

COLORADO RIVER RECOVERY PROGRAM  
FY-2004 ANNUAL PROJECT REPORT

RECOVERY PROGRAM  
PROJECT #: FR Sed Mon

I. Project Title: Gunnison and Green River Basin Sediment Monitoring and Evaluation Program

I. Principal Investigator

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III Project Summary:

The primary objective of this sediment-monitoring project is to address key uncertainties in priority reaches of the Colorado, Gunnison and Green Rivers relevant to the role of flows and sediment transport on the formation and maintenance of backwater habitats and spawning bars<sup>1</sup>. A secondary objective is to collect all necessary sediment data that will be needed to evaluate Service flow recommendations for the Aspinall Unit and Flaming Gorge Reservoir.

1. A retrospective analysis of historic sediment data will be done to determine the availability of historic sediment data for the key sites on the Colorado, Gunnison, and Green River near Green River Utah. This objective includes an evaluation of the data to determine their utility for developing sediment-transport equations, evaluating trends in sediment transport, and evaluating how variations (wet vs. dry years) in annual hydrographs affect sediment transport.
2. To support the evaluation of the effects of the flows and sediment movement on the morphometric and bed material characteristics of Gunnison and Green River.
3. Determine if there is any distinction between sediment load estimates computed from daily sediment data, sediment transport equations, and empirical bedload transport equations.

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<sup>1</sup> While spawning bars were not emphasized by decision makers in 2003 they were ranked high in the priorities report LaGory 2003 and data collection to address spawning bar issues need to be collected simultaneously with data needed for backwater habitat studies.

4. Evaluate the dynamics of sediment movement in the study reaches by collecting and analyzing data to compute sediment load, including suspended sediment using daily samples and sediment transport equations. Water-surface slope and bed-material samples will be collected at two sites to support bedload calculations. These data will be collected at the Whitewater gage and the Green River near Jensen Utah (Jensen). These sites represent the range in sediment conditions found in other habitat monitoring reaches (primarily cobble bottom in the Gunnison at Whitewater and a sand cobble mixture, primarily sand, found in the Green River near Jensen).

IV. Study Schedule Initial Year 2004 Final Year 2009?

V. Relationship To Riprap

General Recovery Program Support Action Plan I.A.3&4  
Gunnison River Action Plan: 1.A. Identify fish habitat and flow needs  
Green River Action Plan: 1.A. Identify fish habitat and flow needs

VI. Accomplishments and Shortcomings for 2004:

When the Habitat Monitoring program was deferred, by the Biology Committee in January of 2004 a joint effort to begin collecting have USGS begin collection of suspended sediment data. The end result was that at least 9 drafts of a scope of work were developed and evaluated by the Biology Committee and Recovery Program staff to insure that the objectives of the data collection effort were clearly defined. The data retrospective component of the Scope of Work finally got underway in late September after several contracting issues were clarified between USGS and Reclamation. Sediment collection equipment was purchases and transferred to USGS so data collection can begin before spring run off 2005.

VII Recommendations:

The project has not been under way sufficient time to have any meaningful recommendations

VIII Project Status

The Project status just got underway in September and as of this time about?? Percent of the Data Retrospective has been completed.

IX. FY 2004 Budget Discussion

The original proposal for this anticipated that USGS matching funds would be applied to the project. However, BOR was unable to enter into an agreement with CRWCD that would have made the pass through possible. The eight l version of

