

COLORADO RIVER RECOVERY PROGRAM
FY 2012 ANNUAL PROJECT REPORT

RECOVERY PROGRAM
PROJECT NUMBER: C-9

I. Project Title: Elkhead Lease (Operation and Maintenance of Elkhead Reservoir to make releases for Yampa River flow augmentation.)

II. Bureau of Reclamation Agreement Number(s): 05-WC-40-420

If Reclamation funds only one agency/entity for this project, fill out the project/grant period information below. If more than one agency/entity receives Reclamation funds for this project, delete the project/grant period portion below, have each agency/entity prepare a Performance Progress Report (PPR) (attached), and append the PPRs to this report.

Project/Grant Period: Start date : 02/17/05
End date: ongoing
Reporting period end date: 09/30/12
Is this the final report? Yes _____ No XX

III. Principal Investigator(s): Ray Tenney
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IV. Abstract:

7,000 acre-feet of water was available for Recovery Program use in 2012. This was the “normal” Recovery Program pool of 5,000 acre-feet and 2,000 acre-feet which had been leased by the Recovery Program per our agreement. 6,582 acre-feet was delivered as requested to maintain Yampa River flows. 418 acre-feet are available to the Recovery Program for carry-over into 2013. See attached operations summary graphic.

V. Study Schedule: Deliveries began in 2007 and will continue as requested.

VI. Relationship to RIPRAP: Relationship to RIPRAP: Green River Action Plan: Yampa and Little Snake Rivers, I.B.2.a.(2)(b), Deliver water for endangered fish.

VII. Accomplishment of FY 2012 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

The Recovery Program leased an additional 2,000 acre-feet of water in 2012 for a total pool in Elkhead Reservoir of 7,000 acre-feet as requested.

Wetland mitigation areas continue to develop. The constructed mitigation areas on the reservoir shoreline are reaching the end of the required 5 year monitoring period and results suggest monitoring can be discontinued. The upstream “delta” mitigation area is accumulating sufficient sediment to support vegetation and could for the first time be surveyed this year. This “delta” area requires 5 more years of monitoring under the USACE Section 404 permit.

The movable fish screen on the bottom reservoir outlet experienced a failure of the guide rails discovered during routine testing in late 2011. Repairs were conducted in April 2012. The fish screen guides had separated from the wall of the tower and had to be bolted back on. This work required drilling out of the failed anchors and cementing in replacement anchor studs. The work required 20 days of hard hat diving at a cost of \$89,283.20. Unfortunately the replacement anchors are not as substantial as the original designed anchors. The cost of the repair will be included in the Recovery Program’s portion of the operational costs for Elkhead Reservoir per our agreements.

Pieces retrieved from the failed anchors and diver observations and reports show the construction contractor did not provide the specified anchors. The River District has notified the construction contractor, Ames Construction, of a potential construction defect claim within the 6 year statute of limitation after Substantial Completion. Ames has responded with notification that they take no responsibility for the repair effort, although they cannot verify the anchor system used to secure the guide rails. The River District and Recovery Program need to determine what further course of action is warranted.

Some maintenance items were identified in the annual dam safety inspection including repainting of some of the valves. Otherwise the dam is performing well.

The recreational aspects of Elkhead Reservoir are managed by Colorado Parks and Wildlife through an agreement between CPW and the City of Craig and the River District, supported by a \$30,000 annual subsidy. The facilities are well maintained and well used by the public. CPW conducts 100 percent inspections of all motorized water craft entering Elkhead Reservoir under Colorado Aquatic Nuisance Species program.

No unscreened releases or spills occurred from Elkhead Reservoir in 2012. Inflows to Elkhead Reservoir were low enough that the reservoir was able to be operated in 2012 without spills over the service spillway. The service spillway is not screened to prevent escape of fish.

VIII. Recommendations:

Pursue further evaluation of corrosion protection in the outlet works moving toward an impressed current corrosion protection system installation.

Arrange for painting of the valves where paint is failing.

Consider investment in some cottonwood trees in the mitigation areas. These trees were included in the mitigation plan but not in the original mitigation area plantings. The trees will require watering and volunteer Boy Scout troop watering may be available.

IX. Project Status: *"on track and ongoing"*

X. FY 2012 Budget Status

A. Funds Provided: \$80,000 budgeted in 2012 SOW submitted

B. Funds Expended: \$ 54,500.51 for operations
\$ 89,283.20 for fish screen repairs

C. Difference: Didn't do cathodic protection system evaluation in 2012 savings of \$14,000 – deferred to 2013.

D. Percent of the FY 2012 work completed, and projected costs to complete: 90%, costs to complete under evaluation.

E. Recovery Program funds spent for publication charges: none

XI. Status of Data Submission (Where applicable): N/A

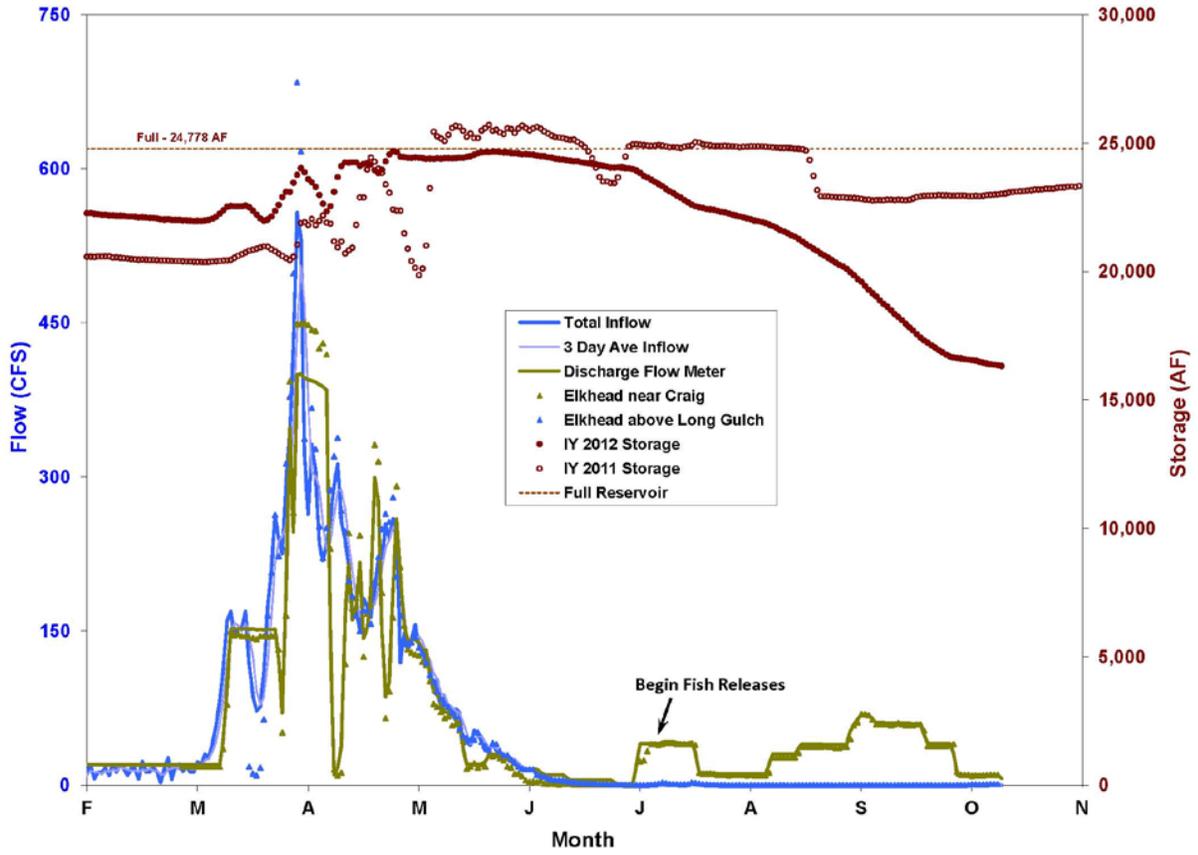
XII. Signed:

Principal Investigator

Date: November 14, 2012

APPENDIX: Operational Graph for 2012
Operational costs spreadsheet

Elkhead Reservoir IY 2012 Flows and Storage



Elkhead Reservoir FFY 2012 Rates & Responsibilities				
I:\COLORADO\2012 Annual Reports\Habitat Management Instream Flows\Elkhead FFY 2012 Cost Summary.xls				
	Participant	Entire Pool	Enlargement Pool	
	af	24777 af	11956 af	
Yampa Participants	8408	33.93%		
City of Craig	4413	17.81%		
Recovery Program	5000	20.18%	41.82%	
CO River District	6956	28.07%	58.18%	
Total	24777	100.00%	100.00%	

Elkhead Reservoir							
CRWCD's FFY 2012 Employee's Time							
I:\COLORIV\2012 Annual Reports\Habitat Management Instream Flows\[Elkhead FFY 2012 Cost Summary.xlsx]Time&Travel							
Through	<u>9/30/2012</u>						
					Entire	Enlargement	
Employee	OM&R	Capital Time	Loaded Rate	Total	Pool	Pool	Non-Reimb.
Dave S	232.25	0.00	\$ 42.76	\$ 9,930.17		\$ 9,930.17	\$ -
Don	76.00	0.00	\$ 76.73	\$ 5,831.33	\$ 1,166.27	\$ 4,665.06	\$ -
Dan	3.00	0.00	\$ 100.84	\$ 302.53	\$ 99.84	\$ 202.70	\$ -
John C	4.00	0.00	\$ 96.08	\$ 384.31	\$ 76.86	\$ 307.45	\$ -
Ray	208.50	0.00	\$ 85.42	\$ 17,809.13	\$ 3,561.83	\$ 14,247.31	\$ -
Ian	3.00	0.00	\$ 43.97	\$ 131.90	\$ 43.53	\$ 88.37	\$ -
Totals	526.75	0.00		\$ 34,389.37	\$ 4,948.32	\$ 29,441.06	\$ -

CRWCD's Elkhead Expenses

FFY 2012

I:\COLORIV\2012 Annual Reports\Habitat Management Instream Flows\Elkhead FFY 2012 Cost Summary.xlsx\Invoices

					Entire	Enlargement	
09/30/12					Pool	Pool	Non-Reimb.
Vendor	Date	Description	Amount	Type			
YVEA	10/20/11	Invoice: 10/17/11	150.66	Operating	150.66	-	
TENNEYR	10/31/11	Invoice: 10/31/11	166.24	Operating	166.24	-	
URS	11/7/11	Invoice: 4865757	11,062.46	Operating	-	11,062.46	
YVEA	11/15/11	Invoice: 11/15/11	196.86	Operating	196.86	-	
YVEA	12/15/11	Invoice: 12/20/11	857.24	Operating	857.24	-	
NW WEED	12/19/11	Invoice: 12/19/11	17,273.20	Operating	17,273.20	-	0
URS	12/30/11	Invoice: 4938661	3,595.00	Operating	-	3,595.00	
GEN J/E #291	12/31/11	ENT's Dec exp paid by GEN	1,296.79	Operating	1,296.79	-	
USGS	12/31/11	Invoice: 90069401	4,616.74	Gauging	2,308.37	2,308.37	
YVEA	1/17/12	Invoice: 1/17/12	1,035.03	Operating	1,035.03	-	
GEN J/E #300	1/31/12	ENT's Jan exp paid by GEN	140.00	Operating	-	-	140.00
YVEA	2/15/12	Invoice: 2/20/12	788.79	Operating	788.79	-	
URS	2/24/12	Invoice: 5016526	1,026.55	Operating	-	1,026.55	
URS	2/29/12	Invoice: 4900127	752.50	Operating	-	752.50	
PARKS	3/8/12	Invoice: 2012	15,000.00	Operating	-	15,000.00	
YVEA	3/21/12	Invoice: 3/21/12	642.48	Operating	642.48	-	
YVEA	4/19/12	Invoice: 4/19/12	223.80	Operating	223.80	-	-
NATIVE	4/30/12	Invoice: 116207	558.00	Operating	558.00	-	
ASICONST	5/15/12	Invoice: 1109-08	83,770.00	Operating	83,770.00	-	
YVEA	5/21/12	Invoice: 5/21/12	140.82	Operating	140.82	-	
GEN J/E #313	5/31/12	ENT's May exp paid by GEN	1,513.20	Operating	1,513.20	-	
WOLFCAMP	5/23/12	Invoice: 1214	4,000.00	Operating	4,000.00	-	
YVEA	6/20/12	Invoice: 6/20/12	145.27	Operating	145.27	-	
USGS	7/13/12	Invoice: 90104432	7,289.71	Gauging	3,644.86	3,644.86	
YVEA	7/19/12	Invoice: 7/19/12	160.79	Operating	160.79	-	
YVEA	8/22/12	Invoice: 8/22/12	134.82	Operating	134.82	-	
USGS	9/14/12	Invoice: 90120778	7,289.71	Gauging	3,644.86	3,644.86	
YVEA	9/17/12	Invoice: 9/19/12	158.38	Operating	158.38	-	
URS	9/28/12	Invoice: 5268050	836.00	Operating	-	836.00	
							-
		TOTALS	\$ 164,821.04		122,810.45	41,870.59	140.00
Distribution of Above Operating Costs:							
Gauging			19,196.16		9,598.08	9,598.08	-
Water Quality			-		-	-	-
PARKS		Rec. Fee	15,000.00		-	15,000.00	-
YVEA		Electric	4,634.94		4,634.94	-	-
Fish Screen Work			89,283.20		89,283.20	-	-
All others		Operating	36,706.74		19,294.23	17,272.51	140.00
			\$ 164,821.04		\$ 122,810.45	\$ 41,870.59	\$ 140.00

Elkhead Reservoir Federal Fiscal Year 2012 Summary						
I:\COLORIV\2012 Annual Reports\Habitat Management Instream Flows\Elkhead FFY 2012 Cost Summary.xlsx\Invoices						
			Entire Pool	Enlargement Pool		Non-Reimbursible
		Totals	24777 af	11956 af	RIP Only	Expenses
Gauging		\$ 19,196.16	\$ 9,598.08	\$ 9,598.08	\$ -	\$ -
Water Quality		\$ -	\$ -	\$ -	\$ -	\$ -
Rec. Fees		\$ 15,000.00	\$ -	\$ 15,000.00	\$ -	\$ -
Electric		\$ 4,634.94	\$ 2,594.94	\$ -	\$ 2,040.00	\$ -
Operating		\$ 36,706.74	\$ 19,294.23	\$ 17,272.51	\$ -	\$ 140.00
Fish Screen Work		\$ 89,283.20	\$ 89,283.20	\$ -	\$ -	\$ -
Labor		\$ 34,389.37	\$ 4,948.32	\$ 29,441.06	\$ 0.00	\$ -
Management/Admin. Fee		\$ 19,907.04	\$ 12,571.88	\$ 7,131.16	\$ 204.00	
Subtotals		\$ 219,117.45	\$ 138,290.64	\$ 78,442.81	\$ 2,244.00	\$ 140.00
City of Craig Expenses		29,193.83	\$ 12,231.28	\$ 16,962.55	\$ -	\$ -
Subtotals		\$ 248,311.28	\$ 150,521.92	\$ 95,405.36	\$ 2,244.00	\$ 140.00
Less Fish Screen		\$ 89,283.20	\$ 89,283.20	\$ -	\$ -	\$ -
Grand Totals		\$ 159,028.08	\$ 61,238.72	\$ 95,405.36	\$ 2,244.00	\$ 140.00
<u>FFY 2012 Prorated Costs Calculations</u>						
Partipants		af	%	%	Prorated Costs	Cost/af
**Yampa Participants		8408	33.93%		\$ 20,781.17	\$ 2.47
City of Craig		4413	17.81%		\$ 10,907.15	\$ 2.47
Recovery Program		5000	20.18%	41.82%	\$ 54,500.51	\$ 10.90
CO River District		6956	28.07%	58.18%	\$ 72,699.25	\$ 10.45
					<u>\$ 158,888.08</u>	