**DRAFT ENVIRONMENTAL ASSESSMENT Checklist**

**Transfer of Westslope Cutthroat Trout from Page Gulch to Beaver Creek (Upper Missouri River drainage)**

**May 17th, 2023**





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# **Compliance with the Montana Environmental Policy Act**

Before a proposed *project* may be approved, environmental review must be conducted to identify and consider potential impacts of the proposed project on the human and physical environment affected by the project. The Montana Environmental Policy Act (MEPA) and its implementing rules and regulations require different levels of environmental review, depending on the proposed project, significance of potential impacts, and the review timeline. § 75-1-201, Montana Code Annotated (“MCA”), and the Administrative Rules of Montana (“ARM”) 12.2.430, General Requirements of the Environmental Review Process.

FWP must prepare an EA when:

* It is considering a “state-proposed project,” which is defined in § 75-1-220(8)(a) as:

(i) a project, program, or activity initiated and directly undertaken by a state agency;

(ii) … a project or activity supported through a contract, grant, subsidy, loan, or other form of funding assistance from a state agency, either singly or in combination with one or more other state agencies; or

(iii) … a project or activity authorized by a state agency acting in a land management capacity for a lease, easement, license, or other authorization to act.

* It is not clear without preparation of an EA whether the proposed project is a major one significantly affecting the quality of the human environment. ARM 12.2.430(3)(a));
* FWP has not otherwise implemented the interdisciplinary analysis and public review purposes listed in ARM 12.2.430(2) (a) and (d) through a similar planning and decision-making process (ARM 12.2.430(3)(b));
* Statutory requirements do not allow sufficient time for the FWP to prepare an EIS (ARM 12.2.430(3)(c));
* The project is not specifically excluded from MEPA review according to § 75-1-220(8)(b) or ARM 12.2.430(5); or
* As an alternative to preparing an EIS, prepare an EA whenever the project is one that might normally require an EIS, but effects which might otherwise be deemed significant appear to be mitigable below the level of significance through design, or enforceable controls or stipulations or both imposed by the agency or other government agencies. For an EA to suffice in this instance, the agency must determine that all the impacts of the proposed project have been accurately identified, that they will be mitigated below the level of significance, and that no significant impact is likely to occur. The agency may not consider compensation for purposes of determining that impacts have been mitigated below the level of significance (ARM 12.2.430(4)).

MEPA is procedural; its intent is to ensure that impacts to the environment associated with a proposed project are fully considered and the public is informed of potential impacts resulting from the project.

# **Background and Description of Proposed Project**

This section includes a short description of the proposed project including the project sponsor/ applicant/ responsible party, the type of proposed action and the anticipated schedule of the proposed project.

**Name of Project:** Transfer of westslope cutthroat trout from Page Gulch to Beaver Creek (Upper Missouri subbasin).

Montana Fish, Wildlife & Parks (FWP) is proposing to transfer nonhybridized westslope cutthroat trout (WCT) *Oncorhynchus clarkii lewisi* to the fishless headwaters of Beaver Creek (Tenmile Creek drainage) from Page Gulch (Virginia Creek drainage) in the Upper Missouri River subbasin. The section of Beaver Creek where WCT will be introduced is entirely within the Helena-Lewis and Clark National Forest, Helena Ranger District above a series of natural waterfalls and a water diversion structure that isolates the upper 4.1 miles of fish habitat from downstream nonnative fish populations.

Rescued fish from Page Gulch would be individually genetically tested prior to transfer to Beaver Creek. Nonhybridized WCT from Page Gulch would be collected by backpack electrofishing. Beaver Creek would receive WCT by transfer of fertilized embryos from wild spawned Page Gulch WCT or by direct transfer of juveniles and adults. Page Gulch has upstream and downstream fish passage to Virginia Creek. It is plausible that fish seasonally migrate into Page Gulch, subsequently if nonhybridized WCT are found and confirmed with individual genetic testing within Virginia Creek, these fish would be considered part of the Page Gulch population. Transfers would likely occur over several years (1-3 years depending on wild collections/genetic results) to maximize total number of nonhybridized WCT for transfer to Beaver Creek. Montana FWP is considering the proposed action to prevent the loss of a unique genetic lineage of WCT native to north central Montana, expand the current range and add stream mileage to the WCT conservation goals for the Upper Missouri River subbasin, and reduce the likelihood of listing of WCT under the ESA.

Westslope cutthroat trout, a Montana Species of Concern, have declined in abundance, distribution, and genetic diversity throughout their native range (Shepard et al. 2005; Muhlfeld et al. 2016; Heckel et al. 2020). Reduced distribution of WCT is particularly evident in the Missouri River drainage of Montana where nonhybridized populations are estimated to persist in about 4% of habitat they historically occupied. Major factors contributing to this decline include competition with nonnative brook, brown, and rainbow trout that were first introduced in Montana in the 1890’s (Dunham et al. 2002; Peterson et al. 2004), hybridization with rainbow and Yellowstone cutthroat trout (Leary et al. 1995; Hitt et al. 2003; Muhlfeld et al. 2014, Bourret et al. 2022), habitat changes, and isolation to small headwater streams (Wang et al. 2002). Because of these threats, most remaining WCT populations in the Missouri River drainage are considered to have a low likelihood of long-term (100 years) persistence unless conservation actions are implemented (Shepard et al. 1997). The U.S. Fish and Wildlife Service has been petitioned to list WCT as a Threatened species on two occasions but found listing was not warranted stating “The conservation efforts presently being accomplished as part of the routine management objectives of State and Federal agencies, and as part of formal interagency agreements and plans, provide substantial assurance that the WCT subspecies is being conserved.”

Montana state law authorizes FWP to manage wildlife, fish, game and nongame animals to prevent the need for listing under the Endangered Species Act (ESA), and listed, sensitive, or species that are candidates for listing under the ESA must be managed in manner that assists in the maintenance or recovery of the species (MCA§ 87-5-107). Planning documents and strategies developed by agencies and collaborating entities also provide justification for the proposed project (Table 1). These include conservation agreements among stakeholder groups, state and federal laws, and agency plans designed to conserve, secure, and protect WCT within the upper Missouri River drainage (i.e., restore WCT to 20% of historic range). Translocations and transfers have been commonly used to augment established populations, re-establish historic populations, and in this case create refuge populations (Tews et al. 2000; Stockwell and Leberg 2002; Galloway et al. 2016). Moreover, one of the restoration actions specifically referenced in the WCT Conservation Agreement is translocation of nonhybridized populations into new habitats (FWP 2007), such as Beaver Creek.

**Table 1: Planning and strategy documents with relevance to conservation of WCT in Beaver Creek.**

|  |  |  |
| --- | --- | --- |
| **Agency** | **Citation** | **Website** |
| Montana Cutthroat  Trout Steering  Committee  (MCTSC ) | Memorandum of Understanding and Conservation Agreement for Westslope and Yellowstone Cutthroat Trout in Montana (2007) | https://myfwp.mt.gov/getRepositoryFile?objectID=28662 |
| FWP | Statewide Fisheries Management Plan  (2019) | https://fwp.mt.gov/conservation/fisheries-management/statewide-fisheries-management |
| FWP | Westslope Cutthroat Trout (Oncorhynchus clarki lewisi) in Northcentral Montana: Status and Restoration Strategies (2000) | https://myfwp.mt.gov/getRepositoryFile?objectID=24717 |
| FWP | Wild Fish Transfer Policy (1996) | https://myfwp.mt.gov/getRepositoryFile?objectID=30569 |
| USFS | Helena-Lewis and Clark National Forest Land Management Plan (2021) | https://www.fs.usda.gov/detail/hlcnf/landmanagement/planning/?cid=fseprd738958 |

Page Gulch is a tributary of Virginia Creek in the Upper Missouri River drainage located approximately 24 miles northeast of Helena, MT. A 0.71-mile reach of Page Gulch upstream of the Stemple Pass Road currently contains WCT and nonnative brook trout. Genetic monitoring of WCT collected in Page Gulch (n=6) in 1997 indicated a nonhybridized population was present at that time. Updated genetic samples collected in 2021 (n=20) found clear evidence of hybridization with nonnative rainbow trout. However, rainbow trout alleles were non-randomly distributed among individuals in the sample. A clear pattern was present where many individuals appeared to be nonhybridized WCT (~45% of the sample), and a fairly large percentage of individuals had ~28% rainbow trout ancestry (25% of the sample). This pattern of rainbow trout ancestry likely arose because of recent immigration of rainbow trout or hybrids into the population from elsewhere within the Little Prickly Pear Creek drainage where their presence has been well documented. The WCT population in Page Gulch is at extremely high risk of genomic extinction within the very immediate future as there appears to be high immigration of rainbow trout genes into this population, which suggests that Page Gulch is not likely to harbor either a core or conservation population of WCT within one or two generations. At this stage it is possible to rescue nonhybridized WCT genetics in the Page Gulch (Virginia Creek drainage) population by genetically testing individuals prior to transfers. In the summer of 2022, a total of 93 WCT were tagged and sampled for genomic analysis in Page Gulch.

Beaver Creek is a tributary of Tenmile Creek in the Upper Missouri River drainage located 11 miles southeast of Helena, MT. The upper 4.1 miles of habitat in Beaver Creek is isolated from Tenmile Creek by a series of natural waterfall barriers as well as a City of Helena water diversion structure. No previous sampling or stocking records for this waterbody could be found. Beaver Creek was surveyed above the waterfall barriers for presence of fish and habitat fragmentation in 2022. No fish were found, and habitat was deemed good to excellent, with numerous overwintering pools, good channel complexity, adequate spawning gravels, and a robust aquatic invertebrate community. Average August temperature was 9.54°C in 2022, well above minimum summer temperatures determined too low to support WCT populations over most years (Harig and Fausch 2002; Coleman and Fausch 2005).

**Affected Area / Location of Proposed Project**

* Legal Description
  + Latitude/Longitude: 46.48445, -112.21803
  + Section, Township, and Range: T8N R5W Sections 2, 3, 4, 10
  + Town/City, County, Montana: Rimini, Lewis and Clark County, Montana
* Location Map

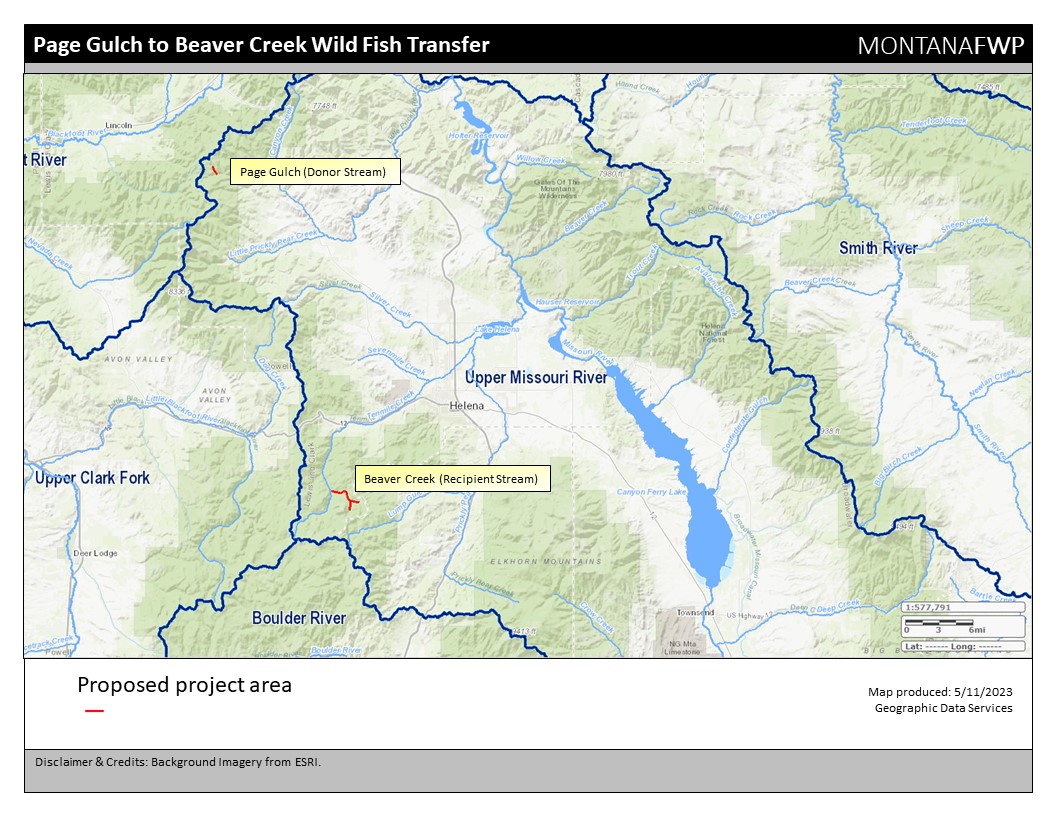
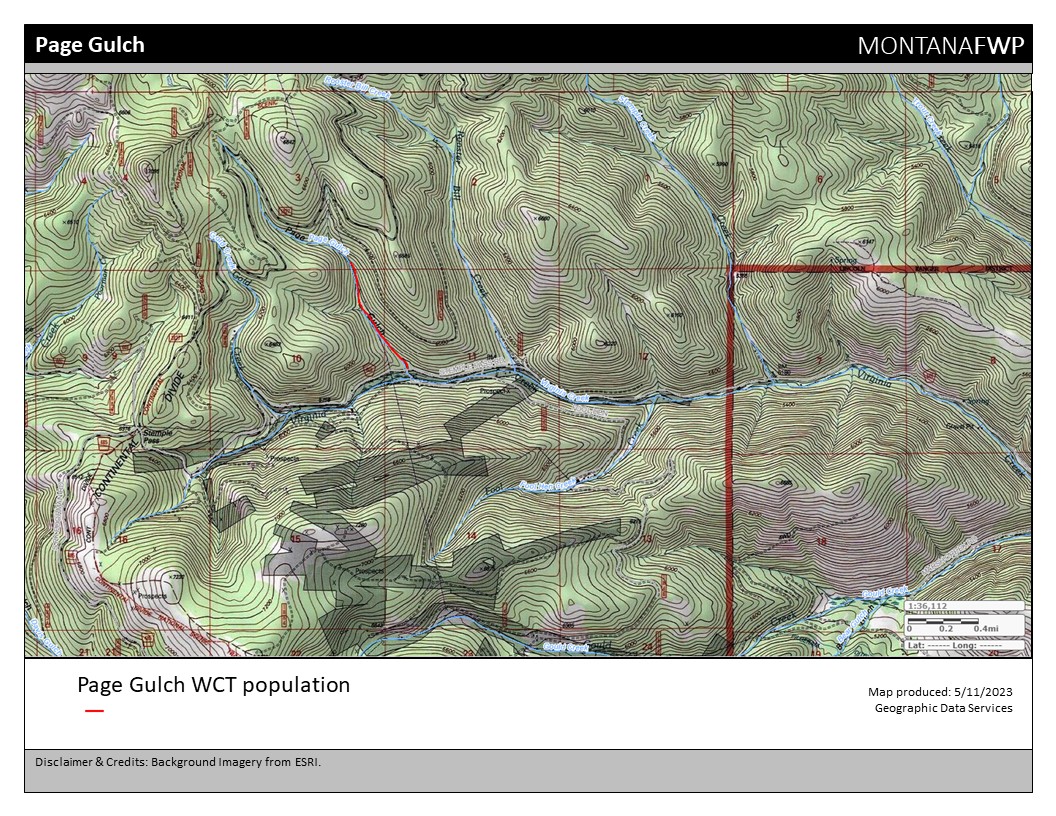
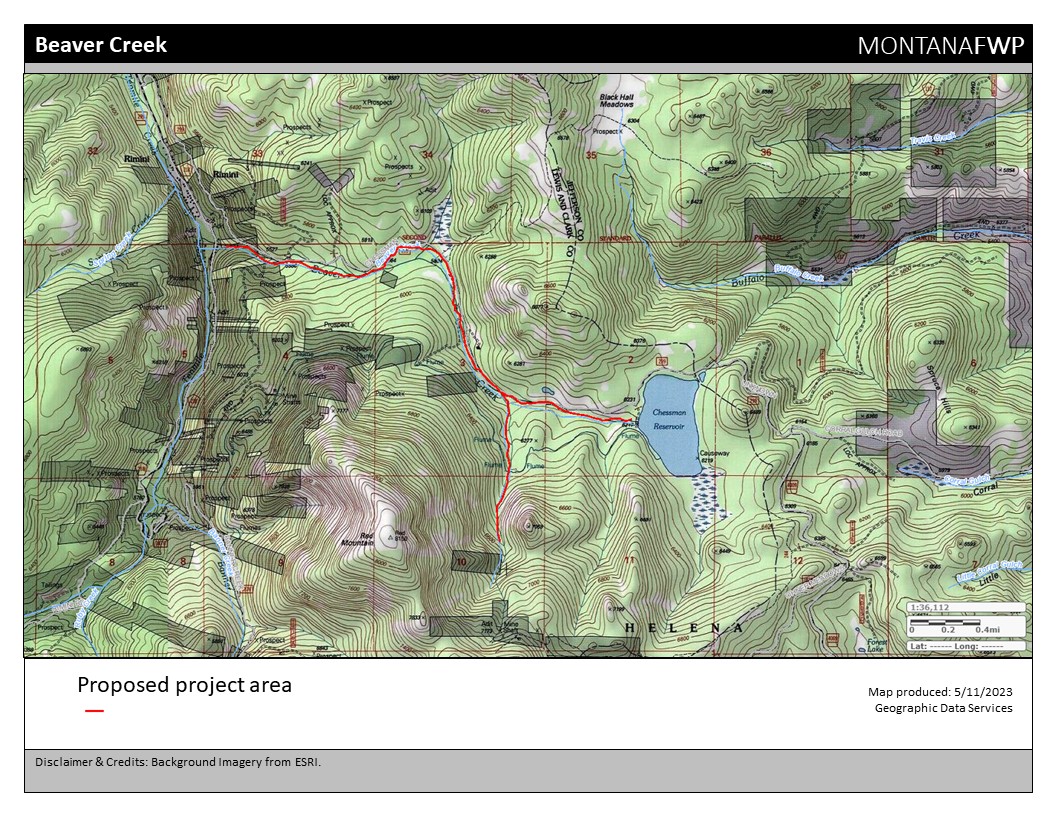


Figure 1. Page Gulch and Beaver Creek in the Upper Missouri River drainage. The stream segments delineated in red indicate the proposed project area.

 Figure 2. Page Gulch in the Virginia Creek drainage. The stream segment delineated in red indicates the area occupied by WCT.

 Figure 3. Beaver Creek in the Tenmile Creek drainage. The stream segment delineated in red indicates the fishless area proposed for WCT introduction.

# **Purpose and Need**

The EA must include a description of the benefits and purpose of the proposed project. ARM 12.2.432(3)(b). Benefits of the proposed project refer to benefits to the resource, public, department, state, and/or other.

The intent of the proposed action would be to support the following FWP goals and objectives:

• Prevent the loss of a unique genetic lineage of WCT native to north central Montana

• Expand the current WCT range by adding the affected stream mileage to the WCT conservation goals for the Upper Missouri River subbasin

• Reduce the likelihood of ESA-listing of WCT.

• Establish a self-sustaining WCT conservation population in Beaver Creek

• Increase the amount of protected WCT habitat in the Upper Missouri River drainage by 8.1% (from 50.6 miles to 54.7 miles; FWP 2022).

• Prevent the loss of the nonhybridized Page Gulch WCT genetic lineage

• Use the affected section of Beaver Creek as a donor stream for future WCT conservation efforts in north central Montana

FWP’s intends to begin WCT transfers from Page Gulch to Beaver Creek in 2023. Transfers would likely occur over several years (1-3 years depending on wild collections/genetic results) to maximize total number of nonhybridized WCT for transfer to Beaver Creek.

If FWP prepared a cost/benefit analysis before completion of the EA, the EA must contain the cost/benefit analysis or a reference to it. ARM 12.2.432(3)(b).

|  |  |  |
| --- | --- | --- |
|  | Yes\* | No |
| Was a cost/benefit analysis prepared for the proposed project? |  |  |

\* If yes, a copy of the cost/benefit analysis prepared for the proposed project is included in Attachment A to this Draft EA

# **Other Agency Regulatory Responsibilities**

FWP must list any federal, state, and/or local agencies that have overlapping or additional jurisdiction, or environmental review responsibility for the proposed project, as well as permits, licenses, and other required authorizations. ARM 12.2.432(3)(c).

A list of other required local, state, and federal approvals, such as permits, certificates, and/or licenses from affected agencies is included in **Table 2** below. **Table 2** provides a summary of state requirements but does not necessarily represent a complete and comprehensive list of all permits, certificates, or approvals needed. Rather, **Table 2** lists the primary state agencies with regulatory responsibilities, the applicable regulation(s) and the purpose of the regulation(s). Agency decision-making is governed by state and federal laws, including statutes, rules, and regulations, that form the legal basis for the conditions the proposed project must meet to obtain necessary permits, certificates, licenses, or other approvals. Further, these laws set forth the conditions under which each agency could deny the necessary approvals.

**Table 2: Federal, State, and/or Local Regulatory Responsibilities**

|  |  |  |
| --- | --- | --- |
| **Agency** | **Type of Authorization (permit, license, stipulation, other)** | **Purpose** |
| Helena-Lewis and Clark National Forest | Management of forest resource, including Beaver Creek | Consultation on proposed project |

# **List of Mitigations, Stipulations**

Mitigations, stipulations, and other *enforceable* controls required by FWP, or another agency, may be relied upon to limit potential impacts associated with a proposed Project. The table below lists and evaluates enforceable conditions FWP may rely on to limit potential impacts associated with the proposed Project. ARM 12.2.432(3)(g).

**Table 3: Listing and Evaluation of Enforceable Mitigations Limiting Impacts**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Are enforceable controls limiting potential impacts of the proposed action? If not, no further evaluation is needed.* | | | **Yes** | **No** |
| *If yes, are these controls being relied upon to limit impacts below the level of significance? If yes, list the enforceable control(s) below* | | | **Yes** | **No** |
| **Enforceable Control** | **Responsible Agency** | **Authority (Rule, Permit, Stipulation, Other)** | **Effect of Enforceable Control on Proposed Project** | |
| Fish Health Inspection | FWP | Aquatic Health Advisory Committee | Minimizes disease transfer risk associated with movement of wild fish between waterbodies. | |
| Wild Fish Transfer | FWP | Wild Fish Transfer Committee | Ensures that movement of wild fish by FWP personnel is compatible with overall stewardship of Montana’s fishery resources. | |
| AIS Early Detection & Monitoring | FWP | AIS Bureau | Minimizes the harmful impacts of AIS through the prevention and management of AIS into, within, and from Montana. | |

# **Alternatives Considered**

In addition to the proposed Project, and as required by MEPA, FWP analyzes the "no-action" alternative in this EA. Under the "no-action" alternative, FWP would not do the proposed project.

The “no-action” alternative forms the baseline from which the potential impacts of the proposed Project can be measured. Under the no-action alternative FWP would not transfer nonhybridized WCT from Page Gulch to Beaver Creek. Without action, the WCT population in Page Gulch would continue to hybridize and likely face genomic extinction in the near future. The 4.1-miles of fishless habitat in the headwaters of Beaver Creek will remain fishless under the no-action alternative.

|  |  |  |
| --- | --- | --- |
|  | Yes\* | No |
| Were any additional alternatives considered and dismissed? |  |  |

\* If yes, a list and description of the other alternatives considered, but not carried forward for detailed review is included below

**Other Alternatives Not Carried Forward for Detailed Analysis**

No other alternatives were considered but not carried forward for further analysis.

# **Summary of Potential Impacts of the Proposed Project on the Physical Environment and Human Population**

The impacts analysis identifies and evaluates **direct**, **secondary**, and **cumulative impacts**.

* **Direct impacts** are those that occur at the same time and place as the action that triggers the effect.
* **Secondary impacts** “are further impacts to the human environment that may be stimulated or induced by or otherwise result from a direct impact of the action.” ARM 12.2.429(18).
* **Cumulative impacts** “means the collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures.” ARM 12.2.429(7).

Where impacts are expected to occur, the impact analysis estimates the **extent, duration, frequency,** and **severity** of the impact. The duration of an impact is quantified as follows:

* **Short-Term**: impacts that would not last longer than the proposed project.
* **Long-Term**: impacts that would remain or occur following the proposed project.

The severity of an impact is measured using the following:

* **No Impact**: there would be no change from current conditions.
* **Negligible**: an adverse or beneficial effect would occur but would be at the lowest levels of detection.
* **Minor**: the effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
* **Moderate**: the effect would be easily identifiable and would change the function or integrity of the resource.
* **Major**: the effect would irretrievably alter the resource.

Some impacts may require mitigation. As defined in ARM 12.2.429, mitigation means:

* Avoiding an impact by not taking a certain action or parts of a project;
* Minimizing impacts by limiting the degree or magnitude of a project and its implementation;
* Rectifying an impact by repairing, rehabilitating, or restoring the affected environment; or
* Reducing or eliminating an impact over time by preservation and maintenance operations during the life of a project or the time period thereafter that an impact continues.

A list of any mitigation strategies including, but not limited to, design, enforceable controls or stipulations, or both, as applicable to the proposed project is included in **Section VI** above.

FWP must analyze impacts to the physical and human environment for each alternative considered. The proposed project considered the following alternatives:

* Alternative 1: No Action; and
* Alternative 2: Proposed Project

**Table 4: Impacts to the Physical Environment – Alternative 2: Proposed Project**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PHYSICAL ENVIRONMENT** | **Duration of Impact** | | | **Severity of Impact** | | | | |  |
| **Resource** | **None** | **Short-Term** | **Long-Term** | **None** | **Negligible** | **Minor** | **Moderate** | **Major** | **Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures** |
| Terrestrial, avian, and aquatic life and habitats |  |  |  |  |  |  |  |  | Introduction of WCT would result in positive long-term moderate impacts to WCT conservation in the Upper Missouri River drainage. Introduction of WCT may result in long-term moderate changes in species composition of the aquatic invertebrate community (Benjamin et al. 2011; Lepori et al. 2012) as well as trophic or food web level alterations within the project area. However, overall richness and diversity of invertebrates is likely to be preserved following WCT introduction (Lepori 2012; Banting et al. 2020). Restoring the native fish species is consistent with improved biological integrity, as the native fish would exert the same community level pressure on invertebrates with which they evolved. Expected impacts to the affected ecosystem and associated wildlife would be long-term, beneficial, and minor.  On August 22nd, 2022, 34 brook trout were collected in Page Gulch and submitted for fish health inspection. Results of the inspection detected *Myxobolus cerebralis*, the parasite that causes whirling disease, in the brook trout submitted. Additional fish health sampling was performed in Tenmile Creek (proposed recipient watershed) on October 25th-26th, 2022, to better understand the risks associated with the proposed transfer of wild WCT from Page Gulch to Beaver Creek. Two 60 fish samples were collected: one from the upper watershed (1st Rimini Road crossing) and one combined sample from two localities in the lower watershed (Sierra Road crossing and Tenmile Creek Park). *M. cerebralis* was detected in a both samples. Transfer of fertilized embryos from Page Gulch to Beaver Creek would eliminate the risk of disease transfer as whirling disease is not vertically transmissible, meaning the disease is not passed on via reproduction. However, if whirling disease positive juvenile and adult WCT were transferred from Page Gulch to Beaver Creek, it would not represent a novel introduction of this pathogen into the Tenmile Creek watershed. Therefore, any impacts associated with the potential for transfer of *M. cerebralis* would be consistent with existing impacts and negligible. |
| Water quality, quantity, and distribution |  |  |  |  |  |  |  |  | No significant adverse impacts to water quality, quantity, and distribution would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population and would not require the use of any additional new water resources, nor would it affect the distribution of any existing water resources. |
| Geology |  |  |  |  |  |  |  |  | No significant adverse impacts to geology would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek. The proposed project would not affect any geologic features in the project area; therefore, no impacts to geology would be expected because of the proposed project. |
| Soil quality, stability, and moisture |  |  |  |  |  |  |  |  | No significant adverse impacts to soil quality, stability, and moisture would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek. The proposed project would not affect soils; therefore, no impacts would be expected because of the proposed project. |
| Vegetation cover, quantity, and quality |  |  |  |  |  |  |  |  | No significant adverse impacts to vegetation cover, quantity, and quality would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek. The proposed project would not affect vegetation in the affected area; therefore, no impacts would be expected because of the proposed project. |
| Aesthetics |  |  |  |  |  |  |  |  | No significant adverse impacts to the aesthetic nature of the affected area would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek. The proposed project would not affect any aesthetic values in the affected area; therefore, no impacts would be expected because of the proposed project. |
| Air quality |  |  |  |  |  |  |  |  | No significant adverse impacts to air quality would be expected because of the proposed project. Air quality in the area affected by the proposed project is currently unclassifiable or in compliance with applicable National and Montana ambient air quality standards (NAAQS/MAAQS). The proposed project constitutes establishing a WCT conservation population in Beaver Creek and, when completed, would not result in additional new air quality disturbance in the affected area. Further, no significant point-sources of air pollution exist in the area affected by the proposed project. Existing sources of air pollution in the area are limited and generally include unpaved county roads (fugitive dust source) and vehicle exhaust emissions. Fugitive dust and vehicle exhaust emissions resulting from the use of motor vehicles for the proposed project may adversely impact air quality. However, any impacts to air quality would be short-term, consistent with existing impacts, and negligible. |
| Unique, endangered, fragile, or limited environmental resources |  |  |  |  |  |  |  |  | No significant adverse impacts to unique, endangered, fragile or limited environmental resources would be expected because of the proposed project. Genetic analysis of the WCT in Page Gulch has demonstrated that the population harbors a disproportionally large amount of unique genetic variation. Therefore, it is expected the proposed project would result in positive beneficial, long-term, and moderate impacts to the conservation of central Montana’s wild WCT, a Montana Species of Concern.  Prior to WCT introduction, aquatic macroinvertebrates would be collected and analyzed for rare or imperiled species that may be impacted by the introduction of fish. Despite multiple samplings of fishless streams across north central Montana, historically, no threatened or endangered aquatic invertebrates have been identified in streams considered for wild WCT introduction. If a species of invertebrate is present that is rare and could potentially be impacted by fish introduction, aquatic invertebrate experts from the Montana Natural Heritage Program would be consulted to determine the potential impacts of fish introduction on the rare species. If the potential impacts are high or are unknown, Beaver Creek would not be stocked with WCT and would remain fishless. Some rare invertebrates, however, have coevolved with fish and there is little interaction between the two species and therefore little impact from fish introduction. Consultation with aquatic invertebrate experts is necessary if a rare invertebrate is encountered during pre-introduction sampling. Therefore, no impacts would be expected because of the proposed project. |
| Historical and archaeological sites |  |  |  |  |  |  |  |  | No significant adverse impacts to historic and archaeological sites would be expected because of the proposed project. Potential impacts from the proposed project were assessed by FWP’s Heritage Program in accordance with the Montana Antiquities Act (22-3-421-442, MCA) and related rules and determined to have no effect on cultural resources in the area affected by the proposed project. |
| Demands on environmental resources of land, water, air, and energy |  |  |  |  |  |  |  |  | No significant adverse impacts to demands on the environmental resources of land, water, air, and energy would be expected because of the proposed project. Fuel would be required to operate equipment and vehicles used for the proposed project. No other demands on the environmental resources of land, water, air, and energy would be expected because of the proposed project. Therefore, any impacts to such resources would be short-term, negligible, and limited to energy resources in the form of fuel. |

**Table 5: Impacts to the Human Population – Alternative 2: Proposed Project**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **HUMAN POPULATION** | **Duration of Impact** | | | **Severity of Impact** | | | | |  |
| **Resource** | **None** | **Short-Term** | **Long-Term** | **None** | **Negligible** | **Minor** | **Moderate** | **Major** | **Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures** |
| Social structures and mores |  |  |  |  |  |  |  |  | No significant adverse impacts to social structures and mores in the affected area would be expected because of the proposed project. WCT have been designated Montana's state fish. Many Montanans and visitors to the state alike hold high regard for wild WCT as an angling resource, an icon of the state, and a valuable component of the ecosystems in which it resides. As such, wild WCT are deeply engrained in the customs and lifestyles of residents and visitors to the state of Montana. The proposed project constitutes establishing a WCT conservation population in Beaver Creek to prevent the loss of a unique genetic lineage of WCT native to north central Montana; expand the current WCT range by adding the affected stream mileage to the WCT conservation goals for the Upper Missouri River subbasin; and reduce the likelihood of ESA-listing of WCT. Therefore, the proposed project would benefit any person who enjoys fishing for WCT or otherwise values the species’ existence, the State of Montana, and the ecosystem in which they reside. Any impacts from the proposed project would be long-term, beneficial, and moderate. |
| Cultural uniqueness and diversity |  |  |  |  |  |  |  |  | No significant impacts to cultural uniqueness and diversity in the affected area would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek and it is not expected this action would result in any relocation of people into or out of the affected area. Therefore, no impacts to the existing cultural uniqueness and diversity of the affected area would be expected because of the proposed project. |
| Access to and quality of recreational and wilderness activities |  |  |  |  |  |  |  |  | No significant adverse impacts to access or the quality of recreational and wilderness activities would be expected because of the proposed project. No Wilderness areas currently exist in the affected area; therefore, no impacts to Wilderness recreation activities would occur because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek. No closures of public lands would occur because of the proposed project. The new WCT population would provide an opportunity to fish for native trout in a remote natural setting, a long-term, minor, and beneficial impact to recreational opportunities in the affected area. |
| Local and state tax base and tax revenues |  |  |  |  |  |  |  |  | No significant adverse impacts to the local and state tax base and tax revenue would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek and, when completed, would not result in changes to local or state taxes. The proposed project would be expected to increase state and local tax revenues from the sale of fuel, supplies and/or equipment to complete the project. Any impacts to the local and state tax base and tax revenue would be short -term and negligible, lasting only as long as the proposed project. |
| Agricultural or Industrial production |  |  |  |  |  |  |  |  | No significant impacts to agricultural or industrial production in the affected area would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek. Because the affected area is not currently used for agricultural and/or industrial production the proposed project would not impact such practices. Therefore, no impacts would be expected because of the proposed project. |
| Human health and safety |  |  |  |  |  |  |  |  | No significant adverse impacts to human health and safety would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek and, when completed, would not impact human health and safety. Affected government staff may realize increased risk to human health and safety during project implementation; however, FWP would require affected staff to operate in a safe manner and utilize best management practices, including the use of available and appropriate safety precautions. Therefore, any potential impacts to human health and safety would be short-term and negligible, lasting only as long as the proposed project. |
| Quantity and distribution of employment |  |  |  |  |  |  |  |  | No significant adverse impacts to the quantity and distribution of employment in the affected area would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek. Existing government staff would be used to implement the proposed project as part of their typical job duties. Therefore, no impacts would be expected because of the proposed project. |
| Distribution and density of population and housing |  |  |  |  |  |  |  |  | No significant adverse impacts to the distribution and density of population and housing would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek using existing government staff for implementation. The proposed project would not require or result in the movement of existing or new population into or out of the affected area. Therefore, no impacts would be expected because of the proposed project. |
| Demands for government services |  |  |  |  |  |  |  |  | No significant adverse impacts to the demands for government services in the affected area would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek and, when completed, would not further impact demands for government services. The proposed project would use existing government staff to complete the work. No additional demands for government services would be expected because of the proposed project. Any impacts would be short -term and negligible. |
| Industrial, agricultural, and commercial activity |  |  |  |  |  |  |  |  | No significant adverse impacts to industrial, agricultural, and commercial activity would be expected because of the proposed project. The proposed project constitutes establishing a WCT conservation population in Beaver Creek and would not disturb or otherwise impact any industrial, agricultural, or commercial properties or operations; therefore, no impacts to industrial, agricultural, or commercial activity would be expected because of the proposed project. |
| Locally adopted environmental plans and goals |  |  |  |  |  |  |  |  | The proposed project would result in beneficial, long-term, and moderate impacts to WCT conservation goals outlined in the Montana Statewide Fisheries Management Plan, Memorandum of Understanding and Conservation Agreement for Westslope and Yellowstone Cutthroat Trout in Montana, and the Helena-Lewis and Clark National Forest Land Management Plan. |
| Other appropriate social and economic circumstances |  |  |  |  |  |  |  |  | No significant adverse impacts to any other appropriate social and economic circumstances would be expected because of the proposed project. FWP is unaware of any other appropriate social and economic circumstances that may be impacted by the proposed project. Therefore, no significant adverse impacts to other appropriate social and economic circumstances would be expected because of the proposed project. |

**Table 6:** **Determining the Significance of Impacts on the Quality of the Human Environment**

|  |  |
| --- | --- |
| If the EA identifies impacts associated with the proposed project FWP must determine the significance of the impacts. ARM 12.2.431. This determination forms the basis for FWP’s decision as to whether it is necessary to prepare an environmental impact statement.  According to the applicable requirements of ARM 12.2.431, FWP must consider the criteria identified in this table to determine the significance of each impact on the quality of the human environment. The significance determination is made by giving weight to these criteria in their totality. For example, impacts identified as moderate or major in severity may not be significant if the duration is short-term. However, moderate or major impacts of short-term duration may be significant if the quantity and quality of the resource is limited and/or the resource is unique or fragile. Further, moderate or major impacts to a resource may not be significant if the quantity of that resource is high or the quality of the resource is not unique or fragile. | |
| **Criteria Used to Determine Significance** | |
| 1 | The **severity, duration, geographic extent,** and **frequency** of the occurrence of the impact  **“Severity”** describes the density of the potential impact, while **“extent”** describes the area where the impact will likely occur, e.g., a project may propagate ten noxious weeds on a surface area of 1 square foot. Here, the impact may be high in severity, but over a low extent. In contrast, if ten noxious weeds were distributed over ten acres, there may be low severity over a larger extent.  **“Duration”** describes the time period during which an impact may occur, while **“frequency”** describes how often the impact may occur, e.g., an operation that uses lights to mine at night may have frequent lighting impacts during one season (duration). |
| 2 | The probability that the impact will occur if the proposed project occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur |
| 3 | Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts |
| 4 | The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values |
| 5 | The importance to the state and to society of each environmental resource or value that would be affected |
| 6 | Any precedent that would be set as a result of an impact of the proposed project that would commit FWP to future actions with significant impacts or a decision in principle about such future actions |
| 7 | Potential conflict with local, state, or federal laws, requirements, or formal plans |

# **Private Property Impact Analysis (Takings)**

The 54th Montana Legislature enacted the Private Property Assessment Act, now found at § 2-10-101. The intent was to establish an orderly and consistent process by which state agencies evaluate their proposed projects under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency projects pertaining to land or water management or to some other environmental matter that, if adopted and enforced without due process of law and just compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agencies to assess the impact of a proposed agency project on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency project has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act.

**Table 7: Private Property Assessment (Takings)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | | **Yes** | **No** |
| *Is FWP regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required* | |  |  |
| *Does the proposed regulatory action restrict the use of the regulated person’s private property? If not, no further analysis is required.* | |  |  |
| *Does FWP have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required* | |  |  |
| *If so, FWP must determine if there are alternatives that would reduce, minimize, or eliminate the restriction on the use of private property, and analyze such alternatives. Have alternatives been considered and/or analyzed? If so, describe below:* | |  |  |
| **PRIVATE PROPERTY ASSESMENT ACT (PPAA)** | | | |
| **Does the Proposed Action Have Takings Implications under the PPAA?** | **Question #** | **Yes** | **No** |
| Does the project pertain to land or water management or environmental regulations affecting private property or water rights? | 1 |  |  |
| Does the action result in either a permanent or an indefinite physical occupation of private property? | 2 |  |  |
| Does the action deprive the owner of all economically viable uses of the property? | 3 |  |  |
| Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 4a and 4b and continue with question 6.) | 4 |  |  |
| Is there a reasonable, specific connection between the government requirement and legitimate state interest? | 4a |  |  |
| Is the government requirement roughly proportional to the impact of the proposed use of the property? | 4b |  |  |
| Does the action deny a fundamental attribute of ownership? | 5 |  |  |
| Does the action have a severe impact of the value of the property? | 6 |  |  |
| Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public general? (If the answer is NO, skip questions 7a-7c.) | 7 |  |  |
| Is the impact of government action direct, peculiar, and significant? | 7a |  |  |
| Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded? | 7b |  |  |
| Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question? | 7c |  |  |
| **Does the proposed action result in taking or damaging implications?** | |  |  |
| Taking or damaging implications exist if **YES** is checked in response to Question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if **NO** is checked in response to question 5a or 5b. | | | |
| If taking or damaging implications exist, the agency must comply with MCA § 2-10-105 of the PPAA, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff. | | | |
| **Alternatives:**  The analysis under the Private Property Assessment Act, §§ 2-10-101 through -112, MCA, indicates no impact. FWP does not plan to impose conditions that would restrict the regulated person’s use of private property to constitute a taking. | | | |

# **Public Participation**

The level of analysis in an EA will vary with the complexity and seriousness of environmental issues associated with a proposed action. The level of public interest will also vary. FWP is responsible for adjusting public review to match these factors (ARM 12.2.433(1)). Because FWP determines the proposed action will result in limited environmental impact, and little public interest has been expressed, FWP determines the following public notice strategy will provide an appropriate level of public review:

* An EA is a public document and may be inspected upon request. Any person may obtain a copy of an EA by making a request to FWP. If the document is out-of-print, a copying charge may be levied (ARM 12.2.433(2)).
* Public notice will be served on the Montana Fish, Wildlife and Parks website at: [*https://fwp.mt.gov/aboutfwp/public-comment-opportunities*](https://fwp.mt.gov/aboutfwp/public-comment-opportunities)
* Copies will be distributed to neighboring landowners to ensure their knowledge of the proposed project and opportunity for review and comment on the proposed action.
* FWP maintains a mailing list of persons interested in a particular action or type of action. FWP will notify all interested persons and distribute copies of the EA to those persons for review and comment (ARM 12.2.433(3)).
* FWP will issue public notice in the following newspaper periodical(s) on the date(s) indicated.

|  |  |
| --- | --- |
| **Newspaper / Periodical** | **Date(s) Public Notice Issued** |
| Helena Independent Record | 5/17/2023 |
|  |  |

* Public notice will announce the availability of the EA, summarize its content, and solicit public comment.
  + **Duration of Public Comment Period:** The public comment period begins on the date of publication of legal notice in area newspapers (see above). Written or e-mailed comments will be accepted until 5:00 p.m., MST, on the last day of public comment, as listed below:

**Length of Public Comment Period:** 15 days

**Public Comment Period Begins**: May 17th, 2023

**Public Comment Period Ends**: June 1st, 2023

Comments must be addressed to the FWP contact, as listed below.

* + **Where to Mail or Email Comments on the Draft EA:**

Name: ALEX pOOLE

Email: alex.poole@mt.gov

Mailing Address:

FWP Region 4

4600 Giant Springs Road

Great Falls, MT 59405

# **Recommendation for Further Environmental Analysis**

|  |  |
| --- | --- |
| **NO** further analysis is needed for the proposed action |  |
| FWP must conduct **EIS** level review for the proposed action |  |

# **EA Preparation and Review**

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Title** |
| **EA prepared by:** | Alex Poole | Native Fish Biologist, FWP Region 4 |
| **EA reviewed by:** | Jason Rhoten | Fisheries Manager, FWP Region 4 |
|  | Adam Strainer | Helena Area Fisheries Biologist, FWP Region 4 |
|  | Allison Russell | Fisheries Biologist, Helena-Lewis and Clark National Forest |
|  | Eric Merchant | MEPA Coordinator, FWP Director’s Office |

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