



FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION

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



I. APPLICANT INFORMATION

A. Applicant Name: Jim Olsen

Mailing Address: 1820 Meadowlark Lane

City: Butte State: MT Zip: 59701

Telephone: 406-533-8451 E-mail: jimolsen@mt.gov

B. Contact Person (if different than applicant): _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____ E-mail: _____

C. Landowner and/or Lessee Name (if different than applicant): USDA Forest Service, Beaverhead Deerlodge National Forest

Mailing Address: 420 Barrett St

City: Dillon State: MT Zip: 59701

Telephone: 406-683-3900 E-mail: _____

II. PROJECT INFORMATION

A. Project Name: Doolittle Creek fish barrier

River, stream, or lake: Doolittle Creek

Location: Township: 1S Range: 14W Section: 28

Latitude: 45.714795 Longitude: -113.339418 *within project (decimal degrees)*

County: Beaverhead

B. Purpose of Project:

The purpose of this project is to conserve and expand a non-hybridized (100% pure) population of westslope cutthroat trout located in the South Fork of Doolittle Creek by constructing a fish barrier in the mainstem of Doolittle Creek downstream of the South Fork and removing the non-native fish upstream.

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

Westslope cutthroat trout (WCT) in the upper Missouri River drainage occupy less than 5% of their historically occupied habitat. Many of the remaining populations are at risk of extirpation due to small population size and the threats of competition, predation and hybridization with non-native trout species.

There are a total of 47 remaining WCT populations in the Big Hole drainage. Of the 47, at least 39 are considered at risk (an additional 5 have unknown population status). An at risk population is one that is not likely to persist over the long-term because of poor habitat, small population size and/or the presence of non-native species. Once a population is extirpated the unique adaptations that have been developed over millennia are lost which could affect the ability of the species as a whole to persist through time. If conservation actions are not taken, more populations will be lost. Projects which restore WCT are necessary to ensure the continued survival of the species in the Big Hole drainage and elsewhere. The restoration goal for WCT east of the Continental Divide (Upper Missouri River Basin upstream from and including the Judith River) is to restore WCT to 20% of the historic distribution (FWP Statewide Fisheries Management Plan 2019). In the Big Hole River drainage where WCT historically occupied approximately 2,141 miles of stream the restoration goal is roughly 400 miles of streams restored to westslope cutthroat trout. The first objective in the Memorandum of Understanding for the Conservation of Cutthroat Trout is to conserve existing non-hybridized populations of WCT in their natal habitat.

Doolittle Creek is located 9 miles northeast of Wisdom, MT. It is home to a native, 100% pure population of westslope cutthroat trout that is isolated to upper reaches of the South Fork of the stream (Figure 1). Brook trout are also present in the stream and have eliminated the native cutthroat in the rest of the drainage. Brook trout are also sympatric with the remaining cutthroat in the South Fork and it is likely only a matter of time before the cutthroat trout in the South Fork will be replaced by brook trout if conservation actions are not taken.

The goal of this project is to conserve the native cutthroat in Doolittle Creek through the construction of a fish barrier downstream of the confluence of the North Fork Doolittle Creek (Figure 1). The barrier would be constructed of treated lumber (See attached design drawing) like the barrier installed on Bender Creek in 2017 (Figure 2). The pond created upstream of the barrier would be small (0.09 acres) due to the higher gradient nature of the stream and the incised nature of the floodplain in this area. Fill and riprap for the barrier would be obtained on site and from adjacent hill slopes along the Doolittle Creek Road. Riprap would be placed downstream of the structure and a riprap apron will be placed in the bed of the stream immediately downstream of the structure to prevent undercutting. The expected lifespan of a treated wood fish barrier is 30-40 years. Once the fish barrier is in place westslope cutthroat trout would be salvaged from the stream and brook trout would be removed using rotenone. After brook trout are removed the native westslopes would be released back to Doolittle Creek. The amount of habitat occupied by westslope cutthroat trout in Doolittle Creek will increase from approximately 1 mile to 11 miles and this project will aid in reaching the overall goal of restoring 400 miles of stream for cutthroat trout in the Big Hole.

D. Length of stream or size of lake that will be treated: 11 Miles

E. Project Budget:

Grant Request (Dollars):	\$	\$10,000		
Matching Dollars:	\$	\$15,000		
Matching In-Kind Services:*	\$			
<i>*salaries of government employees <u>are not</u> considered matching contributions</i>				
Total Project Cost:	\$	\$25,000		

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

G. **Attach** specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support and fish biologist support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete a *supplemental questionnaire*. (<http://fwp.mt.gov/fwpDoc.html?id=36110>)

H. **Attach** land management & maintenance plans that will ensure protection of the reclaimed area.

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

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

Westslope cutthroat trout

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

The project will secure 11 miles of stream for native cutthroat. It will expand a population of cutthroat trout that is now isolated to approximately 1 mile of stream to 11 miles of stream in 3 different forks which will greatly increase the likelihood the population will persist through time. An expanded cutthroat populations in Doolittle Creek will also allow for its future use for conservation of other populations either through transferring live fish or collection of eggs.

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

The project will greatly expand the amount of occupied habitat for westslope cutthroat trout in Doolittle Creek. The creek is entirely on public lands and has a road that parallels much of the stream. The stream is also large enough that it does receive some angling.

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

This project will increase the opportunity to catch wild, native cutthroat but the overall fishing opportunity for wild trout will remain the same because there are brook trout present throughout most of the stream.

E. The project agreement includes a 20-year maintenance commitment. Please discuss your ability to meet this commitment.

Past experience has shown that these fish barrier structures require little maintenance. However, annual inspections will be made to ensure the barrier is functioning as designed and that debris is not being caught in the throat of the structure.

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

The habitat in Doolittle Creek is in very good condition on the National Forest. Because it is home to one of the few remaining populations of WCT, the grazing system on the stream is one of only late season grazing (Sept and Oct) and the stock density is low. Further, the majority of the stream on the forest is a moderate gradient stream channel with larger substrates and mostly forest type riparian vegetation. This kind of stream is generally naturally very resilient as it relates to potential grazing impacts. There are no other land uses in the drainage that are significantly impacting aquatic habitat at this time.

G. What public benefits will be realized from this project?

The public benefits by conserving a native fish species in its native habitat. The cumulative effect of such projects is that westslope cutthroat trout populations will increase across the landscape and thus not warrant listing under the Endangered Species Act.

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

No. No diversions are present on the National Forest in Doolittle Creek and all of the project is located on public ground.

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

No.

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

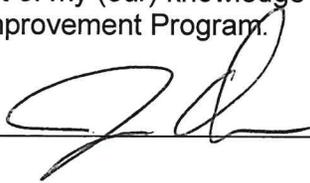
No.

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: _____

11-22-19

Sponsor (if applicable): _____

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

Mail to: Montana FWP
Fish Management Bureau
PO Box 200701
Helena, MT 59620-0701

Email: Michelle McGree
mmcgree@mt.gov
(electronic submissions must be signed)
For files over 10MB, use <https://transfer.mt.gov>

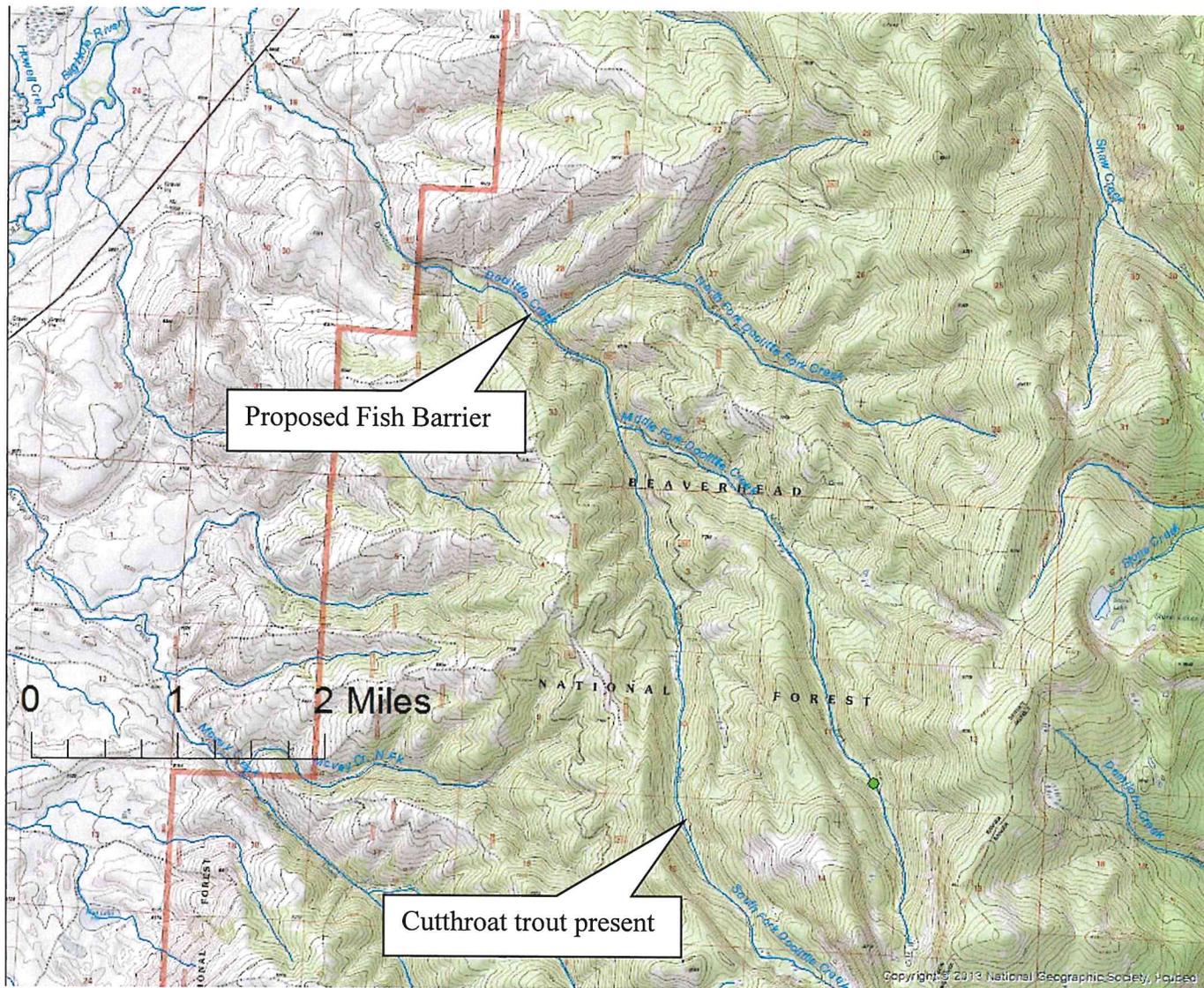


Figure 1. Map of Doolittle Creek showing the location of the proposed fish barrier and the location of the existing WCT in the drainage.

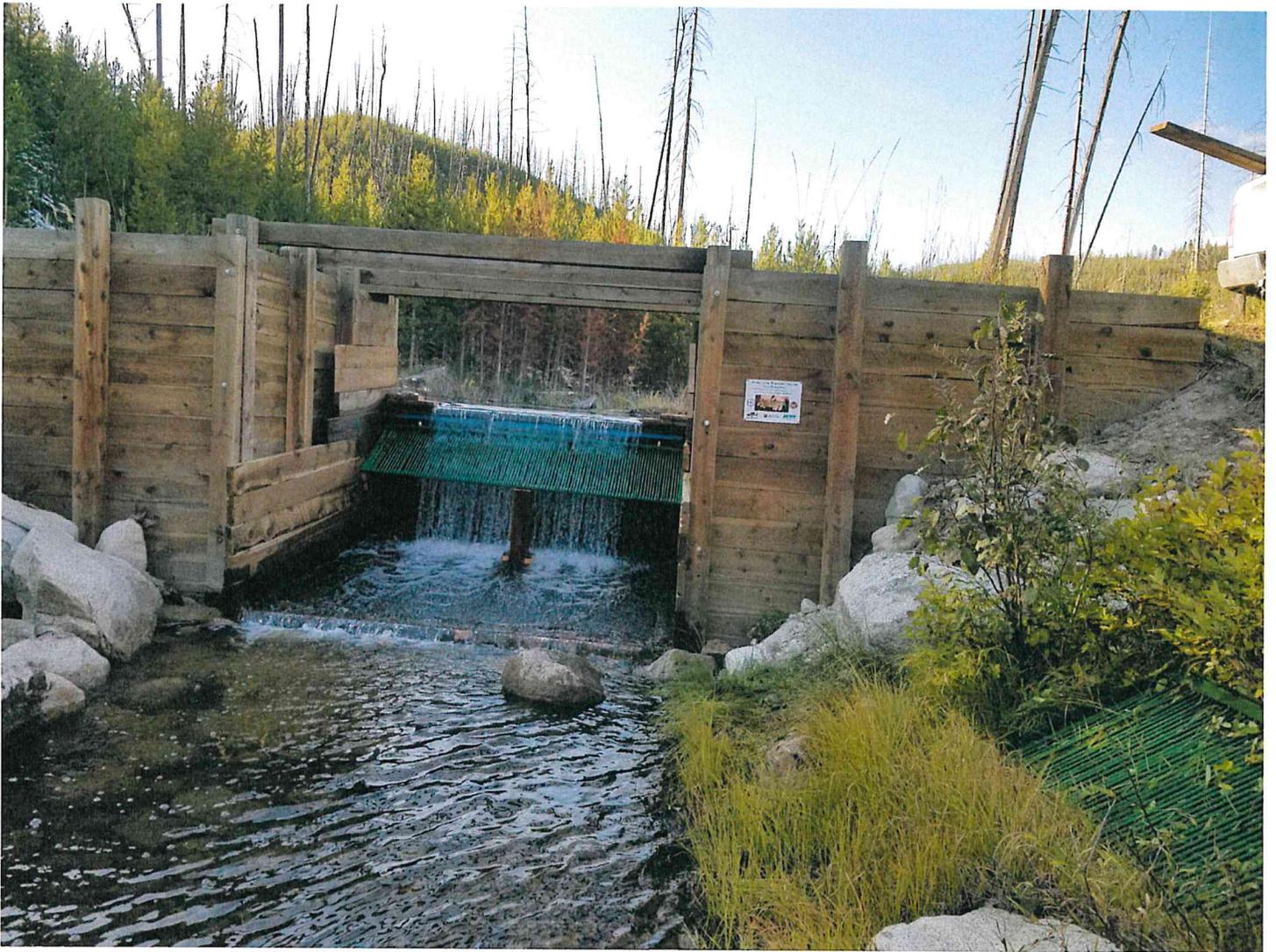


Figure 2. Bender Creek fish barrier constructed in 2017 which would be similar to the barrier proposed on Doolittle Creek.

Doolittle Creek fish barrier
BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

003-2020

Both tables must be completed or the application will be returned

WORK ITEMS (ITEMIZE BY CATEGORY)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT	TOTAL COST	CONTRIBUTIONS			
					FUTURE FISHERIES REQUEST	IN-KIND SERVICES**	IN-KIND CASH	TOTAL
Personnel***								
Survey				\$ -				\$ -
Design				\$ -				\$ -
Engineering				\$ -				\$ -
Permitting				\$ -				\$ -
Oversight				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -
Travel								
Mileage				\$ -				\$ -
Per diem				\$ -				\$ -
			Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -
Construction Materials****								
Treated Lumber and additional riprap				\$ 7,926.80	5,000.00		2,926.80	\$ 7,926.80
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ 7,926.80	\$ 5,000.00	\$ -	\$ 2,926.80	\$ 7,926.80
Equipment and Labor								
Equip: Getting Equip, Rock and Materials to site, Dewatering site and excavator time installing structure				\$ 7,581.00	3,000.00		4,581.00	\$ 7,581.00

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Labor: Travel time, building structure, dewatering, intallaiton (includes additnoial time for tree removal from creek			\$ 8,246.00	2,000.00		6,246.00	\$ 8,246.00
			\$ -				\$ -
Oversight/admin			\$ 1,300.00			1,300.00	\$ 1,300.00
			\$ -				\$ -
			\$ -				\$ -
		Sub-Total	\$ 17,127.00	\$ 5,000.00	\$ -	\$ 12,127.00	\$ 17,127.00
Mobilization							
			\$ -				\$ -
			\$ -				\$ -
			\$ -				\$ -
			\$ -				\$ -
		Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -
TOTALS			\$ 25,053.80	\$ 10,000.00	\$ -	\$ 15,053.80	\$ 25,053.80

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 for calculations). Describe here or in text.

Reminder: Government salaries cannot be used as in-kind match

***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 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.

MATCHING CONTRIBUTIONS (do not include requested funds)

CONTRIBUTOR	IN-KIND SERVICE	IN-KIND CASH	TOTAL	Secured? (Y/N)
FFIP	\$ -	\$ 10,000.00	\$ 10,000.00	
SW MT RAC (US Forest Servcie funding)	\$ -	\$ 5,000.00	\$ 5,000.00	
George Grant Chapter TU	\$ -	\$ 5,000.00	\$ 5,000.00	

Doolittle Creek fish barrier
BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

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MT Trout Foundation	\$ -	\$ 5,000.00	\$ 5,000.00	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTALS	\$ -	\$ 25,000.00	\$ 25,000.00	

