

DRAFT

ENVIRONMENTAL ASSESSMENT

CHECKLIST

Bootjack and Leon Lakes Burbot Introduction

FWP-CEA-FSH-R1-24-024

08/23/2024



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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: Bootjack and Leon Lakes Burbot Introduction

Montana Fish, Wildlife & Parks (FWP) is proposing to stock burbot into Bootjack Lake and Leon Lake. Bootjack and Leon Lakes are closed basin lakes in the Thompson Chain of Lakes south of Highway 2 near Happy’s Inn. The proposed action is being considered to provide angling opportunity, reduce density of illegally introduced yellow perch thus reducing competition with and predation on stocked rainbow trout, and improve individual growth rates of existing game fish populations. Juvenile burbot would be stocked as fish become available from Twin Rivers Hatchery administered by the Kootenai Tribe of Idaho, and/or adult burbot would be transferred directly from the Kootenai River in Montana pending availability and disease testing. Burbot would be introduced at

densities not to exceed 10 burbot/acre. Because hatchery and wild burbot are rare and likely not available at numbers approaching 10/acre, this project may take several to many years to establish a self-reproducing, harvestable population. As such, regulations will start conservatively (no harvest) and evolve to limited harvest as the populations reach 10 burbot/acre.

Burbot (ling) are the only freshwater member of the cod family found in North America and are easily identified by their eel-like appearance, rounded tail, and single chin barbel (McPhail and Paragamian 2000). With a circumpolar distribution above 40 degrees north, burbot occupy both rivers and lakes (Scott and Crossman 1973). Although found throughout much of the state, burbot are native only to the Kootenai, Missouri, and Saskatchewan drainages in Montana (Brown 1971). In the Kootenai drainage, burbot are present upstream of Libby Dam in Lake Koocanusa, as well as downstream in the Kootenai River to Idaho and Kootenay Lake in British Columbia. They are also present in Glen, Sophie, and Tetrault (Carpenter) Lakes near Eureka, Montana, likely from unauthorized placement but possibly from intermittent connectivity of some lakes to Lake Koocanusa.

Most burbot reach sexual maturity by age three to four having attained total lengths of around 400 to 500 mm (Arndt and Hutchinson 2000). Spawning occurs during late winter or early spring. Larval burbot are pelagic feeders, consuming mainly zooplankton. Juvenile burbot become benthic oriented and prey on invertebrates and small fish before ultimately becoming predominantly ambush piscivores.

Bootjack Lake

Located in the Kootenai River drainage, Bootjack Lake is an 11-acre closed basin lake with a maximum depth of 40 feet. Bootjack Lake was chemically treated in 1997 to remove illegally introduced yellow perch and pumpkinseed. Beginning in 1998, FWP began stocking rainbow trout and westslope cutthroat trout on alternating years. Illegally introduced yellow perch were detected again in 2014 and largemouth bass were found in 2018. While largemouth bass exist at low densities, yellow perch have expanded resulting in an abundant population of mostly stunted individuals. In 2020, stocking of westslope cutthroat trout was discontinued due to their small size (~ 1.5") at release, making them vulnerable to predation by abundant yellow perch. Only rainbow trout are currently stocked on an annual basis. Yellow perch prey on stocked rainbow trout and compete for the same food resources (zooplankton and aquatic and terrestrial invertebrates) in Bootjack Lake, resulting in decreased rainbow trout survival and growth. The most recent gillnet surveys during spring of 2022 indicated abundance of small yellow perch is very high (34 fish / net).

Leon Lake

Leon Lake is one of the deeper small lakes in the Thompson Chain of Lakes. Located between Loon and Horseshoe Lakes, Leon is a closed basin 22-acre lake with a maximum depth of 87 feet. Initially managed as a trout fishery, Leon Lake was poisoned in 1969 to remove illegally introduced pumpkinseed and largemouth bass. Following pumpkinseed and largemouth bass removal, westslope cutthroat and rainbow trout have been stocked. In 1994, it was determined that an illegally introduced yellow perch population had become established, and subsequent sampling indicated variable sizes and abundances of perch and trout through time. In 2020, stocking of westslope cutthroat trout was discontinued due to their small size (~ 1.5") at release, making them vulnerable to predation by abundant yellow perch. Only rainbow trout are currently stocked on an annual basis. Yellow perch prey on stocked rainbow trout and compete for the same food resources (zooplankton and aquatic and terrestrial insects) in Leon Lake, resulting in decreased rainbow trout survival and

growth. The most recent gillnet surveys during spring of 2024 indicated abundance of small yellow perch is extremely high (58 fish / net).

Introducing burbot will add a natural predator for illegally introduced yellow perch, as burbot are known to target yellow perch (Rudstam et al. 1995). The objective would be to reduce yellow perch densities, thereby decreasing predation on and competition with rainbow trout and increasing individual growth and the overall quality of the fishery for both species. The potential loss of stocked rainbow trout through burbot predation would be mitigated by adjusting stocking rates for rainbow trout to meet recreational fishing objectives. Additionally, burbot would provide a unique trophy fishery for a regionally native species.

Implementation timing of the proposed action would depend on several factors including procuring an appropriate source of burbot, mitigating potential disease risks, and evaluating genetic considerations for population establishment.

Affected Area / Location of Proposed Project:

- Legal Description
 - Latitude/Longitude: Bootjack = 48.085024, -115.152039, Leon = 48.08048, -115.17937
 - Section, Township, and Range: T27N R28W Sections 23, 24
 - Town/City, County, Montana: Happy's Inn, Lincoln County, Montana
- Location Map

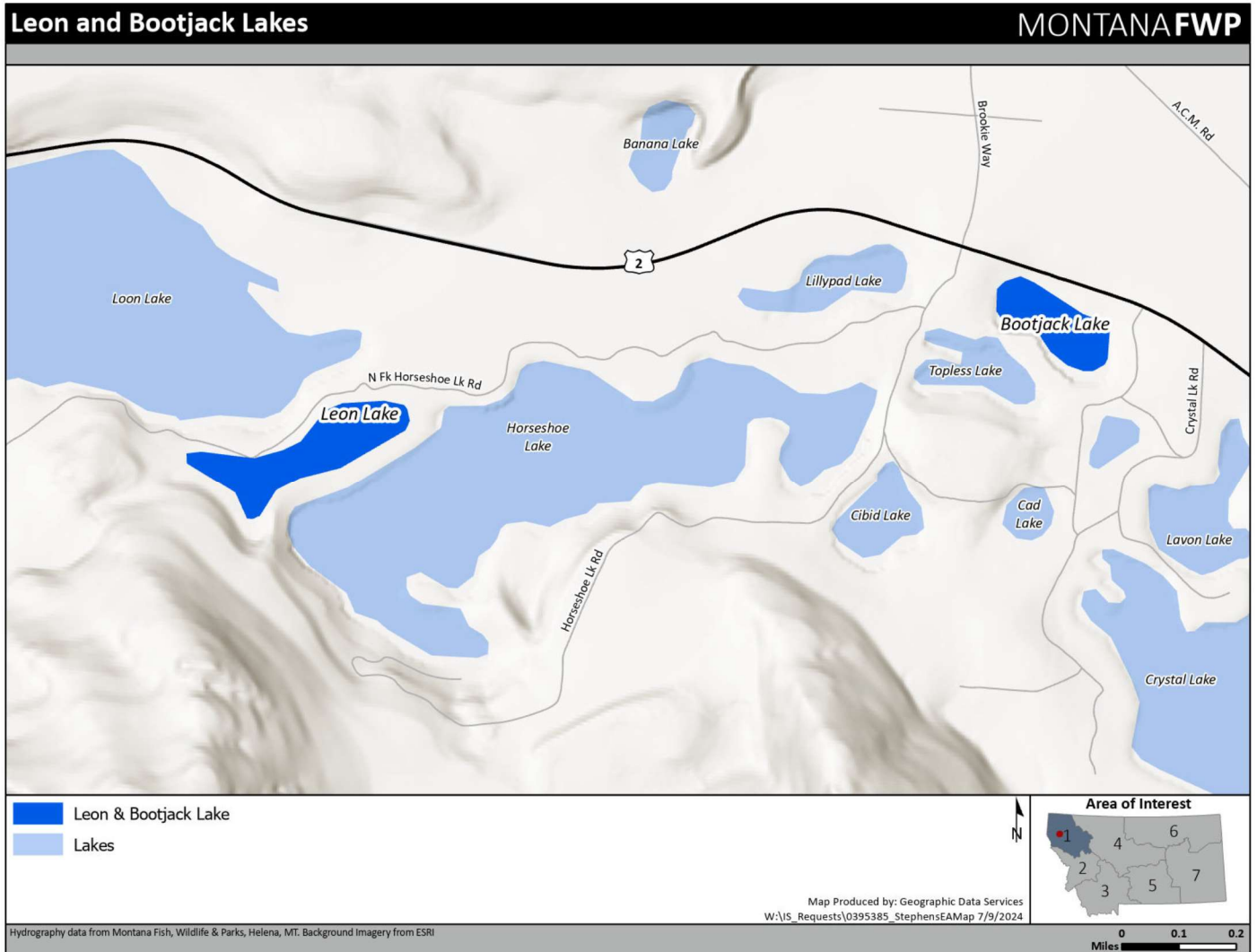


Figure 1: Location map of Bootjack Lake and Leon Lake (Thompson Chain of Lakes), Lincoln County, MT.

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.

Illegally introduced yellow perch have become abundant and stunted in Bootjack and Leon Lakes, preying on and competing with stocked rainbow trout for limited food resources. Introducing burbot would add a natural predator of yellow perch to the affected lake ecosystems. The purpose of the proposed action would be to:

- substantially reduce the existing yellow perch population in Bootjack and Leon Lakes, and
- decrease yellow perch competition with and predation on rainbow trout.

Benefits of the proposed action would include:

- increased food availability for rainbow trout and a subsequent increase in the quality of the rainbow trout fishery,
- increased quality of the remaining yellow perch population, and

- the addition of a unique trophy fishery for regionally native burbot.

Table 1: Planning and strategy documents with relevance to fish stocking activities.

Agency	Citation	Website
FWP	Statewide Fisheries Management Plan 2023-2026	https://fwp.mt.gov/conservation/fisheries-management/statewide-fisheries-management
FWP	Wild Fish Transfer Policy (1996)	

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
NA		

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"/>
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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	
Fish Health Inspection	FWP	Aquatic Health Advisory Committee	Minimizes disease transfer risk associated with movement of fish between waterbodies.	
Wild Fish Transfer	FWP	Wild Fish Transfer Committee	Ensures that movement of wild fish by FWP personnel is compatible with overall stewardship on Montana's fishery resources.	
AIS Early Detection & Monitoring	FWP	AIS Bureau	Minimizes the harmful impacts of AIS through the prevention and management of AIS into, within, and from Montana.	

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 introduce burbot to Bootjack or Leon Lakes. Without action, FWP would remain limited on their ability to improve the quality of the existing fishing opportunities in the lake.

	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 introduce burbot to Bootjack or Leon Lakes. Without action, FWP would remain limited on their ability to improve the quality of the existing fishing opportunities in the lake.

- **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					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Terrestrial, avian, and aquatic life and habitats	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No significant adverse impacts would be expected because of the proposed project. The proposed action would expand native burbot occurrence and establish a burbot fishery within their native Kootenai River drainage, as prioritized by the 2023 Statewide Fisheries Management Plan and more specifically FWP's management plan for native burbot in the Kootenai River drainage. The introduced burbot population would be expected to utilize the existing population of illegally introduced yellow perch and stocked rainbow trout as a food source thereby reducing both populations. Through reduced abundance from predation by burbot, size structure of the illegally introduced yellow perch population would be improved through reduced competition for limited food resources. Further, survival and growth of stocked rainbow trout would improve through reduced predation from and competition with yellow perch. The potential loss of stocked rainbow trout through burbot predation would be mitigated by adjusting stocking rates for rainbow trout to meet recreational fishing objectives. Therefore, any expected beneficial impacts would be long-term and minor to moderate. Further, because the objective of the proposed project would be to reduce the existing, illegally introduced yellow perch population and thereby improve the quality (size) of yellow perch and stocked rainbow trout, no adverse impacts would be expected because of the proposed action.
Water quality, quantity, and distribution	<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 water quality, quantity, and distribution would be expected because of the proposed project. The proposed project constitutes the

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	
										introduction of burbot to the existing fish communities in Bootjack and Leon Lakes, which would not require the use or distribution of any new water resources and would not affect existing water quality. Therefore, no impact to water quality, quantity, and distribution would be expected because of the proposed project.
Geology		<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 geology would be expected because of the proposed project. The proposed project would introduce burbot to the existing fish communities of Bootjack and Leon Lakes, which would not be expected to impact any geologic features of the affected area in any way. Therefore, no impacts to geology would be expected because of the proposed project.
Soil quality, stability, and moisture		<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 soils would be expected because of the proposed project. The proposed project would introduce burbot to the existing fish communities of Bootjack and Leon Lakes, which would not require disturbance or alteration of soils in any way. Therefore, no impacts to soil quality, stability and moisture would be expected because of the proposed project.
Vegetation cover, quantity, and quality		<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 impact to vegetation would be expected because of the proposed project. The proposed project would introduce burbot to the existing fish communities of Bootjack and Leon Lakes, which would not disturb or alter vegetation in any way. Therefore, no impact to vegetation would be expected because of the proposed project.
Aesthetics		<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 impact to aesthetics would be expected because of the proposed project. The proposed project would introduce burbot to the existing fish communities of Bootjack and Leon Lakes, which would not change the aesthetic nature of the affected area in any

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	
									way. Therefore, no impact to aesthetics would be expected because of the proposed project.
Air quality	<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 air quality would be expected because of the proposed project. Air quality in the affected area is currently unclassifiable or in compliance with applicable national ambient air quality standards (NAAQS). Further, no significant point-sources of air pollution exist in the affected area. Existing sources of air pollution are limited and generally include unpaved roads (particulate matter (PM), fugitive dust source) and vehicle exhaust emissions (PM, nitrogen oxides (NO _x), and volatile organic compounds (VOCs)). The proposed project would introduce burbot to the existing fish communities of Bootjack and Leon Lakes, which would require the use of motor vehicles for transport. Fugitive dust and vehicle exhaust emissions from the use of motor vehicles would occur on established roads, including unpaved roads. When completed, the proposed project would not result in additional new air quality disturbance or impacts in the affected area. Therefore, any adverse impacts to air quality would be short-term, consistent with existing impacts, negligible, and would not be expected to cause or contribute to a NAAQS violation.
Unique, endangered, fragile, or limited environmental resources	<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 burbot is currently ranked an S4 species in Montana (i.e., expected to be declining) and thus is considered a potential <i>species of concern</i> . One of the intents of the proposed project would be to increase the distribution of native burbot in the Kootenai River drainage. The existing yellow perch population was illegally introduced, and the recreational rainbow trout fishery was stocked. Therefore, any expected impacts from the introduction of native burbot would be long term, beneficial and moderate. FWP is unaware of any other unique, endangered, fragile,

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	
									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 impacts to historical and archaeological sites would be expected because of the proposed project. In keeping with the Montana Antiquities Act and related regulations (12.8.501-12.8.510), all undertakings on state 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 or SHPO. FWP also consults with all Tribal Historic Preservation Offices or THPOs affiliated with each property in accordance with FWP's Tribal Consultation Guidelines. No ground disturbing activities would occur because of the proposed project. Therefore, no impact to historical and archaeological sites would be expected because of the proposed project.
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 environmental resources of land, water, air, and energy would be expected because of the proposed project. The proposed project would introduce native burbot to the existing fish communities of Bootjack and Leon Lakes. No impacts to demands for land, water, and air would be expected. Fuel would be required to operate vehicles used to accommodate the proposed project; however, the amount fuel required would be minimal. Therefore, any adverse impacts to demands on the environmental resource of energy would be short-term, consistent with existing impacts, and negligible.

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"/>	<p>No significant adverse impacts would be expected because of the proposed project. Burbot are native and unique to the Kootenai River drainage. They are not found anywhere else west of Montana's Continental Divide. They are also of cultural significance to many Native American peoples in the affected area, including the Confederated Salish and Kootenai Tribes of Montana (Salish, Pend Oreille, and Kootenai) and the Kootenai Tribe of Idaho. They are also unique in body form and catchability from the trout species of which most anglers in the affected area are accustomed to catching. Many Montanans and visitors to the state have historically travelled considerable distances to enjoy burbot as an angling resource. As such, burbot are deeply engrained in the customs and lifestyles of Native Americans, residents, and visitors of Montana. The intent of the proposed project is to sustain and improve distribution of burbot in the Kootenai River drainage by providing for biological control of the illegally introduced yellow perch populations through the introduction of a native, piscivorous burbot population to Bootjack and Leon Lakes. Therefore, the proposed project would benefit any person who enjoys fishing for burbot or otherwise values the species' existence, the State of Montana, and the ecosystem in which they reside. Therefore, any impacts would be long-term, moderate, and beneficial.</p>

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	
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 adverse impacts would be expected because of the proposed project. As a native species, burbot are culturally important to resident and non-resident anglers as well as Native American peoples living or recreating in the affected area (see Social Structures and Mores above). Increases in native burbot distribution would help conserve this native species for the enjoyment of current and future recreational anglers and affected native populations. The proposed project would not be expected to result in the relocation of people into or out of the affected area and thus would not be expected to change the existing demographic of the affected area. Therefore, no impacts to existing cultural uniqueness and diversity of the affected area would be expected because of the proposed project.
Access to and quality of recreational and wilderness activities		<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 access and quality of recreational and wilderness activities would be expected because of the proposed project. No congressionally designated wilderness areas exist within the proposed project area; therefore, no impacts to access and quality of wilderness activities would occur. Further, access to Bootjack and Leon Lakes would not be impacted in any way by the proposed project. Angling quality for the existing populations of yellow perch and rainbow trout would be expected to improve because burbot would be expected to decrease their overall population densities in both lakes through predation, thereby limiting competition for food resources and thus likely increasing the average size of fish available for anglers to catch and harvest. Also, burbot would be available for angling purposes. Therefore, any impacts to the quality of

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	
									recreational activities in the affected area would be long term, moderate and beneficial.
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"/>	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 does not involve the acquisition of land or property, production of any products, or displacement of any businesses. Local businesses rely largely on recreation as a stable source of income and some people visiting the area to recreate would seek opportunities to fish for Montana's native burbot. A new fishery for burbot and improved yellow perch and rainbow trout size classes may increase the number of anglers recreating and spending money in the affected area. Increased recreational angling in the affected area would likely increase the local sale of goods and services thereby benefitting local tax revenues. Any expected impacts would be short- and long-term, minor and beneficial.
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 adverse impacts would be expected because of the proposed project. The proposed project would not disturb or otherwise impact any agricultural or industrial land; therefore, no impacts to agricultural or industrial production would be expected because of the proposed project.
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"/>	No significant adverse impacts would be expected because of the proposed project. No changes to the environment impacting human health or safety would occur because of the proposed project. Therefore, no impacts would be expected because of the proposed project.
Quantity and distribution of employment	<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 would be expected because of the proposed project. The proposed project would utilize existing FWP staff to conduct activities;

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
									therefore, no impacts to the existing quantity and distribution of employment would be expected because of the proposed project.
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"/>	No significant adverse impacts would be expected because of the proposed project. The proposed project would use existing FWP staff to accomplish the proposed project and would not otherwise require or result in the movement of existing or new population into or out of the affected area. Therefore, no impacts to the distribution and density of population and housing would be expected because of the proposed project.
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"/>	No significant adverse impacts would be expected because of the proposed project. The proposed project would use existing FWP staff. No additional demands for government services would be expected due to the proposed project because these activities are included in the current day-to-day roles of affected staff. Any impacts would be short-term, consistent, and negligible, lasting only as long as the proposed project.
Industrial, agricultural, and commercial activity	<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 would be expected because of the proposed project. The proposed project would not disturb or otherwise impact any industrial, agricultural, or commercial properties or operations; therefore, no impacts to industrial, agricultural, or commercial activity would be expected because of the proposed project.
Locally adopted environmental plans and goals	<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 would be expected because of the proposed project. As detailed in Montana's 2023 statewide Fisheries Management Plan (2023), several lakes in the Kootenai River drainage, including Bootjack and Leon Lakes, have been deemed candidates for burbot stocking to serve as a biological control for undesirable

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	
									fish communities while providing unique trophy angling opportunities for a regionally native species. These lakes may also serve as wild broodstock for future burbot introductions and augmentation, where deemed appropriate. In lakes with illegally introduced populations of yellow perch, and without a biological control mechanism in place, yellow perch can become over-abundant and stunted, as is the case with Bootjack and Leon Lakes. The introduction of burbot as a natural predator would be expected to reduce the illegally introduced yellow perch, create more opportunity for desirable species, and improve the size structure of the existing perch and trout fisheries. Therefore, any impacts would be long-term, moderate, and beneficial. FWP is unaware of any other related locally adopted environmental plans or goals that may be impacted by the proposed project.
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 impacts would be expected because of the proposed project.

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

If the EA identifies impacts associated with the proposed project FWP must determine the significance of the impacts. ARM 12.2.431. This determination forms the basis for FWP's decision as to whether it is necessary to prepare an environmental impact statement. 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 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> <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).</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 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)

PRIVATE PROPERTY ASSESSMENT 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 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 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.

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-notice>*
 - *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)).*
 - *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. oWritten 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: 30 days

Public Comment Period Begins: 08/23/2024

Public Comment Period Ends: 09/21/2024

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

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

Name: Brian Stephens

Email: bstephens@mt.gov

Mailing Address:

385 Fish Hatchery Road, Libby MT 59923

X. 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"/>

XI. EA Preparation and Review

	Name	Title
EA prepared by:	Brian Stephens	Fisheries Management Biologist
EA reviewed by:	Mike Hensler	Fisheries Manager

Appendix A: Literature Cited

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