

**COLORADO RIVER RECOVERY PROGRAM
FY-1999 ANNUAL PROJECT REPORT**

**RECOVERY PROGRAM
PROJECT NUMBER: PIP 5
CAP 14**

I. Project Title: Coordinated Reservoir Operations

II. Principal Investigator(s):

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III. Project Summary: Project involves voluntary operational coordination of selected reservoirs in the Colorado River Basin upstream from the confluence of the Colorado and Gunnison Rivers. The goal is to increase spring peak flows to improve endangered fish species habitat in the 15 Mile Reach of the Colorado without diminishing reservoir yields. Participating reservoirs this year included Green Mountain and Ruedi (Reclamation), Wolford Mountain (Colorado River Water Conservation District), Dillon and Williams Fork (Denver Water), and Willow Creek and Granby (Northern Colorado Water Conservancy District & Reclamation). The project completed its third year of successfully augmenting spring peak flows in the 15 Mile Reach. The project continues to seek improvement of the coordination process, public involvement, and participation of additional reservoirs.

IV. Study Schedule: Ongoing

V. Relationship to RIPRAP: I.A.3.c.(3)(c)

VI. Accomplishment of FY99 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

Tasks and Deliverables: The Coordinated Reservoirs Operations group successfully coordinated releases from the participating reservoirs for the third consecutive year. The coordination focused on releasing inflows during spring peak runoff to augment the duration and volume of flows in the 15 Mile Reach. Augmentation is attempted when the flows in the 15 Mile Reach are between 12,900 cfs to 26,000 cfs; and, when reservoir owner/operators have the discretion to participate without affecting yields.

Prediction and tracking of the peak flows in the 15 Mile Reach (measured at the Cameo gage) was conducted with the State of Colorado and the National Weather Service. The participants successfully coordinated releases between June 1st and June 14, 1999. Reservoir owner/operators made adjustments to their releases during this peak flow period and were able to

augment the flows by an average of 1500 cfs over a 12 day period with a maximum augmentation of approximately 2350 cfs. The total amount released over the augmentation period for peak enhancement was 35,871 acre feet--including a 10% transportation loss applied by the State of Colorado. The augmented releases pushed the spring peak flows in the 15 Mile Reach to approximately 11,900 cfs. The maximum amounts provided at the participating reservoirs beyond traditional releases were approximately: Williams Fork +100 cfs, Dillon +440 cfs, Wolford Mtn. +480 cfs, Granby +530 cfs, Willow Creek +440 cfs, Green Mtn. +880 cfs (including 440 cfs from Dillon), and Ruedi +290 cfs. (See table at the end of this document.) The coordination process worked well and the entities cut back flows when the peak in the 15 Mile Reach had passed.

In an effort to better communicate the scope and purpose of the Coordinated Reservoirs Operations Program to the public, we restructured our annual public meeting agenda, placing more emphasis on the value of the Recovery Program. We opened the meeting with information on the Recovery Program, instead of a presentation of releases scheduling. Representatives from the U.S. Fish and Wildlife Service presented the history, goals, importance and benefits of the FWS and the Recovery Program. Then, ECAO staff explained the Coordinated Reservoir Program releases, and the participation of Ruedi Reservoir in that. This was followed by the annual Ruedi Reservoir operations review. We closed with the public forum.

Three news releases, informing the public of the operation, were issued to local media and interested parties between May 21 and June 9. The existing mail, e-mail and fax databases of interested parties were updated.. All three lists and forms of communication were used during coordinated operations to provide quicker notification to concerned entities. A few interested parties were even invited to participate in one of the CROS coordination calls in May.

Discussion of Initial Findings and Shortcomings: This year was an unusual year for Coordinated Reservoir Operations. Until early May, participating entities were expecting significantly less than normal runoff and did not expect to be able to conduct the effort this season. Normally, a public meeting is held in March or April to inform the public of the effort. Since the decision attempt to augment was not made until early May, the public meeting was combined with the Ruedi Annual Operations on June 2 in Glenwood Springs.

As in the first year of coordinated reservoir operations, it was recognized that there is a need for greater coordination between State and Federal agencies in the identification and declaration of local inundation levels and a need for more information to define these levels. This issue is currently being addressed by the State of Colorado and NWS.

The State is proceeding with the development of the Colorado Decision Support System which includes a river administration (accounting) module. The accounting module will facilitate tracking and accounting of releases for Coordinated Reservoir Operations.

The agreement to provide Green Mountain surplus water to the Grand Valley Power Plant, identified in the Orchard Mesa Check Case, was finalized and made available to the public on July 27, 1999.

VII. Recommendations: The Recovery Program should continue to support the efforts of and encourage participation in Coordinated Reservoir Operations. The ongoing effort should continue to refine and improve the coordination process and address issues that were identified in the interim report including constraints due to local inundation and accounting.

VIII. Project Status: The Coordinated Reservoir Operations is an ongoing activity and will continue to refine and improve the process and address issues identified to allow for greater effectiveness of the effort.

IX. FY99 Budget Status:

- A. Funds Provided: \$ 54,200 (CAP-14: \$35,000 BOR and \$15,000 Colorado in-kind; PIP-5: \$4,200)
- B. Funds Expended: \$ 54,200
- C. Difference: \$ 0
- D. Percent of FY99 work completed, and projected costs to complete: 100%
- E. Recovery Program Funds for publication charges: n/a

X. Status of Data Submission: n/a

XI: Signed:

Malcolm Wilson 12/20/99

1999 COORDINATED RESERVOIR RELEASES TOTALING 35,870 ACRE FEET

DATE	GREEN MTN RES	DILLON	WILLOW CR	GRANBY	RUEDI	WILLIAMS FORK
	(INCLUDES DILLON RESERVOIR* RESERVOIR RESERVOIR RESERVOIR RESERVOIR RESERVOIR RES RELEASE)					
06/01/1999			440	268	87	
06/02/1999	200		440	525	240	18
06/03/1999	505		440	525	256	101
06/04/1999	805	109	440	525	291	101
06/05/1999	878	316	440	525	283	101
06/06/1999	878	435	395	525	227	101
06/07/1999	879	439	302	525	182	101
06/08/1999	719	439	264	531	150	89
06/09/1999	467	239	182	344	100	83
06/10/1999	220	39				83