

RECOVERY PROGRAM
FY 2016-2020 SCOPE OF WORK for:
Operation and Maintenance of Gages

Recovery Program Project Number: 8

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

Note: Recovery Program FY18-19 scopes of work are drafted in May 2017. They often are revised before final Program approval and may subsequently be revised again in response to changing Program needs. Program participants also recognize the need and allow for some flexibility in scopes of work to accommodate new information (especially in nonnative fish management projects) and changing hydrological conditions.

Lead agency: U.S Fish and Wildlife Service

Submitted By: Don Anderson
 P.O. Box 25486, DFC,
 Denver, CO 80225-0486
 Phone: (303) 236-9883
 Fax: (303) 236-8739
 Donald.Anderson@fws.gov

Date Last Modified 6/5/2017 4:25 PM

<u>Category:</u>	<u>Expected Funding Source:</u>
<input checked="" type="checkbox"/> Ongoing project	<input type="checkbox"/> Annual funds
<input type="checkbox"/> Ongoing-revised project	<input type="checkbox"/> Capital funds
<input type="checkbox"/> Requested new project	<input checked="" type="checkbox"/> O&M funds
<input type="checkbox"/> Unsolicited proposal	<input checked="" type="checkbox"/> Other ()

- I. Title of Proposal: Operation and Maintenance of Gages Important to the Recovery Implementation Program.
- II. Relationship to RIPRAP:
- | <u>Task #</u> | <u>Task Description</u> |
|---------------|--|
| | Colorado River Action Plan |
| I.A.5 | Provide and legally protect instream flows pursuant to the Colorado River PBO. |
| | Green River Action Plan |
| I.A.3 | Deliver identified flows |
| | Yampa River Action Plan |
| I.B.2a.(2)(b) | Elkhead Reservoir delivery flows for endangered fish |
| I.A.1.f | Install and/or operate gages |
| | Duchesne River Action Plan |
| I.C. | Legally protect and deliver identified flows. |
| I.D. | Coordinate reservoir operation |
- III. Study Background/Rationale and Hypotheses:

Over the years, the Recovery Program has identified a need to expand stream gaging in the basin to support development of flow recommendations, quantify sediment movement, and administer water secured for endangered fish. This scope of work covers the Recovery Program gaging program and identifies the contributions of cooperating agencies. Cooperators are USGS, the Colorado State Engineers Office Gages are funded directly by the Recovery Program by funds administered by the Bureau of Reclamation.

IV. Study Goals, Objectives, End Products:

Provide a basis for refining the flow recommendations for the important stream reaches of the Colorado, Yampa, Price and Duchesne Rivers.

Gages are used to aid scheduling releases from Ruedi, Wolford, Williams Fork, Elkhead and Green Mountain Reservoirs and other water sources which may be acquired by the Recovery Program.

Gaging has been upgraded to provide reliable system for monitoring flows in the lower Duchesne River.

V. Study Area: Colorado, Green, Yampa, and Duchesne Rivers.

VI. Study Methods/Approach:

The Recovery Program will work with cooperators to operate gages of importance.

The USGS Colorado and Utah Water USGS Science Centers independently estimate their program costs for the Recovery Program largely based on local salary structure and logistical factors specific to the networks they each operate; however, their cost-estimate methodology is reasonably consistent. The percentage of operation and maintenance costs for the stream gages and temperature monitors operated by the USGS for the Recovery Program is typically distributed among the following activities:

Labor for field and office:	41%
Administrative support:	25%
Building and Utilities:	10 %
Field Equipment:	10 %
Data Management and Data Delivery:	7 %
Vehicles:	5 %
Travel (lodging and per diem):	2 %

VII. Task Description and Schedule:

- A. Colorado River near Palisade, Colorado gage is the flow target measurement location for the 15-Mile Reach. It was installed in FY-90 below the large irrigation diversions in the Grand Valley of Colorado.

- B. Yampa River flow gages (at Deerlodge Park, above Elkhead Creek, and near Craig) were installed in FY-97 by the Recovery Program. Recent funding shortfalls have resulted in the Recovery Program funding 1/4 of the cost of the Craig gage on the Yampa River. The gage on the Yampa River above Elkhead Creek and the gage on Williams Fork are needed to administer releases from the enlarged Elkhead Reservoir.

Williams Fork near Craig gage: In about 2005, the Division Engineer (Bob Plaska) was adamant that this gage was necessary for their office to protect reservoir releases made from Elkhead Creek Reservoir. This is a state-operated gage used to distinguish reservoir water from natural flow in the Yampa River below Williams Fork. Tri-State is interested in this gage located downstream of their diversions, as in a dry year like 2012 it allows the flows at the Craig gage station to be compared to senior diversions downstream of their diversion. Tri-State does not want to be called out by a downstream senior and uses this information to compute what to release from their own reservoir.

- C. Yampa River at Deerlodge Park temperatures:

In addition to funding a gage for flow measurement on the Yampa River at Deerlodge Park, Colorado, the Recovery Program also funds USGS to monitor water temperatures at that gage.

- D. Duchesne and Uinta Rivers flow gages:

Installed in FY-97 by the Central Utah Water Conservancy District. The Recovery Program will cost-share:

The Duchesne-River-at-Myton gaging station, located 34.4 river miles downstream of Starvation Dam and with a flow-change arrival time of 17 to 20 hours from the dam, provides us with river conditions after the influences of the Duchesne Feeder Canal Diversion, the Gray Mountain Diversion, the Myton Townsite Diversion, and the inflows from the Lake Fork River. This is also one of the oldest functioning gaging stations in the Uintah Basin with a long history of river data.

The Duchesne-River-above-Uintah-River-near-Randlett gaging station provides us with river conditions after the additional influences of the Riverdell Diversion and the Ouray School Diversion along with thunderstorm and evaporation influences. This gaging station also provides an important double-check and confirmatory reading, along with the Uinta-River-at-Randlett gaging station, for flows passing the Duchesne-River-near-Randlett gaging station. It also provides a similar double-check and confirmatory reading for the Duchesne-River-at-Myton gaging station.

The Uinta-River-at-Randlett gaging station provides the only measurement point along the Uinta River that is used for lower Duchesne River operations. It provides natural flow and thunderstorm activity and is used to monitor flow releases from Big Sand Wash Reservoir, via the Big Sand Wash--Roosevelt Pipeline, for instream flow purposes. Releases from this pipeline travel 19.6 river miles to this gaging station.

Consistent flow travel time has not yet been determined, and this is an additional item of study requiring this gaging station.

The Duchesne-River-near-Randlett gaging station, located 58.5 river miles downstream of Starvation Dam and with a flow-change arrival time of 34 to 40 hours from the dam, is the milestone gaging station where all targets are measured. All lower Duchesne river operations, documentation, and reporting hinge on the information from this gaging station.

Managing the Duchesne River System for target flows requires coordination among several entities: Central Utah Water Conservancy District (CUWCD), Upper Colorado River Endangered Fish Recovery Program (Program), U.S. Department of the Interior Central Utah Project Completion Act Office, U.S. Bureau of Reclamation, U.S. Geological Survey (USGS), U.S. Weather Service, U.S. Natural Resources Conservation Service, Utah Division of Wildlife Resources, Utah Division of Water Rights, Duchesne/Strawberry Water Users Association, Moon Lake Water Users Association, Duchesne County Water Conservancy District, Ute Tribe, and several other independent canal companies and water users. This effort is facilitated by the Duchesne River Working Group (DRWG) and the Inter-agency Biological Assessment Team (IBAT) over the past two decades. The DRWG and the IBAT meet on a semi-annual basis usually in November and April. This work is summarized in the 2004-2011 Water Management Report, August 2013.

Shepherding lower Duchesne River instream flows from Starvation Dam and Big Sand Wash Dam is done by local agreement and not by state law. This agreement, initially verbal, but now, to a degree, written, has culminated in a Safe Harbor Agreement/Candidate Conservation Agreement with assurances by local water users to allow the instream flows to bypass their diversions. This effort is partially due to assurances that water users have adequate flow measurements by these four gaging stations. CUWCD's position is that for continued success, all four gaging stations need to be in place. Removal would result in the use of more water to attain target flows to compensate for less information available within the Uinta Basin, with the likely effect of achieving target flows less frequently.

E. Green River flow and temperature gages:

Fund a USGS flow gage on the Green River at Ouray, Utah (#09272400, installed in 2009), and partially fund a USGS flow gage on the Green River above Gates of Ladore (#09234500, installed in 1950). In addition, fund the USGS to monitor Green River water temperatures at their Jensen, Utah gage (#09261000).

F. Operate and maintain the temperature equipment installed on the Duchesne and Uinta Rivers installed in FY-97 by the Central Utah Water Conservancy District. The Recovery Program will cost-share in the operation of this gage.

G. Operate and maintain the temperature equipment installed on the Green River near Jensen, Utah gage installed in FY-98 for the Recovery Program. The Recovery Program will cost-share in the operation of this gage.

H. Operate and maintain the gage installed on the Price River near Woodside, UT. The gage was requested by the Biology Committee. River stage/flow and temperature will be collected. The Recovery Program will cost-share in the operation of this gage.

I: Added in 2017: Operate and maintain temperature equipment installed on the USGS Colorado River near the Colorado-Utah State Line (#09163500).

VIII. Study Schedule: gages are operated on an October to September Water/Fiscal year.

Deliverables: Provisional USGS data are available at: <http://waterdata.usgs.gov/nwis/rt>. The data are finalized in March of each year. Historic data are also available on the web but usually lag a year because of quality assurance procedures and the volume of data which must be processed by USGS. Temperature for Lodore, Jensen and Deerlodge is available at:

http://waterdata.usgs.gov/nwis/uv?multiple_site_no=404417108524900%0D%0A09260050%0D%0A09261000&search_site_no_match_type=exact&index_pmcode_00010=5&index_pmcode_82292

Contact Information

Colorado Gages

Steve Anders
Western Colorado Office
764 Horizon Drive, Rm 125
Grand Junction, CO 81506
970-628-7140
Spanders@usgs.gov

Daniel Meyer, P.E.

Division 6 Hydrographic / Water Resources Engineer
Colorado Division of Water Resources
505 Anglers Drive, Suite 101
Steamboat Springs, CO 80487
Tel: (970) 879-0272 x 2
Dan.Meyer@state.co.us

Utah Gages

Cory E. Angeroth

Hydrologist/Chief
Surveillance Section
U.S. Geological Survey Utah Water Science Center
2329 Orton Circle
Salt Lake City, UT 84119-2047
Phone: (801) 908-5048
E-mail: angeroth@usgs.gov

Robert Radke at 801-524-3719

USBR contact that coordinates contracts

UCREFRP Stream Gages FY 2018	\$ 196,173
UCREFRP Stream Gages FY 2019	\$ 200,096
UCREFRP Stream Gages FY 2020	\$ 204,098
UCREFRP Stream Gages FY 2021	\$ 208,180
UCREFRP Stream Gages FY 2022	\$ 212,343

XI. Reviewers: Recovery Program Staff. Angela Kantola

FY 2018 (CO and UT)				Breakdown of costs							
		Funding source									
	COLORADO	CWCB	UCREFR	COST	Labor	Admin	Facility	Equipment	Data Delivery	Vehicles	Travel
Gage #	Funds go to Colorado State Engineers Office Steamboat Springs				41%	25%	10%	10%	7%	5%	2%
	Williams Fork Creek near Craig	\$3,041	\$9,122	\$12,162	\$3,740	\$2,281	\$912	\$912	\$639	\$456	\$183
	Funds go to USGS Grand Junction*										
9260050	Yampa @ Deerlodge (Temps)		\$4,891	\$4,891	\$2,005	\$1,223	\$489	\$489	\$343	\$245	\$98
9234500	Green River above Gates of Lodore		\$4,891	\$4,891	\$2,005	\$1,223	\$489	\$489	\$343	\$245	\$98
9247600	Yampa River near Craig ¼ of O/M (Flow)		\$4,314	\$4,314	\$1,769	\$1,078	\$431	\$431	\$302	\$215	\$87
9106150	Colorado River near Palisade (Flow)		\$17,254	\$17,254	\$7,074	\$4,314	\$1,726	\$1,726	\$1,208	\$863	\$345
9244490	Yampa River above Elkhead Creek (Flow)		\$17,254	\$17,254	\$7,074	\$4,314	\$1,726	\$1,726	\$1,208	\$863	\$345
9260050	Yampa River at Deerlodge (Flow)		\$17,254	\$17,254	\$7,074	\$4,314	\$1,726	\$1,726	\$1,208	\$863	\$345
9163500	Colorado River Stateline gage	-	\$3,734	\$3,734	\$1,531	\$934	\$373	\$373	\$261	\$187	\$74
	Colorado Total	\$3,041	\$78,714	\$81,755							
	UTAH										
			UCREFR	COST							
9314500	Price R.nr Woodside (Flow,Temp& Cond)		\$24,967	\$24,967	\$10,236	\$6,241	\$2,497	\$2,497	\$1,747	\$1,248	\$500
9302000	Duchesne R. Randlett (Flow, Temp & Cond)		\$19,611	\$19,611	\$8,040	\$4,902	\$1,961	\$1,961	\$1,373	\$980	\$393
9295100	Duchesne River above Uinta (Flow &Temp)		\$16,830	\$16,830	\$6,900	\$4,208	\$1,683	\$1,683	\$1,178	\$842	\$337
9272400	Green River at Ouray (Flow)		\$16,830	\$16,830	\$6,900	\$4,208	\$1,683	\$1,683	\$1,178	\$842	\$337
9261000	Green River nr Jensen (Temp only)		\$5,561	\$5,561	\$2,280	\$1,390	\$556	\$556	\$390	\$278	\$111
9301500	Uinta River nr Randlett (Flow)		\$16,830	\$16,830	\$6,900	\$4,208	\$1,683	\$1,683	\$1,178	\$842	\$337
9295000	Duchesne River at Myton (Flow)		\$16,830	\$16,830	\$6,900	\$4,208	\$1,683	\$1,683	\$1,178	\$842	\$337
	Utah Total		\$117,458								
	Subtotal UCREFRP FY 2018 (CO and UT)		\$196,173								
					minus Wyoming's contribution to Colorado USGS						

FY 2019 (CO and UT)				Breakdown of costs							
		Funding source									
COLORADO		CWCB	UCREFR	COST	Labor	Admin	Facility	Equipment	Data Delivery	Vehicles	Travel
Gage #	Funds go to Colorado State Engineers Office Steamboat Springs				41%	25%	10%	10%	7%	5%	2%
	Williams Fork Creek near Craig	\$3,101	\$9,304	\$12,406	\$3,815	\$2,326	\$930	\$930	\$651	\$465	\$186
	Funds go to USGS Grand Junction*										
9260050	Yampa @ Deerlodge (Temps)		\$4,989	\$4,989	\$2,045	\$1,247	\$498	\$498	\$350	\$250	\$100
9234500	Green River above Gates of Lodore		\$4,989	\$4,989	\$2,045	\$1,247	\$498	\$498	\$350	\$250	\$100
9247600	Yampa River near Craig ¼ of O/M (Flow)		\$4,400	\$4,400	\$1,804	\$1,100	\$440	\$440	\$308	\$220	\$88
9106150	Colorado River near Palisade (Flow)		\$17,599	\$17,599	\$7,215	\$4,400	\$1,760	\$1,760	\$1,232	\$880	\$352
9244490	Yampa River above Elkhead Creek (Flow)		\$17,599	\$17,599	\$7,215	\$4,400	\$1,760	\$1,760	\$1,232	\$880	\$352
9260050	Yampa River at Deerlodge (Flow)		\$17,599	\$17,599	\$7,215	\$4,400	\$1,760	\$1,760	\$1,232	\$880	\$352
9163500	Colorado River Stateline gage	-	\$3,809	\$3,809	\$1,562	\$953	\$381	\$381	\$266	\$190	\$76
	Colorado Total	\$3,101	\$80,289	\$83,390							
	UTAH		UCREFR	COST							
9314500	Price R.nr Woodside (Flow,Temp& Cond)		\$25,466	\$25,466	\$10,440	\$6,366	\$2,547	\$2,547	\$1,782	\$1,273	\$510
9302000	Duchesne R. Randlett (Flow, Temp & Cond)		\$20,003	\$20,003	\$8,200	\$5,000	\$2,001	\$2,001	\$1,400	\$1,000	\$401
9295100	Duchesne River above Uinta (Flow &Temp)		\$17,167	\$17,167	\$7,038	\$4,292	\$1,717	\$1,717	\$1,202	\$858	\$343
9272400	Green River at Ouray (Flow)		\$17,167	\$17,167	\$7,038	\$4,292	\$1,717	\$1,717	\$1,202	\$858	\$343
9261000	Green River nr Jensen (Temp only)		\$5,672	\$5,672	\$2,325	\$1,418	\$567	\$567	\$397	\$284	\$113
9301500	Uinta River nr Randlett (Flow)		\$17,167	\$17,167	\$7,038	\$4,292	\$1,717	\$1,717	\$1,202	\$858	\$343
9295000	Duchesne River at Myton (Flow)		\$17,167	\$17,167	\$7,038	\$4,292	\$1,717	\$1,717	\$1,202	\$858	\$343
	Utah Total		\$119,807								
	Subtotal UCREFRP FY 2019 (CO and UT)		\$200,096		minus Wyoming's contribution to Colorado USGS						

FY 2020 (CO and UT)				Breakdown of costs							
		Funding source									
COLORADO		CWCB	UCREFR	COST	Labor	Admin	Facility	Equipment	Data Delivery	Vehicles	Travel
Gage #	Funds go to Colorado State Engineers Office Steamboat Springs				41%	25%	10%	10%	7%	5%	2%
	Williams Fork Creek near Craig	\$3,163	\$9,490	\$12,654	\$3,891	\$2,373	\$949	\$949	\$664	\$474	\$190
	Funds go to USGS Grand Junction*										
9260050	Yampa @ Deerlodge (Temps)		\$5,088	\$5,088	\$2,086	\$1,272	\$508	\$508	\$357	\$255	\$102
9234500	Green River above Gates of Lodore		\$5,088	\$5,088	\$2,086	\$1,272	\$508	\$508	\$357	\$255	\$102
9247600	Yampa River near Craig ¼ of O/M (Flow)		\$4,488	\$4,488	\$1,840	\$1,122	\$449	\$449	\$314	\$224	\$90
9106150	Colorado River near Palisade (Flow)		\$17,951	\$17,951	\$7,359	\$4,488	\$1,796	\$1,796	\$1,256	\$898	\$359
9244490	Yampa River above Elkhead Creek (Flow)		\$17,951	\$17,951	\$7,359	\$4,488	\$1,796	\$1,796	\$1,256	\$898	\$359
9260050	Yampa River at Deerlodge (Flow)		\$17,951	\$17,951	\$7,359	\$4,488	\$1,796	\$1,796	\$1,256	\$898	\$359
9163500	Colorado River Stateline gage	-	\$3,885	\$3,885	\$1,593	\$972	\$388	\$388	\$272	\$194	\$77
	Colorado Total	\$3,163	\$81,894	\$85,058							
	UTAH		UCREFR	COST							
9314500	Price R.nr Woodside (Flow,Temp& Cond)		\$25,975	\$25,975	\$10,649	\$6,494	\$2,598	\$2,598	\$1,818	\$1,299	\$520
9302000	Duchesne R. Randlett (Flow, Temp & Cond)		\$20,403	\$20,403	\$8,364	\$5,100	\$2,041	\$2,041	\$1,428	\$1,020	\$409
9295100	Duchesne River above Uinta (Flow &Temp)		\$17,510	\$17,510	\$7,179	\$4,377	\$1,751	\$1,751	\$1,226	\$875	\$350
9272400	Green River at Ouray (Flow)		\$17,510	\$17,510	\$7,179	\$4,377	\$1,751	\$1,751	\$1,226	\$875	\$350
9261000	Green River nr Jensen (Temp only)		\$5,786	\$5,786	\$2,372	\$1,446	\$578	\$578	\$405	\$290	\$116
9301500	Uinta River nr Randlett (Flow)		\$17,510	\$17,510	\$7,179	\$4,377	\$1,751	\$1,751	\$1,226	\$875	\$350
9295000	Duchesne River at Myton (Flow)		\$17,510	\$17,510	\$7,179	\$4,377	\$1,751	\$1,751	\$1,226	\$875	\$350
	Utah Total		\$122,203								
	Subtotal UCREFRP FY 2020 (CO and UT)		\$204,098								
											minus Wyoming's contribution to Colorado USGS

FY 2021 (CO and UT)				Breakdown of costs							
		Funding source									
COLORADO		CWCB	UCREFR	COST	Labor	Admin	Facility	Equipment	Data Delivery	Vehicles	Travel
Gage #	Funds go to Colorado State Engineers Office Steamboat Springs				41%	25%	10%	10%	7%	5%	2%
	Williams Fork Creek near Craig	\$3,227	\$9,680	\$12,907	\$3,969	\$2,420	\$968	\$968	\$678	\$484	\$194
	Funds go to USGS Grand Junction*										
9260050	Yampa @ Deerlodge (Temps)		\$5,190	\$5,190	\$2,128	\$1,298	\$518	\$518	\$364	\$260	\$104
9234500	Green River above Gates of Lodore		\$5,190	\$5,190	\$2,128	\$1,298	\$518	\$518	\$364	\$260	\$104
9247600	Yampa River near Craig ¼ of O/M (Flow)		\$4,578	\$4,578	\$1,877	\$1,144	\$458	\$458	\$320	\$228	\$92
9106150	Colorado River near Palisade (Flow)		\$18,310	\$18,310	\$7,507	\$4,578	\$1,831	\$1,831	\$1,282	\$916	\$366
9244490	Yampa River above Elkhead Creek (Flow)		\$18,310	\$18,310	\$7,507	\$4,578	\$1,831	\$1,831	\$1,282	\$916	\$366
9260050	Yampa River at Deerlodge (Flow)		\$18,310	\$18,310	\$7,507	\$4,578	\$1,831	\$1,831	\$1,282	\$916	\$366
9163500	Colorado River Stateline gage	-	\$3,963	\$3,963	\$1,625	\$992	\$396	\$396	\$277	\$198	\$79
	Colorado Total	\$3,227	\$83,532	\$86,759							
	UTAH		UCREFR	COST							
9314500	Price R.nr Woodside (Flow,Temp& Cond)		\$26,495	\$26,495	\$10,862	\$6,623	\$2,650	\$2,650	\$1,854	\$1,325	\$530
9302000	Duchesne R. Randlett (Flow, Temp & Cond)		\$20,811	\$20,811	\$8,532	\$5,202	\$2,082	\$2,082	\$1,457	\$1,040	\$417
9295100	Duchesne River above Uinta (Flow &Temp)		\$17,860	\$17,860	\$7,323	\$4,465	\$1,786	\$1,786	\$1,250	\$893	\$357
9272400	Green River at Ouray (Flow)		\$17,860	\$17,860	\$7,323	\$4,465	\$1,786	\$1,786	\$1,250	\$893	\$357
9261000	Green River nr Jensen (Temp only)		\$5,901	\$5,901	\$2,419	\$1,475	\$590	\$590	\$413	\$296	\$118
9301500	Uinta River nr Randlett (Flow)		\$17,860	\$17,860	\$7,323	\$4,465	\$1,786	\$1,786	\$1,250	\$893	\$357
9295000	Duchesne River at Myton (Flow)		\$17,860	\$17,860	\$7,323	\$4,465	\$1,786	\$1,786	\$1,250	\$893	\$357
	Utah Total		\$124,647								
	Subtotal UCREFRP FY 2021 (CO and UT)		\$208,180								
											minus Wyoming's contribution to Colorado USGS

FY 2022 (CO and UT)				Breakdown of costs							
		Funding source									
COLORADO		CWCB	UCREFR	COST	Labor	Admin	Facility	Equipment	Data Delivery	Vehicles	Travel
Gage #	Funds go to Colorado State Engineers Office Steamboat Springs				41%	25%	10%	10%	7%	5%	2%
	Williams Fork Creek near Craig	\$3,291	\$9,874	\$13,165	\$4,049	\$2,469	\$987	\$987	\$691	\$494	\$198
	Funds go to USGS Grand Junction*										
9260050	Yampa @ Deerlodge (Temps)		\$5,294	\$5,294	\$2,171	\$1,324	\$529	\$529	\$371	\$265	\$106
9234500	Green River above Gates of Lodore		\$5,294	\$5,294	\$2,171	\$1,324	\$529	\$529	\$371	\$265	\$106
9247600	Yampa River near Craig ¼ of O/M (Flow)		\$4,669	\$4,669	\$1,914	\$1,167	\$467	\$467	\$327	\$233	\$94
9106150	Colorado River near Palisade (Flow)		\$18,677	\$18,677	\$7,657	\$4,669	\$1,868	\$1,868	\$1,307	\$934	\$373
9244490	Yampa River above Elkhead Creek (Flow)		\$18,677	\$18,677	\$7,657	\$4,669	\$1,868	\$1,868	\$1,307	\$934	\$373
9260050	Yampa River at Deerlodge (Flow)		\$18,677	\$18,677	\$7,657	\$4,669	\$1,868	\$1,868	\$1,307	\$934	\$373
9163500	Colorado River Stateline gage	-	\$4,042	\$4,042	\$1,657	\$1,011	\$404	\$404	\$283	\$202	\$81
	Colorado Total	\$3,291	\$85,203	\$88,494							
	UTAH		UCREFR	COST							
9314500	Price R.nr Woodside (Flow,Temp& Cond)		\$27,025	\$27,025	\$11,079	\$6,756	\$2,703	\$2,703	\$1,891	\$1,351	\$541
9302000	Duchesne R. Randlett (Flow, Temp & Cond)		\$21,227	\$21,227	\$8,702	\$5,306	\$2,123	\$2,123	\$1,486	\$1,061	\$425
9295100	Duchesne River above Uinta (Flow &Temp)		\$18,217	\$18,217	\$7,469	\$4,554	\$1,822	\$1,822	\$1,275	\$911	\$364
9272400	Green River at Ouray (Flow)		\$18,217	\$18,217	\$7,469	\$4,554	\$1,822	\$1,822	\$1,275	\$911	\$364
9261000	Green River nr Jensen (Temp only)		\$6,019	\$6,019	\$2,468	\$1,505	\$602	\$602	\$422	\$301	\$120
9301500	Uinta River nr Randlett (Flow)		\$18,217	\$18,217	\$7,469	\$4,554	\$1,822	\$1,822	\$1,275	\$911	\$364
9295000	Duchesne River at Myton (Flow)		\$18,217	\$18,217	\$7,469	\$4,554	\$1,822	\$1,822	\$1,275	\$911	\$364
	Utah Total		\$127,140								
	Subtotal UCREFRP FY 2022 (CO and UT)		\$212,343								
											minus Wyoming's contribution to Colorado USGS