# 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:

D&S PERL FAMILY TRUST C/O DANIEL AND SANDRA PERL, TRUSTEES 149 SHOOTING STAR CIRCLE WHITEFISH, MT 59937-8166

- 2. Type of action: Surface Water Application for Beneficial Water Use Permit 76LJ 30162781
- 3. Water source name: Whitefish River (Whitefish Lake)
- 4. Location affected by project: Whitefish Lake Summer Homes Addition 1, Lot 10 in SENWNW of Section 14, Township 31N, Range 22W and SWNENW of Section 14, Township 31N, Range 22W, Flathead County, Montana.
- 5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to divert water from the Whitefish River (Whitefish Lake), hereafter Whitefish Lake, by means of a pump from January 1 to December 31 at 31 GPM up to a total volume of 1.8 AF annually for multiple domestic use at two houses (0.7 AF) and for lawn and garden irrigation of 0.44 acres (1.1 AF). Multiple domestic use will occur from January 1 to December 31 and lawn and garden irrigation will occur from April 15 to October 15 annually. The point of diversion (POD) is approximately 205 feet west of the shoreline in Whitefish Lake from Lot 10 of Whitefish Summer Homes Addition 1, N2SENWNW of Section 14, Township 31N, Range 22W in Flathead County, Montana. The place of use (POU) is located in Lot 10 of Whitefish Lake Summer Homes Addition 1, SENWNW Section 14, Township 31N, Range 22W and SWNENW Section 14, Township 31N, Range 22W in Flathead County, Montana. The POD and POU are in the Upper Flathead River Basin (76LJ), in an area not subject to water right basin closures or controlled groundwater area restrictions.

The 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:

- 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

<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 proposes to divert water from Whitefish Lake, which is not on the MTDFWP list of chronically or periodically dewatered streams.

Determination: No significant impact.

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

According to the MTDEQ Clean Water Act Information Center's 2020 Water Quality Information, Whitefish Lake is listed as "fully supporting" for primary contact recreation and agriculture. The aquatic life use is "threatened", with the probable causes being mercury and polychlorinated biphenyls. Whitefish Lake has not been assessed for the drinking water beneficial use. The lake's use class is "A-1", meaning the waters are classified as suitable for drinking, culinary, and food processing purposes after conventional treatment for removal of naturally present impurities. Whitefish Lake's Water Quality Category is "5", meaning one or more applicable beneficial uses are impaired or threatened, and a total maximum daily load (TMDL) is required to address the factors causing the impairment or threat.

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.

Applicant will divert water year-round from Whitefish Lake at a maximum rate of 31 GPM using a Goulds model 35GS15 submersible pump or a comparable model with a 1.5-horsepower motor equipped with a check valve to prevent backflow of water into the system and set in a flow sleeve that prevents larger debris from plugging the intake. The pump will be located 205 feet offshore at a depth greater than 15 feet below the low water elevation. A 1.5-inch high density polyethylene (HDPE) mainline will convey water approximately 270 feet to the mechanical room of the main residence. A Well-X-Troll WX-250 vertical pressure tank and variable frequency drive (VFD) in the mechanical room will maintain constant operating pressure of 65 pounds per square inch (psi) in the water system. Water will flow from the main residence approximately 410 feet through a 1.5-inch HDPE waterline for use in the guest residence. A minimum operating pressure of 50 psi will be maintained in the guest residence using a Grundfos CMBE 3-62 booster pump with a 1.5-horsepower motor. At each residence, water will flow through two sediment filters and ultraviolet light disinfection system prior to distribution for household fixtures.

From April 15-October 15, water will be utilized for lawn and garden irrigation. Each residence will have an irrigation diversion line with hose bib connections that will bypass the treatment system. Initially, the lawn and garden areas will be irrigated 50-ft of hose connected to 11 Rain Bird 25-PJDA-C riser mounted impact sprinklers, each requiring 5 GPM. The maximum lawn and garden flow rate is 22 GPM. Lawn and garden irrigation will occur during periods of off-peak domestic use with the two residences.

The total dynamic head (TDH) of the system in the main residence during peak demand is 145 feet, based on :

- i. The minimum operating pressure of 50 psi (equivalent to 115.4 feet of head);
- ii. A 9-ft elevation gain from Whitefish Lake's surface to the pressure tank; and
- iii. The friction losses in the 1.5-in HDPE supply line at 31 GPM (equivalent to 20.83 feet of head).

The primary pump can produce 35 GPM at 145 feet of TDH based on the Applicant provided system specifications; however, the maximum diverted flow rate will be limited and controlled by the VFD. This flow rate will allow the Applicant to supply their water system at peak demand at an adequate operating pressure. The Department finds that the proposed means of diversion and conveyance are capable of diverting and conveying the proposed flow rate of 31 GPM and annual volume of 1.8 AF.

This project will not create any channel impacts, flow modifications, barriers, dams, or riparian impacts to Whitefish Lake, 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 to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any "species of special concern" in Section 14, Township 31N, Range 22W that could be impacted by the proposed project. Twelve animal and two 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 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. 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				
Grizzly Bear (Ursus arctos)	Fisher ( <i>Pekania pennanti</i> )	Bull Trout (Salvelinus confluentus)	Long-legged Myotis (Myotis Volans)	
Westslope Cutthroat Trout (Oncorhynchus clarkia lewisi)	Northern Alligator Lizard (Elgaria coerulea)	Pileated Woodpecker (Dryocopus pileatus)	Varied Thrush (Ixoreus naevius)	
Brown Creeper (Certhia americana)	Cassin's Finch (Haemorhous cassinii)	Evening Grosbeak (Coccothraustes vespertinus)	Pacific Wren (Troglodytes pacificus)	

Table 2. Plant Species of Concern				
Beck Water-marigold	Dense-flower Rein Orchid			
(Bidens beckii/Megalodonta bevkii)	(Piperia elongate)			

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.

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

<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.

The proposed 0.44 acres of lawn and garden irrigation will not negatively impact the soil quality, stability, or moisture content. The soil type in the project area comprises Dystric Eutrochrepts (terraces) of outwash substratum consisting of silt loam to very extremely gravelly loam to very cobbly loamy sand. Slopes are 0 to 20 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.

<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 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 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. However, fugitive dust should be controlled during development.

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. 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. It shall be the landowner's responsibility to comply with all local county & city planning and zoning regulations.

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.

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

This proposed use will not adversely impact human health.

Determination: No significant impact.

<u>PRIVATE PROPERTY</u> - 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.

<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) 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) <u>Distribution and density of population and housing?</u> None identified.

- (f) <u>Demands for government services</u>? None identified.
- (g) Industrial and commercial activity? None identified.
- (h) <u>Utilities</u>? None identified.
- (i) Transportation? 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 Whitefish 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  $\underline{X}$  Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain  $\underline{why}$  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: Erin Wall

Title: Water Resource Specialist

Date: April 8, 2024