# FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION

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

## I. APPLICANT INFORMATION

A. Applicant Name: Karen Knudsen - Clark Fork Coalition

Mailing Address: PO Box 7593 Missoula, MT 59807

City: Missoula State: MT Zip: 59807

Telephone: 406-543-0539 E-mail: karen@clarkfork.org

B. Contact Person (if different than applicant): Katie Racette – Clark Fork Coalition

Address: PO Box 7593 Missoula, MT 59807

City: Missoula State: MT Zip: 59807

Telephone: 406-214-8933 E-mail: katie@clarkfork.org

C. Landowner and/or Lessee Name (if different than applicant): Jacob Wustner

Mailing Address: 10925 Miller Creek Road, Missoula, MT 59803

City: Missoula State: MT Zip: 59803

Telephone: (406) 370-9089 E-mail: Jacob.wustner@gmail.com

## II. PROJECT INFORMATION

A. Project Name: Bear Run- Miller Creek Stream Restoration

River, stream, or lake: Miller Creek

Location: Township: 12N Range: 19W Section: 26

Latitude: -113.953686 Longitude: 46.775458 *within project (decimal degrees)*

County: Missoula County

B. Purpose of Project:

The purpose of this project is to restore riparian integrity, enhance channel form and instream habitat complexity, facilitate floodplain access, and promote bank and channel stability on Miller Creek. These actions are expected to increase trout carrying capacity and population resilience. Actions are also intended to reduce sediment inputs and moderate stream temperatures on Miller Creek through restoration of the riparian corridor.

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

The Clark Fork Coalition and project partners are implementing a restoration project on Miller Creek that improves natural stream function, enhances fish habitat and addresses the creek's TMDLs for temperature and sediment. Miller Creek is located in Missoula County, and flows west for 18 miles from the Sapphire Mountains to its confluence with the Bitterroot River near the city of Missoula. The watershed encompasses 48 square miles and supports a variety of land uses, from silviculture and agriculture to residential subdivisions. This project builds upon other previous and ongoing work in adjacent stream reaches.

The Bear Run- Miller Creek project represents a partnership among project managers, a willing private landowner and natural resource management agencies. The project, near the confluence of Bear Run and Miller Creek, will address a series of impairments that limit fishery and water quality potential. Future Fisheries was a partner on successful projects on the upstream Spooner Creek Ranch and we anticipate similar improvements on this project that benefit native Westslope cutthroat trout and other species.

The channel in the project reach is confined along the south side of the valley, and much of this section is characterized by a deeply incised channel (8-10 ft) with active lateral erosion. Channel and fisheries habitat issues include a loss of connectivity between the channel and floodplain, increased fine sediment delivery to the channel, reduced aquatic habitat diversity, and reduced riparian vegetation and cover - all of which contribute to overall degraded conditions in the project area.

In order to improve conditions in this reach and the overall stream system, CFC, Geum Environmental Consulting, private landowners, and project partners collaborated in project design to address the aforementioned limiting factors, improve fish carrying capacity, and mitigate riparian, temperature, sediment, and aquatic resource concerns. Specific project components include diversifying channel plan form and realigning it away from the eroding banks, grading and elevation controls to increase floodplain connectivity, large wood/debris matrix installations and other features to increase instream habitat complexity, and large scale riparian planting (with fencing) to facilitate recovery of a native riparian community. Overall, the project is designed to promote riparian recovery, floodplain connection, and increased habitat complexity that resembles unimpacted reference reach conditions.

D. Length of stream or size of lake that will be treated (project extent): 2200 feet

Length/size of impact, if larger than project extent (e.g. stream miles opened): 8 miles

E. Project Budget:

| | | |
|---|---|---|
| **Grant Request (Dollars):** | **$** | **39,500** |
| Matching Dollars: | **$** | **89,500** |
| Matching In-Kind Services:* | **$** | **6,400** |

**salaries of government employees are not considered matching contributions*

| | | |
|---|---|---|
| Other Contributions (not part of this app) | **$** | **0** |
| **Total Project Cost:** | **$** | **129,000** |

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

G. **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.

Please see attached map.

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 [x] No [ ]

The landowner has indicated he is committed to this project, including land management changes that correct impacts associated with previous owners. This commitment includes installation of livestock exclosure fencing to protect riparian improvements/investments, donation of materials for construction, and support of monitoring and maintenance requirements. CFC will have a signed landowner agreement formalizing these commitments for a 20 year period before starting project implementation.

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

The landowner is using his property as a small-scale farm and hopes to seek organic certification in the future. He has bees, gardens, and plans to have a few livestock in the future. In order to protect the project from potential future impacts from livestock, we are installing a hardened crossing/water gap and riparian fence as part of this project.

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

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

Upper Miller Creek and its tributaries support Westslope cutthroat trout and brook trout. *Oncorhynchus s*pp. populations have a high Westslope cutthroat trout genetic contribution, with some tributary populations still testing ‘pure’ (nonhybridized)

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

The project will enhance wild fish habitat by:

- Increasing connectivity between the channel and the floodplain.
- Increasing width and quality of riparian corridor, with enhanced woody vegetative cover.
- Enhancing instream habitat complexity and cover
- Protecting the stream corridor, channel and overall investment from future impacts
- Reducing fine sediment delivery to the channel with enhanced buffer and channel stability.

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

Miller Creek is one of three primary tributaries within the lower Bitterroot River system that provide trout recruitment to the fishery. Although Miller Creek is primarily a stream-resident, wild trout fishery in middle and upper reaches with intermittency in lower reaches, it does provide recruitment to the river during spring high flow periods. The lower Bitterroot River is a recruitment-limited fishery with intense fishing pressure (Ladd Knotek,FWP).

Middle reaches of the stream where this project takes place are also a local fishery resource in terms of anticipated high trout densities and high conservation value for native cutthroat trout. Connection of these projects/reaches with important river reaches will only improve as projects are completed and connectivity is restored.

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

This project will increase trout carrying capacity in an upper reach of main stem Miller Creek. Through this project and those already completed and planned in Miller Creek, we hope to increase recruitment to the Bitterroot River and enhance opportunity for the thousands of anglers that recreate there.

As mentioned above, there is also a local fisheries benefit as trout abundance/carrying capacity is significantly increased in project reaches similar to that proposed.

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

Past land management and channel manipulation resulted in a modified stream and riparian environment. These changes manifested in reduced trout densities, simplified habitat, increased sediment loads and an elevated temperature regime. Project objectives and planned treatments described above directly address these impacts, in concert with changes in land management.

With changes in land ownership and management, many of the current and potential impacts have been reduced and opportunities for restoration have emerged. We hope that this project and adjacent work in the upper watershed will collectively improve conditions for fisheries and concurrently address other impairments (e.g., temperature and sediment TMDLs).

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

Public benefits include increased fish carrying capacity, improved water quality, increased instream habitat and riparian habitat complexity benefitting a range of wildlife species, enhanced trout recruitment and fishing opportunity on the Bitterroot River.

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

No. This project will not interfere with the water supply, water rights, or property rights of adjacent landowners. There are no water rights issues involved with this project.

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

No, there is no planned development of commercial recreational use at this project site.

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: Karen Knudsen Date: 5/26/2021

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: | FWP Future Fisheries<br>Fish Habitat Bureau<br>PO Box 200701<br>Helena, MT 59620-0701 | Email: | Future Fisheries Coordinator<br>FWPFFIP@mt.gov<br>(electronic submissions must be signed)<br>For files over 10MB, use https://transfer.mt.gov |

*Applications may be rejected if this form is modified.*

**BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS**

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 | 1 | LS | $5,901.14 | $ 5,901.14 | | 5,901.14 | | $ 5,901.14 |
| Design | 1 | LS | $10,045.85 | $ 10,045.85 | | 10,045.85 | | $ 10,045.85 |
| Engineering | 1 | LS | $8,087.76 | $ 8,087.76 | | 8,087.76 | | $ 8,087.76 |
| Permitting | 1 | LS | $4,010.25 | $ 4,010.25 | | 4,010.25 | | $ 4,010.25 |
| Oversight | 1 | LS | $10,000.00 | $ 10,000.00 | | 10,000.00 | | $ 10,000.00 |
| | | | | $ - | | | | $ - |
| | | | Sub-Total | $ 38,045.00 | $ - | $ 38,045.00 | $ - | $ 38,045.00 |
| **Travel** | | | | | | | | |
| Mileage | 500 | mile | $0.55 | $ 275.00 | | 275.00 | | $ 275.00 |
| Per diem | | | | $ - | | | | $ - |
| | | | Sub-Total | $ 275.00 | $ - | $ 275.00 | $ - | $ 275.00 |
| **Construction Materials****** | | | | | | | | |
| Trees/rootwads | 50 | Each | $100.00 | $ 5,000.00 | | 5,000.00 | | $ 5,000.00 |
| Rock (6 in) | 75 | CY | $50.00 | $ 3,750.00 | | 3,750.00 | | $ 3,750.00 |
| Rock (24-36") | 50 | each | $38.00 | $ 1,900.00 | | 1,900.00 | | $ 1,900.00 |
| containerized woody plants | 80 | each | $3.85 | $ 308.00 | | 308.00 | | $ 308.00 |
| Native seed | 1 | LS | $500.00 | $ 500.00 | | 500.00 | | $ 500.00 |
| Exclosure Fencing | 650 | linear ft | $2.50 | $ 1,625.00 | | 1,625.00 | | $ 1,625.00 |
| Riparian Fencing | 3300 | linear ft | $2.50 | $ 8,250.00 | 4,500.00 | 3,750.00 | | $ 8,250.00 |
| | | | | $ - | | | | $ - |
| | | | | $ - | | | | $ - |
| | | | Sub-Total | $ 21,333.00 | $ 4,500.00 | $ 16,833.00 | $ - | $ 21,333.00 |
| **Equipment, Labor, and Mobilization** | | | | | | | | |
| Water management | 1 | LS | $2,000.00 | $ 2,000.00 | | 2,000.00 | | $ 2,000.00 |
| Collect willow cuttings | 12630 | each | $0.80 | $ 10,104.00 | | 10,104.00 | | $ 10,104.00 |
| Install plants | 1 | LS | $1,000.00 | $ 1,000.00 | | 1,000.00 | | $ 1,000.00 |
| Grading and structures (see attachment for breakout) | 1 | LS | $46,893.00 | $ 46,893.00 | 35,000.00 | 11,893.00 | | $ 46,893.00 |
| Install exclosures | 1 | LS | $600.00 | $ 600.00 | | 600.00 | | $ 600.00 |

**BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Harvest/Transport trees/rootwads | 1 | LS | $3,000.00 | $ 3,000.00 | | 3,000.00 | | $ 3,000.00 |
| Mobilization | 1 | LS | $5,750.00 | $ 5,750.00 | | 5,750.00 | | $ 5,750.00 |
| | | | | $ - | | | | $ - |
| | | | | $ - | | | | $ - |
| | | | | $ - | | | | $ - |
| | | | | $ - | | | | $ - |
| | | | | $ - | | | | $ - |
| | | | Sub-Total | $ 69,347.00 | $ 35,000.00 | $ 34,347.00 | $ - | $ - |
| | | | **TOTALS** | $ 129,000.00 | $ 39,500.00 | $ 89,500.00 | $ - | $ 59,653.00 |

**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). 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:

## APPLICATION MATCHING CONTRIBUTIONS

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

| CONTRIBUTOR | IN-KIND | CASH | TOTAL | Secured? (Y/N) |
|---|---|---|---|---|
| **MT DEQ 319** | $ - | $ 110,000.00 | $ 75,600.00 | Y |
| **Westslope Chapter Trout Unlimited** | $ - | $ 5,000.00 | $ 5,000.00 | N |
| **Landowner in-kind (trees/rootwads)** | $ 5,000.00 | $ - | $ 5,000.00 | Y |
| **Missoula Conservation District** | $ - | $ 2,500.00 | $ 2,500.00 | N |
| **CFC volunteers** | $ 1,400.00 | $ - | $ 1,400.00 | Y |
| | $ - | $ - | $ - | |
| | $ - | $ - | $ - | |
| | $ - | $ - | $ - | |
| **TOTALS** | $ 6,400.00 | $ 117,500.00 | $ 89,500.00 | |

## OTHER CONTRIBUTIONS

(contributions not associated with the application)

**BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS**

| CONTRIBUTOR | IN-KIND | CASH | TOTAL | Secured? (Y/N) |
|---|---|---|---|---|
| | $ - | $ - | $ - | |
| | $ - | $ - | $ - | |
| | $ - | $ - | $ - | |
| | $ - | $ - | $ - | |
| | $ - | $ - | $ - | |
| | $ - | $ - | $ - | |
| | $ - | $ - | $ - | |
| | $ - | $ - | $ - | |
| **TOTALS** | $ - | $ - | $ - | |

# Bear Run - Miller Creek Restoration Project

LEIK THOMAS H & DONNA A

WUSTNER JACOB C

NATURE CONSERVANCY (THE)

Bottom of reach
Lat/Long:46.776490, -113.956403

Miller Creek

LEIK THOMAS H & DONNA A

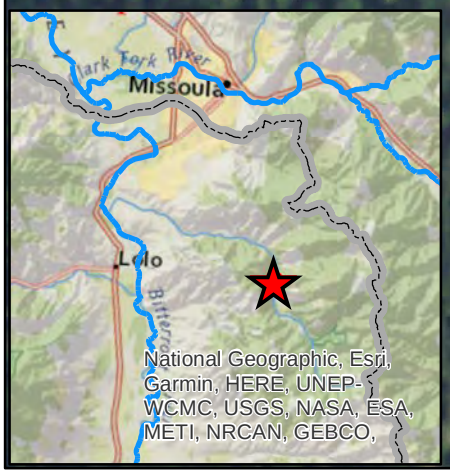
WUSTNER JACOB C

GRAHAM ALTA M

Bear Run Creek

Top of reach
Lat/Long: 46.775023, -113.953000

N




0 600 Feet

CLARK FORK COALITION

FWP.MT.GOV

THE **OUTSIDE** IS IN US ALL.

Region 2 Headquarters
3201 Spurgin Road
Missoula, MT 59804
Phone 406-542-5506
May 27, 2021

Future Fisheries Improvement Program
C/O Michelle McGree
Montana Fish, Wildlife & Parks
P.O. Box 200701
1420 E. 6th Avenue
Helena, MT 59620

**RE: Clark Fork Coalition FFIP Proposal – Miller Creek Wustner Property**

Dear Review Committee Members:

This letter in written in support of the Clark Fork Coalition's (CFC) application for Future Fisheries Improvement Program (FFIP) funding for continued enhancement work on Miller Creek. This stream system is one of three major tributaries to the lower Bitterroot River and has been a focus area for restoration work over the past several years.

This proposed project is continuation of successful habitat improvements and habitat enhancement work on main stem Miller Creek. This project is viable and a priority because it complements and builds upon projects in neighboring reaches, includes solid restoration design concepts, and is planned for a property with a single, committed landowner. This commitment is evident in his contribution of large wood and materials needed for construction, flexibility in accommodating needed design features, and long term pledge to maintain riparian plantings and livestock exclosures to ensure recovery of the stream corridor.

Upper Miller Creek supports mildly hybridized Westslope Cutthroat Trout and Brook Trout in project reaches. We anticipate densities of these species to increase substantially after construction based on monitoring of similar projects that feature significant improvements in instream habitat complexity, floodplain viability, and riparian condition.

This project represents another key reach in ongoing Miller Creek restoration work. Please give the project strong consideration for funding as it will surely enhance wild trout populations in this watershed. I am also happy to provide fisheries monitoring information if needed in your evaluation of the proposal.

Sincerely,

Ladd

W. Ladd Knotek
Fisheries Management Biologist

October 20, 2019

TO: Jed Whiteley, Project Manager
Clark Fork Coalition
Box 7593
Missoula, MT 59807

FROM: Jacob Wustner, Landowner
Missoula County, upper Miller Creek

RE: LETTER OF SUPPORT FOR WUSTNER-MILLER CREEK SEDIMENT REDUCTION PROJECT

I am a landowner on upper Miller Creek, downstream of the National Forest boundary. I would like to support improvements to water quality, fisheries habitat, riparian condition and stream channel stability on this reach of Miller Creek. Conserving fish and wildlife habitat is important to my land management.

The Miller Creek Sediment Reduction Project led by Clark Fork Coalition (CFC) is proposing restoration on a 1/3 mile reach of Miller Creek running through our property in order to reduce fine sediments, increase connectivity, enhance aquatic habitat and to increase ecological function of the riparian and floodplain corridor. I support this project and will coordinate with CFC, DEQ, Fish Wildlife and Parks, and contractors on granting permission for access to the site. Thank you.

Date: 10/20/2019

Bear Run- Miller Creek Project Site Pictures

Clark Fork Coalition

*Miller Creek, Missoula County, Montana*

Figure 1: Picture taken Summer, 2018. This reach of Miller Creek is characterized by 8-10 foot incised banks.

Figure 2: Picture taken October, 2019. Sloughing banks on the lower stretch of the Wustner Property reach of Miller Creek.

Figure 3: Photo taken October, 2019. Miller Creek has been straightened in this stretch. The system is incised and has a simplified habitat, with little riparian vegetation.