

- I. Project Title: Grand Valley Water Management
- II. Principal Investigator(s): Brent R. Uilenberg  
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- III. Project Summary: The 15-Mile Reach of the Colorado River, extending from the confluence of the Gunnison River upstream to the Grand Valley Irrigation Company Diversion Dam near Palisade, CO, is considered to be important habitat critical to the recovery of the Colorado pikeminnow and razorback sucker. This reach of the river is severely depleted by both east and west slope water diversions. The project consists of seven new canal check structures and rehabilitation of eight existing canal check structures in the Government Highline Canal; the Palisade return flow pipeline; Highline Lake pumping plant; and integrated SCADA system. The overall purpose of the project is to reduce river diversions by the Grand Valley Project and increase flows in the 15-Mile Reach.
- IV. Study Schedule: Project planning and design was initiated in 1992 utilizing Reclamation's General Investigation funding. Construction of the Palisade return flow pipeline, check structures and Highline Lake pumping plant were completed in 2000, 2001 and 2005 respectively. Installation and programming of the SCADA system was essentially completed in September 2006. Completed components of the overall system have been successfully phased into operation resulting in significant water saving since 2002. Minor technical support work was provided in FY 2008 and additional technical support is anticipated in FY 2009 to trouble shoot problems, implement corrective actions.
- V. Relationship to RIPRAP: Colorado River Action Plan: Mainstem I.A.5.1. Grand Valley Water Management Project
- VI. Accomplishment of FY 2008 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings: Continued improvements and refinements to the SCADA system were completed in FY 2008 as well as minor technical support in the operation of the canal automation system. Based on preliminary data, significant water saving were achieved in 2008 contributing to an early declaration of surplus water in Green Mountain Reservoir and subsequent delivery of water in the August through October time frame. Final data from the Colorado State Engineer, Division 5 Office is not available at this date. Additional minor work and O&M technical support is anticipated in FY 2009 to trouble shoot problems and implement corrective actions.

### Summary of Project Results

	<u>1998</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
Irrigation Diversion (af)	285,217	240,424	252,289	256,289	249,318	277,994	245,927
Reduced Diversion (af)	NA	44,793	32,928	28,928	35,899	7,223	39,290
Palisade Pipeline Flow (af)	<u>NA</u>	<u>2,053</u>	<u>10,161</u>	<u>13,654</u>	<u>19,143</u>	<u>10,812</u>	<u>10,625</u>
Potential Fish Benefit (af)	NA	46,846	43,089	42,582	55,042	18,035	49,915
Green Mountain Surplus (af)	NA	0	47,526	0	31,200	25,358	32,743

Note: Final FY 2007 results are not yet available from the SEO Division 5

VII. Recommendations: Responsibility for project O&M needs to be transferred to the Grand Valley Water Users Association.

VIII. Project Status: Ongoing.

IX. FY 2008 Budget Status

- A. Funds Provided: \$0
- B. Funds Expended: \$4,690
- C. Difference: -\$4,690
- D. Percent of the FY 2008 work completed, and projected costs to complete: NA
- E. Recovery Program funds spent for publication charges: NA

X. Status of Data Submission (Where applicable): NA

XI. Signed: Brent R. Uilenberg November 20, 2008

Principal Investigator                      Date

*(Just put name and date here, since you will be submitting the report electronically)*

APPENDIX: *[More comprehensive/final project reports (NOT to be used in place of a complete annual report.). If distributed previously, simply reference the document or report.]*