

COLORADO RIVER RECOVERY PROGRAM RECOVERY PROGRAM
FY 2010 ANNUAL PROJECT REPORT PROJECT NUMBER: 86

I. Project Title: Peer Review of Geomorphology Related Work

II. Principal Investigator: Jana Mohrman
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III. Project Summary: The refinement of flow recommendations and channel monitoring are becoming increasingly important as the Recovery Program moves from a research-oriented program to implementation of flow enhancement projects such as coordinated reservoir operations, re-operation of dams, instream flow protection, and levee removal. The Recovery Program's Channel Monitoring Program is expanding, into a habitat monitoring program and additional projects expected in the future. To ensure that future geomorphology and channel monitoring projects are designed properly, a peer review process has been implemented by the Recovery Program. Funds were made available but not used in 2010.

IV. Study Schedule: Data collected 2006 to 2008, raw data published in January 2009 for Colorado, Gunnison, Dushesne, and Green Rivers. Synthesis report schedule began in early in mid 2010:

5/15/10 USGS Supervisor comments back to author
6/1 /10 Resubmit to supervisor and Jana/Tom/Angela
6/8 /10 Return comments from supervisor and Tom/Jana/Angela
6/15/10 30-day peer review
6/29/10 Report to Biology/Water Acquisition Committees for 30 days
7/14/10 Peer review due
8/6 /10 Biology/Water Acquisition Committees' reviews due

V. Relationship to RIPRAP: General Recovery Program Support Action Plan
I. Provide and Protect Instream Flows

VI. Restore Habitat

VII. Accomplishments of FY 2010: This peer group reviewed Sed Mon 85f: Paul von Guerard, Bob Mussetter, John Pitlick, Kirk LaGory, and Scott A Wright

The refinement of flow recommendations and channel monitoring are important as the Recovery Program moves from a research-oriented program to implementation of flow program. The 2010 Gunnison and Green River Basin Sediment Monitoring and Evaluation Report's objective is to define the relation between streamflow and sediment transport to evaluate Service flow recommendations.

A data rich draft of the USGS Interpretive Report was provided to the Program in mid FY 2010. Tom Chart, Program Director, Angela Kantola, Assistant Program Director and Jana Mohrman Upper Colorado River Hydrologist were concerned about bridging the gap between sediment transport trends and quality habitat for endangered fish. We decided to request the assistance of the Program staff that had dealt with this in the past. We consulted with Bob Muth, former Program Director, and George Smith, retired Program Hydrologist to clarify the intent of the original contract and direction to proceed with the report. Specifically we requested the George read the current USGS draft report, 7 of the peer reviewer's remarks, find the meeting notes that had developed the plan for this research and meeting notes that had dealt with converting sediment transport conditions to habitat needs. Below is George Smith's contribution in time, activity and input.

| Sediment Monitoring Report Review and Solution Development | | George Smith | | |
|--|--|--------------|-------------|----------|
| DATE | ACTIVITY | Time | Hourly Rate | |
| 8/19/10 | Met with Jana, Tom and Angela to discuss USGS report and comments | 1.25 | 50 | \$62.50 |
| 8/20/10 | Reviewed Biology committee comments on Report | 1 | 50 | \$50.00 |
| 8/20/10 | Called Jana to discuss BC comments and get up to date on the status of the report | 0.25 | 50 | \$12.50 |
| 8/20/10 | Reviewed SOW and comments from Scott, Pitlick, Mussetter, von Guerard, and LaGory | 1 | 50 | \$50.00 |
| 8/23/10 | Called Jana to discuss the sediment monitoring and location of the sediment data | 0.25 | 50 | \$12.50 |
| 8/23/10 | Reviewed Scientific Investigations Report "Sediment characteristics and transport in selected main-stem reaches of the upper Colorado River, Colorado and Utah, water years 1966-2008. | 3 | 50 | \$150.00 |
| 8/25/10 | Met with Jana to discuss peer comments and 2007 MS-SWMS Demo project | 0.5 | 50 | \$25.00 |
| 8/26/10 | Additional work on Sediment Peer Review reports | 1 | 50 | \$50.00 |
| 8/27/10 | Read 41 pages of USGS Report | 1.5 | 50 | \$75.00 |
| 8/28/10 | Read 10 pages of USGS Report | 0.25 | 50 | \$12.50 |
| Total Hours | | 10 | | \$500.00 |

George Smith refreshed himself of the historic issues by reading the past Biology Committee Meeting notes. He then read the draft 2010 USGS Sediment Report and the peer comments. George worked on crafting the questions for the USGS webinar based on research which are still in draft. The Recovery Program, Bob Muth and George are going to finalize the questions upon receipt of the next draft in January 2011.

VII. Recommendations: In early 2011 any willing from the peer group and WAC/BC will review the document that has responded to original comments and receive a webcast briefing

- 1/3/2011 Release of draft revised report to USGS Editorial review and to Program Staff Future dates will be firmed up.
- Recovery Program's 2nd review before the report goes to the USGS Editorial review. In this scenario the PD would send the updated version to the WAC/BC for final review after Jan 3, then have a Webinar (with peer reviewers invited) a couple of weeks later. The WAC/BC feedback during webinar or/ no later than 1 week after Webinar. Cory would make any needed revisions, then send to USGS editorial (30 days), then revise based on USGS review and send to BC/WAC for final approval. Revise dates based on above option.

Technical Work:

- Cory will check on Stats comparison between two-part model and Eq used in report
- Cory added analysis of supply limitations using hysteresis
- Cory will respond to 3 technical reviews (von Guerard, Pitlick, Wright) in USGS review Process and incorporate changes into report as appropriate from combination of technical review and Cooperator review (Mussetter, LaGory/other, Luecke/Bledsoe, Pitts).

Project Status: It needs rewriting and publishing. George also suggested scientists: LaGory, Pitlick and von Guerard to lead an effort to bridge the reoccurring gap between sediment science and habitat needs for the endangered fish.

IX. FY 2010 Budget Status: peer review costs for FY10

- A. Funds provided: up to \$10,000 Section 7 funds (on an as-needed basis)
 B. Funds expended: \$500
 C. Difference: Not applicable

X. Status of Submissions: Not Applicable

XI. Signed: *Jana Mohrman* December 8, 2010
 Principal Investigator Date: