

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:**

Paul and Christine Stubbins  
PO Box 116  
Bigfork, MT 59911

2. **Type of action:** Surface Water Application for Beneficial Water Use Permit 76LJ 30148842

3. **Water source name:** Flathead River (Flathead Lake)

4. **Location affected by project:** Government Lot 2, N2SENE Section 20, Township 25N, Range 19W, Lake County, Montana.

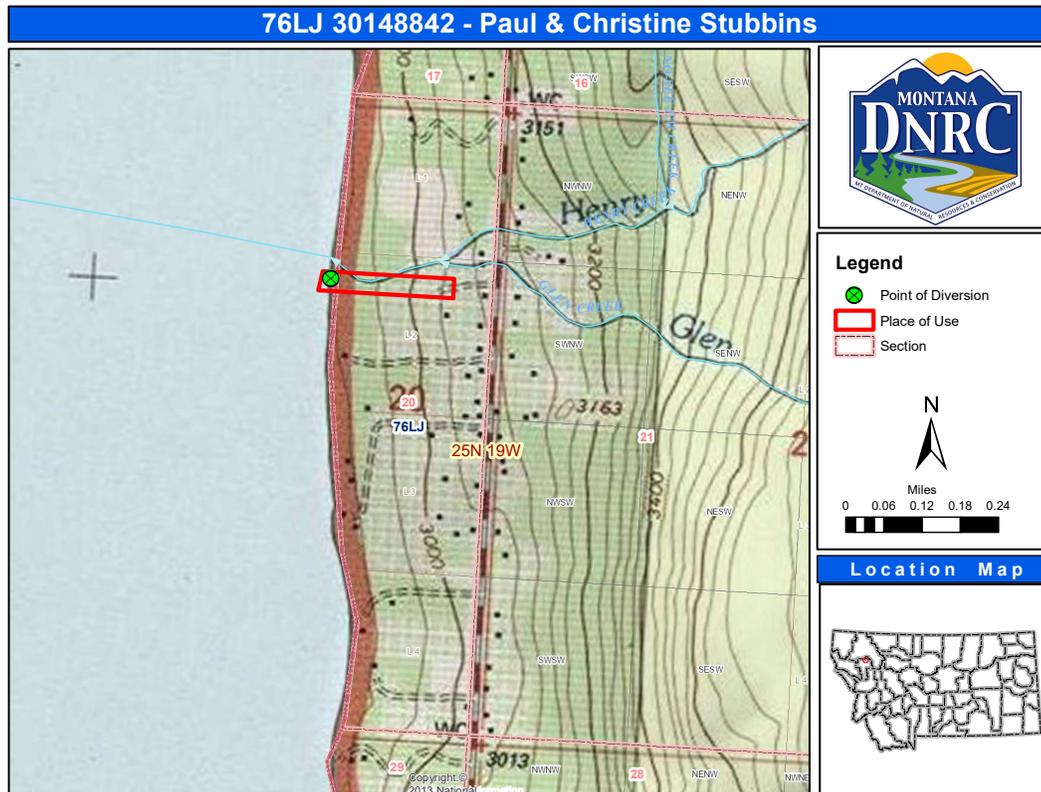


Figure 1. Map of the proposed place of use and point of diversion.

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

The Applicants propose to divert water from the Flathead River (Flathead Lake), by means of a pump, at a rate of 23.0 GPM up to a volume of 2.3 AF annually for irrigation of 1.0 acres of orchard from May 15 – September 15. The point of diversion (POD) is located in Government Lot 2, NWSENE Section 20, Township 25N, Range 19W, Lake County, Montana. The place of use is located in Government Lot 2, N2SENE Section 20, Township 25N, Range 19W, Lake County, Montana. The point of diversion 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 Resources Conservation Service (NRCS): Web Soil Survey

**Part II. Environmental Review**

**1. Environmental Impact Checklist:**

<b>PHYSICAL ENVIRONMENT</b>
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**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 plans to divert water from Flathead Lake, which is not on the DFWP 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 2018 Water Quality Information, Flathead Lake is listed as "Not Fully Supporting" for aquatic life due to Mercury (no TMDL completed), Total Nitrogen (TMDL completed), Total Phosphorus (TMDL completed), and Polychlorinated Biphenyls (no TMDL completed). Flathead Lake's Water Quality Category is "5," meaning one or more applicable beneficial uses are impaired or threatened, and a TMDL is required to address the factors causing the impairment or threat. The proposed project will not affect 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.

*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 Applicants propose to divert water from Flathead Lake at a maximum rate of 23.0 GPM while maintaining a minimum operating pressure of 25 pounds per square inch (psi) via a 4-inch Flint and Walling 4F19S30 3-hp submersible pump. The submerged pump diverts water initially into a 20-foot length of 2-inch galvanized steel pipe which then connects to a 2-inch polyethylene line. The polyethylene line extends 436 feet to a valve box from which water can be distributed to the three separate irrigation zones. From the valve box, water is transmitted to the irrigation zones by 1-inch polyethylene transmission lines (225 and 75 feet to the most distant and nearest zones, respectively) and distribution lines (90 feet per zone). Within each zone, water then travels down the orchard rows through 75-foot  $\frac{3}{4}$ -inch lateral lines from which Nelson Irrigation R5 High Pressure sprinkler emitters with green plates and yellow nozzles are supplied with water (six lateral lines and 41 emitters per zone).

The diversion is manually controlled by the operator using the pump control box at the house on the property. Each of the three zones is individually irrigated through the activation of a solenoid control valve. Applicant will operate a single zone at a time, irrigating all three zones on a rotating cycle throughout the day.

This project will not create any channel impacts, flow modifications, barriers, dams, or riparian impacts to Flathead 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 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 Township 25N, Range 19W that could be impacted by the proposed project. 20 animal and seven 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*), Canada Lynx (*Lynx canadensis*), Yellow-billed Cuckoo (*Coccyzus americanus*), 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 highly 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**

Wolverine ( <i>Gulo gulo</i> )	Canada Lynx ( <i>Lynx canadensis</i> )	Little Brown Myotis ( <i>Myotis lucifugus</i> )	Fisher ( <i>Pekania pennanti</i> )	Pygmy Shrew ( <i>Sorex hoyi</i> )
Grizzly Bear ( <i>Ursus arctos</i> )	Great Blue Heron ( <i>Ardea herodias</i> )	Evening Grosbeak ( <i>Coccothraustes vespertinus</i> )	Yellow-billed Cuckoo ( <i>Coccyzus americanus</i> )	Pileated Woodpecker ( <i>Dryocopus pileatus</i> )
Western Toad ( <i>Anaxyrus boreas</i> )	Westslope Cutthroat Trout ( <i>Oncorhynchus clarkii lewisi</i> )	Pygmy Whitefish ( <i>Prosopium coulteri</i> )	Bull Trout ( <i>Salvelinus confluentus</i> )	Northern Rocky Mountains Refugium Caddisfly ( <i>Goereilla baumanni</i> )
Alexander's Rhyacophilan Caddisfly ( <i>Rhyacophila alexanderi</i> )	A Rhyacophilan Caddisfly ( <i>Rhyacophila gemona</i> )	Northern Rocky Mountains Refugium Caddisfly ( <i>Rossiana montana</i> )	Cordilleran Forestfly ( <i>Zapada cordillera</i> )	Smoky Taildropper ( <i>Prophyaon humile</i> )

<b>Table 2. Plant Species of Concern</b>				
Adder's Tongue ( <i>Ophioglossum pusillum</i> )	Kalm's Lobelia ( <i>Lobelia kalmii</i> )	Desert Groundsel ( <i>Senecio eremophilus</i> )	Clustered Lady's-slipper ( <i>Cypripedium fasciculatum</i> )	Giant Helleborine ( <i>Epipactis gigantea</i> )
Giant Golden Moss ( <i>Homalothecium megaptilum</i> / <i>Trachybryum megaptilum</i> )	Douglas' Neckera Moss ( <i>Neckera douglasii</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.

*Determination:* N/A, project does not involve wetlands or critical riparian habitats.

**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.

It is not anticipated that the proposed irrigation of approximately 1.0 acre of orchard will have a negative impact on the soil quality, stability, or moisture content. The soil in the project area is Winfall very gravelly loam, 15 to 30 percent slopes, formed from glacial till parent material. Winfall very gravelly loam has 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.

The orchard has been in place for at least 15 years. 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.*

*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.*

The project is consistent with planned land uses.

*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.*

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 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 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:* Travis Wilson

*Title:* Water Resource Specialist

*Date:* October 9, 2020