

Project Description

Located in Placer County, just east of the City of Lincoln, the Hemphill Diversion Structure is located within Auburn Ravine. The structure diverts water from Auburn Ravine into the Hemphill Canal, located south of the ravine, for delivery to Nevada Irrigation District (NID) raw-water customers. The diversion structure is an approximately eight-foot-high concrete structure, with an approximately 40-foot-long concrete apron extending downstream, and has been operated by NID since its purchase in 1933. The existing diversion has been subject to damage during high flow events, has required ongoing maintenance, and is currently in need of additional repairs. The Hemphill Diversion Structure is located in Section 13, Township 12 North, and Range 6 West (Mount Diablo Base and Meridian) of the "Lincoln" 7.5-minute quadrangle. The structure is located at latitude 38.896731° and longitude -121.251885°.

Hemphill Diversion has historically presented an impediment to the passage of migrating anadromous fish species that spawn in Auburn Ravine upstream of the diversion. NID is considering three alternatives to eliminate this impediment while still maintaining water deliveries to customers served by Hemphill Canal. These three alternatives include:

- *Alternative 1 - Riverbank Infiltration Gallery Alternative:* Includes the removal of the diversion structure, site stabilization, and construction of a subterranean riverbank infiltration structure and pipeline connection to Hemphill Canal.
- *Alternative 2 - Fish Passage Alternative:* Includes the removal of the diversion structure, site stabilization, construction of a nature-like roughen rock ramp instream fish passage, installation of a fish screen and improvements to a portion of the Hemphill Canal.
- *Alternative 3 - Pipeline Alternative:* Includes the removal of the diversion structure, site stabilization, and installation of the majority of the pipeline within roadway right-of-way (ROW) from the NID Placer Yard facility to the Hemphill Canal near the existing diversion structure.

Each alternative is designed to allow anadromous fish to migrate past the Hemphill Diversion Structure site. NID has not yet identified a preferred alternative. While varied in their approaches to enhancing fish passage at the Hemphill Diversion site, each Project alternative would require removal of the existing diversion structure.

The area in which the three alternatives are located is relatively flat, with elevations ranging from 196-450 feet above mean sea level (AMSL). Auburn Ravine at this location is a perennial stream with a cobbly/rocky/sandy bottom in an incised channel that averages approximately 100 feet in width. When the Hemphill Diversion flashboards are in place during spring and summer, the stream is impounded to form a slack pond behind the diversion structure. The stream supports a band of riparian vegetation dominated by narrow-leaved willow (*Salix exigua* var. *exigua*) and red alder (*Alnus rubra*) below the ordinary high-water mark. Incising of the channel has resulted in the stream being mostly isolated from its historic floodplain.

Significant or Potentially Significant Effects and Proposed Mitigation Measures that would Reduce or Avoid that Effect

Biological Resources

[APPLIES TO ALL ALTERNATIVES] Protect Water Quality and Minimize Sedimentation Runoff in Wetlands and Non-Wetland Waters, Install Fencing and/or Flagging to Protect Sensitive Biological Resources, Conduct Environmental Awareness Training for Construction Personnel, Conduct Preconstruction Surveys for Western Spadefoot, Conduct Section 7 Consultation with USFWS for Elderberry Long Horn Beetle and Implement Required Mitigation, Conduct Preconstruction Survey for Sensitive Reptiles – Blainville’s horned lizard, Conduct Preconstruction Northwestern Pond Turtle Surveys, Survey for Swainson’s Hawk and Other Protected Raptor Nests and Protect Nesting Activity, Survey for Western Burrowing Owl and Protect Nesting Activity, Survey for Tricolored Blackbird and Protect Nesting Activity, Survey for White-tailed Kite, Cooper’s Hawk and Other Protected Raptors and Protect Nesting Activity, Survey for Nuttall’s Woodpecker, Loggerhead Shrike, Yellow-Billed Magpie, Oak Titmouse, Wrentit, Song Sparrow and other MBTA-Protected Birds and Protect Nesting Activity, Survey for Townsend’s big-eared bat and western red bat and Protect Nesting Activity, Conduct Fish Rescue and Relocation, Conduct Section 7 and Magnuson-Stevens Act Consultation with NMFS for CCV DPS Steelhead and EFH for Pacific Salmon and Implement Required Mitigation, Conduct Preconstruction Survey for Spawning Fish, Conduct Preconstruction Survey for Sensitive Plant Species, Alternative Mitigation for PCCP Covered Species, Compensate for the Loss of Riparian Habitat and Restore Temporary Disturbed Areas, Compensate for the Permanent Loss of Waters of the United States/Waters of the State and Restore Temporary Disturbed Areas, Obtain a Placer County Tree Permit

[APPLIES TO ALTERNATIVE 3 ONLY] Survey and Protect Pipeline Alignment Staging Area Environmentally Sensitive Resources

Cultural Resources

[APPLIES TO ALL ALTERNATIVES] Protect Historical Resources as Environmentally Sensitive Areas, Cultural Resources Awareness Training, Monitor Ground Disturbance and Stop Work if Cultural Resources or Remains are Detected, Stop Work if Human Remains Detected

Geology and Soils

[APPLIES TO ALL ALTERNATIVES] Discovery of Unknown Paleontological Resources

Hydrology and Water Quality

[APPLIES TO ALL ALTERNATIVES] Bank Stabilization Measures

Noise

[APPLIES TO ALL ALTERNATIVES] Equipment Use, Imports and Exports

Tribal Cultural Resources

[APPLIES TO ALL ALTERNATIVES] Worker Awareness Training, Monitor Ground Disturbance, Installation of Environmentally Sensitive Area Fencing, and Stop Work if Cultural Resources or Remains are Detected