

RECLAMATION

Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

Natomas Central Mutual Water Company's R-Drain Check Structure Automation Project Mid-Pacific Region

FONSI 16-02-NCAO

Recommended by:



Megan K. Simon
Natural Resources Specialist
Northern California Area Office

Date: 2/12/16

Concurred by:



Paul Zedonis
Environmental and Natural Resources Division Manager
Northern California Area Office

Date: 2/12/16

Approved by:



for Federico Barajas
Area Manager
Northern California Area Office

Date: 2/12/2016



Background

Reclamation proposes to provide a Department of the Interior CALFED Bay-Delta Water Use Efficiency grant to the Natomas Central Mutual Water Company (Company) to support implementation of the Proposed Action. The CALFED Bay-Delta Program is a 30-year Program (2000 – 2030) among 25 Federal and state agencies with responsibility in the Sacramento San Joaquin Delta (Delta). The Program is based on four major resource management objectives that guide its actions to achieving a Delta that has a healthy ecosystem and can supply Californians with a reliable water supply. Those objectives are: levee system integrity; water quality; water supply reliability, and; ecosystem restoration. Reclamation plays a key role as the Federal lead agency for implementation of the water supply reliability actions in coordination with our state CALFED partner agencies.

The purpose of the Proposed Action is to improve irrigation service and efficiency of water use by replacing the existing R-Drain manually-operated check structure on the Northern Main Canal (NMC) with a new structure equipped with electronically-driven, remotely-operated gates. Presently, the lack of automated control of the flow gates result in periodic uncontrolled spills (up to 3,800 acre-feet annually) that result in reduced potential for water use efficiency. Automating the water level and control of flow through the gates would minimize operational spills allowing for improved efficiency of available water and improved reliability of water supply. In addition, implementing this action would be consistent with past and present planning efforts to improve water use efficiency within the bounds of the lands served by the Company.

In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, the Bureau of Reclamation (Reclamation) has prepared an Environmental Assessment (EA) for the *Natomas Central Mutual Water Company's R-Drain Check Structure Automation Project*, dated February 2016.

Alternatives Including the Proposed Action

No Action Alternative

The No Action Alternative would consist of Reclamation not providing grant funding for the Project, which would likely result in the Company continuing to operate and maintain their distribution system under the existing condition.

Proposed Action

The Proposed Action is for Reclamation to award the Company with a grant in support of the Project, located approximately 13 miles north of Sacramento in Sutter County, California. The Proposed Action includes funding an administrative, management, and final design component, construction activities, and performance monitoring. Construction activities are the focus of the environmental review.

Construction Activities

Site Preparation

Demolition of the existing structure would occur over a few days in the winter months when the canal is closed for typical canal maintenance activities. The process would include use of a crane operating from the canal maintenance roads to remove large sections of the existing structure and an excavator/backhoe working within the canal (below the high-water mark) to clean up remaining demolition debris. The estimated 63 tons of cement and unusable miscellaneous materials expected from demolition would be hauled to an appropriate landfill or recycled. The existing canal access roads accessing the R-Drain Check Structure would be used for staging of heavy equipment.

Following removal of the demolition debris, the site would be prepared for the replacement structure. This would include use of the excavator to excavate into the canal banks and level the canal bottom for the footprint of the replacement structure (estimated at 12 by 60 feet (ft) or 720 square feet (sf)). The new structure will protrude into the canal access road banks to limit the potential for future scour around the head structure. Soil removal is anticipated to ensure adequate working space to place the cement form boards for the headwall structures at the R Drain Canal entrance and the R-Drain Check Structure that serves the NMC. Similarly, some soil removal is anticipated behind each headwall structure to make space for placement of cement form boards and connecting new corrugated metal pipes (CMP) to the existing similarly sized pipelines.

The existing rip-rap and soil/road base would be removed and stockpiled nearby for reuse following new structure completion. The Project area will be cordoned off with exclusionary fencing prior to the inactive season for giant garter snakes (GGS) to prevent them from occupying any habitat that could be temporarily affected by this action.

Check Structure Installation

Following site preparation, cement forms would be constructed to create the replacement structure. The dimensions of this structure are provided in Appendix B-1, B-2, and B-3 of the EA. The base of the structure would be 15 inches thick and the vertical headwall would be 12 inches thick. Cement trucks would deliver cement to the forms from the canal access road. Portions of the new structure will be outfitted with emergency overflow weirs to accommodate rare times when excess flow may exceed outlet capacities of the new structure.

Once the cement has cured for a few weeks, the new CMPs would be reattached at the junction where they were removed during demolition. The areas around the structures would be back-filled with acquired soil and rip-rap attained during site preparation. Excess soil, if any, would be hauled away. Approximately 12 cubic yards of new rip-rap would be placed along each bank upstream of the new structure for approximately 5 feet. This rip-rap would serve to armor the banks from erosion. This newly acquired rip-rap would be of a dimension considered optimal for GGS use (15 to 18-inch minus angular rock).

The last steps in check structure completion would include installation of the slide and Hydra-Lopac gates on the new cement structure; installation of an electronic water level transducers and stilling well above the new structure, and one below in both the R-Drain Canal and the NMC; installation of electronic flow meters at each new gate structure; installation of the metal grating and guard rails on the structure for the walkway; installation of the SCADA system to the new structure; and installation of a solar power/battery back-up system to energize the Hydra-Lopac gate and SCADA system.

Findings

In accordance with Section 102(2)(c) of NEPA, as amended, Reclamation's Northern California Area Office has determined that an environmental impact statement is not required for further review of these modifications. This Finding of No Significant Impact (FONSI) is supported by Reclamation's EA Number EA-14-07-NCAO, *Natomas Central Mutual Water Company's R-Drain Check Structure Automation Project*, which is incorporated by reference and attached. This FONSI is based on the following:

1. Surface Water Resources

Under the Proposed Action, cost share funding would be provided to the Company to manage, plan, finalize design, and construct new facilities to automate flow regulation at the present location of the R-Drain check structure. Full integration of SCADA, coupled with the automation of the gates, would facilitate improved water management practices by maintaining a constant water level upstream of the R-Drain Structure to avoid uncontrolled spills, in particular during drier years when water supplies are limited. In doing so, the Project would improve the Company's overall ability to balance the agricultural and environmental demands for water.

Construction activities would not result in any impact to erosion and turbidity that could affect any natural stream systems. This is because: 1. the area impacted by the construction activities would be confined to about 720 sf; 2. the contractor would be required to submit and adhere to conditions of an approved Surface Water Pollution Prevent Plan that would limit the potential for erosion; 3. the Project would not likely increase turbidity of any storm water relative to typical canal maintenance activities that could occur in several miles of canal in the same year; and 4. any discharge to the Sacramento River would be subject to existing National Pollution Discharge Elimination System (NPDES) permit conditions of Reclamation District No. 1000.

2. Biological Resources

The Proposed Action would allow greater flexibility in water management for lands served by the Company, which in turn would improve the Company's ability to balance the agricultural and environmental demands (i.e. Natomas Basin Conservancy mitigation properties) on the water to the benefit of water-dependent species. This includes earlier flood up to a greater proportion of the land planted in rice, an important agricultural habitat for the GGS, which is the only species of concern for this project.

The potential direct effects of constructing the replacement check structure on GGS is expected to be minor because: the potential area of impact to GGS habitat is small and it would not likely be occupied by GGS because of the installation of exclusionary fencing (i.e., silt fence) prior to the hibernation period that would prevent them from entering this habitat before construction; and upon check structure completion the potential overwintering habitat would be restored. In doing so, the main effect of this action is limited to a temporary loss of potential overwintering GGS habitat rather than direct harm to the species. In addition, additional avoidance and minimization measures and BMPs would be used to ensure that no snakes are harmed and any adverse modifications to their habitat are minimized during all aspects of project implementation. In light of these requirements, Reclamation has determined the Proposed Project may affect, but is not likely to adversely affect, GGS and has informally consulted with the Service. The Service Concurred with Reclamation's determination in a letter dated December 11, 2015.

3. Cultural Resources

The Proposed Action will have no adverse effect to historic properties. Reclamation consulted with the California State Historic Preservation Officer under Section 106 of the National Historic Preservation Act, receiving concurrence on a finding of no adverse effect on November 30, 2015.

4. Indian Sacred Sites

No impacts to Indian sacred sites would occur as the Proposed Action would not limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or adversely affect the physical integrity of such sacred sites.

5. Indian Trust Assets

The Proposed Action will not impact Indian Trust Assets. The nearest ITA is the Auburn Rancheria approximately 13 miles northeast of the Project location.

6. Environmental Justice

Implementing the Proposed Action will not disproportionately affect minorities or low-income populations and communities since there will be no change in land use.

7. Cumulative Impacts

There are no adverse impacts associated with implementing the Proposed Action, and therefore there are no cumulative effects to consider.