FUTURE FISHERIES IMPROVEMENT PROGRAM
GRANT APPLICATION

(Please fill in the highlighted areas)
all sections (IA, IB, IC, etc.) must be addressed or the application will be considered invalid

I. APPLICANT INFORMATION

A. Applicant Name: Clark Fork Coalition

B. Mailing Address: Box 7593

C. City: Missoula State: MT Zip: 59807

Telephone: 406-396-7716 E-mail: will@clarkfork.org

D. Contact Person: William McDowell

Address if different from Applicant:

City: State: Zip:

Telephone: E-mail:

E. Landowner and/or Lessee Name (if other than Applicant): US Forest Service, Pintler Ranger District, BVDL NF

Mailing Address: 88 Business Loop

City: Philipsburg State: MT Zip: 59858

Telephone: 406-859-3211 E-mail: phooper@fs.fed.us

II. PROJECT INFORMATION*

A. Project Name: North Fork Cottonwood AOP Replacement

River, stream, or lake: North Fork Cottonwood Creek

Location: Township: 7N Range: 8W Section: 15
Latitude: 46.3652 Longitude: -112.5829 *within project (decimal degrees)*

County: Powell

B. Purpose of Project:

The purpose of this Project is to improve headwaters habitat connectivity for westslope cutthroat trout in the Cottonwood Creek drainage near Deer Lodge, Montana. The project will remove and replace a fish passage barrier culvert which is located at the bottom of the North Fork of Cottonwood Creek. The new culvert will allow genetically tested pure westslope cutthroat trout to access upstream of the culvert, and maintain a single, connected population throughout the three forks of Cottonwood Creek in the Beaverhead Deer Lodge National Forest, enhancing their long-term population viability.

C. Brief Project Description:

The project will remove and replace a fish passage barrier culvert which is located at the bottom of the North Fork of Cottonwood Creek. Upstream fish movement into the entire North Fork is constrained by a long, steep, narrow and under-sized culvert (4'x 5.5' squash CMP) with an outlet drop-off. The USFS has prioritized this culvert for upgrades to enhance native fish passage. They have designed a new structure for aquatic organism passage at this site with a proposed 13-foot wide structural plate arch and a nine-foot wide natural channel inside the arch, matching the natural bankfull width. The Project is a collaboration between Clark Fork Coalition and US Forest Service.

Fish passage barriers to habitat connectivity are a key issue in the Upper Clark Fork basin, and certainly in Cottonwood Creek. The US Forest Service rated this existing culvert on Forest Road 1504 as the number one priority fish passage barrier in the entire East Deer Lodge landscape (40,000 acres). This culvert fragments habitat connectivity for the native westslope cutthroat trout population in the Cottonwood Creek headwaters. Aquatic habitat measurements by Montana Fish Wildlife and Parks (FWP) fish biologists indicate that the North Fork of upper Cottonwood has exceptionally high fish habitat quality (97% of potential).

Conservation populations of westslope cutthroats in the Upper Clark Fork drainage tend to be small, isolated headwater populations of limited geographic extent. The Cottonwood Creek headwaters westslope cutthroat habitat is an excellent stronghold: it is the largest occupied habitat patch in the East Deer Lodge landscape; it includes higher elevations, and colder water, and it includes four interconnected tributaries of Cottonwood Creek with 16 miles of high-quality occupied habitat. Cottonwood includes a remnant fluvial population of westslope cutthroats, as confirmed by FWP radio-tagging in 2010. Fluvial, or migratory cutthroat populations which use the river mainstem and spawn in tributaries, are rare in the Upper Clark Fork. This Project will protect and enhance this stronghold for genetically pure cutthroat by reconnecting the North Fork population to the rest of the drainage.

This Project is part of a larger native fisheries restoration initiative in the entire 42-square mile Cottonwood drainage. This Project expands an ongoing fish habitat partnership effort between FWP, NRDP, CFC and Watershed Restoration Coalition from private lands in the lower watershed up into the US Forest Service controlled headwaters. Cottonwood Creek is a Fish Key watershed in the Beaverhead Deer Lodge National Forest's 2007 Forest Plan, which ensures that protection of the existing high-quality native fish habitat is a top priority for federal land managers in this drainage.

D. Length of stream or size of lake that will be treated: Three (3) miles

E. Project Budget:

Grant Request (Dollars): $ 37,710

Contribution by Applicant (Dollars): $ 0 In-kind $ 800
(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): $ 73,950 In-kind $ 15,500
(attach verification - See page 2 budget template)

Total Project Cost: $ 127,960

F. Attach itemized (line item) budget – see 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 supplemental questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).

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

III. PROJECT BENEFITS*

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

Westslope cutthroat trout, some brook trout (less common than cutthroats).

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

This Project will enhance a native trout stronghold by reconnecting some of the highest-quality cold water habitat in the entire drainage to the rest of the 42-square mile drainage.

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

We expect improvements in resident westslope cutthroat trout populations, and potential reconnection of this area to fluvial westslope cutthroat runs that still use Cottonwood Creek.

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

Public fishing in the National Forest can benefit from the improved habitat by increasing resident populations of westslope cutthroat in this publicly accessible area. An old road runs up the North Fork valley allowing access to this high-quality fish habitat. If fluvial westslope cutthroats use this area, then fishing could benefit all the down to and including the Upper Clark Fork river.

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

The US Forest Service has ongoing maintenance responsibilities and a maintenance program for Road 1504, including culverts.

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

Habitat was degraded when the original under-sized culvert caused fish passage problems. This culvert will be removed and replaced by a much larger culvert specifically designed to enhance fish passage for native trout (stream simulation design).

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

The public will benefit from an improved resident fishery in NF of Cottonwood Creek, and a potentially improved fishery downstream all the way to the Clark Fork River.

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

No, this Project is on US Forest Service property, as is adjacent land.

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

No, the road up the North Fork of Cottonwood Creek is generally gated.

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

No.

Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.

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: Nov. 30, 2016

Sponsor (if applicable):

***Highlighted boxes will automatically expand.**

Mail To: **Montana Fish, Wildlife & Parks**
Habitat Protection Bureau
PO Box 200701
Helena, MT 59620-0701

E-mail To: **Michelle McGree**
mmcgree@mt.gov
(electronic submissions MUST be signed)

Incomplete or late applications will be rejected and returned to applicant.
Applications may be rejected if this form is modified.

*****Applications may be submitted at anytime, but must be signed and received by the Future Fisheries Program Officer in Helena before December 1 and June 1 of each year to be considered for the subsequent funding period.*****

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

pumps	3	units	$400.00	$	1,200.00		1,200.00				$	1,200.00
			Sub-Total	$	30,850.00	$	28,650.00	$	-	$	2,200.00	$ 30,850.00
Mobilization												
All equipment				$	4,500.00		1,500.00				3,000.00	$ 4,000.00
				$	-							$ -
			Sub-Total	$	4,500.00	$	1,500.00	$	-	$	3,000.00	$ 4,000.00
			TOTALS	$	127,960.00	$	37,710.00	$	16,300.00	$	73,950.00	$ 127,460.00

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)
USFS-Beaverhead Deer Lodge NF	$ 15,500.00	$ -	$ 15,500.00	yes
Clark Fork Coalition	$ 800.00	$ -	$ 800.00	yes
Tri-County RAC (USFS)	$ -	$ 43,950.00	$ 43,950.00	yes
Western Native Trout Initiative	$ -	$ 30,000.00	$ 30,000.00	no (applied 2016)
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
TOTALS	$ 16,300.00	$ 73,950.00	$ 90,250.00	

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

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				$ 3,000.00	500.00	2,500.00		$ 3,000.00
Design								$ -
Engineering				$ 13,000.00		13,000.00		$ 13,000.00
Permitting				$ 400.00	400.00			$ 400.00
Oversight				$ 1,600.00	800.00	800.00		$ 1,600.00
				$ -				$ -
			Sub-Total	$ 18,000.00	$ 1,700.00	$ 16,300.00	$ -	$ 18,000.00
Travel								
Mileage				$ 200.00	200.00			$ 200.00
Per diem				$ -				$ -
			Sub-Total	$ 200.00	$ 200.00	$ -	$ -	$ 200.00
Construction Materials** **								
13' span structural plate arch	78	feet	$370.00	$ 28,860.00	5,660.00		23,200.00	$ 28,860.00
precast concrete culvert footing	158	feet	$185.00	$ 29,230.00			29,230.00	$ 29,230.00
crushed aggregate	100	cubic yards	$20.00	$ 2,000.00			2,000.00	$ 2,000.00
geocell abutment stabilization	108	square yards	$65.00	$ 7,020.00			7,020.00	$ 7,020.00
18-24" rock for weirs	20	cubic yards	$85.00	$ 1,700.00			1,700.00	$ 1,700.00
class 5 riprap	80	cubic yards	$70.00	$ 5,600.00			5,600.00	$ 5,600.00
			Sub-Total	$ 74,410.00	$ 5,660.00	$ -	$ 68,750.00	$ 74,410.00
Equipment and Labor								
Trakhoe excavator w/ thumb	10	days	$1,600.00	$ 16,000.00	16,000.00		-	$ 16,000.00
Dump truck	4	days	$800.00	$ 3,200.00	3,200.00			$ 3,200.00
D-7 Dozer	5	days	$900.00	$ 4,500.00	4,500.00			$ 4,500.00
assembly culvert	1	days	$1,500.00	$ 1,500.00	1,500.00			$ 1,500.00
vibrating roller compacter	3	days	$750.00	$ 2,250.00	2,250.00			$ 2,250.00
compaction testing	2	lump	$2,200.00	$ 2,200.00	-		2,200.00	$ 2,200.00

USDA United States Department of Agriculture
Forest Service
Beaverhead-Deerlodge National Forest
Pintler Ranger District
88 Business Loop
Philipsburg, MT 59858
406-859-3211

File Code: 2600
Date: November 28, 2016

Michelle McGree
Montana Fish Wildlife and Parks
Habitat Protection Bureau
PO Box 200701
Helena, MT 59620-0701

Dear Future Fisheries:

The Beaverhead-Deerlodge National Forest has a Master Participating Agreement for cooperation with the Clark Fork Coalition (CFC) and we have had a successful history of partnership on past projects. This letter is in regards to a proposed project by the CFC for the North Fork Cottonwood AOP Culvert Replacement project. I would like to express my support for this project and ask your organization for partnership on this culvert replacement which is a top priority for our ongoing East Deer Lodge Valley Landscape Project (EDLV).

Cottonwood Creek supports the largest conservation population of pure westslope cutthroat trout and is the only Fish Priority Watershed on the east side of the Deer Lodge valley. Fragmentation of native fish populations is an issue here. The North Fork contains some of the best trout habitat in the Cottonwood Creek drainage. This AOP structure will re-connect this important tributary with the rest of the stream allowing the passage of genetics throughout the drainage. Cottonwood is also the only major Deer Lodge valley tributary which maintains a fluvial (migratory) cutthroat run, with potential to recruit juvenile trout to the Clark Fork River. Hence this watershed provides a very good conservation area for resident westslope cutthroats on the Forest and also a potential recruitment area for fluvial native fish to the Clark Fork River.

However, over three miles of high-quality stream habitat in the North Cottonwood Creek are cut off from upstream fish movements and migration by a fish barrier culvert on Forest Road 1504 near the bottom of the watershed. The replacement of this culvert with an aquatic organism passage structure is the NUMBER ONE PRIORITY for aquatic restoration in the whole East Deer Lodge Landscape Project.

Please know that this Project is of major interest to the district and forest fisheries program; however, current funding is not commensurate with restoration needs and implementation of the EDLV project Record of Decision. Funding help from the Future Fisheries would be a tremendous value to the watershed and the resident and fluvial westslope cutthroat trout.

If you have any questions regarding this project please contact Paul Hooper, District Fisheries Biologist, at (406) 859-3211.

Montana Fish, Wildlife & Parks

November 28, 2016

Montana Fish, Wildlife & Parks
Future Fisheries Program, Attn: Michelle McGree
PO Box 200701
Helena, MT 59620

RE: Support for the North Fork Cottonwood Creek AOP Culvert Replacement Project.

Michelle:

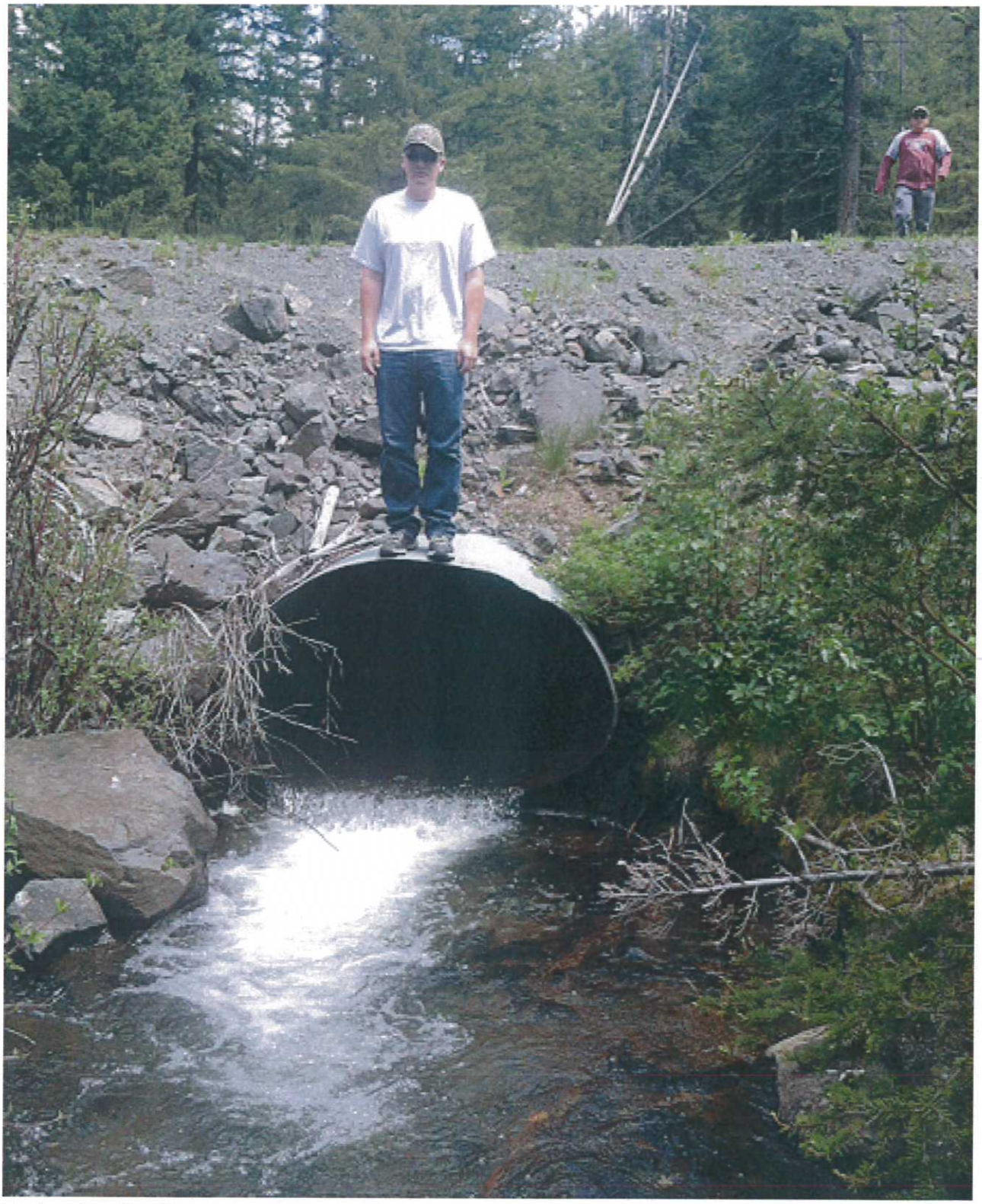
As the fisheries biologist for the Upper Clark Fork basin, I would like to express my support for the proposed North Fork Cottonwood Creek AOP Culvert Replacement project. This project will replace a priority fish barrier in the 42-square mile Cottonwood Creek drainage, and enhance a conservation population of westslope cutthroat trout by reconnecting over three miles of high-value fish habitat to the mainstem of the creek.

Cottonwood Creek and its three forks support the largest conservation population of pure westslope cutthroat trout on the east side of the Deer Lodge valley. Cottonwood Creek is an FWP priority tributary for fisheries restoration in the Upper Clark Fork basin. Cottonwood Creek is also one of few Deer Lodge valley tributaries that maintain a fluvial (migratory) cutthroat run, with potential to recruit fish to the Clark Fork River. I believe that investment in fish passage in the upper Cottonwood Creek drainage will enhance connectivity for this population, and bolster the long-term resilience of westslope cutthroat trout in the upper Clark Fork basin. Thank you for consideration of this proposal.

Sincerely,

Jason Lindstrom
Fisheries Biologist
Montana Fish, Wildlife & Parks
P.O. Box 24
Anaconda, MT 59711

Phone: (406) 529-8058
Email: jlindstrom@mt.gov



Outlet of 64"x43" CMP arch pipe on USFS Road 1504 near Deer Lodge, in June, 2016.