

RECLAMATION

Managing Water in the West

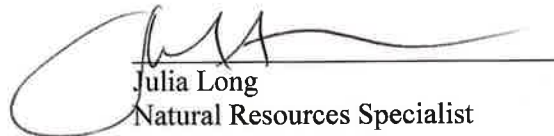
**Finding of No Significant Impact
and
Final Environmental Assessment**

**Truckee Carson Irrigation District Lewis Wasteway
Replacement and Low Head Hydroelectric Project**

Newlands Project, Churchill County, Nevada

FONSI NO. LO 2014-1004

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I. Background, Proposed Action, and Purpose and Need

The Newlands Project, formerly the Truckee-Carson Project, was one of the first Reclamation projects authorized by the Secretary of the Interior on March 14, 1903, pursuant to the Reclamation Act of 1902 (Act of June 17, 1902, 32 Stat. 388). Construction began in 1903, with the first irrigation season being in 1905.

The Newlands Project covers lands in the west-central Nevada counties of Churchill, Lyon, Storey, and Washoe. Primarily, water for the Newlands Project is used for agriculture. Water comes from the Carson River and is supplemented by the Truckee River.

Under terms of the contract between the United States Department of the Interior Bureau of Reclamation and the Truckee-Carson Irrigation District (TCID), dated December 18, 1926, the care, operation, and maintenance of the Newlands Project was transferred to TCID on December 31, 1926. The United States and TCID entered into a new contract for the care, operation, and maintenance of the Newlands Project on November 25, 1996.

The Bureau of Reclamation (Reclamation) Lahontan Basin Area Office has evaluated the potential environmental consequences of authorizing TCID to replace the Lewis Wasteway and to develop low head hydroelectric power sources and related appurtenances at two locations within the Newlands Project.

The action associated with the project is for Reclamation to issue a Lease of Power Privilege (LOPP) Agreement and an Additions or Alterations to Conveyance and Distribution Facilities Permit (Permit) to use facilities under Reclamation's jurisdiction for hydroelectric power generation that is consistent with Reclamation project purposes.

TCID is proposing to replace the Lewis Wasteway structure, which suffered a structure failure in June 2008. The structure was replaced with a compacted earthen embankment. Replacement of the Wasteway would:

- Restore the ability to evacuate the V-Line Canal during an emergency event
- Allow TCID operational flexibility in delivering water to the Newlands system
- Reduce risk to the urbanized reaches of the V-Line Canal.

In addition to replacement of the Lewis Wasteway, TCID is requesting to construct and install small conduit low head hydroelectric units and related appurtenances at two structures located within the Newlands Project.

One small conduit low head hydroelectric unit would be installed at the replaced Lewis Wasteway and would be a maximum of 250 kW unit. Connection to the electrical grid would be through existing NV Energy facilities.

The second small conduit low head hydroelectric unit would be installed at A-C3 Panicker Drop and would generate a maximum of 125 kW. In addition, there would be the construction and installation of a 1,400-foot single-phase power line by NV Energy that would connect the hydroelectric unit at A-C3 to the electrical grid.

TCID is proposing to take advantage of the irrigation water flows and vertical drops across the two

structures to provide energy and generate power efficiently while providing a revenue source for TCID's care, operation, and maintenance costs associated with the Newlands Project. No new water is needed for the hydroelectric projects, as the water being used would be incidental to the normal irrigation flows.

II. Summary of Impacts

Proposed Action Alternative

The EA includes analysis of potential impacts for each environmental category in accordance with the National Environmental Policy Act (NEPA) of 1969. The results of the analysis are summarized in the following:

Wildlife: During the construction phase, anticipated impacts to wildlife are expected to be temporary and localized. Wildlife may be temporarily displaced due to equipment noise, exhaust emissions, and fugitive dust. However, these effects will be minimized by Best Management Practice's (BMP's).

Since the canals are dry part of the time they do not support aquatic life. Therefore it is anticipated there will be no injury or mortality to fish due to the project.

Threatened and Endangered Species: No threatened or endangered species are known to occur in the project areas therefore, it has been determined that the Proposed Action will not negatively affect any Federal or State-listed species or any critical habitat.

Water Resources: The project will not affect water resources in regard to quality or quantity. In fact the anticipated effect and purpose of the project will be water conservation. Any machinery, such as the turbine, will use vegetable-based lubricants but, under normal operating conditions, lubrication will not come in contact with the water.

Air Quality: The project may have temporary, localized impacts to air quality during construction. Emissions from construction equipment would be temporary and insubstantial and would not result in violations of national or state ambient air quality standards. No air quality issues are anticipated post construction.

Land Use: The project will have no impact or change existing land uses within the vicinity.

Noise: There will be a temporary increase in noise associated with the construction of the project. However, the amount of construction equipment for these actions will be minimal and brief. Once the project is completed, the turbine will produce some noise but it is anticipated it will be below existing ambient noise levels at the check structures. Ambient noise includes vehicle traffic and noise from water being released into the Lewis Wasteway and through the check structure.

Vegetation and Invasive, Noxious Weeds: Some vegetation may be disturbed during the installation of the hydroelectric plants but since the construction will take place within the existing footprint of the canals, minimal effects are anticipated. There will be soil disturbances creating the potential for invasive weed growth. However, weed control BMPs, including a noxious weed plan will be instituted to prevent the spread of invasive plant species.

Hazardous Materials: Other than fuel and lubricants used during construction, the project includes no other hazardous materials. BMP's will be implemented to reduce the risk for the release of any pollutants.

Visual Resources: The proposed project will change the appearance of the canal bottoms at both sites and the power poles for the A-C3 Panicker Drop hydroelectric plant will be visible along Sorenson road but no other visual resources will be affected.

Transportation: The proposed project will affect transportation only during construction. Any interruption to transportation would be temporary, possibly 1 day. Traffic control standards will be maintained until project completion.

Indian Trust Assets: There are no Indian Trust Assets (ITAs) within proposed project areas therefore, there will be no impact to ITAs.

Indian Sacred Sites: There are no identified Indian Sacred Sites within the action area of the proposed project and therefore this project will not inhibit use or access to any Indian Sacred Sites.

Environmental Justice: The proposed project will have no disproportionately high and/or adverse human health or environmental effects, including social and economic effects on minority and low income populations.

Soils: Project-related soil disturbance will be temporary and localized and will occur in the canals and the embankment at the Lewis Wasteway. Disturbances will include excavation and possibly some importation of structural fill at the Lewis Wasteway site.

Floodplains: Neither of the proposed project sites are located within 100-year flood areas and therefore this project will not affect the flood plain.

Historic and Cultural Resources: All elements of the Newlands Project are considered historic properties including the Lewis Wasteway and the A-C3 Panicker Drop sites. Reclamation applied the criteria of adverse effect pursuant to 36 CFR §800.5(a)(1) to the project and has determined the restoration and minor alternations proposed for this project are consistent with the Secretary's Standard's for the Treatment of Historic Properties (36 CFR Part 68) and will result in no adverse effect to historic properties within the area of potential effect (APE). Reclamation initiated consultation with the Nevada State Preservation Office (SHPO) by letter and SHPO responded July 2, 2014, concurring with Reclamation's determination of no adverse effect to historic properties.

The No Action Alternative

Under the "No Action" alternative, Reclamation would not authorize the TCID to replace the Lewis Wasteway and to develop low head hydroelectric power sources and related appurtenances at two locations within the Newlands Project. A LOPP and a Permit would not be issued to use facilities under Reclamation's jurisdiction for hydroelectric power generation. The No Action alternative maintains existing conditions at both the Lewis Wasteway and Panicker Drop sites including not providing increased flood protection by restoring the Lewis Wasteway to its pre-2008 condition.

III. Cumulative Impacts

Based on existing information, there are no known cumulative effects from the proposed project at Lewis Wasteway and Panicker Drop locations.

IV. Irreversible and Irretrievable Commitments

All of the proposed project elements would be constructed on existing facilities and changes in the function, status, and operation of these facilities is not anticipated. The intent of the project elements is to improve the operation or use of the existing structures and canals.

All of the proposed project elements are reversible and installation of all project elements is relatively superficial. Proposed project elements could be removed in a week or two.

V. Environmental Commitments

The following environmental commitments would be implemented before, during, and after construction to prevent and reduce the impacts of the Proposed Action.

- The contractor shall be responsible for complying with all environmental requirements identified in this environmental assessment (EA) and with all Federal, State, and local permits. BMPs shall be implemented to limit impacts to water quality and hazardous material accidents.
- Reclamation will require that all earth-moving equipment, gravel, other materials or equipment need to be noxious-weed free.
- Reclamation will conduct post-construction monitoring to ensure new construction at the TCID Lewis Wasteway Replacement and Low Head Hydroelectric sites are compliant with Secretary of the Interior Standards for the Treatment of Historic Properties, 36 CFR §68.

VI. Consultation and Coordination

The Draft EA was provided for a 25-day public review and comment period on May 30, 2014, at www.usbr.gov/mp, at the Churchill County Library, and at the Bureau of Reclamation, Lahontan Basin Area Office which is located in Carson City, Nevada. A news release was issued and notice of availability was sent to those on the mailing list.

The Final EA and FONSI were developed after a review of public comments received. Two written comments were received, one from Churchill County and a letter from the Fallon-Paiute Shoshone Tribe. Responses were prepared to comments and are included with their letters in the Appendix of the Final EA. Reclamation reviewed the comments and made minor revisions in the Final EA. In addition, minor revisions to the EA include grammatical and formatting corrections and clarification of the National Historic Preservation Act, Section 106 process.

No significant impacts were identified in the Final EA or as a result of the public review process.

VII. Findings and Decision

Reclamation's decision is to implement the Proposed Action alternative. Based on the environmental analysis as described in the EA and thorough review of public comments received, Reclamation has determined that implementing the Proposed Action alternative will not have a significant impact on the quality of the human environment and the natural resources of the area. A Finding of No Significant

Impact is justified for the proposed project. Therefore, an environmental impact study is not necessary to further analyze the environmental effects of the proposed action.

The following summarizes the reasons why the impacts of the proposed action are not significant:

1. There may be short-term, temporary impacts during construction to the following resources: wildlife, migratory birds, soils, air quality, water resources, and vegetation. Many of these impacts will be mitigated by BMPs and other measures.
2. There will be no impact to Threatened or Endangered Species.
3. There are no known impacts to Native American cultural values.
4. Implementing the proposed action will not disproportionately affect minorities or low income populations and communities.
5. Hazardous materials will be handled in accordance with federal and state regulations. An emergency response plan would be implemented that includes contingencies for hazardous materials spills and disposals.
6. Historic or cultural resources: Protection measures included in the project would minimize the likelihood of effects (through avoiding all known resources and stopping work if a resource or remains are encountered).
7. There would be no impact to existing land uses in the vicinity of the project.

The EA documents that compliance has occurred with the Endangered Species Act, Section 106 of the National Historic Preservation Act, Indian Trust Assets, Clean Air Act, Clean Water Act, Environmental Justice, Fish and Wildlife Coordination Act, Migratory Bird Treaty Act, and the National Environmental Policy Act.