter Snake	S	Mitigation Measure B-5: Avoid Disturbance to Giant Garter Snake Habitat	LTS
Possible Disturbance of Habitat for Non-Federally Listed Special-Status Amphibians and Reptiles	S	Mitigation Measure B-6: Avoid Riparian and Wetland Habitats That Support Special-Status Species by Establishing and Observing Exclusion Zones	LTS
		Mitigation Measure B-6: Avoid Riparian and Wetland Habitats That Support Special-Status Species by Establishing and Observing Exclusion Zones	
Construction Activities near Areas with Potentially Active Nonlisted Special-Status Raptor Nests and Other Potential Nesting Habitat	S	Mitigation Measure B-7: Avoid Disturbance to Special-Status Reptiles and Amphibians by Boring Under Streams or Constructing Barrier Fencing and Relocating Animals During Construction	LTS
		Mitigation Measure B-8: Avoid Disturbing Active Special-Status Raptor Nests	
Possible Disturbance of Active Swainson's Hawk Nests	S	Mitigation Measure B-9: Avoid Disturbing Active Swainson's Hawk Nests by Establishing and Observing Buffer Zones	LTS
Possible Disturbance to Active Northern Spotted Owl or Northern Goshawk Nests	S	Mitigation Measure B-10: Avoid Disturbing Northern Spotted Owl and Northern Goshawk Nests by Constructing During the Non-Breeding Season or by Establishing and Observing Buffer Zones Around Active Nests	LTS
Construction Activities in Areas near Potential Active Burrowing Owl Nests	S	Mitigation Measure B-11: Avoid Disturbing Active Burrowing Owl Nests and Implement Standard DFG Guidelines during the Nonbreeding Season	LTS
Construction Activities on Bridges that are Nesting Habitat for Swallows	S	Mitigation Measure B-12: Avoid Disturbance to Nesting Swallows by Implementing Timing Restrictions, Removing Nests, and Installing Mesh Netting	LTS

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Construction Activities in Areas Near Bat Maternity Roosting Sites	S	Mitigation Measure B-6: Avoid Riparian and Wetland Habitats That Support Special-Status Species by Establishing and Observing Exclusion Zones Mitigation Measure B-13: Avoid Bat Maternity Roost by Postponing Bridge Attachments	LTS
Possible Disturbance of Other Special-Status Wildlife Species	S		LTS
Temporary Construction Activities in Streams that Support Threatened, Endangered, and Special-Status Fish Species	S	Mitigation Measure B-6: Avoid Riparian and Wetland Habitats That Support Special-Status Species by Establishing and Observing Exclusion Zones Mitigation Measure B-14: Avoid and Minimize Disturbance of Woody Riparian Vegetation along Drainages Mitigation Measure B-15: Conduct Postconstruction Monitoring in Woody Riparian and Wetland Communities That Are Substantially Disturbed during Construction Activities Mitigation Measure B-16: Avoid In-Water Construction in All Flowing Streams That Support Sensitive Fish Species at or below the Crossing Location	LTS
Possible Removal or Disturbance of Woody Riparian Vegetation	S	Mitigation Measure B-6: Avoid Riparian and Wetland Habitats That Support Special-Status Species by Establishing and Observing Exclusion Zones Mitigation Measure B-14: Avoid and Minimize Disturbance of Woody Riparian Vegetation along Drainages Mitigation Measure B-15: Conduct Postconstruction Monitoring in Woody Riparian and Wetland Communities That Are Disturbed during Construction Activities	LTS

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Possible Disturbance of Sensitive Biological Resources from the Use of Staging Areas outside the Delineated Proposed Project Study Area and Not within Previously Paved or Graveled Areas	S	Mitigation Measure B-17: Survey Proposed Staging Areas before Construction and Implement Avoidance Measures, if Required	LTS
Possible Short-Term Disturbance of 0.39 Acre to 2.63 Acres Waters of the United States (Including Wetland Communities)	S	Mitigation Measure B-15: Conduct Postconstruction Monitoring in Woody Riparian and Wetland Communities That Are Substantially Disturbed during Construction Activities	LTS
		Mitigation Measure B-18: Minimize Disturbance and Restore Other Waters of the United States to Preproject Conditions	
		Mitigation Measure B-19: Minimize Disturbance and Restore Jurisdictional Wetlands to Preproject Conditions	
		Mitigation Measure B-20: Avoid and Protect Specified Jurisdictional Wetlands Adjacent to Construction Areas	
Possible Temporary Disturbances to Wildlife Movements	S	Mitigation Measure B-6: Avoid Riparian and Wetland Habitats That Support Special-Status Species by Establishing and Observing Exclusion Zones	LTS
		Mitigation Measure B-7: Avoid Disturbance to Special-Status Reptiles and Amphibians by Boring Under Streams or Constructing Barrier Fencing and Relocating Animals During Construction	
Possible Wildlife Entrapment in Open Trenches	S	Mitigation Measure B-21: Fill or Cover Open Trenches Daily	LTS
Possible Temporary Disturbance of Common Wildlife Species	LTS	None required	LTS

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Possible Temporary Increases in Sedimentation and Turbidity Possibly Affecting Fish	S	Mitigation Measure B-14: Avoid and Minimize Disturbance of Woody Riparian Vegetation along Drainages	LTS
		Mitigation Measure B-15: Conduct Postconstruction Monitoring in Woody Riparian and Wetland Communities That Are Substantially Disturbed during Construction Activities	
		Mitigation Measure B-16: Avoid in-Water Construction in All Flowing Streams That Support Sensitive Fish Species at or below the Crossing Location	
		Mitigation Measure B-18: Minimize Disturbance and Restore Other Waters of the United States to Preproject Conditions	
Possible Short-Term Disturbance of Fish Habitat	S	Mitigation Measure B-14: Avoid and Minimize Disturbance of Woody Riparian Vegetation along Drainages	LTS
		Mitigation Measure B-15: Conduct Postconstruction Monitoring in Woody Riparian and Wetland Communities That Are Substantially Disturbed during Construction Activities	
		Mitigation Measure B-16: Avoid in-Water Construction in All Flowing Streams That Support Sensitive Fish Species at or below the Crossing Location	
		Mitigation Measure B-18: Minimize Disturbance and Restore Other Waters of the United States to Preproject Conditions	
Possible Short-Term Degradation of Fish Habitat from Accidental Seepage of Bentonite into Streams	LTS	None required	LTS
Possible Effects on Fish from Accidental Spills of Toxic Substances during Construction	LTS	None required	LTS

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
CULTURAL RESOURCES			
Possible Long-Term Disturbance of Cultural Resource Sites, C-Ukiah-1 (Ukiah Railroad Station and Loading Platform), C-Arbuckle-1 (Concrete Road By-pass Structure over Colusa Trough Site Ca-Col-219-H), C-Arbuckle-2 (Colusa Trough Site Ca-Col-219H), C-Elledge Peak-1 (CA-Men-1108), and Isolates (C-Kirkville-1)	S	Mitigation Measure C-1: Develop and Implement Avoidance Procedures Mitigation Measure C-2: Develop and Implement Cultural Resources Monitoring Plan Mitigation Measure C-3: Conduct Test Excavation to Determine Resources Significance, and if Significant, Conduct Data Recovery Excavation	LTS
Possible Long-Term Damage to Unidentified Buried Cultural Resource Sites from Ground-Disturbing Activities	S	Mitigation Measure C-4: Stop Work If Cultural Resources Are Discovered during Ground-Disturbing Activities.	LTS
Possible Disturbance to Paleontological Resources during Construction	S	Mitigation Measure C-5: Retain a Qualified Paleontologist to Oversee Construction Activities and Prepare a Report.	LTS
Possible Long-Term Damage to Previously Unidentified Human Remains on Nonfederal Land from Ground-Disturbing Activities	S	Mitigation Measure C-6: Comply with State Laws Pertaining to the Discovery of Human Remains.	LTS
GEOLOGY AND SOILS			
Possible Temporary Damage to the Fiber Optic Cable System from Strong Earthquake-Induced Ground Shaking	LTS	None required	LTS
Possible Temporary Damage to the Fiber Optic Cable System from Earthquake Fault Displacement	LTS	None required	LTS
Possible Temporary Accelerated Erosion and Sedimentation from Soil Disturbance and Vegetation Removal	LTS	None required	LTS

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Possible Temporary Damage to the Fiber Optic Cable System from Earthquake-Induced Liquefaction	LTS	None required	LTS
Possible Long-Term Slope Mass Failure	LTS	None required	LTS
Potential Damage to the Cable System from Seasonal Soil Expansion and Contraction	LTS	None required	LTS
HAZARDS AND HAZARDOUS MATERIALS			
Possible Temporary Exposure to or Release of Hazardous Materials during Construction	S	Mitigation Measure H-1: Ensure Proper Labeling, Storage, Handling, and Use of Hazardous Materials.	LTS
Possible Exposure of the Public or Environment to Hazardous Materials Sites	LTS	None required	LTS
Possible Temporary Limited Emergency Access	LTS	None required	LTS
Possible Temporary Exposure of People or Structures to Wildland Fires	LTS	None required	LTS
HYDROLOGY AND WATER QUALITY			
Possible Temporary Transport of Sediment to Waterbodies	S	None required. As defined in the project description, avoidance of sensitive drainages, construction best management practices, and the SWPPP will ensure that potential impacts on water are minimized to a less-than-significant level.	LTS
Possible Temporary Disruption of Bed and Bank Sediments in Channels during Fiber Optic Conduit and Cable Installation	S	None required. As defined in the project description, avoidance of sensitive drainages, construction best management practices, and the SWPPP will ensure that potential impacts on water are minimized to a less-than-significant level.	LTS
Possible Long-Term In-Channel Erosion and Deposition from Decreased Channel Stability	S	None required. Mitigation Measure B-6 has been incorporated into Williams' construction mitigation, ensuring that there will be a less-than-significant impact on channel erosion and deposition.	LTS
Possible Temporary Degraded Water Quality from Accidental Spills of Hazardous Materials during Construction	S	None required. Mitigation measures identified in the SWPPP will ensure a less-than-significant impact on water quality resulting from accidental spills of hazardous materials.	LTS

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Possible Temporary Water Quality Degradation and Siltation from Accidental Seepage of Bentonite into Streams	S	None required. Mitigation measures identified in the SWPPP will and the “General Project Commitments” described in the Biological Resources section of Chapter 5 will ensure a less-than-significant impact on water degradation and siltation from an accidental seepage of bentonite into streams.	LTS
LAND USE AND PLANNING			
Possible Conflict with Local Land Use Plans	S	Mitigation Measure LU-1: Obtain and Comply with Local Zoning Permits	LTS
Possible Conflict with Habitat Conservation or Natural Community Conservation Plans	LTS	None required	LTS
MINERAL RESOURCES			
Impact: Possible Conflict with Future Mineral Exploration and Access to Resource Sites	LTS	None required	LTS
NOISE			
Temporary Exposure of Residences and Other Sensitive Receptors to Construction Noise in Excess of Local Standards	S	Mitigation Measure N-1: Employ Noise-Reducing Construction Practices	LTS
Temporary Exposure of Residences or Other Sensitive Uses to Localized Groundborne Vibration and Noise	LTS	None required	LTS
Exposure of Nearby Sensitive Receptors to Excessive Noise Levels from Use of Emergency Backup Generators and Other Support Equipment at Regenerator/OP-AMP Stations	S	Mitigation Measure N-2. Design and Locate Emergency Backup Generators and Other Support Equipment to Limit Noise from the Engine Generator	LTS
POPULATION AND HOUSING			
No Impacts			
PUBLIC SERVICES			

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
The Construction of Regenerator/op-amp Facilities Would Have No Impact on Public Services Except Fire Protection, Which Could Be Minimally Affected by a Resulting Increase in Need for Fire Services	LTS	None required. As defined in the project description, a fire prevention and response plan will be implemented to ensuring there will be a less-than-significant impact.	LTS
RECREATION			
Possible Temporary Disruption of Hunting Opportunities	LTS	None required	LTS
TRANSPORTATION/TRAFFIC			
Temporary Traffic Disruption within Road Rights-of-Way	S	Mitigation Measure T-1: Obtain and Comply with Local and State Road Encroachment Permits	LTS
Temporary Disruption of Traffic	LTS	None required	LTS
Temporary Increase in Accident Risk	S	Mitigation Measure T-1: Obtain and Comply with Local and State Road Encroachment Permits	LTS
Temporary Effects on Traffic Flow	S	Mitigation Measure T-1: Obtain and Comply with Local and State Road Encroachment Permits	LTS
Creation of Limited New, Temporary Vehicle Parking	S	Mitigation Measure T-1: Obtain and Comply with Local and State Road Encroachment Permits	LTS

UTILITIES AND SERVICE SYSTEMS

No Impacts

S = significant.

LTS = less than significant.