

# **DRAFT**

# **ENVIRONMENTAL ASSESSMENT**

# **CHECKLIST**

## **Big Coulee Fish Barrier Enhancement Project**

**FWP-CEA-FSH-R4-25-003**

**January 29, 2025**



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## I. 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.*

## II. Background and Description of Proposed Project

**Name of Project:** Big Coulee Fish Barrier Enhancement

Montana Fish, Wildlife & Parks (FWP) is proposing to enhance a previously constructed fish barrier on Big Coulee to protect a nonhybridized population of westslope cutthroat trout *Oncorhynchus lewisi* (WCT). The fish barrier project site on Big Coulee is located entirely on the Helena-Lewis and Clark National Forest, Judith-Musselshell Ranger District. The proposed enhancements to the Big Coulee fish barrier include constructing a cast-in-place concrete weir on top of a previously blasted bedrock waterfall and pouring a concrete splash pad at the base of the waterfall to eliminate the formation of a plunge pool. Additionally, drilling, blasting, and/or hydraulic

hammering of the bedrock directly downstream the barrier would be performed to grade the streambed in a manner that prevents pooling of water during periods of high stream discharge.

Westslope cutthroat trout 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 trout *Salvelinus fontinalis*, brown trout *Salmo trutta*, and rainbow trout *O. mykiss* 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 *O. virginalis bouvieri* (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 declining status of WCT has led to its designation as a *Species of Special Concern* by the State of Montana, a *Species of Conservation Concern* by the U.S. Forest Service (USFS), and a *Special Status Species* by the Bureau of Land Management (BLM). In addition, in 1997 a petition was submitted to the U.S. Fish and Wildlife Service (USFWS) to list WCT as “threatened” under the *Endangered Species Act* (ESA), 16 U.S.C. 1531, et seq. USFWS status reviews have found that WCT were “not warranted” for ESA listing (DOI 2003); however, this finding was in litigation until 2008 and additional efforts to list WCT under the ESA are possible.

To advance WCT conservation efforts in Montana, a Memorandum of Understanding and Conservation Agreement for Westslope Cutthroat Trout in Montana was developed in 1999 by several federal and state resource agencies (including the BLM, FWP, the USFS, and Yellowstone National Park), non-governmental conservation and industry organizations, tribes, resource users, and private landowners (FWP 1999: MOU). The MOU outlined goals and objectives for WCT conservation in Montana, which, if met, would significantly reduce the need for special status designations and listing of WCT under the ESA. The MOU was revised and endorsed by signatories in 2007 (FWP 2007). As described in the MOU, *the primary management goal for WCT in Montana is to ensure the long-term self-sustaining persistence of the subspecies in its historical range*. Presently the highest conservation priority is to secure existing, non-hybridized populations of WCT in place to conserve the remaining genetic diversity left on the landscape. Secure WCT populations are isolated from non-native species (usually by a fish barrier) and occupy enough habitat to ensure long-term persistence. Hilderbrand and Kershner (2000) recommended a minimum WCT population size of 2,500 fish for long-term persistence (>100 years) and Harig and Fausch (2002) recommended a minimum of 5.6 square miles (minimum watershed size) of occupied habitat.

The long-term goal for WCT conservation is to restore secure conservation populations of WCT to 20% of their historic distribution east of the Continental Divide (Upper Missouri River Basin upstream from and including the Judith River; FWP 2023). Mainstem rivers support important non-native recreation fisheries (i.e. brown and rainbow trout) and are not part of this conservation goal. FWP recognizes the value of non-native trout fisheries and will continue to manage 80% of the streams in the upper Missouri River for non-native fish such as brook, rainbow and brown trout. In the Upper Missouri-Dearborn drainage, WCT historically occupied approximately 1,002 miles of streams and rivers. Today there are a total of three remaining WCT populations in small headwater tributaries which occupy just over 8 miles of stream (~ 0.8% of their historic range). Of these three WCT populations, Big Coulee is the only population presently at risk due to competition and hybridization with non-native fish. Projects that secure WCT, such as that proposed for Big Coulee, are necessary to ensure the continued survival of the species, conserve remaining genetic diversity and meet statutory obligations to prevent listing under the ESA.

Big Coulee is a tributary of Highwood Creek located approximately 33 miles east of Great Falls, MT in the Highwood Mountains. The stream contains nonnative brook trout and a remnant population of nonhybridized

WCT. Historically, WCT were the only trout species present in Big Coulee, but brook trout had almost entirely displaced them by the mid-1990s when intensive management of the WCT population began. Brook trout, which are native to eastern North America and were introduced to the Highwood Creek drainage in the early 1900's, outcompete WCT because of their high reproductive rate, aggressive nature, and early emergence of fry in the spring (Shepard et al. 2005). A bedrock cascade was enhanced by blasting in 2002 and 2004 to create a waterfall barrier to isolate the upper 2.4 miles of fish habitat (Figure 1). From 1997-2008, brook trout were removed by backpack electrofishing to reduce negative impacts on the remaining WCT found above the barrier. Brook trout were completely removed from the reach upstream of the barrier by 2008 and the WCT population was monitored annually from 2009-2015.



Figure 1. Blasted bedrock barrier on Big Coulee.

Brook trout were once again discovered above the barrier during annual monitoring efforts in 2015. It is believed that brook trout gained access to the reach above the barrier in 2011 as a result of the record spring runoff experienced that year. Brook trout removals were again initiated in 2015 above the barrier. From 2015 to 2021, approximately 674 brook trout were removed. No brook trout were detected during annual monitoring in 2022 and 2023. In 2024, one brook trout and one brown trout were found in the reach immediately above the barrier indicating a bypass event likely took place during a high flow event that spring. Additional enhancement of the Big Coulee fish barrier is needed to ensure nonnative trout do not continue to invade and displace the nonhybridized WCT population.

FWP proposes to conserve WCT in Big Coulee by increasing the effectiveness of the fish barrier with the addition of multiple design elements. Hydraulic modeling and fish leaping analyses indicate that a concrete vertical-drop fish barrier 38 feet(ft) wide, tied into bedrock on both ends, with an 8 ft long and 3.5 ft tall weir opening will meet the design criteria. The design includes a sloped downstream apron set to grade. Barrier construction will

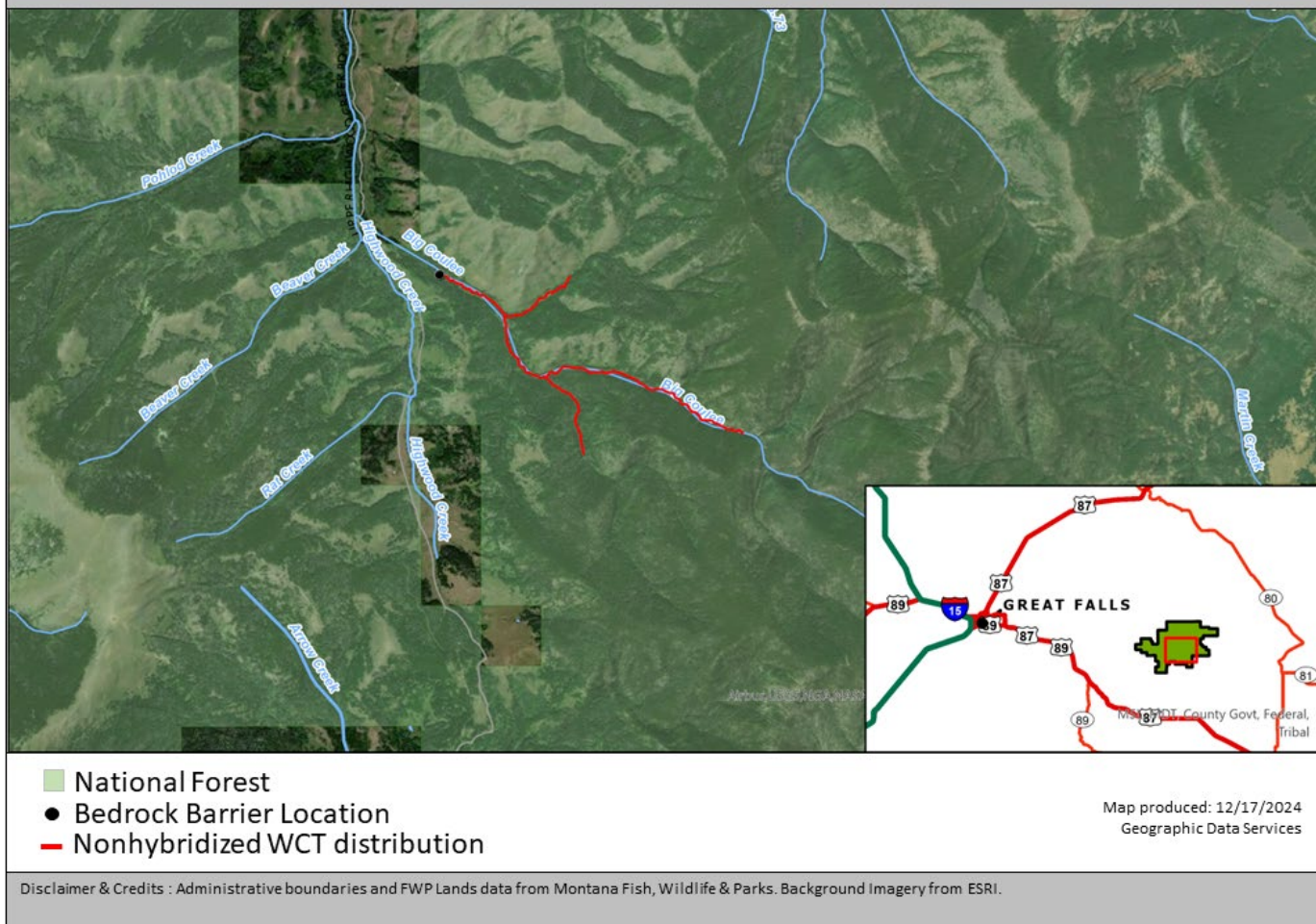
require some bedrock demolition to create a vertical drop and to place the sloped apron on grade. The addition of a sloped apron will eliminate the formation of a scour pool immediately below the vertical drop of the barrier which will reduce the burst velocity and restrict jumping ability of nonnative fish below the barrier. FWP will continue to monitor Big Coulee upstream of the newly constructed barrier to ensure its effectiveness at preventing upstream movement by nonnative trout. The project will be funded using a combination of grants including State Wildlife Grant (federal), Missouri River Fisheries Technical Advisory Committee (MoTAC – NorthWestern Energy), and the MaltEurope Water Lease Fund.

The primary benefit of this project is the long-term conservation of WCT in Big Coulee. The WCT in Big Coulee would shift from an “at-risk” population to one that is secure and will be resilient for generations to come. This project would conserve the unique genetic legacy of WCT in Big Coulee and add to the long-term conservation of the species. Collectively, WCT conservation projects like the one proposed for Big Coulee are intended to secure a small amount of the overall fish-bearing habitat for WCT to ensure the species long-term, self-sustaining persistence while managing the vast majority of habitat (80%) for non-native fish like brook trout, rainbow trout, and brown trout.

**Affected Area / Location of Proposed Project:**

- Legal Description
  - Latitude/Longitude: 47.429103, -110.574131
  - Section, Township, and Range: T19N, R9E, Section 10
  - Town/City, County, Montana: Highwood, Chouteau County, Montana
- Location Map





### III. Purpose and Need

*The EA must include a description of the purpose and need or benefits 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:

- Isolate the upper 2.4 miles of fish habitat in Big Coulee from nonnative fish invasion
- Increase the amount of protected WCT habitat in the Upper Missouri-Dearborn River drainage by 40% (from 6 miles to 8.4 miles; FWP 2022)
- Create a refugium for an at-risk WCT conservation population of highest conservation need
- Use the affected section of Big Coulee as a donor stream for future WCT conservation efforts in north central Montana
- Reduce the likelihood of ESA-listing of WCT

FWP intends to begin construction of the Big Coulee fish barrier enhancements in August 2025 and reach substantial completion by December 2025.

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

#### IV. 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 1** below. **Table 1** provides a summary of requirements but does not necessarily represent a complete and comprehensive list of all permits, certificates, or approvals needed for the proposed project. 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 1: Federal, State, and/or Local Regulatory Responsibilities**

Agency	Type of Authorization (permit, license, stipulation, other)	Purpose
<b>Helena-Lewis and Clark National Forest</b>	Management of forest resource, including Big Coulee	Consultation on proposed project.
<b>Montana Department of Environmental Quality</b>	318 Authorization	To provide a short-term water quality turbidity standard for construction activities.
<b>Montana Department of Environmental Quality</b>	Section 401 Permit	Gives states and authorized tribes the authority to grant, deny, or waive certification of proposed federal licenses or permits that may discharge into waters of the United States.
<b>U.S. Army Corps of Engineers</b>	Section 404 Permit	Establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands.

#### V. 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 2: 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>



Enforceable Control	Responsible Agency	Authority (Rule, Permit, Stipulation, Other)	Effect of Enforceable Control on Proposed Project
Montana Stream Protection Act	Montana Fish, Wildlife & Parks	SPA 124 Permit	Provide best management practices in the form of enforceable controls to limit potential adverse impacts from the proposed project.
Montana Antiquities Act	Montana Fish, Wildlife & Parks	MCA 22-3-421-442	Identify and develop methods and procedures to ensure that the identification and protection of heritage properties and paleontological remains on lands owned by the state are given appropriate consideration in state agency decision making.
Native and sensitive species management	FWP	Section 87-1-201(9)(a), M.C.A.	FWP is required by law to implement programs that manage sensitive fish species in a manner that assists in the maintenance or recovery of those species, and that prevents the need to list the species under § 87-5-107, MCA, or the federal ESA.
Westslope cutthroat conservation	FWP, DNRC, DEQ, MT Stockgrowers, MT Farm Bureau Federation, USFS, BLM, USFWS, US Natural Resource and Conservation Service and 10 other signatories	Memorandum of Understanding	FWP is a signatory to the Memorandum of Understanding and Conservation Agreement for Westslope Cutthroat Trout in Montana (FWP 1999, 2007) which states: "The management goal for WCT in Montana is to ensure the long-term, self-sustaining persistence of the subspecies within each of the five major river drainages they historically inhabited in Montana, and to maintain genetic diversity and life history strategies represented by the remaining local populations."
Westslope cutthroat conservation goal 20% of historically occupied habitat	FWP	Statewide Fisheries Management Plan	Specifies a management goal of restoring westslope cutthroat trout into the Upper Missouri River drainage to 20% of their historically occupied habitat.
Upper Missouri Westslope Cutthroat Conservation Strategy	FWP	Conservation Strategy	Defines conservation of WCT by securing existing populations in natal habitat as highest conservation priority.

## VI. 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, the proposed project would not occur. Therefore, no additional impacts to the physical environment or human population in the analysis area would occur. 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 enhance the existing Big Coulee fish barrier. If the "No Action" alternative were selected, the Big Coulee fish barrier would only restrict upstream movement of nonnative trout in low discharge years. Nonnative trout would likely reinvade Big Coulee threatening the WCT population with extirpation by competition and hybridization.

	Yes*	No
Were any additional alternatives considered and dismissed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

## VII. 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. Evaluation and Summary of Potential Impacts on the Physical Environment and Human Population**

Under the “No Action” alternative, the proposed project would not occur. Therefore, no additional impacts to the physical environment or human population in the analysis area would occur. 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 enhance the existing Big Coulee fish barrier. If the “No Action” alternative were selected, the Big Coulee fish barrier would only restrict upstream movement of nonnative trout in low discharge years. Nonnative trout would likely invade Big Coulee threatening the WCT population with extirpation by competition and hybridization.

- **Alternative 2: Proposed Project. Evaluation and Summary of Potential Impacts on the Physical Environment and Human Population**

See **Table 3** (Impacts on Physical Environment) and **Table 4** (Impacts on Human Population) below.

**Table 3 - Potential Impacts of Proposed Project on the Physical Environment**

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
Terrestrial, avian, and aquatic life and habitats	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to terrestrial, avian, and aquatic life and habitats would be expected because of the proposed project. The proposed project would enhance an existing fish barrier on Big Coulee to prevent the upstream movement of nonnative trout. Construction activities associated with the proposed project may prevent certain wildlife from using the affected area. However, any such impacts would be short-term, consistent with existing impacts, and negligible because the affected area already experiences moderate human use.
Water quality, quantity, and distribution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to water quality, quantity, and distribution would be expected because of the proposed project. The proposed project would enhance an existing fish barrier on Big Coulee to prevent the upstream movement of nonnative trout. Construction would occur in summer following peak flows. The stream will be diverted around the barrier site to allow for construction to occur in the dry channel. All required permits would be obtained prior to construction including Montana Stream Protection Act (SPA 124), Short-Term Water Quality Standard for Turbidity (318 Authorization), and Federal Clean Water Act Permits (401, 404) permits. The proposed action would not affect the rate or amount of surface water or flood flows; however, by design it would alter the drainage pattern by having a barrier in the stream. The barrier may create ponding, but only for a short distance. The ponding upstream of the barrier would eventually be eliminated by the accumulation of stream sediments. This process typically takes between one and five years depending on watershed characteristics and

PHYSICAL ENVIRONMENT		Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Resource		None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
										flow years. Once constructed, the same amount of flow would pass below the barrier as prior to construction. Therefore, any impacts to existing water resources would be short-term and minor in nature.
Geology		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to geology would be expected because of the proposed project. The proposed project would enhance an existing fish barrier on Big Coulee to prevent the upstream movement of nonnative trout. Barrier construction will require some bedrock demolition of the site previously blasted in 2002 and 2004 to create a vertical drop and to place a sloped apron on grade. The project would be implemented based on conditions stipulated by permitting agencies as well as the use of Construction Best Management Practices (BMPs) designed to reduce erosion and sedimentation and would include but may not be limited to work occurring in the dry channel, erosion control measures installed to control erosion and sediment release into the stream, and mulching and reseedling of any disturbed areas following construction.
Soil quality, stability, and moisture		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to soil quality, stability, and moisture would be expected because of the proposed project. Movement and compaction of soils to facilitate development of the fish barrier additions would occur directly at the barrier site. The project would be implemented based on conditions stipulated by permitting agencies as well as the use of Construction Best Management Practices (BMPs) designed to reduce erosion and sedimentation and would include but may not be limited to work occurring in the dry channel, erosion control measures installed to control erosion and sediment release into the stream, and mulching and reseedling of any disturbed areas following construction.



PHYSICAL ENVIRONMENT		Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Resource		None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
										Soils compacted during construction of the barrier will be decompacted to the extent possible following construction. Any impacts to soil quality, quantity, and moisture would be long-term and minor in the immediate vicinity of the barrier.
Vegetation cover, quantity, and quality		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to vegetation cover, quantity, and quality would be expected because of the proposed project. During construction there would be localized impacts to vegetation for gaining access to the construction site and at the immediate construction site. Impacts to vegetation would be limited to staging areas and ground immediately adjacent to the construction site. Following construction, all disturbed areas would be mulched and reseeded with a native plant mix. Woody riparian species may also be planted to help stabilize banks. Temporary and localized disturbance to the ground during construction may create an environment conducive to noxious weed recruitment and growth. In addition, machinery and equipment used during the project may inadvertently carry noxious weeds to the project site. Proposed mitigation includes: 1) washing all equipment and vehicles prior to work on the construction site; removal of mud, dirt, and plant parts from project equipment before moving into the project area; 2) inspection of the project area for noxious weeds after the project is completed. If noxious weeds are found in the project area after completion, integrated weed management methods, including herbicide application, bagging and appropriate disposal may be implemented. Inspections would continue for at least three years after weeds are observed. Any adverse impacts would be short-term and minor.

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
Aesthetics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to the aesthetic nature of the affected area would be expected because of the proposed project. Some people may be adversely impacted by noise and movement of materials during the construction phase of the proposed project. Further, the existing fish barrier would be enlarged by additions of a concrete weir crest and sloped apron. However, any impacts associated with the noise and movement of materials would be short-term and minor, lasting only as long as the construction phase of the proposed project. Modifications made to the barrier would be long-term and minor in severity.
Air quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 unclassifiable or in compliance with applicable National Ambient Air Quality Standards (NAAQS). The proposed project would not result in additional new air quality impacts in the affected area. 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 roads (fugitive dust source), vehicle exhaust emissions, and various agricultural practices (vehicle exhaust emissions and fugitive dust). Fugitive dust and vehicle exhaust emissions resulting from the movement of heavy equipment and materials for the proposed project may adversely impact air quality. However, any impacts to air quality would be short-term, mitigated by dust control practices, consistent with existing impacts within the recreational area, and negligible.
Unique, endangered, fragile, or limited	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to any unique, endangered, fragile, or limited environmental resources would be

PHYSICAL ENVIRONMENT		Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Resource		None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
environmental resources										expected because of the proposed project. Westslope cutthroat trout is currently ranked an S2 species of concern. The intent of the proposed project is to enhance an existing fish barrier on Big Coulee to protect a nonhybridized WCT population from nonnative fish. Any impacts to WCT would be long-term, beneficial, and moderate. The presence of any additional animal or plant Species of Concern and/or any species listed as Threatened or Endangered under the Endangered Species Act (ESA) that may be located within or use the affected area were assessed (Appendix B). FWP is unaware of any other unique, endangered, fragile, or limited environmental resources in the affected area that would be impacted by the proposed project.
Historical and archaeological sites		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse effects to historic and archaeological sites would be expected because of the proposed project. In keeping with Section 106 of the National Historic Preservation Act, the Montana Antiquities Act and related regulations (12.8.501-12.8.510), all undertakings on federal lands are assessed by a qualified archaeologist or historian for their potential to affect cultural resources. The process for this assessment may include a cultural resource inventory and evaluation of cultural resources within or near the project area, in consultation with the State Historic Preservation Office. FWP also consults with all Tribal Historic Preservation Offices affiliated with each property in accordance with FWP's Tribal Consultation Guidelines. If cultural resources within or near the project area are recorded that are eligible for the National Register of Historic Places, they will be protected from adverse effects through adjustments to the project design or cancellation of the project if no design alternatives are

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
									available. If cultural resources are unexpectedly discovered during project implementation, FWP will cease implementation, and contact FWP's Heritage Program for further evaluation.
Demands on environmental resources of land, water, air, and energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 4 - Potential Impacts of Proposed Project on the Human Population**

HUMAN POPULATION	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
Social structures and mores	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to social structures and mores in the affected area would be expected because of the proposed project. The proposed project would enhance an existing fish barrier on Big Coulee to prevent the upstream movement of nonnative trout. 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 would secure the WCT

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
									conservation population in the future following completion of the fish barrier. Long-term positive impacts of the proposed project would include adding the affected stream mileage to the WCT conservation goals for the Upper Missouri-Dearborn subbasin and a reduction in 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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impacts to cultural uniqueness and diversity in the affected area would be expected because of the proposed project.
Access to and quality of recreational and wilderness activities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 enhancing a fish barrier on Big Coulee. No closures of public lands would occur because of the proposed project.
Local and state tax base and tax revenues	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 would enhance an existing fish barrier on Big Coulee to prevent the upstream movement of nonnative trout 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



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
									would be short-term and negligible, lasting only as long as the proposed project.
Agricultural or Industrial production	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant impacts to agricultural or industrial production in the affected area would be expected because of the proposed project. The proposed project would enhance an existing fish barrier on Big Coulee to prevent the upstream movement of nonnative trout. Though the area is currently permitted by the Forest Service for cattle grazing, no impacts would be expected because of the proposed project.
Human health and safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to human health and safety would be expected because of the proposed project. The proposed project would enhance an existing fish barrier on Big Coulee to prevent the upstream movement of nonnative trout. and, when completed, would not impact human health and safety. Affected government staff and contractors 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. Use of the site by the public is low. Safety precautions will be taken to avoid any conflicts with recreationists that may be in the area. 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to the quantity and distribution of employment in the affected area would be expected because of the proposed project. The project constitutes construction activities to enhance an existing fish barrier and, when completed, would not impact the quantity and distribution of the employment in the affected area. Short-term, minor beneficial impacts to the

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
									local quantity and distribution of employment may be realized because of the need for contracted services to complete the construction activities. Any impacts would be short-term, minor, and beneficial.
Distribution and density of population and housing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to the distribution and density of population and housing would be expected because of the proposed project. The project constitutes construction activities to enhance an existing fish barrier on Big Coulee. Contractors would be used to accomplish portions of the proposed project, which may result in the need for temporary housing if the contractors selected for the proposed project do not live in the affected area. Any impacts from contracted work would be short-term and negligible and, when completed, would not impact the distribution and density of population and housing in the affected area. Therefore, any impacts to the distribution and density of population and housing in the affected area because of the proposed project would be short-term and negligible.
Demands for government services	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to demands for government services would be expected because of the proposed project. The project constitutes construction activities to enhance an existing fish barrier on Big Coulee. FWP would obtain funding for the proposed project through several external grant resources. The proposed project would use hired contractors to complete the work. Therefore, some impacts to demands for government services would occur as contractors would be paid with funds obtained by FWP for their services. Any adverse impacts would be short-term and negligible to minor.
Industrial, agricultural, and commercial activity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts to industrial, agricultural, and commercial activity would be expected because of the proposed project. The project constitutes construction

HUMAN POPULATION	Duration of Impact			Severity of Impact					Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	
									activities to enhance an existing fish barrier on Big Coulee. Though the area is currently permitted by the Forest Service for cattle grazing, no impacts would be expected because of the proposed project.
Locally adopted environmental plans and goals	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The proposed project would result in beneficial, long-term, and moderate impacts to WCT conservation goals outlined in the Montana Statewide Fisheries Management Plan, the 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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 5: 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. An impact may be adverse, beneficial, or both. If none of the adverse effects of the impact are significant, an EIS is not required. An EIS is required if an impact has a significant adverse effect, even if the agency believes that the effect on balance will be beneficial. ARM 12.2.431.

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	<p>The <b>severity, duration, geographic extent</b>, and <b>frequency</b> of the occurrence of the impact</p> <p><b>“Severity”</b> describes the density of the potential impact, while <b>“extent”</b> 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.</p> <p><b>“Duration”</b> describes the time period during which an impact may occur, while <b>“frequency”</b> 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).</p>
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

## VIII. Private Property Impact Analysis (Takings)

*The 54<sup>th</sup> 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 6: Private Property Assessment (Takings)**

	Yes	No	
<i>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</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<i>Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required.</i>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>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</i>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>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:</i>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>PRIVATE PROPERTY ASSESMENT ACT (PPAA)</b>			
<b>Does the Proposed Action Have Takings Implications under the PPAA?</b>	<b>Question #</b>	<b>Yes</b>	<b>No</b>
Does the project pertain to land or water management or environmental regulations affecting private property or water rights?	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action result in either a permanent or an indefinite physical occupation of private property?	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action deprive the owner of all economically viable uses of the property?	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there a reasonable, specific connection between the government requirement and legitimate state interest?	4a	<input type="checkbox"/>	<input type="checkbox"/>
Is the government requirement roughly proportional to the impact of the proposed use of the property?	4b	<input type="checkbox"/>	<input type="checkbox"/>



Does the action deny a fundamental attribute of ownership?	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action have a severe impact of the value of the property?	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the impact of government action direct, peculiar, and significant?	7a	<input type="checkbox"/>	<input type="checkbox"/>
Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?	7b	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
<b>Does the proposed action result in taking or damaging implications?</b>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Taking or damaging implications exist if <b>YES</b> 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 <b>NO</b> 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.			
<b>Alternatives:</b> 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.			

## IX. 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/news/public-notices>*
- *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)).*
- *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 on the FWP website. 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:** Feb. 27, 2025

**Public Comment Period Ends:** Mar. 14, 2025

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

## X. Recommendation for Further Environmental Analysis

<b>NO</b> further analysis is needed for the proposed action	<input checked="" type="checkbox"/>
FWP must conduct <b>EIS</b> level review for the proposed action	<input type="checkbox"/>

## XI. EA Preparation and Review

	<b>Name</b>	<b>Title</b>
<b>EA prepared by:</b>	Alex Poole	Native Fish Biologist, FWP Region 4
<b>EA reviewed by:</b>	Jason Mullen	Fisheries Manager, FWP Region 4
	Eric Archer	Fisheries Biologist, Helena-Lewis and Clark National Forest

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## Appendix B: Sensitive Species of Occurrence (SOC) list for project area.

MT Status	Species Group	Sort Order	Common Name	Scientific Name	Habitat	Distribution
SOC	Fish	5	Westslope Cutthroat Trout	Oncorhynchus clarkii lewisi	Mountain streams, rivers, lakes	Resident Year Round
SOC	Mammals	1	Long-legged Myotis	Myotis volans	Conifer forest	Resident Year Round
SOC	Birds	2	Cassin's Finch	Haemorhous cassinii	Drier conifer forest	Resident Year Round
SOC	Birds	2	Clark's Nutcracker	Nucifraga columbiana	Conifer forest	Resident Year Round
SOC	Birds	2	Evening Grosbeak	Coccothraustes vespertinus	Conifer forest	Resident Year Round
SOC	Birds	2	Veery	Catharus fuscescens	Riparian forest	Migratory Summer Breeder
SOC	Mammals	1	Little Brown Myotis	Myotis lucifugus	Generalist	Resident Year Round
SOC	Mammals	1	Long-eared Myotis	Myotis evotis	Forest	Resident Year Round
SOC	Mammals	1	Hoary Bat	Lasiurus cinereus	Riparian and forest	Migratory Summer Breeder
SOC	Amphibians	4	Western Toad	Anaxyrus boreas	Wetlands, floodplain pools	Resident Year Round
PSOC	Bryophytes	9	Acuminate Dung Moss	Tayloria acuminata		Unknown