

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:

RANDALL D. SWENSON
4510 HI LINE DRIVE
BILLINGS, MONTANA 59106 - 4703

2. Type of action: Application for Beneficial Water Use Permit No. 76LJ 30162756

3. Water source name: Flathead Lake/Flathead River

4. Location affected by project: NWNWSE Sec. 26, T27N, R21W, Flathead County, Montana, more specifically described as Tract 7 of Government Lot 9

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

Randall D. Swenson submitted an Application for Beneficial Water Use Permit to DNRC requesting an appropriation of 28 gallons per minute (GPM) up to 1.45 acre-feet (AF) of water from Flathead Lake. The water will be used for domestic use in one household and lawn and garden irrigation of 0.18-acres. The applicant proposes to divert water from the lake using a 3.0 horsepower (HP) submersible pump placed in the lake that conveys water through a 1.25-inch HDPE pipe to a tee connection that diverts to an irrigation line and to the residence. DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

Montana Department of Fish, Wildlife and Parks - 2005 Dewatered Stream List, 2022 Dewatered Streams Map
Montana Department of Environmental Quality – 303(d) List of Impaired Streams, 2020 Clean Water Act Information Center
Montana Natural Heritage Program - Species of Concern
U.S. Fish and Wildlife Service (USFWS) – National Wetlands Inventory Mapper
U.S. Natural Resource Conservation Service (NRCS) - Web Soil Survey
Flathead County Interactive Mapping Application (IMA) – Zoning and Neighborhood Plans

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.*

Flathead Lake is not listed on the 2005 Montana Department of Fish, Wildlife and Parks (MT FWP) Impaired Stream List nor the MT FWP Dewatered Streams Map updated January 21, 2022. The application is for a diversion out of Flathead Lake, which is tributary to the Flathead River. The Flathead River is also not listed on the 2005 Impaired Stream list nor the 2022 Dewatered Streams Map. The appropriation of 28 GPM up to 1.45 AF of water from Flathead Lake will not cause dewatering in the Flathead River basin.

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.*

The Department of Environmental Quality (DEQ) assessed water quality in Flathead Lake, determining it to be impaired with mercury, polychlorinated biphenyls, nitrogen, and phosphorus. The 2020 Assessment places Flathead Lake in water quality category 5, in which one or more beneficial uses have been assessed as impaired or threatened. The beneficial use they determined to be impaired and/or threatened is aquatic life. They assess the lake to be fully supporting agricultural use, drinking water use, and primary contact recreational use. The minimal withdrawal of water requested by the Applicant will not result in increased impairment of water quality.

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.*

This is a surface water appropriation.

Determination: N/A

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.*

Applicant will divert water from Flathead Lake at a maximum rate of 28.0 GPM using a Goulds 3.0 horsepower (HP) model 25GS30 submersible 4-inch pump (or equivalent) that extends approximately 100-feet from the shoreline into Flathead Lake. The submersible pump will be located at least 5-feet below the low water elevation (2884 feet) of Flathead Lake and will include a plastic flow sleeve and check valve to prevent backflow. The pump will be controlled by a variable frequency drive (VFD) that is set to maintain a constant pressure of 50 pounds per square inch (PSI). From the shoreline water will be pumped approximately 163 feet to the crawlspace of the domestic residence through a 1.25-inch-high density polyethylene (HDPE) pipe. The water system will be equipped with one Well-X-Troll WX-250 vertical pressure tank and a treatment system with two sediment filters and a Pentek Ultraviolet Light. A tee connection outside the domestic residence will divert water into an irrigation line that leads to five different irrigation zones through one-inch HDPE water lines. Two of these irrigation zones will utilize Hunter MP1000 Rotator Sprinklers and three will utilize TLDL6-1201 Landscaping Driplines. Each zone has a demand of 5 GPM and only one zone will be operated at a time.

The total dynamic head (TDH) of the system at the residence is 213.75-feet, based on:

- a. The 29-foot elevation gain from Flathead Lake's surface to the place of use;
- b. The friction losses (equivalent to 41.03-feet of head) in the transmission and distribution lines at approximately 28.0 GPM.
- c. The system operating pressure of 116-feet of head at pump vault (50 PSI x 2.31 feet = 116 pressure head);
- d. The water treatment system losses of 27.72-feet of head (12 PSI x 2.31 feet = 27.72 pressure head); and,
- e. $TDH = \text{elevation head} + \text{friction head loss} + \text{pressure head}$

The location of the pump in the lake will not cause any channel impacts or flow modifications in Flathead Lake. The use of a pump in the lake will not create any barriers to fish migration. The construction of the water conveyance system may require trenching to bury pipes if the Applicant chooses to bury them. This may cause a temporary disturbance to riparian vegetation on the Applicant's property. This disturbance would be small. The project does not involve a dam or well.

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 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 was used to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern" in the proposed project area in Section 26, Township 27N, Range 21W, that could be impacted by the proposed project. 4 mammal, 13 bird, 1 reptile, 3 fish, 2 invertebrate, 5 vascular plant, and 1 bryophyte species of concern were identified. Of those species, the Grizzly Bear (*Ursus arctos*)

and the Bull Trout (*Salvelinus confluentus*) are listed as threatened by the USFWS. An adequate quantity of water will still exist in the surface water source to maintain existing populations of Bull Trout, should they exist there currently. Given the development in the surrounding region, it is not anticipated that any species of concern will be further impacted by the proposed project.

Species of Concern-

Table 1. Mammals			
Fisher (<i>Pekania pennanti</i>)	Grizzly Bear (<i>Ursus arctos</i>)	Little Brown Myotis (<i>Myotis lucifugus</i>)	Long-legged Myotis (<i>Myotis volans</i>)

Table 2. Birds and Reptiles			
Brewer's Sparrow (<i>Spizella breweri</i>)	Brown Creeper (<i>Certhia americana</i>)	Cassin's Finch (<i>Haemorhous cassinii</i>)	Clark's Nutcracker (<i>Nucifraga columbiana</i>)
Common Tern (<i>Sterna hirundo</i>)	Evening Grosbeak (<i>Coccothraustes vespertinus</i>)	Great Blue Heron (<i>Ardea Herodias</i>)	Lewis's Woodpecker (<i>Melanerpes lewis</i>)
Pacific Wren (<i>Troglodytes pacificus</i>)	Pileated Woodpecker (<i>Dryocopus pileatus</i>)	Trumpeter Swan (<i>Cygnus buccinator</i>)	Varied Thrush (<i>Ixoreus naevius</i>)
Veery (<i>Catharus fuscescens</i>)	Northern Alligator Lizard (<i>Catharus fuscescens</i>)		

Table 3. Fish		
Bull Trout (<i>Salvelinus confluentus</i>)	Pygmy Whitefish (<i>Prosopium coulterii</i>)	Westslope Cutthroat Trout (<i>Oncorhynchus clarkia lewisi</i>)

Table 4. Invertebrates	
Suckley Cuckoo Bumble Bee (<i>Bombus suckleyi</i>)	Oblique Ambersnail (<i>Oxyloma nuttallianum</i>)

Table 5. Vascular Plants and Bryophytes		
Bristly Sedge (<i>Carex comosa</i>)	Panic Grass (<i>Dichanthelium acuminatum</i>)	Howell's Quillwort (<i>Isoetes howellii</i>)
Straightbeak Buttercup (<i>Ranunculus orthorhynchus</i>)	Columbia Water-Meal (<i>Wolffia columbiana</i>)	Warnstorffia Moss (<i>Sarmentypnum exannulatum</i>)

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.

Project does not involve wetlands or critical riparian habitats.

Determination: No significant impact.

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.*

Soil data is not available for the proposed place of use. The proposed place of use is an island in the north end of Flathead Lake, close to Somers. The NRCS Web Soil Survey identifies this island as water and therefore does not have any available data. This island is 2 acres in size which gives ample room for development away from any soils that may be easily erodible. Soil quality, stability, and moisture content are not likely to be significantly impacted by the proposed development of one domestic unit and lawn and garden irrigation of 0.18 acres.

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.*

Development of this property will cause vegetation cover disturbance on the parcel during the construction process and long-term in the exact location where facilities are constructed. It is not anticipated that the issuance of a water use permit will contribute to the establishment or spread of noxious weeds in the project area. The project is located entirely on private property, and the applicants will be responsible for controlling noxious weeds.

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.*

Adverse air quality impacts from increased air pollutants are not expected as a result of this project. The water will be diverted using a submersible electric pump. No air pollutants were identified as resulting from the Applicant's proposed use of Flathead Lake for domestic and lawn and garden purposes.

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.*

Determination: N/A- Project not located on State or Federal Lands.

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 and 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.*

According to the Flathead County's Interactive Mapping Application, the proposed place of use is not in a zoned or planned area. The proposed project is not inconsistent with locally adopted environmental plans or goals because this location is outside of the planned region.

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 or adjacent to land designated as wilderness.

Determination: No significant impact.

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

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

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 significant 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 Flathead Lake.

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:

AN EA IS THE APPROPRIATE LEVEL OF ANALYSIS FOR THE PROPOSED ACTION BECAUSE NO SIGNIFICANT IMPACTS WERE IDENTIFIED.

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

Name: Caitlyn Stevens
Title: Water Resource Specialist
Date: March 13, 2024