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. **Applicant/Contact name and address:**

Montana State Board of Land Commissioners
Trust Land Management Division
PO Box 201601
Helena, MT 59620

2. **Type of action:**
Surface Water Application for Beneficial Water Use Permit 76N 30162478

3. **Water source name:**
McGregor Creek (McGregor Lake)

Location affected by project:

McGregor Lake Cabin Site Lots, Lot 4, Certificate of Survey (COS) 19909, Government Lot 1, SE ¼ of NE ¼ of NE ¼ of Section 16, Township 26N, Range 25W, Flathead County, Montana.

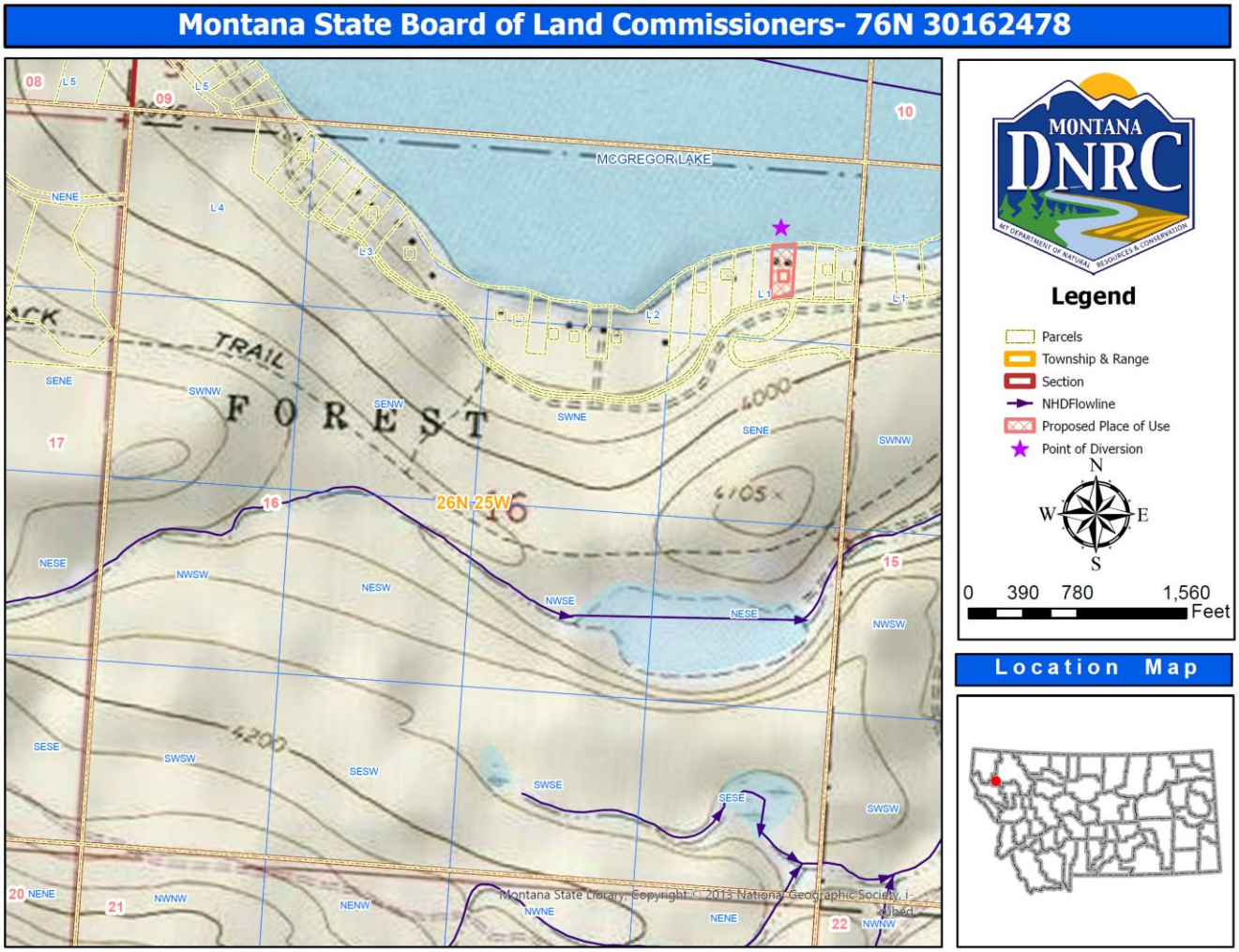

Figure 1. Map of the proposed place of use and point of diversion.

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

The Applicant proposes to divert water from the McGregor Creek (McGregor Lake), hereafter McGregor Lake, using a pump. The Applicant requests a 22.0 GPM flow rate up to an annual volume of 1.05 AF for multiple domestic (2 households) and irrigation of 0.25 acres of lawn and garden from January 1st to December 31st annually. The point of diversion (POD) is in the NE ¼ of NE ¼ of NE ¼ of Section 16 and place of use is in the SE ¼ of NE ¼ of NE ¼ of Section 16, Township 26N, Range 25W, Flathead County, Montana. The POD is in the Lower Clark Fork River Basin (76N), in an area 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.

5. 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 (MTDFWP): Dewatered Stream Information
- Montana Department of Environmental Quality (MTDEQ): Clean Water Act Information Center
- U.S. Natural Resources Conservation Service (NRCS): Web Soil Survey

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- 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 proposes to divert water from McGregor Lake, which is not on the MTDFWP list of chronically or periodically dewatered streams.

Determination: No significant impact.

Water quality *- 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, McGregor Creek, McGregor Lake to mouth (Thompson River) is listed as "Fully Supporting" for primary contact recreation. The aquatic life use is "Not Fully Supporting", for aquatic life due to Flow Regime Modification (no TMDL applicable), Sedimentation-Siltation (TMDL completed), and Temperature (TMDL completed). It has not been assessed for Drinking Water and Agricultural uses. McGregor Creek's Water Quality Category is a "4A" meaning all TMDLs needed to rectify all identified threats or impairments have been completed and approved. The proposed project is not anticipated to affect water quality.

The diversion of water for the proposed project will not affect the water quality of McGregor Lake.

Determination: No significant impact.

Groundwater *- 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.

DIVERSION WORKS - *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 Applicant will divert water from McGregor Lake at a maximum rate of 22.0 GPM. The diversion will utilize a 4-inch Goulds 1.0 HP model 18GS10 8-stage submersible pump as the intake, located 70 feet into McGregor Lake from the low water line. A 1.25-inch high density poly ethylene (HDPE) line will extend 130 feet from the low water line to a pump house. The pump house will host a hydropneumatic pressure tank and variable frequency drive (VFD) to maintain the system pressure at 50 psi. Water for potable household use will be flow through 5- and 1-micron Viqua sediment filtration system and treated with an Ultraviolet disinfection system installed in the crawlspace of each domestic unit. Irrigation water needs will be accessed from five hose bib/frost free hydrant connections to irrigate up to 0.25 acres of landscaping around the property. A manual hose and sprinkler system will be utilized to water any lawn areas.

The maximum total dynamic head (TDH) of the system is 178.2 feet, based on:

i. The minimum system operating pressure of 50 psi (equivalent to 115.5 feet of head) at the pressure tank;

ii. The 13-foot elevation gain from McGregor Lake's surface to the main residence;

iii. The friction losses in the 204-foot length of the 1.25-inch HDPE transmission line at 22.0 GPM (equivalent to 20.3 ft of head);

iv. The 14-foot elevation gain from the main residence to the guest residence; and,

v. The friction losses in the 203-foot length of the 1.25-inch HDPE transmission line at 19.0 GPM (equivalent to 15.4 ft of head.)

The pump is capable of producing 22.0 GPM at 178.2 feet TDH based on the applicant provided system specifications. A VFD will be used to restrict the flow rate to 22 GPM. This flow rate will allow the Applicant to supply the lawn and garden irrigation use at a minimum 50 psi operating pressure.

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

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species *- Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants, 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 to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any "species of special concern" in Township 26N, Range 25W that could be impacted by the proposed project. Thirty-two animal and five 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),* and the Grizzly Bear (*Ursus arctos*) are listed as threatened by the USFWS. This area is already developed, 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 Township 26 N, Range 25 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*	
	Fringed Myotis	*Myotis thysanodes*	
	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	*Corynorhinus townsendii*	
	Wolverine	*Gulo gulo*	Listed Threatened (LT)
	Yuma Myotis	*Myotis umanensis*	
Birds	American Goshawk	*Accipiter atricpillus*	Migratory Bird Treaty Act (MBTA)
	Bobolink	*Dolichonyx oryzivorus*	Migratory Bird Treaty Act (MBTA); Birds of Conservation Concern, Regions 10, 11, 17
	Brewer's Sparrow	*Spizella breweri*	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)
	Common Loon	*Gavia immer*	Migratory Bird Treaty Act (MBTA)
	Evening Grosbeak	*Coccothraustes vespertinus*	Migratory Bird Treaty Act (MBTA); Birds of Conservation Concern, Region 10
	Flammulated Owl	*Psiloscops flammeolus*	Migratory Bird Treaty Act (MBTA); Birds of Conservation Concern, Region 10
	Great Blue Heron	*Ardea herodias*	Migratory Bird Treaty Act (MBTA)
	Great Gray Owl	*Strix nebulosa*	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)
	Varied Thrush	*Ixoreus naevius*	Migratory Bird Treaty Act (MBTA)
Reptiles	Northern Alligator Lizard	*Elgaria coerulea*	
Amphibians	Western Toad	*Anaxyrus boreas*	
Fish	Bull Trout	*Salvelinus confluentus*	Listed Threatened (LT), Critical Habitat (CH)
	Westslope Cutthroat Trout	*Oncorhynchus clarkia lewisi*	
Invertibrates	Rocky Mountain Duskysnail	*Colligyrus greggi*	
	Magnum Mantleslug	*Magnipelta mycophaga*	
	Western Pearshell	*Margaritifera falcata*	

Table 2. Plant Species of Concern in Township 26 N, Range 25 W, Flathead County.

	Common Name	**Scientific Name**	**U.S. FWS – Status under the Federal Endangered Species Act of 1973**
Vascular Plants	Watershield	*Brasenia schreberi*	
	Blunt-leaved Pondweed	*Potamogeton obtusifolius*	

	Spalding's Catchfly	*Silene spaldingii*	Listed Threatened (LT)
Bryophytes	Meesia Moss	*Meesia triquetra*	
	Fringed Bogmoss	*Sphagnum fimbriatum*	

Determination: No significant impact.

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

Determination: N/A; project does not involve wetlands.

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

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

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *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.*

The proposed 0.25 acres of lawn and garden irrigation will not negatively impact the soil quality, stability, or moisture content. The soil type in the project area is Winfall, comprised of volcanic ash over till derived from quartzite rock, consisting of gravelly ashy silt loam to very cobbly silt loam deposited as glacial moraine landforms. Slopes are 8 to 30 percent. The most limiting layer within the 80-inch soil profile has a moderately high to high capacity to transmit water. Soils in this area are not likely susceptible to saline seep.

Determination: No significant impact.

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

This area is already developed, and any existing native vegetation has already been disturbed. 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.

AIR QUALITY - *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.

HISTORICAL AND ARCHEOLOGICAL SITES - *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.*

The project is located on property owned and managed by the Montana State Board of Land Commissioners-Trust Lands Management Division. Proceeds from leasing fees of the property yield revenues to support Montana's public education institutions. There are no unique archeological or historical sites in the vicinity of the proposed project.
Determination: No significant impact.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *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. No further impacts are anticipated.

Determination: No significant impact.

HUMAN ENVIRONMENT

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

The project is consistent with planned land uses. It shall be the landowners' responsibility to comply with all local county & city planning and zoning regulations.

Determination: No significant impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *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.

HUMAN HEALTH - *Assess whether the proposed project impacts human health.*

This proposed use will not adversely impact human health.

Determination: No significant impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No_**X**_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) Cultural uniqueness and diversity? 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) Distribution and density of population and housing? None identified.

(f) Demands for government services? None identified.

(g) *Industrial and commercial activity?* None identified.

(h) *Utilities?* None identified.

(i) *Transportation?* None identified.

(j) *Safety?* 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 McGregor Lake.

III. Conclusion

1. Preferred Alternative

Issue a water use permit if the Applicants prove 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: May 14, 2024