I. Project Title: General Hydrology Support for Water Acquisition Activities.

II. Principal Investigator:
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III. Project Summary:

The Service's Division of Water Resources provides support for activities undertaken by the Water Acquisition Committee (WAC) and the Recovery Program Director’s Office in the areas of water acquisition and water scheduling and coordination. WAC support includes chairing the WAC, preparing agendas, preparing meeting summaries, developing Scopes of Work, preparing Annual Reports, and working on WAC-related projects. Other major tasks include participation in special projects such as Grand Valley Water Management, Coordinated Reservoir Operations, Yampa River Operation and Management Plan, and scheduling reservoir releases for flow support in the 15-Mile Reach and Yampa River.

IV. Study Schedule: Ongoing

V. Relationship to RIPRAP:

Colorado River Action Plan, Mainstem: I.A.5
Yampa River Action Plan: I.A.1, I.B.2

VI. Accomplishments of 2002 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

A. Gage Installation and Maintenance:

Water Rights Acquisition Committee Administrative Work: Scopes of Work and contracts were developed for the operation of the Palisade gage, two gages on the Yampa River, and two gages on the Duchesne River. The gages on the Colorado and Yampa rivers were funded cooperatively by the Recovery Program, Colorado river Water conservation District and USGS. The two gages on the Duchesne River were funded cooperatively by the Recovery Program, Central Utah Water Conservancy District, and USGS. Matching funds for the gages were provide from non-Federal funds, which are held by the National Fish and Wildlife Foundation.
B. Hydrology Support for Water Acquisition activities:

Assistance was provided to the Recovery Program Director with assistance in negotiating the 2012 agreement for water from Ruedi Reservoir. The negotiations were conducted in a public forum between the bureau of reclamation, the Colorado Water Conservation Board and Service. The negotiations have been ongoing since 1999 and were completed on June 24, 2003 when the negotiations were completed. The negotiations were difficult because of the recent expectation of the 2003 drought which prompted the private water users represented by the CWCB to have a shortage clause in the agreement. The issue of payment for the annual O&M costs was also difficult and at the end the Recovery Program agreed to pay the annual O&M costs of $62,000 and Reclamation agreed to pay capital costs of $735,000 per year plus interest.

Water Year 2003 was a year where snowpack was low, but improved in late spring to near normal and Ruedi came to within 3,000 acre feet of filling. Williams Fork filled, Green Mountain obtained a paper fill and Wolford did not fill. The Service Water Resources staff participated in the following activities to help keep water in the Colorado, Green, and Yampa rivers to support endangered fish.

1. During the late summer, flows in the 15-Mile Reach were monitored on a daily basis and weekly conference calls were held to coordinate releases from Ruedi, Green Mountain and Williams Fork reservoirs. Flows in the 15-Mile Reach remained below the Service dry year recommendations of 810 cfs during the beginning of the summer as conditions improved target win increased from 450 to 810 to 1240 cfs as runoff conditions improved. When the target was increased to 810 and 1240 cfs surplus water from Green Mountain Reservoir became available. The final accounting is yet to be completed, but preliminary estimates are that a total of just over 15 thousand acre-feet of water was released from Ruedi, Wolford, and Williams Fork. No water was available from Green Mountain Reservoir under the municipal lease. The use of water for flow support will be documented in the Service’s annual report to CWCB in March of 2003.

2. Water year 2003 was another dry year on the Yampa river which did not get the snow and rain that the Colorado River received during the spring and early summer. Because the flows in the Yampa were low in July and August the Recovery Program leased 1,750 acre feet of water from Steamboat Lake to try and keep the Yampa river at Maybell above 93 cfs. Work is also under way to negotiate a short term lease until water from the Elk Head enlargement becomes available.

3. The geomorphology peer review panel was approved to review two important program reports. The problems with the panel in past years had been corrected by WAC adding three additional reviewers to the review panel. The reviewers would be recommended by the Principal Investigator and approved by the Program Director’s Office on an as-needed basis. Criteria for selection as a reviewer will be similar to the criteria used by the Biology Committee. The Principal Investigator would be responsible for securing comments from individuals suggested. During
2003, reviews were completed for the draft Recommended Priorities for Geomorphology Research in Endangered Fish Habitats of the Upper Colorado River Basin report.

C. Yampa River Reservoir Studies:

Work on the Yampa issues were limited to discussions with Colorado Parks attempting to negotiate a new long-term lease for Steamboat Lake and working with the Program Directors office in deciding on pros and cons of using water from Steamboat Lake. Some guidance was provided to the Program Director on issues relating to Elkhead Reservoir enlargement and the prospects of the status of negotiations with Parks.

D. Coordinated Reservoir Operations and CFOPS:

No Coordinated Reservoir Operations discussions were held in 2003 because of the severe drought condition which persisted in the basin early in the spring of 2003. A considerable amount of time was spent finalizing and reviewing the CFOPS study. Work include reviewing, providing comments, attending work sessions and commenting on the report coordinating WAC review of the report and reporting to the Management committee on the Report findings.

E. General Support Activities:

Served as Chairman of the Water Acquisition Committee where the following tasks were performed: 1) prepared meeting summaries for all WAC meetings and reports to the Management Committee, 2) prepared annual reports to the Colorado Water Conservation Board on Ruedi flows and associated benefits to the 15-Mile Reach, and 3) prepared Scopes of Work and annual reports for the following projects:

1. Water Right Consultant Services
2. General gage operation and maintenance
3. Steamboat Lake water lease
4. Yampa/Green Sediment Sampling
5. Water acquisition Hydrology Support
6. 15-Mile Reach Channel Monitoring
7. Peer review of Geomorphology

As chairman of the Water Acquisition committee, I serve as coordinator for Grand Valley Water Management, Redlands Gage, Coordinated Reservoirs, and the two CWCB projects. Many of the tasks included attending meetings, reviewing reports, providing comments, and reporting to the Service and WAC. I also participated in discussions of Division 4 & 5 SWAT Groups.

VII. Recommendations: Continue general hydrology support for Water Acquisition activities.
VIII. Project Status: The project is ongoing and changes each year to meet the changing objectives of the Recovery Program in securing, protecting, and delivering water for endangered-fish habitat.

IX. FY 2003 Budget Status:

A. Funds provided: $56,800
B. Funds expended: $56,800
C. Difference: $56,800

X. Status of Data Submission: Not applicable.

XI. Signed: George R Smith November 14, 2003
Principal Investigator Date

APPENDIX: Reports, on water right evaluations, and return flow analysis produced by the water rights consultant were submitted to the WAC. An annual report is produced on the benefits of Ruedi release for endangered fish each year by March 1, 2003. The U.S. Geological Survey publishes flow data on the Palisade gage in the annual water resource papers.

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