

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:* William Byxbe  
3927 Killdeer Ln  
Billings, MT 59102
2. *Type of action:* Application for Beneficial Water Use Permit
3. *Water source name:* Fly Creek
4. *Location affected by project:* N2 Sec. 9, S2S2 Sec. 4, NW Sec.10 and SW Sec.3, T2N, R30E, Yellowstone County.
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*  
William Byxbe is requesting a beneficial water use permit to divert 4 CFS flow up to 951.55 acre-feet per year from Fly Creek to use for irrigation of 266 acres and livestock for 100 animal units, in the N2 Sec. 9, S2S2 Sec. 4, NW Sec.10 and SW Sec.3, T2N, R30E, Yellowstone County. 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:*  
(include agencies with overlapping jurisdiction)

Montana Natural Heritage Program  
Montana Department of Fish Wildlife & Parks (MFWP)  
Montana Department of Environmental Quality (MDEQ)  
Montana Bureau of Mines and Geology  
United States Fish and Wildlife Service  
United States Natural Resource and Conservation Service

**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

Fly Creek, tributary to the Yellowstone River is not on the DFWP list of chronically or periodically dewatered streams.

**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

Fly Creek, from the reservation boundary to the mouth with the Yellowstone River is listed as water quality category 5 by DEQ. This category is for waters where one or more applicable beneficial uses are impaired or threatened and a TMDL is required to address the factors causing the impairment or threat. This source is listed as not fully supporting primary contact recreation and aquatic life. Neither of these beneficial uses is threatened. The proposed use of water for livestock and irrigation would not impair water quality on this source.

**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 Impact

This use for livestock and irrigation may increase groundwater recharge on the acres proposed for irrigation. There should be no impact to groundwater quality due to this proposed use.

**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.

The proposed diversion would be a 100 HP fuel powered pump placed on the stream bank with a suction hose in the stream. There are existing ditches and turnouts that will be used for irrigation. A 12-inch pipeline will be built to match the existing system. Water for stock will be pumped out of the stream and into 4 existing reservoirs, all under 2 AF in capacity.

#### **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 Impact*

The Natural Heritage Program identified the following species of concern within the project area: Black-tailed Prairie Dog, Spotted Bat, Golden Eagle, Great Blue Heron, Greater Sage Grouse and Plains Hog-nosed Snake. The State of Montana, Office of the Governor has issued Executive Order No. 12-2015 creating the Montana Sage Grouse Oversight Team and the Montana Sage Grouse Habitat Conservation Program. The proposed place of use falls within currently mapped sage grouse habitat. The Applicant has consulted with the Sage Grouse Habitat Conservation Program and is aware of requirements. Golden Eagles are protected by the Migratory Bird Treaty Act of 1918. This area is already actively farmed and grazed, there should be no new impact to any species due to this proposed project.

**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 Impact*

The project area is not within a wetland, so there should be no significant impacts to wetlands from this proposed use.

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

*Determination: No impact*

The ponds associated with this water right application have already been constructed and used for years. There should be no new impact due to this proposed project.

**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 Impact*

The soils in the proposed place of use are mostly loams, silts and clays which are well drained, and range from non-saline to strongly saline. The watering of livestock and flood irrigation of 266 acres should not degrade soil quality, alter stability or moisture content. The operator will manage his irrigation to minimize saline seep from this use of water.

**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 Impact*

This property is already actively farmed and has livestock on it. The land owner is expected to

prevent the establishment or spread of noxious weeds on their property.

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

*Determination: No Impact*

There should be no deterioration of air quality due to increased air pollutants from this proposed project.

**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 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.*

*Determination: No Impact*

There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

## HUMAN ENVIRONMENT

**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

*Determination: No Impact*

This proposed use is not inconsistent with locally adopted environmental plans and goals for Yellowstone County.

**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 Impact*

The project is located on private land; this project should have no new impact on recreational or wilderness activities.

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

*Determination:* No significant Impact

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

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

Secondary Impacts None identified.

Cumulative Impacts There are no other pending applications on this source of water. There should be no significant cumulative impacts.

**3. *Describe any mitigation/stipulation measures:*** There are no mitigation or stipulation measures required.

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 reasonable alternatives are to grant the application, to advise the Applicant to propose a different application or the no action alternative. Granting the application would allow the Applicant to water livestock and irrigate 266 acres of his property. It may be possible for the Applicant to develop an alternate source of water, such as a spring or well, or abandon the proposal. The no action alternative would prevent the Applicant from using Fly Creek for his livestock and irrigation.

***PART III. Conclusion***

1. ***Preferred Alternative*** To authorize the beneficial water use permit.
2. ***Comments and Responses***
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 environmental impacts were identified. No EIS required.

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

*Name:* Christine Schweigert  
*Title:* Water Resources Specialist  
*Date:* April 23, 2018