

I. Project Title: Basin Wide Stream Gage Operation & Maintenance

II. Principal Investigator:
George Smith
P.O. Box 25486, Denver, CO 80225-0486
E-mail: george_smith@fws.gov
Phone: (303) 236-4485
Fax: (303) 236-4224

III. Project Summary:

In 1990, the Recovery Program first identified a need for a permanent USGS gage in the 15-Mile Reach of the Colorado River below the GVIC diversion. The gage was installed during the summer of 1991 and became operational on October 1, 1991. The gage was to ensure that water secured under the Recovery Program is delivered to the 15-Mile Reach. In 1996, the Recovery Program again identified a need for gages on the Yampa River, and the USGS installed gages above and below the confluence with the Little Snake River. Annual gage operation and maintenance are provided by USGS under contract with Reclamation. The Palisade gage on the Colorado River was very helpful in managing reservoir releases in 2007 because the lack of a Shoshone call during the late summer season. Releasers from Colorado River mainstem reservoirs such as Ruedi, Green Mountain and Williams Fork were closely monitored. The gages on the Yampa River were used for monitoring river conditions where 4,300 acre feet of water was released from Elkhead Reservoir for habitat support of endangered fish in the Yampa River.

The Recovery Program is also a cooperator in the operation of 3 gages on the Duchesne River to facilitate water deliveries to the lower reaches of the river. These gages are used to monitor peak flow and late summer flows. The current gaging station layout along the lower Duchesne River has been in place, as a whole, for approximately 5 years. The four gaging stations have respective periods-of-record as follows: The four Upper Colorado Recovery Implementation Program (UCRIP) supported gages were also relied upon to quantify transit losses and assure water was delivered to the critical reach.

Duchesne River at Myton – 92 years
Duchesne River above Uinta River near Randlett – 5 years
Uinta River at Randlett – 10 years
Duchesne River near Randlett – 61 years

Two of these stations, Duchesne River at Myton and Duchesne River near Randlett, have been in place since before any Central Utah Project facilities were constructed. These two stations have been funded in recent years through Central Utah Project Completion Act (CUPCA) budgets for hydrologic studies and monitoring relating to CUPCA activities in the Uinta Basin. With the Uinta Basin Replacement Project (UBRP) portion of CUPCA

activities drawing to a close, funding for these stations under CUPCA budgets was terminated in October 2004. Since these two gaging stations provide important monitoring for target flows the CRRIP has provided CUPCA with matching support of these gages using Section 7 funding.

The other two stations, Duchesne River above Uinta River near Randlett and Uintah River near Randlett, were put in place to monitor stream flows for CRRIP activities. They have been funded in recent years by matching support by the UCRIP, and, along with the two aforementioned gaging stations, provide important target flow monitoring points along the lower Duchesne River.

The 2007 upgrading these latter two gaging stations to the capabilities listed above, under a "One-Time Cost Items," brought all four stations to a comparable, state-of-the-art status, and will provide a reliable, balanced system for monitoring target flows along the lower Duchesne River.

IV. Study Schedule: Initial Year - 1990, Final Year - Ongoing

V. Relationship to RIPRAP:

Colorado River Action Plan: Mainstem; I.A.5; Provide and legally protect instream flows pursuant to Colorado River PBO

Green River Action Plan:

Duchesne River; I.A; ID Year-round flow needs for recovery

Yampa River; I.A.1; ID fish habitat and flow needs

VI. Accomplishments of 2006 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

The USGS operates and maintains the gages as specified in their Cooperative Agreement with the CDOW. USGS produces daily flow and temperature records, which will be published in the annual Water Resource paper for Colorado. Interim data are available by FAX from the Grand Junction USGS office, 970-245-5257. Near real-time data from the gages can also be found on the Internet @

<http://waterdata.usgs.gov/co/nwis/current/?type=flow>.

VII. Recommendations: The Recovery Program consolidating gage operation and maintenance at one agency in every State. This has made it easier to track contracts, invoices and payments.

VIII. Project Status: On track and ongoing. The gages are operational and information is available from the Internet, Watertalk, and the USGS Water Resource paper for Colorado and Utah.

X. FY- 2007 Budget:

Gage Name/fund target agencies	COST	UCRIP	USGS/COOP	CWCB/SEO
Funds go to Colorado State Engineers Office Steamboat Springs				
Williams Fork Creek near Craig	\$ 9,240	\$ 7,000	\$ -	\$ 2,240
Funds go to USGS Grand Junction				
Yampa and Lodore Temperature	\$ 7,460	\$ 7,460	\$ -	
Yampa River Near Craig	\$ 3,600	\$ 1,910	\$ 1,690	
Colorado River Near Palisade	\$ 10,800	\$ 10,800	\$ -	
Yampa River Above Elkhead Creek	\$ 10,800	\$ 10,800	\$ -	
Yampa River Below Little Snake	\$ 14,000	\$ -	\$ 14,000	
Funds go to Central Utah Project CUPCA				
Green R N/R Jensen (DCP & Temp)	\$ 4,550	\$ 2,275	\$ 2,275	
Duchesne River near Randlett	\$ 13,500	\$ 6,750	\$ 6,750	
Duchesne River above Randlett	\$ 13,500	\$ 6,750	\$ 6,750	
Uinta River at Randlett	\$ 13,500	\$ 6,750	\$ 6,750	
Duch River near Randlett (Temp)	\$ 4,400	\$ 2,200	\$ 2,200	
Price River Flow and (Temp)		\$ 17,600	\$ 8,800	\$ 8,800
Duchesne R. at Myton	\$ 13,500	\$ 6,750	\$ 6,750	
Grand TOTAL:	\$ 136,450	\$ 78,245	\$ 55,965	\$ 2,240

XII. Budget Summary:

FY- 2007 \$ 78,245 Recovery Program Cost

X. Status of Data Submissions: Not applicable.

XI. Signed: George Smith
Principle Investigator

November 9 2007
Date

