



FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION

All sections must be addressed, or the application will be considered invalid



I. APPLICANT INFORMATION

- A. Applicant Name: Clark Fork Coalition
- Mailing Address: Box 7593
- City: Missoula State: MT Zip: 59807
- Telephone: 406-396-7716 E-mail: will@clarkfork.org
- B. Contact Person (if different than applicant): Will McDowell
- Address: _____
- City: _____ State: _____ Zip: _____
- Telephone: _____ E-mail: _____
- C. Landowner and/or Lessee Name (if different than applicant): USFS Beaverhead Deer Lodge National Forest (Pintler RD)
- Mailing Address: 88 Business Loop
- City: Philipsburg State: MT Zip: _____
- Telephone: 406-925-9777 E-mail: phooper@usfs.gov

II. PROJECT INFORMATION

- A. Project Name: Little Gold Creek AOP Culvert Replacement Road 8501 (Part 2)
- River, stream, or lake: Little Gold Creek
- Location: Township: 8N Range: 12N Section: 29
- Latitude: 46.4132 Longitude: -113.1334 *within project (decimal degrees)*
- County: Granite

B. Purpose of Project:

The purpose of the project is to provide fish passage upstream into upper Little Gold Creek for cold-water fish species, particularly westslope cutthroat and bull trout, improving habitat quantity and connectivity in an important native fish watershed.

C. Brief Project Description (attach additional information to end of application):

Design and install a new fish-passage friendly culvert on FS Road 8501 at Little Gold Creek, a tributary to Boulder Creek near Maxville, in the Beaverhead Deer Lodge National Forest (BVDL). Boulder Creek is a 70-square mile tributary watershed to Flint Creek, draining steep forested lands within the Beaverhead Deer Lodge National Forest, Pintler Ranger District. The Boulder Creek drainage is the only Flint Creek tributary with **viable populations of both bull trout and westslope cutthroat trout**. Little Gold Creek is a three-mile long tributary to Boulder Creek. This project would install a new culvert on USFS Road 8501 on lower Little Gold Creek, opening two miles of this drainage to reconnection with the Boulder Creek native fish populations.

The current culvert on lower Little Gold Creek is undersized, and has a dramatic 3.5-foot drop at its outlet, cutting off all chances of upstream fish passage. Replacing this culvert with an Aquatic Organism Passage (AOP) culvert design, and providing sufficient culvert capacity to pass a 100-year flood event, is a USFS priority project (Pintler Ranger District). The Project will help accomplish the USFS "Conservation Strategy for Bull Trout on USFS lands in Western Montana," and the "Memorandum of Understanding and Conservation Agreement for Westslope Cutthroat Trout and Yellowstone Cutthroat Trout in Montana."

The existing round culvert is 40 feet long and is 60 inches in diameter. This culvert is a fish passage barrier due to its small size, steep slope (6%), and severe drop-off at culvert outlet. This culvert is undersized for flood events, which could damage the stream and this major forest road.

The USFS has begun design calculations for this Project. They propose a new AOP culvert (natural stream channel inside culvert) 60 feet long, 11.5 feet wide and 7.2 feet tall, capable of passing a 100-year flow of 123 cfs. Culvert slope will be approximately 6 percent, similar to the existing channel. Final design is underway by USFS and will be complete by mid-summer 2020. The AOP design will include a stream bed top width of 7-feet, with natural stream bed gravels held in place by eight rock weirs built with 24" angular rock.

The USFS Pintler Ranger District fish biologist invited Clark Fork Coalition (CFC) to participate in this project. The Pintler Ranger District and the CFC have successfully collaborated on several other AOP culvert structure projects from 2011 to 2019. The project will proceed according to the following steps: 1) The USFS completed the survey, fish passage analysis and design of the culvert in house in 2020. 2) The USFS will sign an agreement obligating funding and requiring the CFC to raise additional match funds and provide project management, in coordination with both the Beaverhead Deer Lodge National Forest. 3) The designs will go through review and 124 permitting by Montana FWP, 4) the CFC will prepare a bid package, and advertise for private construction firms to bid on replacing the structure. A qualified contractor will be selected through a competitive process in coordination with the USFS. 5) Once a contract is in place, the CFC will provide oversight of construction, in coordination with the Aquatics and Engineering staff at BDNF.

The Clark Fork Coalition has been working with the USFS, Watershed Restoration Coalition (WRC), Natural Resource Damage Program, FWP, and private landowners to address all the limiting factors for native trout in Boulder Creek watershed since 2011 (4 large projects have been completed, including 2 habitat projects on private land, 1 bridge and one series of new AOP culverts).

This is PART 2 of the Little Gold Creek Future Fisheries Application. The first part was submitted and accepted in June 2020, for \$29,475. This application requests \$10,000 additional to make up for a shortfall in match funds from federal Tri-County RAC funds (reduced from \$40K request to \$30K secured).

- D. Length of stream or size of lake that will be treated (project extent): 100 feet
Length/size of impact, if larger than project extent (e.g. stream miles opened): Two miles

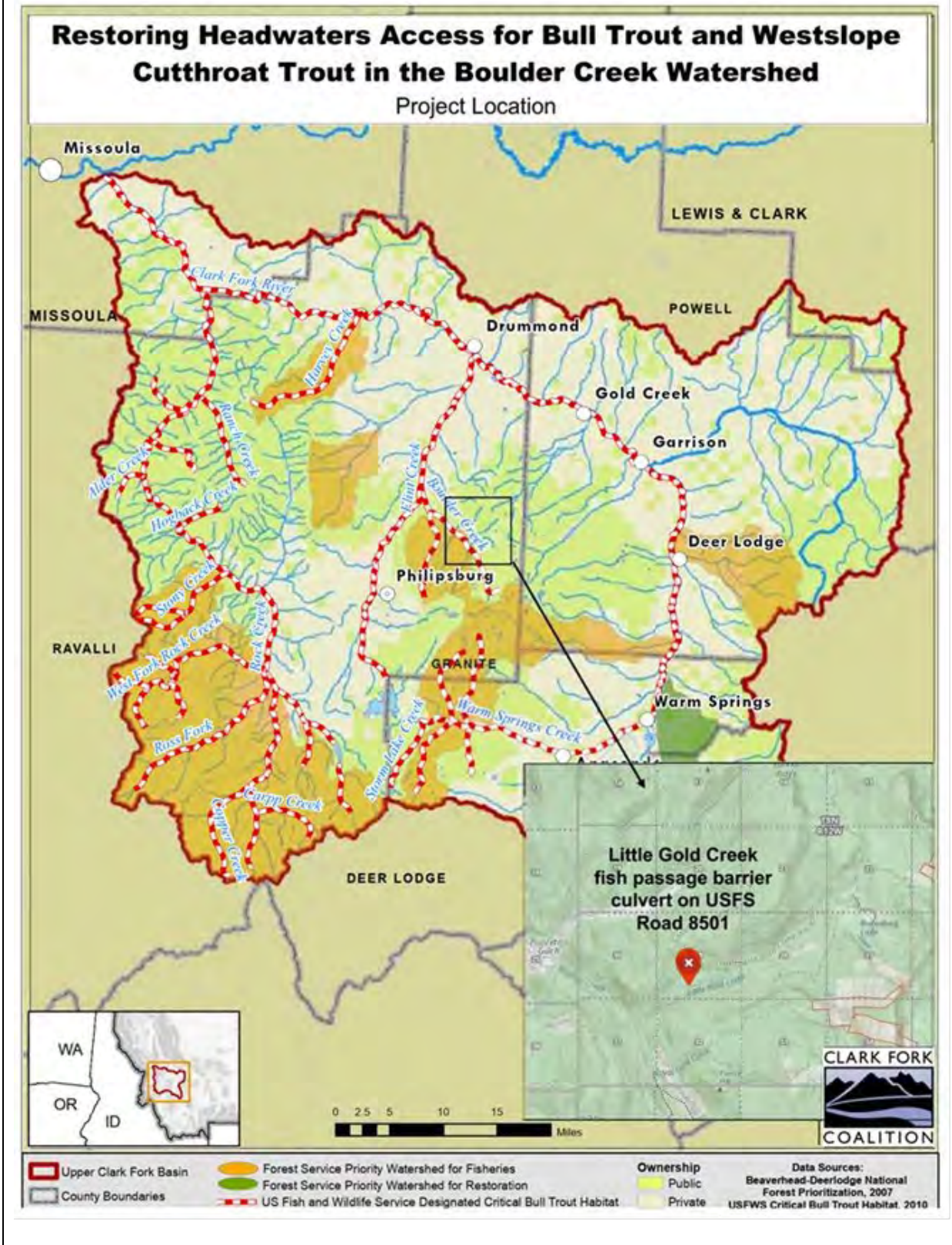
E. Project Budget:

Grant Request (Dollars):	\$ 10,000
Matching Dollars:	<u>\$ 31,702</u>
Matching In-Kind Services:*	<u>\$ 8,520</u>
<i>*salaries of government employees are not considered matching contributions</i>	
Other Contributions (not part of this app)	<u>\$ 29,475</u>
Total Project Cost:	\$ 79,697

- F. **Attach** itemized (line item) budget – see *budget template*

- Insert** or **attach** a project location map showing the project area in relation to a major landmark or town. Please indicate if the project location is on public or private property.
-

MAP OF PROJECT LOCATION (see inset):



H. **Attach** specific project plans (e.g. detailed sketches, plan views [showing location and type of channel modifications], example photographs), current condition photographs, and maps. **If project involves water leasing or water salvage complete and attach a supplemental questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).*

I. **Attach** letters or statements of support. This includes landowner consent, community or public support, and fish biologist support.

J The project agreement includes a 20-year maintenance commitment. Please indicate (yes or no) that you will ensure project protection for 20 years. Discuss your ability to meet this commitment.

Yes No

The USFS Beaverhead Deer Lodge National Forest has maintenance responsibility on the Road 8501 over Little Gold Creek. The USFS is required to maintain this road, including its culverts.

K. **Describe** or **attach** land management & maintenance plans, including changing to grazing regimes, that will ensure protection of the restored area.

The Beaverhead Deer Lodge Forest Management Plan (2008) includes recommendations for improvement and maintenance of fish passage through road culverts in all native fish watersheds.

III. PROJECT BENEFITS (attach additional information to end of application):

A. What species of fish will benefit from this project?

Westslope cutthroat trout and bull trout will benefit from this project. Westslope cutthroat have been sampled several times in this reach, including in summer 2020, and cold-water fish habitat above the culvert appears good. Bull trout were detected by eDNA sampling in the Little Gold Creek drainage by USFS in 2018.

B. How will the project protect or enhance wild fish habitat?

This project will open over 2 miles of excellent high-elevation cold-water habitat to native trout. Montana FWP has documented native trout populations declining and withdrawing upstream as water temperatures increase in western Montana. Little Gold Creek can provide high quality cold-water habitat at over 6000 feet elevation to use by the native fish in the Boulder Creek drainage, essentially providing a cold-water refuge habitat if conditions, particularly stream temperatures, deteriorate downstream.

C. Will the project improve fish populations and/or fishing? To what extent?

The Little Gold Creek channel above the Road 8501 culvert currently has low fish populations. Opening over two miles of high-quality habitat above this culvert will increase access to high-quality habitat, and potentially increase numbers of west-slope cutthroat trout and bull trout. Boulder Creek is the ONLY creek in the Flint Creek drainage that retains a functional bull trout population. Increasing potential habitat for bull trout could be important to that species' survival in the Flint Creek watershed.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?

Small stream fishing for cutthroat trout is available on all USFS land in the drainage. Although Little Gold Creek itself is mostly a steep forested stream, there are segments of Boulder Creek on USFS land near the confluence of Little Gold Creek where fishing for cutthroats is quite viable.

- E. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?

The existing culvert is dramatically undersized for this drainage. The concentration of hydraulic forces during high-flow events has down-cut the stream below the culvert at least 3.5 feet, exacerbating the disconnection between the culvert outlet and the stream channel downstream.

There is a private hydropower intake about 600 yards upstream of the culvert. After a large flood event damaged that facility in 2017, the owner installed some temporary diversion structures which are not fish-friendly, and which need to be upgraded. The USFS is planning to require upgrades to that system, through their Special Use Permit, to facilitate better fish passage.

- F. What public benefits will be realized from this project?

The public will benefit by the expansion of connected, high-quality cold-water habitat for fish and other aquatic life on public lands.

- G. Will the project interfere with water or property rights of adjacent landowners? (explain):

No, there are no property rights or water rights implications.

- H. Will the project result in the development of commercial recreational use on the site? (explain):

No, but there is already significant recreational use of the area, primarily for hunting and fishing on public lands.

- I. Is this project associated with the reclamation of past mining activity?

No.

Each approved project applicant must enter into a written agreement with Montana Fish, Wildlife & Parks specifying terms and duration of the project. The applicant must obtain all applicable permits prior to project construction. A competitive bid process must be followed when using State funds.

IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature: _____



Date: November 25, 2020

Sponsor (if applicable): _____

Submittal: **Applications must be *signed and received before December 1 and June 1 of each year be considered for the subsequent funding period.*** Late or incomplete applications will be rejected.

Mail to: FWP Future Fisheries Fish Management Bureau PO Box 200701 Helena, MT 59620-0701	Email: Future Fisheries Coordinator FFIPFWP@mt.gov (electronic submissions must be signed) For files over 10MB, use https://transfer.mt.gov
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Applications may be rejected if this form is modified.

Little Gold Creek culvert replacement supplement
 BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

005-2021

Both tables must be completed or the application will be returned

PROJECT COSTS					CONTRIBUTIONS			
WORK ITEMS (Itemize by Category)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT	TOTAL COST	FUTURE FISHERIES REQUEST	MATCH (Cash or Services)**	OTHER (Not part of this application)	TOTAL
Personnel***								
Survey	3	crew days	\$500.00	\$ 1,500.00	-	1,500.00		\$ 1,500.00
Design	9	days	\$300.00	\$ 2,700.00	-	2,700.00		\$ 2,700.00
Engineering				\$ -	-			\$ -
Permitting	4	days	\$480.00	\$ 1,920.00	-	1,920.00		\$ 1,920.00
Oversight	12	days	\$480.00	\$ 5,760.00	-	5,760.00		\$ 5,760.00
				\$ -				\$ -
			Sub-Total	\$ 11,880.00	\$ -	\$ 11,880.00	\$ -	\$ 11,880.00
Travel								
Mileage	770	per mile	\$0.58	\$ 442.75		442.75		\$ 442.75
Per diem				\$ -				\$ -
			Sub-Total	\$ 442.75	\$ -	\$ 442.75	\$ -	\$ 442.75
Construction Materials****								
Structure excavation & backfill	500	Cubic Yard (CY)	\$35.00	\$ 17,500.00	-	17,500.00		\$ 17,500.00
Bedding material (furnish & place)	75	CY	\$45.00	\$ 3,375.00	-	-	3,375.00	\$ 3,375.00
Furnish & place riprap (Class 4)	60	CY	\$75.00	\$ 4,500.00	-	-	4,500.00	\$ 4,500.00
10 rock cross vanes furnish & built	40	CY	\$80.00	\$ 3,200.00	-	-	3,200.00	\$ 3,200.00
Crush road aggregate furnished/ compacted	70	CY	\$40.00	\$ 2,800.00	-	-	2,800.00	\$ 2,800.00
137"x87"x60' arch culvert	60	ft	\$260.00	\$ 15,600.00	-	-	15,600.00	\$ 15,600.00
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ 46,975.00	\$ -	\$ 17,500.00	\$ 29,475.00	\$ 46,975.00
Equipment, Labor, and Mobilization								
Trakhoe Excavator	1	days	\$1,400.00	\$ 1,400.00		1,400.00	-	\$ 1,400.00

Little Gold Creek culvert replacement supplement
BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

005-2021

Dump truck	1	days	\$600.00	\$ 600.00	600.00		-	\$ 600.00
Skid steer small	1	days	\$400.00	\$ 400.00	400.00		-	\$ 400.00
Water Diversion & pumping/ erosion control	1	item	\$4,000.00	\$ 4,000.00		4,000.00	-	\$ 4,000.00
Haul and install 137"x87"x60' culvert	1	item	\$9,000.00	\$ 9,000.00	9,000.00		-	\$ 9,000.00
Mobilization	1	item	\$5,000.00	\$ 5,000.00	-	5,000.00		\$ 5,000.00
				\$ -				\$ -
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				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ 20,400.00	\$ 10,000.00	\$ 10,400.00	\$ -	\$ 20,400.00
TOTALS				\$ 79,697.75	\$ 10,000.00	\$ 40,222.75	\$ 29,475.00	\$ 79,697.75

OTHER REQUIREMENTS:

All of the columns in the budget table and the matching contribution table MUST be completed appropriately or the application will be invalid. Please see the example budget sheet for additional clarification.

*Units = feet, hours, inches, etc. Do not use lump sum unless there is no other way to describe the costs.

**Can include in-kind materials. Justification for in-kind labor (e.g. hourly rates used). Do not use government salaries as match. Describe here or in text.

***The Review Panel suggests that design and oversight costs associated with a proposed project not exceed 15% of the total project budget. If design and oversight costs are in excess of 15%, applications must include a justification or minimum of two competitive bids for the cost of undertaking the project.

****The Review Panel recommends a maximum fencing cost of \$1.50 per foot. Additional costs may be the responsibility of the applicant and/or partners.

Additional details: The OTHER column above reflects the Future Fisheries grant approved in summer 2020 for this project. Hence, this request is supplemental, because it is requesting FutFish funds to make up the \$10,000 lost from the RAC grant match in summer 2020 during the citizen panel approval process.

APPLICATION MATCHING CONTRIBUTIONS

(do not include requested funds or contributions not associated with the application)

CONTRIBUTOR	IN-KIND	CASH	TOTAL	Secured? (Y/N)
USFS Beaverhead Deer Lodge	\$ 8,520.00	\$ -	\$ 8,520.00	yes
RAC Grant (USFS federal funds)	\$ -	\$ 30,714.00	\$ 30,714.00	yes
Clark Fork Coalition	\$ -	\$ 988.00	\$ 988.00	yes
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	

Little Gold Creek culvert replacement supplement
 BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

005-2021

	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTALS	\$ 8,520.00	\$ 31,702.00	\$ 40,222.00	

OTHER CONTRIBUTIONS				
(contributions not associated with the application)				
CONTRIBUTOR	IN-KIND	CASH	TOTAL	Secured? (Y/N)
Montana FWP (Future Fisheries June 2020)	\$ -	\$ 29,475.00	\$ 29,475.00	yes
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTALS	\$ -	\$ 29,475.00	\$ 29,475.00	



Future Fisheries
Little Boulder Creek AOP NFS Road 8501.

May 31, 2020

The Beaverhead-Deerlodge National Forest would like to offer our support for Clark Fork Coalition (CFC) Future Fisheries grant proposal for the Little Gold Creek Aquatic Organism Passage (AOP).

Little Gold Creek is a tributary to Boulder Creek on the Pintler Ranger District. The stream contains both resident native westslope cutthroat trout and bull trout. Boulder Creek is considered Critical Habitat for the recovery of the threatened bull trout.

This project will connect the upper reaches of Little Gold Creek with the main stem of Boulder Creek. Past surveying shows that fish are found at low densities above the culvert on NFS Road 8501. Fisheries habitat above the AOP is considered good. Connecting the area with the main stem of Boulder Creek has the potential to populate the reaches above the culvert with bull trout.

Future fisheries founding will greatly increase the opportunity to implant the proposed AOP. The CFC and Pintler Ranger District have had a great relationship contracting and implanting projects. This founding will continue our continued management and enhancement of native fisheries in the upper Clark Fork River Basin.

Sincerely,



Paul Hooper
West Zone Fisheries Biologist
Beaverhead-Deerlodge National Forest

From: Brad Liermann <liermann@blackfoot.net>
Sent: Monday, June 1, 2020 1:00 PM
To: 'McGree, Michelle' <MMcGree@mt.gov>
Subject: RE: Little Gold Creek AOP PROPOSAL

Hey Michelle,

Yes, I am supportive of this project. This culvert is likely a complete barrier and is at least a partial barrier to juvenile WCT. There are a few cutthroat above the barrier but densities are low and do not extend very far above the culvert despite there being excellent fish habitat above. It is uncertain why WCT are not doing better above the barrier, but is likely partially due to the fact that this barrier is in place. There is also a micro-hydro diversion upstream of the culvert that also likely impacts the fishery, but the USFS and Clark Fork Coalition are working on improving that situation too. This project also provides nice cost share with the USFS RAC funds.

Unless I hear differently, this will serve as my letter of support. We will be doing some e-fishing this summer as my data is about 11 years old at this point on Little Gold, but I don't imagine this will change my mind too much on the project. Let me know if you would rather have an official letter and I can draft one this afternoon.

Thanks,
Brad

From: McGree, Michelle <MMcGree@mt.gov>
Sent: Monday, June 1, 2020 7:21 AM
To: Brad Liermann <liermann@blackfoot.net>
Subject: RE: Little Gold Creek AOP PROPOSAL