

# **Draft Environmental Assessment**

**Miller Creek Bear Run stream restoration  
Future Fisheries Improvement Program grant**

**August 23, 2021**



# **Draft Environmental Assessment MEPA, NEPA, MCA 23-1-110 CHECKLIST**

## **PART I. PROPOSED ACTION DESCRIPTION**

### **1. Type of proposed state action:**

The Future Fisheries Improvement Program (FFIP) tentatively plans to provide partial funding toward a stream restoration project on Miller Creek (outside of Missoula). The overall goal to restore the stream and riparian area, promote a functional stream channel and floodplain, increase fish habitat complexity, and reduce erosion.

### **2. Agency authority for the proposed action:**

The 1995 Montana Legislature enacted sections 87-1-272 through 273, MCA that direct Montana Fish, Wildlife & Parks (FWP) to administer a Future Fisheries Improvement Program (FFIP). The program involves providing funding for physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. This legislation was amended again in 2013 to open the program to all native fish species (statute section 87-1-283). The program now calls for the enhancement of native fish through habitat restoration, natural reproduction and reductions in species competition by way of the FFIP.

### **4. Anticipated Schedule:**

Estimated Commencement Date: Fall 2021

Estimated Completion Date: Winter 2021

Current Status of Project Design (% complete): 90% design

### **5. Location affected by proposed action (county, range and township – included map):**

Missoula County; Township 12N, Range 19W, Section 26

**Figure 1. Project location**



6. **Project size -- estimate the number of acres that would be directly affected that are currently:**

	<u>Acres</u>		<u>Acres</u>
(a) Developed:		(d) Floodplain	<u>1.5</u>
Residential	<u>0</u>		
Industrial	<u>0</u>	(e) Productive:	
(existing shop area)		Irrigated cropland	<u>0</u>
(b) Open Space/	<u>0</u>	Dry cropland	<u>0</u>
Woodlands/Recreation		Forestry	<u>0</u>
(c) Wetlands/Riparian	<u>1.5</u>	Rangeland	<u>0</u>
Areas		Other	<u>0</u>

7. **Permits, Funding & Overlapping Jurisdiction.**

- (a) **Permits:** permits will be filed at least 2 weeks prior to project start.

<u>Agency Name</u>	<u>Permits</u>
Missoula County Conservation District	310 permit
MT Department of Environmental Quality	318 Authorization
Army Corps of Engineers	404 permit
Missoula County	Floodplain permit

- (b) **Funding:**

<u>Agency Name</u>	<u>Funding Amount</u>
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Montana Fish, Wildlife and Parks	\$15,000 (FFIP grant)
Montana Department of Environ. Quality	\$110,000 (319 grant)
Missoula Conservation District	\$2,500

(c) **Other Overlapping or Additional Jurisdictional Responsibilities:**  
Agency Name Type of Responsibility

8. **Narrative summary of the proposed action:**

Miller Creek is a tributary to the Bitterroot River south of Missoula. It contains populations of westslope cutthroat trout (WCT) and brook trout. The project location is near the confluence of Bear Run and Miller Creek, on the Wustner Ranch, where the channel is confined and deeply incised, with active lateral erosion. There is a lack of connectivity between the channel and floodplain, fine sediment delivery, reduced aquatic habitat diversity, and reduced riparian vegetation and cover. This project would restore the stream channel and realign it away from eroding banks, re-grade and adjust elevation to connect the channel to the floodplain, install large woody debris and other features to improve habitat complexity, plant riparian vegetation, and install fencing. The project goals are to promote riparian recovery, reconnect the stream channel and floodplain areas, and increase habitat complexity. This project is downstream of a past Future Fisheries project on Miller Creek (2019 grant; Spooner Creek Ranch channel restoration) and the Little Park Creek barrier project. Additional projects in adjacent reaches are in various stages of planning.

9. **Description and analysis of reasonable alternatives:**

**Alternative A:** If no funding is provided through the FFIP, either the applicant would have to seek additional sources of funding to complete the project, or the affected area of Miller Creek would remain impaired for stream function, sediment, and fish habitat.

**Alternative B:** The proposed alternative intends to provide partial funding through the FFIP to improve Miller Creek.

10. **Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:**  
None

## **PART II. ENVIRONMENTAL REVIEW CHECKLIST**

### **Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.**

#### **A. PHYSICAL ENVIRONMENT**

1. <b><u>LAND RESOURCES</u></b> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?		X				
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?			X		X	X
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				

**1a.** Project design includes excavation, bank re-sloping, and re-activation of historic stream channels that will modify the stream channel to approximate a more natural form, profile and character. These changes will result in temporary increases in sediment activation, turbidity, siltation, and fine sediment deposition within and below the project reach. The projects will obtain a 318 Authorization for turbidity. The impacts are considered minor, short term and will be minimized using construction best management practices.

2. <b><u>AIR</u></b> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Emission of air pollutants or deterioration of ambient air quality? (Also see 13 (c).)		X				
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. For P-R/D-J projects, will the project result in any discharge, which will conflict with federal or state air quality regulations? (Also see 2a.)		X				

3. <u>WATER</u>  Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?			X		X	X
b. Changes in drainage patterns or the rate and amount of surface runoff?		X				
c. Alteration of the course or magnitude of floodwater or other flows?			X		X	X
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?			X		X	X
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?			X			X
h. Increase in risk of contamination of surface or groundwater?		X				
i. Effects on any existing water right or reservation?		X				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
l. For P-R/D-J, will the project affect a designated floodplain? (Also see 3c.)						X
m. For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a.)		X				

**3a.** Project design includes excavation, bank re-sloping, and re-activation of historic stream channels that will modify the stream channel to approximate a more natural form, profile and character. These changes will result in temporary increases in sediment activation, turbidity, siltation, and fine sediment deposition within and below the project reach. The projects will obtain a 318 Authorization for turbidity. The impacts are considered minor, short term and will be minimized using construction best management practices.

**3c,3e & 3l.** Project designs and objectives include construction and re-activation of floodplains adjacent to channel within project reach. These modifications to the current condition are incorporated to promote natural stream function, enhance vitality of riparian vegetation, reduce high erosion rates and channel instability, and mitigate negative impacts of flooding. Activated and constructed floodplains will not impact any infrastructure and are approved by the landowner. The project will also require a Missoula County floodplain permit as it occurs within FEMA mapped floodplain jurisdiction, under which channel and floodplain elevations and any potential impacts or hazards will be specifically reviewed.

**3g.** The project is expected to have a positive impact on groundwater by reconnecting the stream to the floodplain and allowing some additional water storage.

4. <u>VEGETATION</u>  Will the proposed action result in?	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?			X			X
b. Alteration of a plant community?			X			X
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?		X				
f. For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		X				X
g. Other:		X				

**4a & 4b.** Project design includes riparian fencing to exclude livestock, numerous locations where native tree and shrub rooted stock will be established, transplanted, or enhanced, and bank areas where willow revetments will be installed. These activities, along with planned noxious weed control, are expected to significantly enhance the diversity and abundance of native plant species within the riparian corridor of the project reach.

**4f.** Project objectives include re-activation and expansion of riparian and peripheral wetlands associated with the Miller Creek stream corridor.

5. <b><u>FISH/WILDLIFE</u></b>  Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?			X			X
c. Changes in the diversity or abundance of nongame species?			X			X
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				
h. For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f.)		X				
i. For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)		X				

**5a & 5b.** Project objectives include enhancement of stream and riparian habitat supporting several native game and nongame fish and wildlife species. These changes are intended to increase abundance and resiliency of local populations of these species.

## B. HUMAN ENVIRONMENT

6. <u>NOISE/ELECTRICAL EFFECTS</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Increases in existing noise levels?			X		X	X
b. Exposure of people to serve or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				

**6a.** Implementation of project will include operation of heavy equipment, including tracked excavators and dump trucks, which create noise levels that are higher than normal for this area. These impacts are mitigated by limiting the timing of operation to normal daylight hours, limiting the number of pieces of heavy equipment on site, and generally limiting the location of operation to the private, subject property.

7. <u>LAND USE</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				

8. <u>RISK/HEALTH HAZARDS</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?		X				
b. Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. For P-R/D-J, will any chemical toxicants be used? (Also see 8a)		X				

9. <u>COMMUNITY IMPACT</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				

<b>10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u></b>  <b>Will the proposed action result in:</b>	<b>IMPACT</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased use of any energy source?		X				
e. Define projected revenue sources		X				
f. Define projected maintenance costs.		X				X

**10f.** Project maintenance costs are expected to be minor once project installation is completed. Examples include maintenance of installed riparian fencing and watering of planted and transplanted vegetation. Maintenance responsibilities are identified and summarized under signed landowner agreement.

11. <b><u>AESTHETICS/RECREATION</u></b> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?			X		X	X
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)		X				
d. For P-R/D-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c.)		X				

**11a.** Project location lies on private property, but is within sight of public road system. Project implementation will include use of heavy equipment and temporary ground disturbance which could alarm neighboring property owners and public. Project management staff and landowner will be on site to address any questions or concerns. Long term, the project will improve the scenic vista of the area.

12. <b><u>CULTURAL/HISTORICAL RESOURCES</u></b> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		X				
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a.)		X				

## SIGNIFICANCE CRITERIA

13. <u>SUMMARY EVALUATION OF SIGNIFICANCE</u>  Will the proposed action, considered as a whole:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)		X				
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				
f. For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)		X				
g. For P-R/D-J, list any federal or state permits required.		X				X

13g. See section 7a above.

## PART III. NARRATIVE EVALUATION AND COMMENT

This project will restore natural stream and floodplain function and improve fish habitat and therefore is not expected to have any lasting adverse effects. Minor, temporary impacts and mitigations are described above and the overall, long term impact is considered beneficial.

## PART IV. PUBLIC PARTICIPATION

### 1. Public involvement:

Due to the level of impact and the lack of controversy, a public comment period is not warranted. Copies of this environmental assessment will be available to interested parties to ensure their understanding of the proposed project. The public has the ability to comment on the project proposals through the Future Fisheries Improvement Program grant process (from application submission to Fish & Wildlife Commission approval). This level of public notice and participation is appropriate for a project of this scope having limited impacts, many of which can be mitigated.

## **PART V. EA PREPARATION**

1. **Based on the significance criteria evaluated in this EA, is an EIS required? (YES/NO)?** No

**If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.**

2. **Person(s) responsible for preparing the EA:** Michelle McGree, Ladd Knotek (FWP)
3. **List of agencies or offices consulted during preparation of the EA:** FWP; other agencies contacted and consulted during the application process and during permitting activities.
4. **Duration of comment period?** Public comment will be accepted through September 22, 2021. This draft EA will be considered as final if no substantive comments are received by the deadline.