I.   Project Title: Backwater Topography in the Middle Green River

II.   Principal Investigator(s): Kirk E. LaGory
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III.   Project Summary: The purpose of this project is to analyze the effects of flow variability on the physical characteristics of in-channel backwater habitats during the baseflow period. Backwater topology data have been collected annually since 2003. Project funds will be used to model the effects of flows in these years on the physical characteristics of subject backwaters.

IV.   Study Schedule: Initial Year—FY 2008, Final year—FY2009

V.   Relationship to RIPRAP: ID1e: Green River Action Plan-Mainstem, Evaluate effect of base flow variability on backwater maintenance and quality

VI.   Accomplishment of FY 2009 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings: We collected data and completed data processing with funding from Western Area Power Administration. Funding from the Recovery Program for this project was used to complete analyses to determine habitat availability under specific base flow conditions. Statistical analyses focused on estimates of within- and between-backwater variance under a range of flow conditions. A set of graphs was provided to the Program on March 21, 2009, depicting the relationships for each sampled backwater between flow and backwater surface area, volume, and depth, as well as changes in the values of these variables during the base flow period in each year. These graphs were the deliverable for the project.

VII.   Recommendations: None.

VIII. Project Status: Complete.

IX.   FY 2009 Budget Status

        A.   Funds Provided: $11,064
        B.   Funds Expended: $10,900
        C.   Difference: $164
        D.   Percent of the FY 2009 work completed, and projected costs to complete: 100%
        E.   Recovery Program funds spent for publication charges: $0

X.   Status of Data Submission (Where applicable): Completed March 21, 2009.

XI.   Signed: <u>Kirk LaGory</u>   <u>11/11/09</u>
                  Principal Investigator   Date