

RECOVERY PROGRAM
FY 2018-2019 SCOPE OF WORK for:
(Passage O&M: Grand Valley Water Users)

Recovery Program Project Number: C-4bGVP

Reclamation Agreement number: R15PG00083
Reclamation Agreement term: October 1, 2014 – Sept. 30, 2019

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
Grand Junction Fish and Wildlife Conservation Office
Submitted by: Travis Francis, Fishery Biologist
Dale Ryden, Project Leader
Address: 445 West Gunnison Ave.
Grand Junction, CO 81501
Phone: (970) 628-7204
FAX: (970) 628-7217
Email: travis_francis@fws.gov
dale_ryden@fws.gov

Date Last Modified: 5/30/2017 9:44:00 AM

Category:

- Ongoing project
- Ongoing-revised project
- Requested new project
- Unsolicited proposal

Expected Funding Source:

- Annual funds
- Capital funds
- Other [*explain*]

I. Title of Proposal: **Annual Operation and Maintenance of the Fish Passage Structure at the Government Highline Diversion Dam on the Upper Colorado River.**

II. Relationship to RIPRAP:

Colorado River Action Plan: Mainstem
II.B.3. Restore fish passage at Government Highline Dam (Grand Valley Project)
II.B.3.a.(3) Operate and maintain fish ladder
II.B.3.a.(4) Monitor and evaluate success

III. Study Background/Rationale and Hypotheses:

The fish passage at Government Highline Diversion Dam (or Grand Valley Water User's Dam [GVWU]) on the Upper Colorado River at the lower end of Debeque Canyon was completed by 1 August 2004. Although the passage was completed in August 2004, it was not operated in 2004. It was also designed for selective fish passage, similar to that at the Redlands fish

passageway. In both 2005 and 2006, it was operated only on a trial basis and in 2007 it was only operated for about 5 weeks at the height and immediately following spring runoff to remove sediment from the head end of the fish passage and attraction flow intakes. In 2008, with the completion of fish passage downstream at the Price Stubb Dam in April 2008, the fish trap was operated full time from the first of May to mid-October. Low flows in 2012, didn't allow for operation of the fish passageway and it was operated in 2013 through 2016.

Project Results to Date

The purpose of this project is to collect and summarize annual data on the number of large-bodied fish, different fish species, and seasonal distribution of fish that use the fish passageway at the Government Highline Diversion Dam on the Upper Colorado River in Debeque Canyon. In 2016, the fish trap was operated for 136 days. Whenever the base flows are too low and there are calls for water by the water user groups we are obligated to shut the facility down because this facility does not have a water right. These periods of non-operation could be long or short in duration. The fish trap was operated for only 12 days in 2005, 41 days in 2006, and 49 days in 2013. The fish trap was not operated during 2004, 2007, and 2012. Through 2016, 117 adult Razorback Sucker (*Xyrauchen texanus*), six Humpback Chub (*Gila cypha*), three Colorado Pikeminnow (*Ptychocheilus lucius*), and 90 Bonytail (*Gila elegans*) have used the fish-way. Through 2016, 135,279 fish have used the fish passage at Government Highline Diversion Dam. Native fishes comprised 83% of the total fish collected through 2016 (Francis and Ryden 2016).

IV. Study Goals, Objectives, End Product(s):

Continue to collect data on the number of large-bodied fish, different fish species, and seasonal distribution of fish that use this passageway. Summarize the annual results of passageway fish use in the annual RIP report.

V. Study Area: Colorado River: river mile 193.7.

Study Methods/Approach: FY 2018-2019

The fish trap at GVWU passageway may be opened by mid-April and closed in mid-October. The trap is designed to collect large-bodied fish. Depending upon manpower, the fish trap at the passageway will be run at least every other day, Monday through Friday, and where possible every weekday. All fish will be sorted by species and counted. Vital statistics including length, weight, and PIT-tag IDs will be collected for all listed species found in the trap. Other introduced species (e. g., largemouth bass, smallmouth bass, green sunfish, black bullhead, gizzard shad, white sucker, and carp) collected will be sacrificed and disposed of in a manner that will not constitute a nuisance or as otherwise directed by Colorado Parks and Wildlife (CPW). Channel catfish will be returned downstream of the fish ladder alive.

In addition to collecting and counting fish in the fish trap, FWS personnel will continue to be responsible for periodic cleaning of river borne sediment in the fish trap and routine cleaning of surface and submerged trash, debris, and river borne algae from the trash grates and bar screens in the fore bay of the passageway. Other tasks include: regulating river flows through

the fish ladder and attraction flow to remove sediment from the fish-way, noxious weed control, and removing all stranded fish in the fish trap and dewatered portion of the fish ladder prior to winterizing. FWS personnel will also be responsible for opening and winterizing the passageway.

FWS personnel are also responsible for maintaining the Price Stubb PIT tag antenna, solar panel, batteries, data logger, cell phone modem, and MUX at the top end of the Price-Stubb Dam Fish Passageway located at Colorado River mile 188.3. This includes one day of providing personnel, coordinated with the Bureau of Reclamation and their hired contractor that operates a track hoe, to assist with removing high water debris from the passageway. A report of annual PIT tag detections will be included with this annual report (previously provided in the annual database management report).

VI. Task Description and Schedule:

Description

Task 1. O & M of GVWU fish ladder includes monitoring the fish trap, sorting, examining, and enumerating all fish in addition to removing and disposing of all non-native fish; removing sediment from the trap and cleaning trash and debris from the trash racks, bar screens, fish trap, and fish-way entrance. Other tasks include: regulating river flows through the fish ladder and attraction flow to remove sediment from the fish-way, noxious weed control, removing all stranded fish in the fish trap and dewatered portion of the fish ladder prior to winterizing.

Task 2. O&M of Price-Stubb Fish Ladder PIT tag antenna and associated equipment. This includes one day of providing personnel, coordinated with the Bureau of Reclamation and their hired contractor that operates a track hoe, to assist with removing high water debris from the passageway.

Task 3. Compile and summarize fish use data from both locations; prepare annual RIP report.

Schedule

Task 1. 4/2018 – 10/2018; 4/2019 – 10/2019

Task 2. 10/2017 –10/2018; 10/2018 – 10/2019

Task 3. 10/2018 – 11/2018; 10/2019 – 11/2019

VII. Deliverables, Due Dates, and Budget by Fiscal Year:

FY 2018

Deliverables: *Tasks 1, 2, and 3*

Labor	Title	# of employees	Hours	Reg. Rate	OT Hours	OT Rate	Total	
	Project Leader GS-14		1	80	80.95	0	0	6476
	Administrative Officer GS-09		1	80	42.14	0	0	3371.2
	Fishery Biologist GS-11		1	320	52.8	0	0	16896
	Crew leader Tech. GS-07		1	100	31.82	0	47.73	3182
	Crew leader Tech. GS-06		1	120	27.2	0	40.8	3264
	Biological Tech. GS-05		2	560	22.94	0	34.41	25692.8
Labor Subtotal								58882
Equipment & Supplies	Category	Item	Quantity	Unit	Rate	Duration	Total	
	Office Supplies	Computer Supplies and Peripherals					100	
	Office Supplies	Ink Cartridges and paper					100	
	Office Supplies	Cell, SAT, and Office phone service					100	
	Field Equipment	GSA vehicle lease per month	1	each	365	6	2190	
	Field Equipment	Mileage	7150	miles	0.42	1	3003	
	Field Equipment	PPE (e.g. rubber boots, first aid)					100	
	Field Equipment	Fish disposal at county landfill					100	
	Field Equipment	Ground Maint. (e.g. sprayer, round-up)					100	
	Field Equipment	Nets, Rakes, Tools					100	
Equipment Total							5,893	
							Grand Total	
USFWS Grand Jct.							64775	

FY 2019

Deliverables: *Tasks 1, 2, and 3*

Labor	Title	# of employees	Hours	Reg. Rate	OT Hours	OT Rate	Total	
	Project Leader GS-14		1	80	82.57	0	0	6605.6
	Administrative Officer GS-09		1	80	42.98	0	0	3438.4
	Fishery Biologist GS-11		1	320	53.84	0	0	17228.8
	Crew leader Tech. GS-07		1	100	32.46	0	48.69	3246
	Crew leader Tech. GS-06		1	120	27.74	0	41.62	3328.8
	Biological Tech. GS-05		2	560	23.4	0	35.1	26208
Labor Subtotal								60055.6
Equipment & Supplies	Category	Item	Quantity	Unit	Rate	Duration	Total	
	Office Supplies	Computer Supplies and Peripherals					102	
	Office Supplies	Ink Cartridges and paper					102	
	Office Supplies	Cell, SAT, and Office phone service					102	
	Field Equipment	GSA vehicle lease per month	1	each	372.3	6	2233.8	
	Field Equipment	Mileage	7150	miles	0.43	1	3074.5	
	Field Equipment	PPE (e.g. rubber boots, first aid)					102	
	Field Equipment	Fish disposal at county landfill					102	
	Field Equipment	Ground Maint. (e.g. sprayer, round-up)					102	
	Field Equipment	Nets, Rakes, Tools					102	
Equipment Total							6,022	
							Grand Total	
USFWS Grand Jct.							66078	

Out-year budgets for GVWU Fish Ladder Operation: 2020-2022

THESE BUDGETS ARE ESTIMATES ONLY AND MAY NOT REPRESENT ACTUAL COSTS

FY 2020

Deliverables: *Tasks 1, 2, and 3*

Labor	Title	# of employees	Hours	Reg. Rate	OT Hours	OT Rate	Total	
	Project Leader GS-14		1	80	84.22	0	0	6737.6
	Administrative Officer GS-09		1	80	43.84	0	0	3507.2
	Fishery Biologist GS-11		1	320	54.92	0	0	17574.4
	Crew leader Tech. GS-07		1	100	33.11	0	49.66	3311
	Crew leader Tech. GS-06		1	120	28.3	0	42.45	3396
	Biological Tech. GS-05		2	560	23.87	0	35.8	26734.4
Labor Subtotal								61260.6
Equipment & Supplies	Category	Item	Quantity	Unit	Rate	Duration	Total	
	Office Supplies	Computer Supplies and Peripherals					104	
	Office Supplies	Ink Cartridges and paper					104	
	Office Supplies	Cell, SAT, and Office phone service					104	
	Field Equipment	GSA vehicle lease per month	1	each	379.75	6	2278.5	
	Field Equipment	Mileage	7150	miles	0.44	1	3146	
	Field Equipment	PPE (e.g. rubber boots, first aid)					104	
	Field Equipment	Fish disposal at county landfill					104	
	Field Equipment	Ground Maint. (e.g. sprayer, round-up)					104	
	Field Equipment	Nets, Rakes, Tools					104	
Equipment Total							6,153	
							Grand Total	
USFWS Grand Jct.							67413	

FY 2021

Deliverables: *Tasks 1, 2, and 3*

Labor	Title	# of employees	Hours	Reg. Rate	OT Hours	OT Rate	Total	
	Project Leader GS-14		1	80	85.9	0	0	6872
	Administrative Officer GS-09		1	80	44.72	0	0	3577.6
	Fishery Biologist GS-11		1	320	56.02	0	0	17926.4
	Crew leader Tech. GS-07		1	100	33.77	0	50.65	3377
	Crew leader Tech. GS-06		1	120	28.87	0	43.3	3464.4
	Biological Tech. GS-05		2	560	24.35	0	36.52	27272
Labor Subtotal								62489.4
Equipment & Supplies	Category	Item	Quantity	Unit	Rate	Duration	Total	
	Office Supplies	Computer Supplies and Peripherals					106	
	Office Supplies	Ink Cartridges and paper					106	
	Office Supplies	Cell, SAT, and Office phone service					106	
	Field Equipment	GSA vehicle lease per month	1	each	387.35	6	2324.1	
	Field Equipment	Mileage	7150	miles	0.45	1	3217.5	
	Field Equipment	PPE (e.g. rubber boots, first aid)					106	
	Field Equipment	Fish disposal at county landfill					106	
	Field Equipment	Ground Maint. (e.g. sprayer, round-up)					106	
	Field Equipment	Nets, Rakes, Tools					106	
Equipment Total							6,284	
							Grand Total	
USFWS Grand Jct.							68773	

FY 2022

Deliverables: *Tasks 1, 2, and 3*

Labor	Title	# of employees	Hours	Reg. Rate	OT Hours	OT Rate	Total	
	Project Leader GS-14		1	80	87.62	0	0	7009.6
	Administrative Officer GS-09		1	80	45.61	0	0	3648.8
	Fishery Biologist GS-11		1	320	57.14	0	0	18284.8
	Crew leader Tech. GS-07		1	100	34.45	0	51.66	3445
	Crew leader Tech. GS-06		1	120	29.45	0	44.17	3534
	Biological Tech. GS-05		2	560	24.84	0	37.25	27820.8
Labor Subtotal								63743
Equipment & Supplies	Category	Item	Quantity	Unit	Rate	Duration	Total	
	Office Supplies	Computer Supplies and Peripherals					108	
	Office Supplies	Ink Cartridges and paper					108	
	Office Supplies	Cell, SAT, and Office phone service					108	
	Field Equipment	GSA vehicle lease per month	1	each	395.1	6	2370.6	
	Field Equipment	Mileage	7150	miles	0.46	1	3289	
	Field Equipment	PPE (e.g. rubber boots, first aid)					108	
	Field Equipment	Fish disposal at county landfill					108	
	Field Equipment	Ground Maint. (e.g. sprayer, round-up)					108	
	Field Equipment	Nets, Rakes, Tools					108	
Equipment Total							6,416	
							Grand Total	
USFWS Grand Jct.							70159	

VIII. Budget Summary:

FY2018
USFWS-GJ \$64,775

FY2019
USFWS-GJ \$66,078

2018-2019 Total = \$130,853

Estimated Budget Summary for Fiscal Years 2020-2022:

FY2020
USFWS-GJ \$67,413

FY2021
USFWS-GJ \$68,773

FY2022
USFWS-GJ \$70,159

2018-2020 Total = \$206,345

5-Year Total = \$337,198

IX. Reviewers: Program Staff and Biology Committee

X. References:

Francis, T.A. and D.W. Ryden 2016. Annual Operation and Maintenance of the Fish Passage Structure at the GVWU Dam on the Colorado River. Annual report prepared for the Upper Colorado River Endangered Fish Recovery Program. Recovery Program Project Number C-4b-GVP. U. S. Fish and Wildlife Service, Grand Junction Fish and Wildlife Conservation Office, Grand Junction, Colorado.