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

II. Bureau of Reclamation Agreement Number(s):

Project/Grant Period: Start date 1990

<table>
<thead>
<tr>
<th>CO USGS Contract: R16PG00077</th>
<th>End date: 9/30/25</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Colorado: SEO R12AP40009</td>
<td>End date: 9/30/18</td>
</tr>
<tr>
<td>UT USGS Contract: R16PG00079</td>
<td>End date: 9/30/26</td>
</tr>
</tbody>
</table>

Reporting period end date: 09/30/2016

Is this the final report? Yes _____ No ___

III. Principal Investigator:

Jana Mohrman
P.O. Box 25486, Denver, CO 80225-0486
E-mail: Jana_Mohrman@fws.gov
Phone: (303) 236-9883 Cell (720)232-6330

IV. The Upper Colorado River Recovery Program employs the nation’s expert, the USGS, to provide data to assist in protecting stream for endangered fishes

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 is available as provisional on the internet and can be found at:
http://waterwatch.usgs.gov/?id=ww_current

2014 was an above-average snowpack year. Real-time USGS streamflow data were critical in helping managers operate reservoirs to benefit fish habitat and simultaneously prevent flooding in the Colorado’s Grand Valley area.

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. Recommendations: All is well, running smoothly

IIIX. Project Status: On track and ongoing. The gages are operational and the information is available from the Internet from the USGS Water Resource in Colorado and Utah.
X. Budget

<table>
<thead>
<tr>
<th>Budget</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCREFRP FY 2016 Cost</td>
<td>$146,760</td>
</tr>
<tr>
<td>Wyoming Contribution</td>
<td>$28,990</td>
</tr>
<tr>
<td>Total</td>
<td>$175,750</td>
</tr>
</tbody>
</table>

RIP costs BOR paid to USGS in FY 16 to USGS Colorado (Grand Junction office) $34,370. RIP funding to the Utah USGS $112,390

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

XII. Signed: Jana Mohrman Principle Investigator  
     November 30, 2016  Date

2017 + $3,662 for State-line Temps  
2017 Wyoming contribution $48,734

See the attached changes for 2017
## FY 2017 (CO and UT)

<table>
<thead>
<tr>
<th>Gage #</th>
<th>Funds go to Colorado State Engineers Office Steamboat Springs</th>
<th>Labor</th>
<th>Admin</th>
<th>Facility</th>
<th>Equipment</th>
<th>Data Delivery</th>
<th>Vehicles</th>
<th>Travel</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Williams Fork Creek near Craig</td>
<td>41%</td>
<td>25%</td>
<td>10%</td>
<td>10%</td>
<td>7%</td>
<td>5%</td>
<td>2%</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9260050</td>
<td>Yampa @ Deerlodge  (Temps)</td>
<td></td>
<td></td>
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<tr>
<td>4E+14</td>
<td>Green River above Gates of Lodore</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>9247600</td>
<td>Yampa River near Craig ¼ of O/M (Flow)</td>
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<tr>
<td>9106150</td>
<td>Colorado River near Palisade (Flow)</td>
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<tr>
<td>9244490</td>
<td>Yampa River above Elkhead Creek (Flow)</td>
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<tr>
<td>9260050</td>
<td>Yampa River at Deerlodge (Flow)</td>
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<tr>
<td>9163500</td>
<td>Colorado River Stateline gage</td>
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<td>Colorado Total</td>
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<tr>
<td>UTAH</td>
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<tr>
<td>9314500</td>
<td>Price R nr Woodside (Flow,Temp&amp; Cond)</td>
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<tr>
<td>9302000</td>
<td>Duchesne R. Randlett (Flow, Temp &amp; Cond)</td>
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<td></td>
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<tr>
<td>9295100</td>
<td>Duchesne Rvier above Uinta (Flow &amp;Temp)</td>
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<tr>
<td>9272400</td>
<td>Green River at Ouray (Flow)</td>
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<tr>
<td>9261000</td>
<td>Green River nr Jensen (Temp only)</td>
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<tr>
<td>9301500</td>
<td>Uinta River nr Randlett (Flow)</td>
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<tr>
<td>9295000</td>
<td>Duchesne River at Myton (Flow)</td>
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<tr>
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<td>Utah Total</td>
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</tr>
</tbody>
</table>

### Subtotal UCREFRP FY 2017 (CO and UT)

- **Wyoming contribution**: unknown

### Net

**Colorado USGS gages**

Steven P. Anders  
Western Colorado Data Section Chief  
US Geological Survey - WRD  
445 West Gunnison Avenue Suite 130  
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phone: 970-628-7140  
cell: 970.640.7130  
spanders@usgs.gov

**State of Utah**

Dan Meyer  
Division 6 Hydrographic / Water Resources Engineer  
Colorado Division of Water Resources  
505 Anglers Drive, Suite 101  
Steamboat Springs, CO  80487  
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Dan.Meyer@state.co.us

**Utah USGS Gages**

Cory Angeroth  
Hydrologist Chief  
USGS Utah Water Science Center  
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Salt lake City, UT 84119-2047  
801-908-5048  
angeroth@USGS.gov

**USBR Coordinates Contract**

Robert Radtke  
GS1301-Physical Scientist (Chemistry)  
Handling the contract for the Recovery Program  
Bureau of Reclamation  
801-524-3719  
rradtke@usbr.gov

FY 2016 Ann. Rpt. Project # 8 - 4
ANNUAL PERFORMANCE PROGRESS REPORT (PPR)

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:
   Jana Mohrman
   P.O. Box 25486, Denver, CO 80225-0486
   E-mail: Jana_Mohrman@fws.gov
   Phone: (303) 236-9883
   Cell (720) 232-6330

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: Jana Mohrman
P.O. Box 25486, Denver, CO 80225-0486
E-mail: Jana_Mohrman@fws.gov
Phone: (303) 236-9883
Cell (720) 232-6330

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:
  Jana Mohrman
  P.O. Box 25486, Denver, CO 80225-0486
  E-mail:  Jana_Mohrman@fws.gov
  Phone:  (303) 236-9883
  Cell (720) 232-6330

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.