

COLORADO RIVER RECOVERY PROGRAM
FY 2017 ANNUAL PROJECT REPORT

RECOVERY PROGRAM
PROJECT NUMBER: 8

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

II. Bureau of Reclamation Agreement Number(s):

Project/Grant Period: Start date 1990

CO USGS Contract: R16PG00077	End date: 9/30/25
State of Colorado: SEO R12AP40009	End date: 9/30/18
UT USGS Contract: R16PG00079	End date: 9/30/26

Reporting period end date: 09/30/2017

Is this the final report? Yes _____ No x

III. Principal Investigator:

Don Anderson
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IV. Abstract:

The Upper Colorado River Recovery Program employs the nation's streamflow measurement expert, the U.S. Geological Survey, to provide data to assist in measuring and protecting streamflow for endangered fishes and other Program partner purposes.

The USGS operates and maintains the gages as specified in their Cooperative Agreement with the Bureau of Reclamation. USGS produces daily flow and temperature records, which are checked and posted to the internet. Near real-time data are available as provisional on the internet and can be found at : http://waterwatch.usgs.gov/?id=ww_current

River runoff in Water Year 2017 was close to or above normal in most of the upper Colorado Basin, with the exception of the Yampa and White River basins which had significantly below normal runoff. Real-time USGS streamflow data were critical in helping managers operate reservoirs to benefit fish habitat while meeting other management and delivery needs.

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

VI. Relationship to RIPRAP:

Colorado River Action Plan I.A.5: Legally protect in stream flows pursuant to Colorado River PBO;
Green River Action Plan I.A.3.d Operate Flaming Gorge Dam to provide flows;

Duchesne River Action Plan; I.A;
ID Year-round flow needs for recovery Yampa River Action Plan;
I.A.1; ID fish habitat and flow needs.

- VII. Accomplishments: All is well, running smoothly. There were very few gage malfunctions in WY2017, and USGS was prompt and transparent in identifying and rectifying the malfunctions as they occurred.
- VIII. Additional noteworthy observations: N/A
- IX. Recommendations: Continue with these stream gaging locations.
- X. Project Status: On-track and ongoing. The gages are operational and the information is available on the Internet in real time from the USGS Water Resources Division in Colorado and Utah.
- XI. FY 2017 Budget Status

UCREFRP FY 2017 Cost	\$154,730 (sum of CO and UT)
Wyoming Contribution	<u>\$ 48,734</u>
Total	\$203,464

RIP costs BOR paid to USGS in FY 2017 to USGS Colorado (Grand Junction office):
\$35,918 + \$3,662 (state line gage). RIP funding to the Utah USGS: \$115,150.

- XII. Status of Data Submissions: Not applicable, resides on the internet

XII. Signed: Don Anderson November 30, 2017
Principal Investigator Date

FY 2017 (CO and UT)				Breakdown of costs							
		Funding source		Labor	Admin	Facility	Equipment	Data Delivery	Vehicles	Travel	
Color		CWCB	UCREFR	COST	41%	25%	10%	10%	7%	5%	2%
Colorado											
Gage #	Funds go to Colorado State Engineers Office Steamboat Springs										
	Williams Fork Creek near Craig	\$2,981	\$8,944	\$11,925	\$3,667	\$2,236	\$894	\$894	\$626	\$447	\$179
Funds go to USGS Grand Junction*											
9260050	Yampa @ Deerlodge (Temps)		\$4,794	\$4,794	\$1,966	\$1,199	\$479	\$479	\$336	\$240	\$96
4E+14	Green River above Gates of Lodore		\$4,794	\$4,794	\$1,966	\$1,199	\$479	\$479	\$336	\$240	\$96
9247600	Yampa River near Craig ¼ of O/M (Flow)		\$4,229	\$4,229	\$1,734	\$1,057	\$423	\$423	\$296	\$211	\$85
9106150	Colorado River near Palisade (Flow)		\$16,915	\$16,915	\$6,935	\$4,229	\$1,692	\$1,692	\$1,184	\$846	\$338
9244490	Yampa River above Elkhead Creek (Flow)		\$16,915	\$16,915	\$6,935	\$4,229	\$1,692	\$1,692	\$1,184	\$846	\$338
9260050	Yampa River at Deerlodge (Flow)		\$16,915	\$16,915	\$6,935	\$4,229	\$1,692	\$1,692	\$1,184	\$846	\$338
9163500	Colorado River Stateline gage		\$3,662	\$3,662	\$1,501	\$916	\$366	\$366	\$256	\$183	\$73
Colorado Total		\$2,981	\$77,168	\$80,149							
Utah											
			UCREFR	COST							
9314500	Price R.nr Woodside (Flow,Temp& Cond)		\$24,475	\$24,475	\$10,035	\$6,119	\$2,448	\$2,448	\$1,713	\$1,224	\$490
9302000	Duchesne R. Randlett (Flow, Temp & Cond)		\$19,225	\$19,225	\$7,882	\$4,806	\$1,923	\$1,923	\$1,346	\$961	\$385
9295100	Duchesne Rvier above Uinta (Flow &Temp)		\$16,500	\$16,500	\$6,765	\$4,125	\$1,650	\$1,650	\$1,155	\$825	\$330
9272400	Green River at Ouray (Flow)		\$16,500	\$16,500	\$6,765	\$4,125	\$1,650	\$1,650	\$1,155	\$825	\$330
9261000	Green River nr Jensen (Temp only)		\$5,450	\$5,450	\$2,235	\$1,363	\$545	\$545	\$382	\$273	\$109
9301500	Uinta River nr Randlett (Flow)		\$16,500	\$16,500	\$6,765	\$4,125	\$1,650	\$1,650	\$1,155	\$825	\$330
9295000	Duchesne River at Myton (Flow)		\$16,500	\$16,500	\$6,765	\$4,125	\$1,650	\$1,650	\$1,155	\$825	\$330
Utah Total			\$115,150								
Subtotal UCREFRP FY 2017 (CO and UT)				\$							
Wyoming contribution				\$							
Net				\$192,318							
				unknown							

Colorado USGS gages

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Utah USGS Gages

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USBR Coordinates Contract

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ANNUAL PERFORMANCE PROGRESS REPORT (PPR)

FY 2017 Ann. Rpt. Project # 8 - 4

BUREAU OF RECLAMATION AGREEMENT NUMBERS:

Utah USGS Contract: R12PG40019

End date: 9/30/16

UPPER COLORADO RIVER RECOVERY PROGRAM PROJECT NUMBER: 8

Project Title: Basin Wide Stream Gage Operation & Maintenance

Principal Investigator:

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Project/Grant Period: Period of performance: 2016 these gages are funded year round
and this activity is ongoing.

Performance: All partners are very helpful and this project ran smoothly in 2016.

USGS: both in Utah and Colorado the USGS runs all aforementioned stream gages year-round during all types of weather and flow conditions. The USGS is the nation's expert in collecting and reporting stream flow data.

ANNUAL PERFORMANCE PROGRESS REPORT (PPR)

BUREAU OF RECLAMATION AGREEMENT NUMBERS:

State of Colorado Contract: SEO R14AP40009

End date: 9/30/18

UPPER COLORADO RIVER RECOVERY PROGRAM PROJECT NUMBER: 8

Project Title: Basin Wide Stream Gage Operation & Maintenance

Principal Investigator:

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Project/Grant Period: Period of performance: 2016 these gages are funded year round
and this activity is ongoing.

Performance: All partners are helpful and this project ran smoothly in 2016.

Colorado: CWCB pays for a third of the Williams Fork gage.

ANNUAL PERFORMANCE PROGRESS REPORT (PPR)

BUREAU OF RECLAMATION AGREEMENT NUMBERS:

Central Utah Contract R11AP40097

End date: 9/30/15

Central Utah WCD? R11AP40097

UPPER COLORADO RIVER RECOVERY PROGRAM PROJECT NUMBER: 8

Project Title: Basin Wide Stream Gage Operation & Maintenance

Principal Investigator:

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Project/Grant Period: Period of performance: 2014 these gages are funded year round and this activity is ongoing.

Performance: All partners are helpful and this project ended in 2014.