

Project Title: Operation and Maintenance of the Fish Screen and Maintenance of the Fish Passage Facility at the Redlands Water and Power Company Diversion Dam.

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Project Summary: The Redlands Water and Power Diversion, located on the Gunnison River near Grand Junction, Colorado, diverts water into the Redlands Power Canal. A fish passage structure was constructed around the diversion dam in 1996. A fish screen and fish return pipeline was constructed in the canal in 2004. The fish passage is operated by the U.S. Fish and Wildlife Service. Redlands operates and maintains the fish screen and performs maintenance on the fish passage.

Study Schedule: Redlands makes every effort to operate the fish screen whenever diverting water into the Power Canal. Maintenance on the fish passage is performed after the U.S. Fish and Wildlife Service complete annual operation.

Relationship to RIPRAP: Colorado River Action Plan: Mainstem II.B.3.

Accomplishment of FY 2017 Tasks and Deliverables, Discussion of Initial Findings and shortcomings:

The following major maintenance activities were completed on the fish passage:
Refer to US Fish and Wildlife Service – Dale Ryden

Redlands Water and Power Co. cooperated with FWS on maintenance

The following improvements were made to the fish passage:

Refer to US Fish and Wildlife Service – Dale Ryden

Redlands Water and Power Co. cooperated with FWS on maintenance

The fish screen was operated during the following periods:

Online	05/01/17	Put unit online
Bypassed	05/08/17	Bypassed due to Plant repairs
Online	05/15/17	Plant repairs complete, put unit back online
Bypassed	06/30/17	Bypassed due to Plant exciter failing, dewater the canal to make necessary repairs
Online	07/15/17	Plant repairs completed, put unit back online
Bypassed	08/09/17	Bypassed to check for silt in bottom of screen
Online	08/09/17	Screen was free of silt, put unit back online
Bypassed	09/20/17	Bypassed to replace west brush drive cable. Left bypassed for concrete pour
Online	09/21/17	Concrete pour complete, unit Unit put back online
Bypassed	10/29/17	Unit bypassed for the season

The following major maintenance activities were completed on the fish screen:

Parts and materials were purchased to allow RWP to service the compressor including filters and hydraulic oil.

Right outside screen sensor was replaced.

Replace drive cable on west brush.

The following improvements were made to the fish screen:

RWP removed old concrete from the trash rake area and prepped and poured a concrete debris pad for the trash rake debris.

RWP also constructed a pump washing station. Electrical was ran to the pump washing station. A set of steel stairs was also fabricated and placed down in the pump station. The station is necessary for washing the screens and deck.

Several maintenance and security light fixtures were repaired as well as adding maintenance and security lighting and electrical to the carport area which covers the large compressor.

The trash rake heater switch failed, therefore, it was necessary to replace it. A EZ up was purchased to protect the electrical components of the heater switch from the outdoor elements.

Noxious weeds such as; Russian Olive, Salt Cedar, Kosha, Cocklebur and Knapweed were sprayed.

Several dump truck loads of driftwood, trash, weeds, etc. from the trash rake were hauled away and disposed of.

The following improvements were made to the fish passage:

Recommendations:

Project Status: On schedule and on budget.

FY 2017 Budget Status:

Funds Provided: \$82,416.23

Funds Expended: \$82,416.23

Status of Data Submission (where applicable): Not applicable

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Kevin E. Jones, Superintendent
REDLANDS WATER AND POWER COMPANY