

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: Bigfork Water & Sewer District  
PO Box 1108  
Bigfork MT 59911
2. Type of action: Application for Beneficial Water Use Permit No. 76LJ 30071153
3. Water source name: Groundwater (wells)
4. Location affected by project: Section 18, Township 27N, Range 20W, Flathead County, Montana
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The DNRC shall issue a water use permit if an applicant proves the criteria in § 85-2-311 MCA are met. The Applicant proposes to divert and use groundwater for irrigation use from April 15th thru October 15th at a rate of 2.23 CFS up to 607.9 AF from two wells (717 and 672 feet deep) in SESENE Section 18, Township 27N, Range 20W, Flathead County, Montana. The wells will operate simultaneously, each supplying half the flow rate. The Applicant proposes to irrigate a variety of crops, including alfalfa on 247.75 acres. The place of use is generally located about 8 miles southeast of Kalispell, 1 mile north of Flathead Lake, and 3 miles west of Flathead River in the E2 Section 18, Township 27N, Range 20W, Flathead County, Montana.

6. Agencies consulted during preparation of the Environmental Assessment:  
Montana Natural Resource Information System (NRIS)  
Montana Department of Fish, Wildlife, & Parks (DFWP)  
Montana Department of Environmental Quality (DEQ)  
Montana Natural Heritage Program  
National Wetlands Inventory  
USDA 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.*

*Determination:* No significant impact

This application is for groundwater that depletes the Flathead River including Flathead Lake. The Flathead River is not listed as chronically or periodically dewatered.

**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.*

*Determination:* No significant impact

According to the Montana Department of Environmental Quality's (MDEQ) Clean Water Act Information Center in 2014 Flathead Lake was listed as having one or more uses impaired due to one or more of the following probable causes: mercury, nitrogen (total), phosphorous (total), polychlorinated biphenyls and sedimentation/siltation. The Flathead River was categorized as having insufficient data to assess any use. The Applicant is proposing to utilize groundwater. Both of the wells deplete Flathead River including Flathead Lake. Irrigation use is 70% efficient meaning 30% of the water used for irrigation will return to groundwater. The total volume of surface water depleted is 263.8 GPM (constant year-round) and is expected to have little or no effect on the water quality of these surface sources.

**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:* No significant impact

The proposed use will reduce discharge from the source aquifer to the Flathead River including Flathead Lake in an amount equivalent to its consumptive use (425.51AF annually). 15.45 AF of 30.28 AF of water that is diverted is consumed. The source aquifer is the Deep Aquifer in Flathead Valley. Groundwater and depleted surface water quality will not be negatively impacted.

**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.*

*Determination:* No significant impact

Groundwater flow paths immediately surrounding the wells will be altered due to the proposed project, however, no significant impacts to the general area including other existing wells and surface sources will manifest. The wells were drilled in 2011 and tested in 2012.

## **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.”

*Determination:* No significant impact

According to the Montana Natural Heritage Program in Township 27N, Range 20W there are three plant species of concern: Bristly Sedge (*Carex comosa*), Guadalupe Water-nymph (*Najas guadalupensis*), and Columbia Water-meal (*Wolffia Columbiana*). According to the Montana Natural Heritage Program in Township 27N, Range 20W there are eleven animal species of concern: Hoary Bat (*Lasiurus cinereus*), Little Brown Myotis (*Myotis lucifugus*), Great Blue Heron (*Ardea Herodias*), Brown Creeper (*Certhia Americana*), Evening Grosbeak (*Coccothraustes vespertinus*), Pileated Woodpecker (*Dryocopus pileatus*), Cassin’s Finch (*Haemorhous cassinii*), Common Tern (*Sterna hirundo*), Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*), Pygmy Whitefish (*Prosopium coulteri*), and Bull Trout (*Salvelinus confluentus*). In addition, the Grizzly Bear (*Ursus arctos*) and Canada Lynx (*Lynx canadensis*) are listed as threatened by the USFS. The Wolverine (*Gulo gulo*), Fisher (*Martes pennanti*), and Townsend’s Big-eared Bat (*Corynorhinus townsendii*) are listed as sensitive by the USFS. An adequate quantity of water will still exist in all depleted surface sources to maintain existing populations of fish and aquatic species should they exist there currently. Raising of agricultural crops has already existed in this parcel in the recent past and any potential impacts to sensitive plant or animal species most likely has already occurred.

***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:* No significant impact

The project does not involve wetlands and will not cause adverse impacts to any nearby wetlands or riparian habitats.

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

*Determination:* No significant impact

The project does not involve ponds and will not cause adverse impacts to any nearby 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.

*Determination:* No significant impact

According to soil survey data provided by the NRCS, soil within the place of use consists of silty clay loams, silty clay, and silt or fine sand loams. The land is nearly flat and therefore very little runoff is expected. Soils within the place of use are not susceptible to saline seep. No degradation of soil quality shall occur.

**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.

*Determination:* No significant impacts

This area has been used as cropland in the past. The addition of irrigation water will simply allow the owner to grow other crops. Noxious weeds are not expected to be established or spread.

**AIR QUALITY** - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

*Determination:* No significant impact

Adverse air quality impacts from increased air pollutants are not expected as a result of this project. No air pollutants were identified as resulting from the applicants proposed use of groundwater.

**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:* NA-project not located on State of 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.

*Determination:* No significant impact

All impacts to land, water and energy have been identified and no further impacts are anticipated.

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| <h2 style="text-align: center;">HUMAN ENVIRONMENT</h2> |
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**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

*Determination:* No known environmental plans or goals will be impacted by this project.

**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.

*Determination:* No access or recreational activities will be impacted by this project.

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

*Determination:* The proposed project will have no impact on human health.

**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? No significant impact identified
- (b) Local and state tax base and tax revenues? No significant impact identified
- (c) Existing land uses? No significant impact identified
- (d) Quantity and distribution of employment? No significant impact identified
- (e) Distribution and density of population and housing? No significant impact identified
- (f) Demands for government services? No significant impact identified
- (g) Industrial and commercial activity? No significant impact identified
- (h) Utilities? No significant impact identified
- (i) Transportation? No significant impact identified
- (j) Safety? No significant impact identified
- (k) Other appropriate social and economic circumstances? No significant impact identified

**2. *Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts No significant impact identified

Cumulative Impacts No significant impact 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 “no action” alternative is to continue farming without irrigation. To grow preferred crops, the applicant must irrigate the land. No reasonable alternative is identified.

**PART III. Conclusion**

1. **Preferred Alternative** Issue a water use permit if an 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:* No significant impacts related to the proposed project have been identified.

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

*Name:* Jim Ferch

*Title:* New Appropriations Program Specialist

*Date:* June 3, 2015