

- I. Project Title: Elkhead Creek Transit Loss Study downstream from Elkhead Reservoir
- II. Principal Investigator(s):
Barbara C. Ruddy
U.S. Geological Survey
Lakewood, CO 80225
303-236-6912
303-236-4912 fax
bcruddy@usgs.gov.
- III. Project Summary: Through the enlargement of Elkhead Reservoir, the CWCB acquired 5,000 acre-feet of storage in Elkhead Reservoir to be use on behalf of the Upper Colorado Recovery Implementation Program (UCRIP) to support the maintenance of base flow through critical habitat reaches for endangered fish (93 cfs at the USGS streamflow-gaging station, Yampa R. near Maybell, CO - 09251000). To ensure that the reservoir releases are adequate to meet the downstream needs and are delivered at the proper time, water managers need to know the traveltime and transit loss for the reservoir releases. Results from releases made in August 2007 provided traveltime information along Elkhead Creek, however, transit losses were not determined. Qualitative interpretation of the streamflow data suggests that transit loss within Elkhead Creek may be higher than estimates for surrounding areas. Quantitative characterization of transit loss on Elkhead Creek, under conditions typical of those in place when supplemental streamflow requests occur during late summer and fall, would provide water and UCRIP managers with the information needed to properly manage reservoir releases made to improve critical habitat for endangered fish. Field investigations occurred August to October 2009 at four locations on Elkhead Creek.
- IV. Study Schedule: 2008-2011
Recovery Program received draft on 4/30/2010
Jana Mohrman commented on 5/2/2010
Water Acquisition Committee (WAC) received a copy on 5/3/2010
No negative comments were received from the WAC
- V. Relationship to RIPRAP: General Recovery Support Action Plan I.A1&3
Green River Action Plan: 1.A.1. Identify fish habitat and flow needs
- VI. Accomplishment of FY 2010 Tasks and Deliverables, field work was completed and the majority of the funding was provided by the State of Colorado, then the interpretive report will be finalized in 2010.

- VII. Recommendations: Recommend project continue as proposed.
- VIII. Project Status: Field investigations occurred August to October 2009. Data analysis, interpretation and report writing is near completion, will be published in early 2011.
- IX. FY 2010 Budget Status
- A. Funds Provided: \$0
 - B. Funds Expended: \$0
 - C. Difference: \$0
 - D. Percent of the FY 2008 -2009 work completed and projected costs to complete:
 - E. Recovery Program funds spent for publication charges:
- X. Status of Data Submission: Interpretative report was reviewed by WAC. Report is approved; SIR 2010-5198, Streamflow Gain-Loss Characteristics of Elkhead Creek downstream from Elkhead Reservoir near Craig, Colorado, 2009, will be available online by December 15, 2010.
- XI. Signed: Barbara C. Ruddy
Principal Investigator Date: December 6, 2010