

I. Project Title: **Grand Valley Irrigation Company Fish Screen and Passage**

II. Principal Investigator: Brent R. Uilenberg
2764 Compass Drive, Suite 106
Grand Junction, CO 81506
970-248-0641
FAX 970-248-0601
builenberg@uc.usbr.gov

III. Project Summary:

The Grand Valley Irrigation Company Diversion Dam, located on the Colorado River near Palisade, CO, diverts water into the Grand Valley Canal. The dam was an impediment to upstream movement of native and non-native fish and entrainment of native fish has been documented. The project consists of constructing a non-selective fish passage through the dam near the left abutment and fish screen in the canal approximately one quarter mile downstream from the dam.

IV. Study Schedule:

A fish passage was constructed in 1997. The fish passage has been operated intermittently 1997 through 2006 but has not been operated continuously because of other upstream obstacles to fish migration (Price-Stubb and Grand Valley Project Diversion Dams) and an inability to easily open and close the fish passage which affects the ability of the Grand Valley Irrigation Company to divert their full water right. An Obermyer gate was installed in the Grand Valley Irrigation Company Fish Passage in FY 2006. The automated gate provides the ability to open and close the fish passage remotely. The Obermyer gate performed extremely well during the 2007 irrigation season which allowed the Grand Valley Irrigation Company to readily open and close the passage in response to changing river flows and maintain their ability to divert their full water right. A fish screen and fish return pipeline was constructed in the canal in 2002. The fish screen has been operated intermittently since 2002 but has not been operated continuously because of an inability to effectively remove debris from the fish screen panels. The canal prism above the fish screen was modified in 2004 to create more uniform approach velocities across the screen panels; however, problems continued to be experienced with the air burst cleaning system.

V. Relationship to RIPRAP:

Colorado River Action Plan: Mainstem

II.B.1. Restore passage at Grand Valley Irrigation Company Diversion Dam (Palisade)

II.B.1.b. Screen Grand Valley Irrigation Company diversion to prevent endangered fish entrainment, if warranted.

VI. Accomplishment of FY 2007 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

Improvements to the Grand Valley Irrigation Company Fish Screen air burst cleaning system were postponed until 2007 pending confirmation of the performance of the Redlands Water and Power Company Fish Screen. This fish screen performed satisfactorily during the 2006 irrigation season and Grand Valley Irrigation Company Fish Screen was retrofitted with a similar air burst cleaning system during the winter of 2007. The screen was operational throughout the 2007 irrigation season with the exception of periods with heavy river debris loads.

VII. Recommendations:

Provide assistance trouble shooting problems and implementing corrective actions if needed.

VIII. Project Status: On track and ongoing.

IX. FY 2007 Budget Status:

A. Funds Provided: \$0 (Capital)

B. Funds Expended: \$50,363 (Capital)

C. Difference: -\$50,363

D. Percent of the FY 2007 work completed, and projected costs to complete: NA

E. Recovery Program funds spent for publication charges: None

X. Status of Data Submission: NA

XI. Signed: /s/ Brent R. Uilenberg November 9, 2007
Principal Investigator Date