

FINAL ENVIRONMENTAL ASSESSMENT CHECKLIST

FWP-CEA-FSH-R5-24-016

Wetland Restoration on North Willow Creek – Musselshell County, MT

05/31/2024



Table of Contents

I.	Compliance with the Montana Environmental Policy Act.....	3
II.	Background and Description of Proposed Project	3
III.	Purpose and Need	5
IV.	Other Agency Regulatory Responsibilities	6
V.	List of Mitigations, Stipulations	6
	Table 4: SPA 124 Permit Conditions the Department Will Require to Issue Permit.....	7
VI.	Alternatives Considered	8
VII.	Summary of Potential Impacts of the Proposed Project on the Physical Environment and Human Population ...	8
VIII.	Private Property Impact Analysis (Takings).....	19
IX.	Public Participation	20
X.	Recommendation for Further Environmental Analysis	21
XI.	EA Preparation and Review	21
	Attachment 1.....	22
	SPA 124 Permit General Conditions	22

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: Wetland Restoration on North Willow Creek – Musselshell County, MT

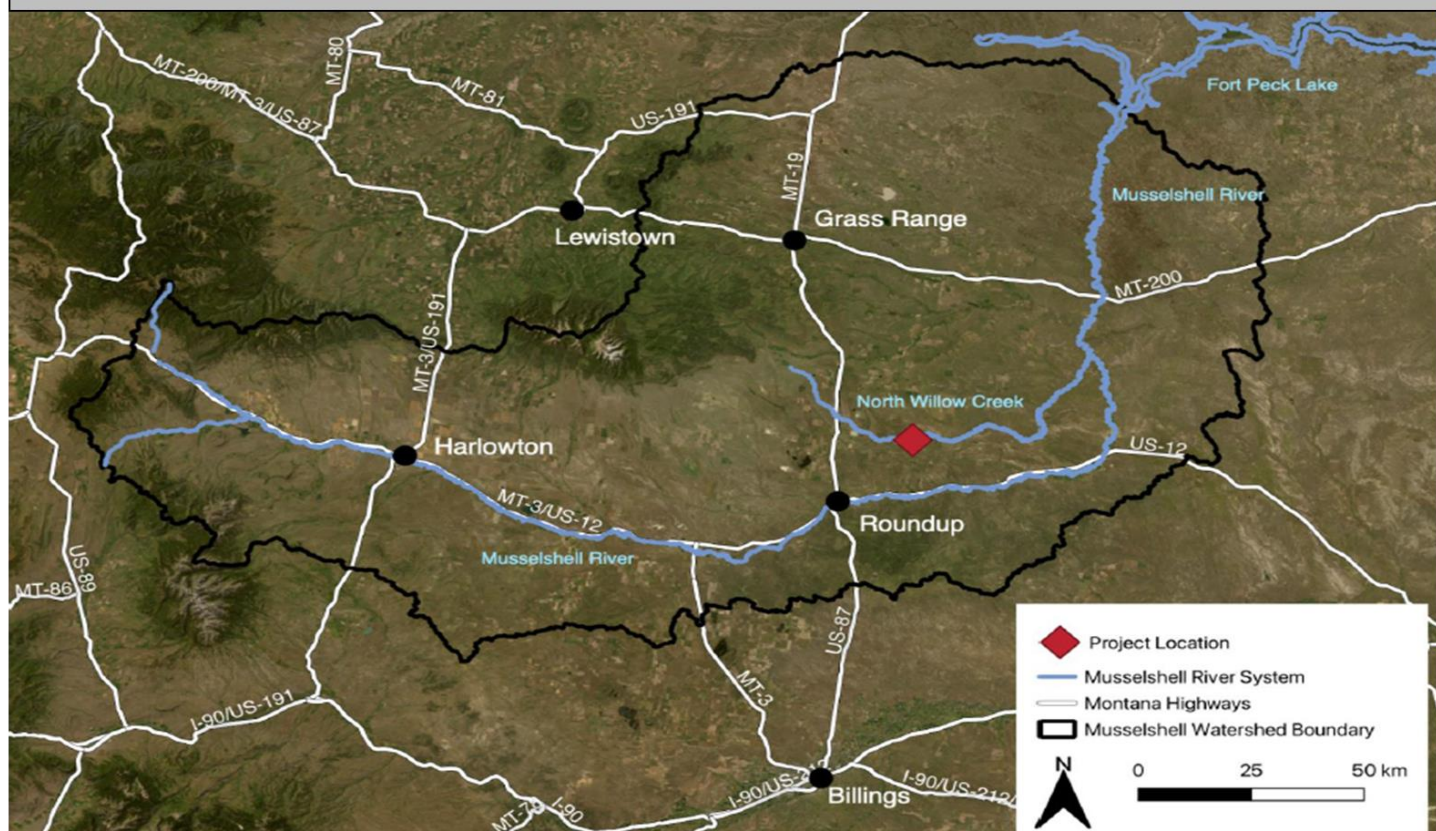
The Bureau of Land Management (BLM) and the National Wildlife Federation (NWF) are partnering to assist in the restoration of prairie streams on BLM administered lands in collaboration with local watershed groups, non-profits, and agencies. As part of this partnership NWF hired Anabran Solutions to assist in developing the assessment and design of low-tech process-based restoration practices (LTPBR; Wheaton et al. 2019) in the Musselshell Region, with phased implementation completed during the 2024 and 2025 seasons. A primary focus of this partnership is to better understand the current conditions of prairie streams and how LTPBR practices may improve overall riverscape health.

The riparian system in the proposed reaches consists of a single thread intermittent stream, which can contain water all year-round but often goes dry during drought years except for a few stagnant pools. They are second order streams with a very low gradient (less than 1%), which have gentle meandering planform in unconfined valleys. The banks are minimally altered and are 1-2 ft high. Incision from grazing has caused vertical unstable banks in some areas. Areas that are not incised have banks with a lower slope. Headcuts are forming along several sections of the creeks and are degrading adjacent wet meadow habitat. The creeks are in the Fort Union geologic formation containing sandstones, shales, and coal beds, and the bends in the stream and exposed banks reveal varying class sizes of sand, gravel, and small rocks. The system is indicative of the Central and Eastern Montana sedimentary and glacial plains which have soils that are more developed in higher terraces, and development decreases towards open water. Hydric soils and wetland hydrology indicators are common on floodplains. Current vegetation is dominated by native and naturalized perennial grasses and silver sagebrush (*Artemisia cana*). Sagebrush is encroaching into the stream channel in some places, indicating a drop in the water table. There is minimal infrastructure, including a culvert under Big Wall Road and legacy fill to create ponds for cattle.

The proposed restoration will build up to 224 in-stream beaver dam analogs (BDAs) and/or post-assisted log structures (PALS) on two tributaries of North Willow Creek in the Musselshell watershed. The expected benefits are to improve in-stream habitat diversity and floodplain connectivity. This project will work in two reaches that cross BLM, State and private land. These structures include BDAs and PALS, which are hand-built structures that mimic the form and function of natural beaver dams and wood jams. They are temporary, semi-permeable structures that can improve in-stream and floodplain health by increasing in-stream physical complexity, increasing channel-floodplain connectivity, and accelerating recovery from channel incision. The applicant anticipates the project to begin July 2024.

Affected Area / Location of Proposed Project:

- Legal Description
 - Latitude/Longitude: *Reach 1*: 46.55114, -108.42168; *Reach 2*: 46.59521, -108.30102
 - Section, Township, and Range: *Reach 1*: 11 9N 26 E and 26 10N 26E; *Reach 2*: 26 10N 27E
 - Town/City, County, Montana: Roundup, Musselshell County, Montana
- Location Map



Map produced: by Anabran Solutions
3/28/2024

III. 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 purpose of the proposed project is to use low-tech process-based restoration (LTPBR) techniques to create in channel habitat complexity, maintain streamflow during the growing season, repair headcuts, promote groundwater storage and expansion of riparian vegetation, and diversify in-channel and floodplain habitat conditions for aquatic and terrestrial flora and fauna.

LTPBR practices use restoration techniques that are aimed at raising the water table and streambed elevation to restore floodplain subirrigation, which is expected to expand wetland area and halt stream downcutting to prevent further loss of wetlands and mesic areas important for sage grouse chick survival. Site-specific objectives for the first round of restoration will center around the concept of restoring stream channel function by mimicking natural processes that historically maintained the attributes and resource values of the low-gradient prairie streams throughout the region. Site selection focused on reaches that have the potential to respond quickly following restoration, have easy access, and provide learning opportunities for prairie systems and soil types (dispersal clay soils).

The applicant proposes to use construction materials like fill excavated from soil and rock at the work site, brush and woody vegetation from nearby forest thinning operations, and untreated wooden fence posts. All structures will be built using hand tools (e.g., chainsaw, shovel, loppers) and, where access allows, a portable hydraulic post-pounder to install

untreated wooden posts to increase the structure's temporary stability. Construction methods will involve the following: (1) laborers cutting down and hauling woody material to the channel (2) laborers placing woody material and excavated material in the channel, and (3) laborers installing posts with a hydraulic post pounder to stabilize the structure.

The project proponent expects to implement the project July 2024, with final completion in November 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 state requirements but does not necessarily represent a complete and comprehensive list of all permits, certificates, or approvals needed. 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
MT DNRC – County Floodplain	Floodplain Permit	Determine if fill will be placed in floodplain and if project will cause a significant rise in floodplain elevation.
US COE	Nationwide 27 Permit	Aquatic Habitat Restoration, Enhancement, and Establishment Activities
MT DEQ	318 Authorization	Reduce the effects of turbidity on the area of impact.

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
SPA 124 Permit - General Requirements (see Appendix 1)	FWP	SPA 124	SPA 124 Permit, General Conditions, provide best management practices in the form of enforceable controls to limit potential adverse impacts from the proposed project. Fines may be levied for violating these general requirements and/or corrective action may be required to remedy non-compliance.
Floodplain Permit – General Requirements	DNRC/Local Administrator	Floodplain	Limiting the amount of fill deposited into the floodplain. Description of how project will contain a ‘no-rise’ effect. See DNRC Permitting information.
Limiting Fill in a Navigable Waterway	US COE	NW Permit 27	Aquatic Habitat Restoration, Enhancement, and Establishment Activities. Activities in waters of the United States associated with the restoration, enhancement, and establishment of tidal and non-tidal wetlands and riparian areas, the restoration and enhancement of non-tidal streams and other non-tidal open waters, and the rehabilitation or enhancement of tidal streams, tidal wetlands, and tidal open waters, provided those activities result in net increases in aquatic resource functions and services.
318 Authorization – Short-Term Water Quality Permit	DEQ	318 Authorization	Short-term narrative water quality standards for total suspended sediment and turbidity resulting from stream-related construction activities or stream enhancement projects.

VI. SPA 124 Permit Action

Any applicable Montana stream work that is not otherwise excluded from MEPA review under the applicable requirements of ARM 12.2.454, Actions that Qualify for a Categorical Exclusion, and has the potential to alter the stream channel or bank, requires a project-specific 124 Stream Protection Act Permit or SPA 124 Permit prior to the start of work. The SPA 124 permit is issued by FWP’s Fisheries Division and includes both the general conditions described in Attachment 1 and any additional Special Conditions deemed necessary to protect and preserve the affected waterway. Additional conditions deemed necessary to protect and preserve the affected stream from potential impacts associated with the proposed project are listed in Table 4 below.

Table 3: SPA 124 Permit Conditions the Department Will Require to Issue Permit.

Activity	Special Condition	Description
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Work Activity	Work shall not occur outside of the project scope outlined in permit. Failure to comply could result in violations.	Clearly defining expectations that work should follow scope established by project proponent in joint application.
FWP Right	FWP reserves the right to revisit, modify, deny, issue an amendment or violation to a previously approved permit.	Clearly defines expectations in the event an amendment and/or modification is required from either the project proponent or FWP staff.

VII. 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.

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.

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

* 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

Alternative 3:

Stream Restoration using heavy machinery

An alternative restoration method would use heavy mechanized construction equipment, but this would likely damage riparian areas. By using LTPBR, the project proponent will likely improve channel conditions rather than degrade them. The proposed restoration actions will improve biological, hydrologic, and geomorphic processes that create and maintain healthy stream and wetland ecosystems.

VIII. 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.

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

See **Table 4** (Impacts on Physical Environment) and **Table 5** (Impacts on Human Population) below.

Table 4 - Potential Impacts of the 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FWP does not expect significant impacts to the terrestrial, avian, and aquatic life and habitats because of this project. The project is aimed increasing floodplain connectivity and improving 'riverscape' health by installing beaver dam analogs and/or post-assisted log structures, which mimic the form and function of natural beaver dams and wood jams. The project will have minor and short-term impacts because of the movement and re-deposition of sediment materials near the structures; however, the project will have long-term, moderate benefit by allowing the stream to maintain natural floodplain connectivity and promote natural streamflow storage ¹ .
Water quality, quantity, and distribution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FWP expects moderate, long-term, and beneficial impacts to the water quality, quantity, and distribution of the project area because of the proposed project. Installing BDAs and PALs in an incised, floodplain disconnected stream, can promote a healthy riverscape. From the BLM Programmatic EA, "A healthy riverscape improves water quality by dissipating energy associated with high waterflow, thereby reducing vertical instability, while developing floodplains and complex hydrogeomorphic features with captured sediment and nutrients. Slowing flood water enables aquifer recharge, deposition, and plant nutrient uptake. Water-loving, densely rooted streambank stabilizing vegetation and/or wood helps integrate riparian functions to maintain channel characteristics for a diversity of habitats, and structural elements (beaver dams and wood accumulations)

¹Montana Natural Heritage Program. Environmental Summary Report for Latitude 46.43964 to 46.73339 and Longitude -108.10081 to -108.63509. Retrieved on 4/16/2024.

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	
										distribute water through more complex flow paths and longer residence times. A complex food web helps slow the nutrient spiral with uptake and storage within the valley bottom. Temperature fluctuations are dampened by delayed discharges, narrower and deeper active channels, surface/groundwater exchange caused by substrate heterogeneity and deeper pools, and shade from riparian vegetation. Collectively, these riverscape functions impact sediment and nutrient loads, dissolved oxygen (DO), and water temperature to sustain beneficial uses and values (fisheries, recreation, etc.) and ecosystem services (e.g., reduced water treatment costs).” In addition, installation of BDAs and PALs can promote water storage, thereby facilitating and maintaining adequate streamflow quantity.
Geology		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FWP does not expect significant impacts to the geology because of the proposed project. The proposed stream drainages are within the Fort Union geologic formation and contain sandstones, shales, and coal beds. The bends in the stream and exposed banks reveal varying class sizes of sand, gravel, and small rock substrates. There are no unique geologic features in the project area.
Soil quality, stability, and moisture		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FWP expects both short term and long term, moderate and beneficial impacts because of the proposed project. The system is indicative of the Central and Eastern Montana sedimentary and glacial plains which have soils that are more developed in higher terraces, and development decreases towards open water. Hydric soils and wetland hydrology indicators are common on floodplains. The installation of BDAs and PALs in systems that lack woody debris can promote water storage and soil moisture, ultimately provided benefit for riparian plant species that only continue to enrich the nearby soils.

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	
Vegetation cover, quantity, and quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FWP expects both short term and long term, moderate and beneficial impacts because of the proposed project. Current vegetation is dominated by native and naturalized perennial grasses and silver sagebrush (<i>Artemisia cana</i>). Sagebrush is encroaching into the stream channel in some places, indicating a drop in the water table. The proposed project would install BDA and PAL structures, which can promote floodplain connectivity and water storage. Thus, riparian plant communities are likely to become re-established in the long-term, which in turn facilitates additional plant species communities and both aquatic and terrestrial fauna that rely on healthy riparian corridors.
Aesthetics	<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"/>	FWP expects long-term, moderate and beneficial impacts because of the proposed project. The installation of BDAs and PALs is likely to promote riparian vegetation along the stream corridor and when paired with the current adaptive livestock grazing management, the stream will continue to improve from an incised, riparian-starved stream ecosystem into a fully functioning system.
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"/>	FWP does not expect significant impacts to air quality in the affected area because of the proposed project. The proposed project constitutes installing BDA and PAL woody debris structures directly in stream and, when completed, would not result in additional new land, air, or water disturbance in the area. Fugitive dust and vehicle exhaust emissions resulting from the movement of maintenance materials for the proposed project may directly impact air quality in the area in the short term. Any impacts would be negligible, lasting only as long as the proposed project.
Unique, endangered, fragile, or limited	<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"/>	FWP does not expect significant impacts to unique, endangered, fragile, or limited environmental resources

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	
environmental resources									because of the proposed project. The proposed project would install BDA and PAL structures directly in stream, over a short time and during summer. The project proponent does not expect restoration to occur in suitable habitat nor in critical habitat for endangered or threatened species. Thus, FWP expects short-term, minor impacts to any unique or endangered species/habitats because the project proponent expects work to be completed in a two-week period during low flow periods (summer) and provide long-term, healthy riverscape function.
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"/>	FWP does not expect significant impacts to historical or archaeological sites because of this project. The project proponent identified the BLM as having conducted a site investigation for potential historic or archaeological artifacts and the inspection revealed that all work would occur within previously disturbed areas or areas inundated by waters. Thus, the BLM determined the proposed project has a finding of "No Historic Properties Affected".
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"/>	FWP does not expect significant adverse impacts to demand on the environmental resources of land, water, and air because of the proposed project. Fuel would be required to operate vehicles used for the proposed project. There are no other demands on the environmental resources of land, water, air, and energy because of the proposed project. Therefore, any impacts to demands on environmental resources of land, water, air, and energy in the affected area would be short-term and negligible.

Table 5 - Potential Impacts of the Proposed Project on the Human Population

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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FWP does not expect significant impacts to social structures and more because of this project. The project is located within a rural area and surrounded by agricultural and livestock ranching lifestyles. Thus, FWP expects long term, beneficial impacts because the installation of BDAs and PALs would improve the local riparian vegetation and promote water storage, thus providing stream flows for livestock use.
Cultural uniqueness and diversity	<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"/>	FWP does not expect significant impacts to cultural uniqueness and diversity because of this project. The project is focused on promoting a healthy stream ecosystem and riparian community, which does not significantly change the current cultural uniqueness and diversity already present within the greater Roundup-Gage area.
Access to and quality of recreational and wilderness activities	<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"/>	FWP does not expect significant impacts to access to and quality of recreational and wilderness activities because of the proposed project. The proposed project would promote a healthy and functioning stream ecosystem on BLM, Montana State Trust Lands, and private land. Thus, FWP expects long term, minor benefits by promoting more natural processes, like beaver dam building activity, wood accumulations, and/or natural flood regimes.
Local and state tax base and tax revenues	<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"/>	FWP does not expect significant adverse impacts to the local and state tax base and tax revenues because of the proposed project. The proposed project constitutes installing BDA and PAL structures in stream to promote a functioning stream corridor through the proposed

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	
									reaches. FWP anticipates the proposed project would increase state and local tax revenues from the sale of fuel, supplies and/or equipment to complete the project. In addition, the project may benefit the private landowner livestock practices and productions and thus there may be local and state tax revenue benefit from the sale of livestock. Any impacts to the local and state tax base and tax revenue would be likely be minor and dependent on market prices for sale of livestock. Revenues of fuel purchases would be negligible and last only as long as the proposed project.
Agricultural or Industrial production	<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"/>	FWP does not expect significant adverse impacts to agricultural or industrial production because of the proposed project. The proposed project constitutes installing BDA and PAL structures in stream to promote a functioning stream corridor through the proposed reaches. FWP anticipates the proposed project may benefit the private landowner livestock practices and productions and thus benefit from the sale of livestock. Any impacts likely be minor and dependent on market prices for sale of livestock.
Human health and safety	<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"/>	FWP does not expect significant to the human health and safety because of this project. The project constitutes installing BDA and PAL structures in stream to promote a functioning stream corridor through the proposed reaches, which are in a rural, un-populated area.
Quantity and distribution of employment	<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"/>	There are no significant adverse impacts to the quantity and distribution of employment in the affected area because of the proposed project. The proposed project constitutes installing BDA and PAL structures in stream to promote a functioning stream corridor through the proposed reaches, which would not impact the quantity and distribution of employment in the affected area.

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	
									Short-term impacts to the local quantity and distribution may be realized because of the need for contracted services to complete maintenance activities. Any impacts the quantity and distribution of employment in the affected area would be short-term and negligible.
Distribution and density of population and housing	<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"/>	There are no significant impacts to the distribution and density of population and housing in the affected area because of the proposed project. The proposed project constitutes installing BDA and PAL structures in stream to promote a functioning stream corridor through the proposed reaches and, when completed, would not impact the distribution and density of population and housing in the affected area.
Demands for government services	<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"/>	FWP does not expect significant adverse effects to the demands for government services because of this project. There may be short-term, negligible effects to transportation associated with vehicle use to transport equipment near the proposed reaches; however, this will be limited to the immediate area and likely will not be within the roadway.
Industrial, agricultural, and commercial activity	<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"/>	FWP does not expect significant impacts to industrial, agricultural, and commercial activity because of the proposed project. The proposed project constitutes installing BDA and PAL structures in stream to promote a functioning stream corridor through the proposed reaches. FWP anticipates the proposed project may benefit the private landowner livestock practices and productions and thus benefit from the sale of livestock. Any impacts likely be minor and dependent on market prices for sale of livestock.
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"/>	FWP expects long term, moderate and beneficial impacts to locally adopted environmental plans and goals. The proposed project constitutes installing BDA and PAL

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	
Resource									structures in stream to promote a functioning stream corridor through the proposed reaches. This proposed project benefits various environmental goals defined by the BLM, Musselshell Watershed Coalition, Montana State Wildlife Action Plan (2015) and the Montana State Water Plan (2015). FWP expects the benefits to be long-term and moderate.
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"/>	FWP is unaware of any other appropriate social and economic circumstances that may be impacted by the proposed project.

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

<p>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.</p> <p>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.</p>	
Criteria Used to Determine Significance	
1	<p>The severity, duration, geographic extent, and frequency of the occurrence of the impact</p> <p>“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.</p>

	“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

IX. 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
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:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
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	<input checked="" type="checkbox"/>	<input 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 5)	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"/>
Does the proposed action result in taking or damaging implications?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 4a or 4b.			
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.			

X. 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>*
- *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

- *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: 05/03/2024
Public Comment Period Ends: 05/17/2024

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

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

Name: DEMI BLYTHE
Email: demi.blythe@mt.gov

Mailing Address:
2300 Lake Elmo Drive
Billings, MT 59105

XI. Recommendation for Further Environmental Analysis

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

XII. EA Preparation and Review

	Name	Title
EA prepared by:	Demi Blythe	R5 Fisheries Biologist
EA reviewed by:	Shannon Blackburn	R5 Fisheries Manager

Attachment 1

SPA 124 Permit General Conditions

FWP.MT.GOV



THE **OUTSIDE** IS IN US ALL.

Stream Protection Act 124 Permit General Conditions

1. Complete work affecting a streambed or stream bank in an expeditious manner to avoid unnecessary impacts to the stream.
2. Limit the clearing of vegetation to that which is absolutely necessary for construction of the project. Take precautions to preserve existing riparian vegetation. Salvage and reuse native vegetation where possible.
3. Install and maintain erosion control measures where appropriate to protect aquatic resources. Do not clear and grub land adjacent to streams prior to installing proper erosion and sedimentation controls. Conduct all work in a manner that minimizes turbidity and other disturbances to aquatic resources.
4. Plan temporary construction facilities to:
 - a. Minimize disturbance to stream banks, stream bank vegetation, and the streambed by locating staging or storage facilities at least 50' horizontally from the highest anticipated water level during construction;
 - b. not restrict or impede fish passage in streams; and
 - c. not restrict any flow anticipated during use.
5. Provide sediment controls for drainage from topsoil stockpiles, staging areas, access roads, channel changes, and instream excavations.
6. Isolate work zones from flowing and standing waters to prevent turbid water and sediments from being discharged into streams or other drainages that flow directly into the stream. Divert flowing waters around the work zone.
7. Do not spill or dump material into streams. Store and handle petroleum products, chemicals, cement and other deleterious materials in a manner that will prevent their entering streams.
8. Do not permit wash water from cleaning concrete-related equipment or wet concrete to enter streams.
9. Do not operate mechanized equipment in any stream or flowing water unless special authorization is obtained. If special authorization is granted, the following conditions apply:
 - a. Power-wash all equipment allowed in a stream prior to entering the stream channel.
 - b. Clean and maintain all equipment so that petroleum-based products and hydraulic fluids do not leak or spill into the waterway.
10. Reclaim streambeds and stream banks as closely as possible to their pre-disturbed condition.
11. Restore disturbed stream banks to their natural or pre-disturbed configuration to match adjacent ground contours or as specified in the project plans. Stabilize, reseed, and re-vegetate disturbed areas. Install and maintain long-term biodegradable erosion-control measures to protect these areas until adequate vegetation has been established.
12. Restore temporary access routes and any temporarily disturbed areas to original conditions, including original contours and vegetation.
13. Dispose of any excess material generated from the project above the ordinary high-water mark and in an area not classified as a wetland.