

**FY-2001 PROPOSED SCOPE OF WORK for:**  
Duchesne Coordinated Reservoir Operations

**Project #:**CAP-24

Lead Agency: U.S. Bureau of Reclamation

Submitted by: Ed Vidmar  
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Project Team  
Ed Vidmar  
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Category:

- Ongoing project
- Ongoing-revised project
- Requested new start

Expected Funding Sources:

- Annual funds
- Capital funds
- Other (explain)

I. Title of Proposal:

Coordinated Reservoir Operations Duchesne River

II. Relation to the RIPRAP:

Green River Action Plan: Duchesne River  
I.D Coordinated reservoir operation

III. Study Background/Rationale and Hypotheses:

The lower 2.5 miles of the Duchesne River has been designated as critical habitat for the razorback sucker and the lower Duchesne River may be important habitat for the endangered Colorado pikeminnow and razorback sucker. Recovery of these fish in the upper Colorado River is expected to require improvement of existing habitat conditions. The coordinated operation of reservoirs located on the Duchesne River may result in the ability to enhance flows in the lower Duchesne River during periods of the year for the benefit of the endangered fish.

IV. Study Goals, Objectives, End Product:

The study will identify and evaluate potential opportunities to coordinate the operation of various reservoirs located in the Duchesne River Basin with the goal of delivering water to the lower Duchesne River for improvement of the habitat. Reclamation projects

located in the basin are the Central Utah Project, Moon Lake Project, Provo River Project, Strawberry Valley Project and the Ute Indian Irrigation Project. Although these projects were independently authorized, there may be opportunities to coordinate the operation of certain facilities to benefit the habitat and endangered fish while not impairing the ability of the projects to satisfy their authorized purposes. Other non-federal reservoirs may offer additional opportunities to coordinate operations. The potential opportunities will be fully described in the Summary Report with emphasis on those that appear to be the most viable.

V. Study Area:

The study area will include the Duchesne River Basin. Reclamation reservoirs located in the study area include Strawberry, Starvation, Currant Creek, Upper Stillwater, Moon Lake, and Midview.

VI. Study Methods/Approach:

During Phase One of this proposal, a team representing the major water users and reservoir operators on the Duchesne River will identify, discuss, and define potential operational options which may create the ability to provide additional flows during selected periods of the year. Members of the team will represent the U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, Utah Division of Water Rights, Utah Division of Water Resources, Central Utah Water Conservancy District, Ute Indian Tribe, principal water users and operators, and others. The team will help to determine how to evaluate the operational options. A conceptual example of an option may be the modification of the filling procedures of a reservoir to change the timing of storage. This option, if one exists, may result in the improvement of flow for the endangered fish during periods of selected years. The potential effects of such an operational modification on water supply and delivery capability, water rights administration, stream channel capacities, flood control operations, and/or contractual obligations would be identified.

Identification of the facilities (federal and non-federal), potential operational options, parameters to be evaluated, and analytical tools to be developed, if necessary, and applied began in FY 1998 and continued in FY 1999. Use of existing tools, i.e., streamflow routing and reservoir operations models, where practicable, were emphasized. Some tool development, if necessary, may be initiated during FY 1998 and continue into FY 1999.

Phase Two, involving the analysis and evaluation of the various operational options using the tools, was initiated in FY 2000.

The analysis and evaluation activities will be completed in FY 2001. A report summarizing the findings, conclusions, and recommendations will be developed and completed. The report will address the need for NEPA compliance before the actual implementation of any recommendations.

VII. Task Description:

1. Establish Team
2. Identify, define, and describe the facilities and potential operational options
3. Identify scope and limits to the river model
4. Develop river model
5. Apply model runs evaluating operational options
6. Prepare report summarizing findings, conclusions, and recommendations

VIII. Study Schedule:

- |            |             |
|------------|-------------|
| 1. FY 1998 | Tasks 1 & 2 |
| 2. FY 1999 | Tasks 2 & 3 |
| 3. FY 2000 | Tasks 4 & 5 |
| 4. FY 2001 | Tasks 5 & 6 |

IX. FY-2001 Work:

1. Tasks 5 & 6
2. Deliverables -
  - Draft for peer review, May 31
  - Draft Final, July 31
  - Final, September 30
3. Budget - Estimated Cost

Task 5*	\$10,000
Task 6	<u>\$20,000</u>
FY 2001 Total	\$30,000

\* Task 5 will be completed in FY 2000 however additional operational scenarios may be required.