

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. APPLICANT/CONTACT NAME AND ADDRESS:

ANNE & DANIEL BOYCHUCK
711 SWAN RIVER RD
BIGFORK, MT 59911-6336

2. TYPE OF ACTION:

Surface Water Application for Beneficial Water Use Permit 76K 30162322

3. WATER SOURCE NAME:

Swan River

4. LOCATION AFFECTED BY PROJECT:

S2SWNW and N2NWSW of Section 28, Township 27N, Range 19W, Flathead County, Montana (Figure 1).

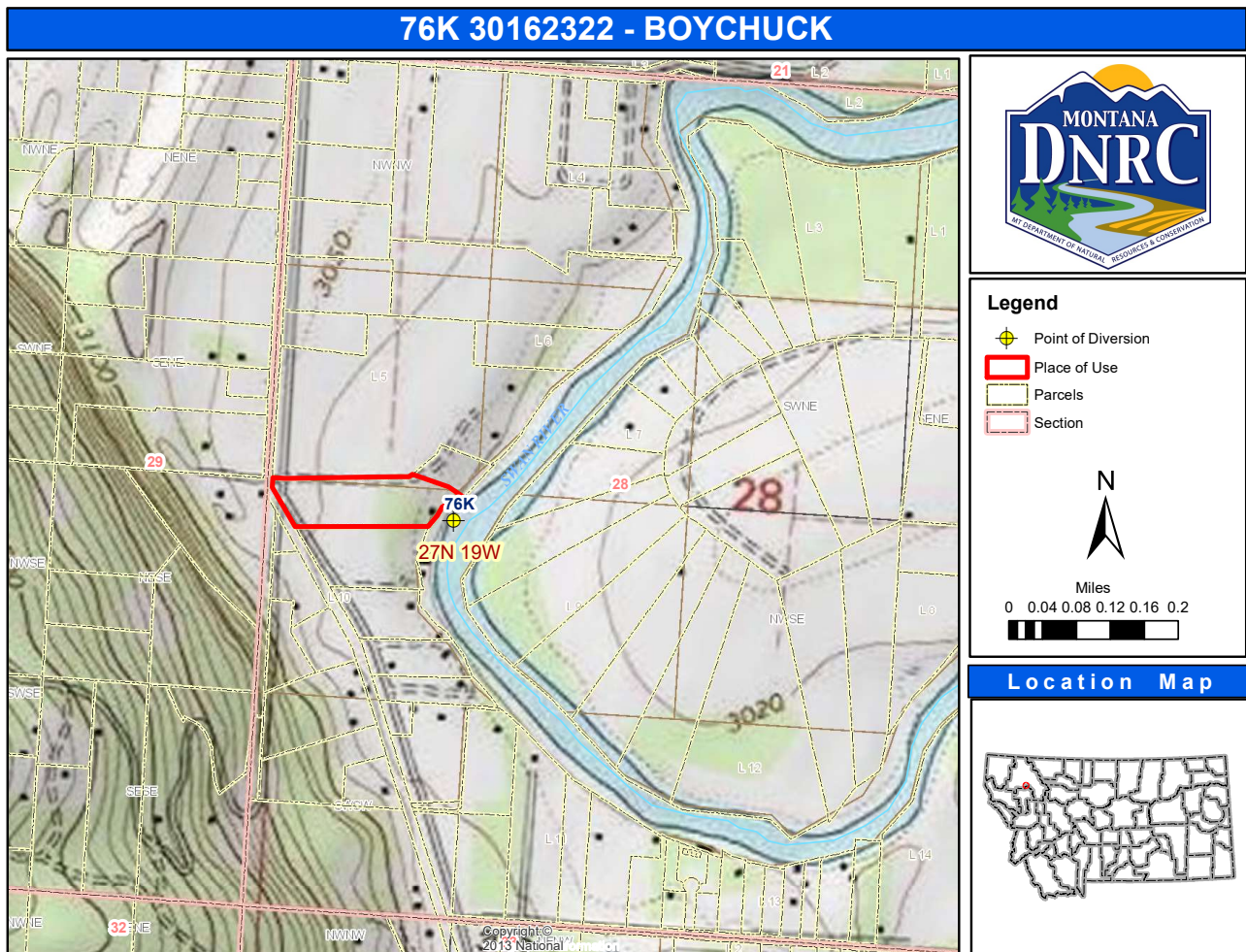


Figure 1. Map of the proposed place of use and point of diversion.

5. NARRATIVE SUMMARY OF THE PROPOSED PROJECT, PURPOSE, ACTION TO BE TAKEN, AND BENEFITS:

The Applicant proposes to divert Swan River water by means of a pump from April 15 – October 15 at 45.0 GPM up to 12.71 AF/year for irrigation of 5.94 acres of lawn and garden from April 15 – October 15. The proposed POD is in the NENWSW of Section 28, Township 27N, Range 19W, Flathead County, Montana (Figure 1). The proposed place of use is in Government Lot 5, S2SWNW, and Government Lot 10, N2NWSW of Section 28, Township 27N, Range 19W, Flathead County, Montana, further described as Tract 1 of Certificate of Survey No. 18839 (Figure 1). The POD is in the Swan River Basin (76K) 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

Part II. Environmental Review

1. ENVIRONMENTAL IMPACT CHECKLIST:

PHYSICAL ENVIRONMENT

1.1 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 will divert water from the Swan River, which is a tributary of the Flathead River (Flathead Lake). Neither the Swan River nor the Flathead River (Flathead Lake) are identified in 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.

Swan River: MDEQ Clean Water Act Information Center's 2020 Water Quality Information report lists the Swan River as:

- i. Water Quality Category 3: Waters for which there is insufficient data to assess the use support of any applicable beneficial use, so no use support determinations have been made;
- ii. Use Class B-1: Waters classified as suitable for drinking, culinary, and food processing purposes after conventional treatment; bathing, swimming and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply.

Flathead Lake: MDEQ Clean Water Act Information Center's 2020 Water Quality Information report lists Flathead Lake as:

- i. Water Quality Category 5: Waters here one or more applicable beneficial uses have been assessed as being impaired or threatened, and a TMDL is required to address the factors causing the impairment or threat;

- ii. Use Class A-1: Waters classified as suitable for drinking, culinary and food processing purposes after conventional treatment for removal of naturally present impurities;
- iii. “Fully supporting” for: primary contact recreation, agriculture, and drinking water; and,
- iv. “Not fully supporting,” for: aquatic life with probable causes for these designations being Mercury, Polychlorinated Biphenyls, Total Nitrogen, and Total Phosphorus.

The diversion of water for lawn and garden irrigation is not anticipated to significantly affect water quality in these sources.

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, project does not involve groundwater.

1.2 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 proposes to divert Swan River water at 45.0 GPM up to 12.71 AF/year for irrigation of 5.94 acres of lawn and garden area via a Franklin Electric model 45FA3S4-PE 4-inch submersible pump with a 3.0 horsepower motor. The pump is located on the bed of the Swan River approximately 107 feet from shore and 10 feet below the low water elevation. The pump is affixed to a skid within a plastic flow sleeve to prevent larger debris from plugging the intake and to draw cool water across the motor. A check-valve on the intake prevents backflow.

The pump conveys water through a 2-inch HDPE main supply line approximately 162 feet to the control box located near the southern end of the Applicant’s house. The 2-inch supply line splits at the control box to convey water to the 11 valve distribution boxes, 17 automated underground sprinkler system irrigation zones, and three pasture-area irrigation connection risers.

One-inch Hunter PGV valves controlled by an Irritrol Total Control-A Series controller convey water to each sprinkler zone via one-inch HDPE water lines. The automated irrigation system consists of 17 zones with 152 Hunter PGP-ADJ #7 nozzle sprinklers, and 6 Irritrol I-Pro heads with Hunter MP-Rotator 2000 nozzles. The typical operating pressure for each sprinkler is 60 PSI, which results in a max flow of approximately 3.7 GPM per sprinkler head. The irrigation system is designed for a maximum demand of 45.0 GPM for the largest zone, with only one zone operating at a time. A Kifco Model T200L Water-Reel will be connected to one of the three pasture-area irrigation connection risers at a time to irrigate the pasture-grass area. The water reel will produce up to 28.0 GPM at an operating pressure of 60 PSI. Irrigation of the pasture-grass will occur as needed to maintain a green space. The automated sprinkler zone controller is set to irrigate the 17 sprinkler zones between 9:00 P.M. and 7:00 A.M. to limit overlapping water use with the pasture grass irrigation. Water will be diverted as required to meet crop demands throughout the irrigation season. The Applicant calculated a TDH of 167-feet at a constant service pressure of 60 PSI for the highest demand zone. The Applicant-provided pump curve demonstrates that the pump is capable of producing 45.0 GPM at 167 feet TDH.

This project will not have any channel or riparian impacts nor will it create barriers or dams on the Swan River.

Determination: No significant impact.

1.3 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 the project area that could be impacted by the proposed project. Ten animal and zero plant species of concern (Table 1) were identified in the general vicinity of the project area. Of these species, the Grizzly Bear (*Ursus arctos*) and the Bull Trout (*Salvelinus confluentus*) are listed as threatened by the USFWS. This general area is developed, and it is not anticipated that any species of concern will be further impacted by the proposed project. This project will not create any barriers to the migration or movement of fish or wildlife.

Table 1. Species of Concern		
Species Group	Common Name	Scientific Name
Mammals	Grizzly Bear	<i>Ursus arctos</i>
Mammals	Little Brown Myotis	<i>Myotis lucifugus</i>
Birds	Cassin's Finch	<i>Haemorhous cassinii</i>
Birds	Great Blue Heron	<i>Ardea herodias</i>
Birds	Pacific Wren	<i>Troglodytes pacificus</i>
Birds	Pileated Woodpecker	<i>Dryocopus pileatus</i>
Birds	Varied Thrush	<i>Ixoreus naevius</i>
Fish	Bull Trout	<i>Salvelinus confluentus</i>
Fish	Westslope Cutthroat Trout	<i>Oncorhynchus clarkii lewisi</i>
Invertebrates	Suckley Cuckoo Bumble Bee	<i>Bombus suckleyi</i>

Determination: No significant impact.

Wetlands and Ponds - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted. For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

There is an area of freshwater emergent wetland near the northwestern extent of the irrigated area. It is not anticipated that irrigating lawn and garden areas near this emergent wetland will disturb or adversely impact the wetland. This project does not involve a pond.

Determination: No significant impact.

1.4 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 lawn and garden use will not negatively impact the soil quality, stability, or moisture content. The soil types in the project area are:

- i. Haskill loamy fine sand, 7 to 20 percent slopes. High capacity to transmit water. Nonsaline to very slightly saline.
- ii. Radnor silty clay loam, 0 to 3 percent slopes. Moderately low to moderately high capacity to transmit water. Not likely saline.
- iii. Selle fine sandy loam, 0 to 3 percent slopes. Moderately high to high capacity to transmit water. Nonsaline to very slightly saline.
- iv. Selle fine sandy loam, 3 to 8 percent slopes. Moderately high to high capacity to transmit water. Nonsaline to very slightly saline.

Determination: No significant impact.

- 1.5 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. Any existing native vegetation has likely 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.

- 1.6 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.

- 1.7 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.

- 1.8 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

- 1.9 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.

- 1.10 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.

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

This proposed use will not adversely impact human health.

Determination: No significant impact.

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

No government regulatory impacts on private property rights.

Determination: No impact.

- 1.13 **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 surface water at this location.

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:

Based on the significance criteria evaluated in this EA, is an EIS required? ___Yes XNo

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.

4. NAME OF PERSON(S) RESPONSIBLE FOR PREPARATION OF EA:

Name: Travis Wilson

Title: Water Resource Specialist

Date: July 24, 2024