Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicants/Contact names and addresses:

Bogdan & Marina Shkurinskiy 834 Blackmer Lane Columbia Falls, MT 59912

2. **Type of action:**

Surface Water Application for Beneficial Water Use Permit 76LJ 30160453

3. Water source name:

Mooring Creek

4. Location affected by project:

The place of use is generally described as 6 acres in the SE ¼ of the NE ¼ of the NE ¼ of Section 22, Township 29N, Range 20W, and 1.5 acres in the SW ¼ of the NE ¼ of the NE ¼ of Section 22, Township 29N, Range 20W, Flathead County, Montana. (See Figure 1.)

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicants propose to divert water from Mooring Creek (historically known as Morning Creek), by means of a pump, from January 1st to December 31st, excluding August 1st to September 30th at 76 GPM up to 10.89 AF, from a point in the SE ¼ of the NE ¼ of the NE ¼ of Section 22, Township 29 N, Range 20 W, Flathead County, for irrigation from April 20th to October 31st, excluding August 1st to September 30th and stock watering use from January 1st to December 31st, excluding August 1st to September 30th. The POD is in the Upper Flathead River Basin (76LJ), in an area that is not subject to water right basin closures or controlled groundwater area restrictions.

The DNRC shall issue a water use permit if the applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

- U.S. Fish and Wildlife Service (USFWS): National Wetlands Inventory Wetlands Mapper
- Montana Natural Heritage Program: Endangered, Threatened Species, and Species of Special Concern
- Montana Department of Fish Wildlife & Parks (DFWP): Dewatered Stream Information
- Montana Department of Environmental Quality (MDEQ): Clean Water Act Information Center
- U.S. Natural Resource Conservation Service (NRCS): Web Soil Survey

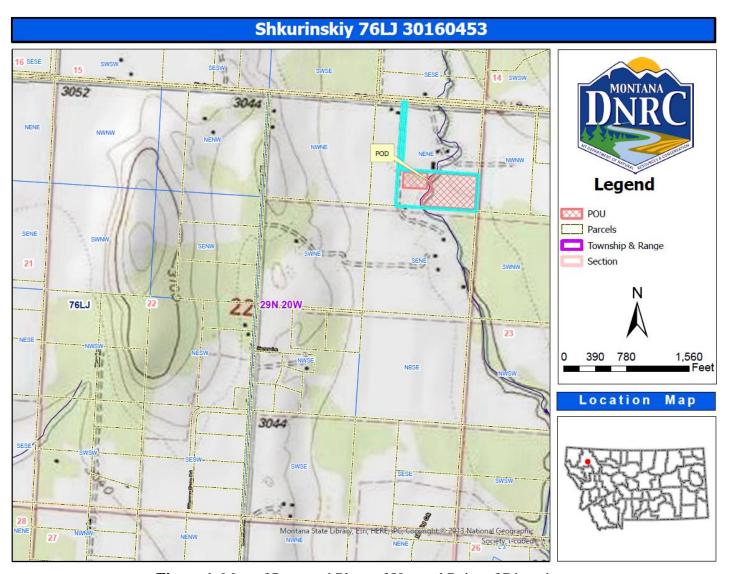


Figure 1. Map of Proposed Place of Use and Point of Diversion

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

The Applicant plans to divert water from Mooring Creek, which is on the DFWP list of periodically dewatered streams listed as Blaine Creek: Above Lake Blaine-Lake Blaine. The Applicant will not pump during the times of low flow (August-September.) Issuance of this permit will be based on the condition that the Applicant has met all statutory requirements outlined in Montana Code Annotated (MCA) § 85.2.311.

Determination: No significant impact.

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

According to the MDEQ Clean Water Act Information Center's 2020 Water Quality Information, there is no data for Mooring Creek in terms of its status as water quality impaired or threatened by DEQ.

Determination: No significant impact.

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: N/A, this project diverts from a surface water source.

<u>DIVERSION WORKS</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

The Applicants will divet water from Mooring Creek at a maximum rate of 76 GPM. The diversion will use an AY McDonald 24500T 5 horespower (HP) submersible pump. Water will be conveyed via 2-inch PVC to a series of irrigation headers producing water 1.5 acres on the west side of Mooring Creek and 6.0 acres on the east side of Mooring Creek. A Kifco Model T210 Water-Reel with a timed retractable sprinkler will be used to irrigate Alfalfa Hay on the property.

The total dynamic head (TDH) of the system at the farthest reach of the irrigation system is 187.6-feet, based on:

- 1. The maximum operating pressure of 62 pounds per square inch (psi) (equivalent to 143.1-feet of head);
- 2. The 5-foot elevation gain from Mooring Creek to the far end of the irrigation system; and,
- 3. The friction losses in the 434-foot long 2-inch diameter PVC supply line at 76 GPM (equivalent to 39.5-feet of head).

The Kifco T210 is cabable of irrigating an area of 171x486 feet in a four hour period at a design flow of 76 GPM and 62 psi, therefore, the irrigated area will be divided into five zones to be operated one at a time. The Applicant intends to irrigate an average of 46 hours per week and record total irrigation hours on a weekly basis.

The AY McDonald 25400T 5 HP pump is capable of producing 76 GPM at 187.6-feet of TDH based on the Applicant-provided system specifications. This flow rate will allow the Applicants to supply the irrigation system at adequate operating pressures.

A 250-gallon stock tank will be manually filled by connecting a 1-inch hose to the irrigation connection on the west side of Mooring Creek. The stock tank will only be refilled when the irrigation system is off to ensure the Applicant does not exceed the requested flow of 76 GPM.

This project will not create any channel impacts, flow modifications, barriers, dams, or riparian impacts to Mooring Creek, nor will it affect any wells.

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

<u>Endangered and threatened species</u> - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

The Montana Natural Heritage Program website was reviewed on March 1, 2024 to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any "species of special concern" in Township 29N, Range 20W that could be impacted by the proposed project. Thirty-six animal and sixteen plant species of concern (Tables 1 and 2, respectively) were identified within the township and range where the project is located. Of these species, the Canada Lynx (*lynx canadensis*), the Grizzly Bear (*Ursus arctos*), the Wolverine (*Gulo gulo*), the Bull Trout (*Salvelinus confluentus*), the Whitebark Pine (*Pinus albicaulis*), and the Spaulding's Catchfly (*Silene spaldingii*) are listed as threatened by the USFWS. This appropriation of water involves minimal development of the land, including irrigation installation and a stock pen, and it is not anticipated that any species of concern will be further impacted by the proposed project.

Table 1. Animal Species of Concern in and around Township 29 N, Range 20 W, Flathead County.					
	Common Name	Scientific Name	U.S. FWS – Status under the Federal Endangered Species Act of 1973		
Mammals	Canada Lynx	Lynx canadensis	Listed Threatened (LT); Critical Habitat (CH)		
	Fisher	Pekania pennanti			
	Grizzly Bear	Ursus arctos	Listed Threatened (LT)		
	Hoary Bat	Lasiurus cinereus			
	Little Brown Myotis	Myotis lucifugus			
	Long-eared Myotis	Myotis evotis			
	Long-legged Myotis	Myotis volans			

	Townsend's Big-eared Bat	Coryhius townsendii	
	Wolverine	Gulo gulo	Listed Threatened (LT)
	Black Tern	Chlidonias niger	Migratory Bird Treaty Act (MBTA); Birds of Conservation Concern, Regions 10, 11, 17
	Bobolink	Dolichonyx oryzivorus	Migratory Bird Treaty Act (MBTA); Birds of Conservation Concern, Regions 10, 11, 17
	Boreal Chickadee	Poecile hudsonicus	Migratory Bird Treaty Act (MBTA)
	Brown Creeper	Certhia americana	Migratory Bird Treaty Act (MBTA)
	Cassin's Finch	Haemorthous cassinii	Migratory Bird Treaty Act (MBTA); Birds of Conservation Concern, Region 10
	Clark's Nutcracker	Nucifraga columbiana	Migratory Bird Treaty Act (MBTA)
	Evening Grosbeak	Coccothraustes vespertinus	Migratory Bird Treaty Act (MBTA); Birds of Conservation Concern, Region 10
	Golden Eagle	Aquila chrysaetos	Bald and Golden Eagle Protection Act (BGEPA); Migratory Bird Treaty Act (MBTA)
Birds	Gray-crowned Rosy-Finch	Leucosticte tephrocotis	Migratory Bird Treaty Act (MBTA)
Bi	Great Blue Heron	Ardea herodias	Migratory Bird Treaty Act (MBTA)
	Great Gray Owl	Strix nebulosa	Migratory Bird Treaty Act (MBTA)
	Harlequin Duck	Histrionicus histrionicus	Migratory Bird Treaty Act (MBTA)
	Lewis's Woodpecker	Melanerpes lewis	Migratory Bird Treaty Act (MBTA); Birds of Conservation Concern, Regions 10, 17
	Long-billed Curlew	Numenius americanus	Migratory Bird Treaty Act (MBTA); Birds of Conservation Concern, Region 11
	Pacific Wren	Troglodytes pacificus	Migratory Bird Treaty Act (MBTA)
	Pileated Woodpecker	Dryocopus pileatus	Migratory Bird Treaty Act (MBTA)
	Trumpeter Swan	Cygnus buccinator	Migratory Bird Treaty Act (MBTA)
	Varied Thrush	Ixoreus naevius	Migratory Bird Treaty Act (MBTA)
	Veery	Catharus fuscescens	Migratory Bird Treaty Act (MBTA)
	Bull Trout	Salvelinus confluentus	Listed Threatened (LT); Critical Habitat (CH)
Fish	Pigmy Whitefish	Prosopium coulterii	
, ,	Westslope Cutthroat Trout	Oncorhynchus clarkia lewisi	
Invertebrate s	Suckley Cuckoo Bumble Bee	Bombus suckleyi	
	Hooked Snowfly	Isocapnia crinite	
vert	Alberta Snowfly	Isocapnia integra	
In	A Cave Obligate Isopod	Salmasellus steganothrix	

Table 2. Plant Species of Concern in and around Section 2, Township 31 N, Range 20 W, Flathead County.

	Common Name	Scientific Name	U.S. FWS – Status under the Federal Endangered Species Act of 1973
Vascular Plants	Sparrow's-egg Lady's-slipper	Cypripedium passerinum	
	English Sundew	Drosera angelica	
	Beaked Spikerush	Eleocharis rostellata	
	Meadow Horsetail	Equisetum pratense	
	Slender Cottongrass	Eriophorum gracile	
	Latah Tule Pea	Lathyrus bijugatus	
	Pygmy Water-lily	Nymphaea leibergii	

	Adder's Tongue	Ophioglossum pusillum	
	Whitebark Pine	Pinus albicaulis	Listed Threatened (LT)
	Pod Grass	Scheuchzeria palustris	
	Water Bulrush	Schoenoplectus subterminalis	
	Spalding's Catchfly	Silene spaldingii	Listed Threatened (LT)
	Columbia Water-meal	Wolffia columbiana	
te	Short-beaked Aloe Moss	Aloina brevirostris	
Bryophyte s	Schreber's Dicranella Moss	Dicranella schreberiana	
	Meesia Moss	Meesia uliginosa	
	Warnstorfia Moss	Sarmentypnum exannulatum	

Determination: No significant impact.

<u>Wetlands</u> - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

A portion of the project location contains a Freshwater Emergent Wetland that exists on either side of Mooring Creek on the northern part of the project location and extending northward outside of the project location. The wetland is classified by the United States Fish and Wildlife Service National Wetlands Inventory as a PEM1A, where;

- o (P) means a Palustrine System that includes all nontidal wetlands dominated by trees, shrubs, persistent emergent, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salt is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with each of the four characteristics;
 - Area less than 8 ha (20 acres);
 - Active wave formed or bedrock shoreline features lacking;
 - Water depth in the deepest part of the basin is less than 2.5 m (8.2 ft) at low water; and,
 - Salinity due to ocean derived salts is less than 0.5 ppt.
- o (EM) means and Emergent Class that is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.
- o (1) means a Persistent Subclass that is dominated by species that normally remain standing at least until the beginning of the next growing season. The subclass is found only I the Estuarine and Palustrine systems.
- (A) means a Temporary Flooded Water Regime, where surface water is present for brief periods (from a few days to a few weeks) during the growing season, but the water table usually lies well below the ground surface for most of the season.

The projected irrigation areas for this project will be outside of the wetland areas. Stock pens will contain stock animals and keep them out of wetland areas. Any impacts to the wetlands resource will be temporary and limited in scope during installation of the irrigation infrastructure.

Determination: No significant impact.

<u>Ponds</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: N/A, project does not involve ponds.

<u>Geology/Soil quality, stability and moisture</u> - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

It is not anticipated that the proposed irrigation of approximately 7.5 acres of alfalfa hay will have a negative impact on the soil quality, stability, or moisture content. The soil in the project area is primarily comprised of silt loam with some fine sand deposits, according to the United States Department of Agriculture (USDA) National Conservation Resource Service (NRCS) Web Soil Survey. Salinity content within the soil ranges from not at all to slightly saline, and hydraulic conductivity is low to moderate. Therefore, saline seep is unlikely, especially with efficiently timed irrigation practices. The slopes in the area are low (0-3 %) and irrigation will not alter the soil stability. Use of high efficiency Water Reel sprinklers and adherence to a strict timed water regiment, paired with low salt content of the soils will prevent saline seep. Moisture content of the soils will increase due to irrigation.

Determination: No significant impact.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

This property has already been historically irrigated and thus any impact to natural vegetation has already occurred. It is not anticipated that issuance of a water use permit will contribute to the establishment or spread of noxious weeds in the project area. Noxious weed prevention and control will be the responsibility of the landowners, who must follow local noxious weed regulations.

Determination: No significant impact.

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

There will be no impact to air quality associated with issuance of the proposed permit for beneficial use of surface water.

Determination: No significant impact.

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.

Determination: N/A, project not located on State or Federal Lands.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water, and energy not already addressed.

All impacts to land, water, and energy have been identified and no further impacts are anticipated.

Determination: No significant impact.

HUMAN ENVIRONMENT

<u>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</u> - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

The project is consistent with planned land uses.

Determination: No significant impact.

<u>ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</u> - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

The proposed project will not inhibit, alter, or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No significant impact.

<u>HUMAN HEALTH</u> - Assess whether the proposed project impacts human health.

No negative impact on human health is anticipated from this proposed use.

Determination: No significant impact.

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights. Yes___ No_ \underline{X} If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact.

<u>Other Human environmental issues</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) <u>Cultural uniqueness and diversity</u>? None identified.
- (b) Local and state tax base and tax revenues? None identified.
- (c) Existing land uses? None identified.
- (d) Quantity and distribution of employment? None identified.
- (e) <u>Distribution and density of population and housing</u>? None identified.
- (f) <u>Demands for government services</u>? None identified.

- (g) <u>Industrial and commercial activity</u>? None identified.
- (h) Utilities? None identified.
- (i) <u>Transportation</u>? None identified.
- (j) <u>Safety</u>? None identified.
- (k) Other appropriate social and economic circumstances? None identified.
- 2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. Describe any mitigation/stipulation measures:

None.

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:

The only alternative to the proposed action would be the no action alternative. The no action alternative would not authorize the diversion of water from Mooring Creek.

Part III. Conclusion

1. Preferred Alternative

Issue a water use permit if the Applicant proves the criteria in § 85-2-311 MCA are met.

2. Comments and Responses

None.

3. Finding:

Yes___No_X_Based on the significance criteria evaluated in this EA, is an EIS required?

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

No significant impacts related to the proposed project have been identified.

Name of person(s) responsible for preparation of EA:

Name: Kristal Kiel

Title: Water Resource Specialist

Date: April 23, 2024