

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:

Melissa & James Miller
PO Box 1230
Whitehall, MT 59759-1230

2. Type of action:

Application To Change Water Right No. 41G 30159310

3. Water source name:

Jefferson River

4. Location affected by project:

E2 Sec 15 1S5W and the downstream reach of The Jefferson River from SESE 15
Sec 1S 5W.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.

The Applicant proposes to change a portion of the place of use on Statement of Claim 41G 30109772 to allow for the operation of a pivot irrigation system. This change will retire 22.6 acres of flood irrigation in E2 Sec 15 1S 5W and proposes to add 15.2 acres of sprinkler irrigation in the same section. All other aspects of the water right will remain the same, including the point of diversion (POD), flow rate, purpose, period of use, etc. With this change, the consumed volume is not changing, and the diverted volume will be reduced from 425.6 AF to 412.9 AF. The point of diversion is now, and will remain at NWSWNW Sec 26 2S 6W, and water is conveyed 11 miles through the Creeklyn Ditch.

6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

- Montana Natural Heritage Program (MTNHP)
- USDA Web Soil Survey
- Montana Department of Environmental Quality
- Montana Bureau of Mines and Geology

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 Impact

All new proposed use will be offset by the retirement of irrigated acres.

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 Impact

While the DEQ lists the water quality as impaired, the listed source of impairment is Sedimentation/Siltation which is unlikely to be affected by the proposed change.

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

Per:

Bobst, A., and Gebril, A., 2021, Hydrogeologic investigation of the Upper Jefferson Valley, Montana—Interpretive report: Montana Bureau of Mines and Geology Report of Investigation 28, 130 p.,

This part of the Jefferson River is gaining. The slight reduction in groundwater inflows as a result of a reduced field applied volume will be mitigated by an equal increase in water left in the Jefferson River.

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 Impact

Neither the means of diversion nor point of diversion will change in the proposed project.

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

There are two species of concern within the affected area of the project, the Great Blue Heron with a habitat of riparian forest, and the Thick-Billed Longspur with a habitat of grassland. Although this project is irrigating roughly 15 new acres, it's retiring about 22 acres. Overall, there will be 7 additional potential acres of grassland habitat after the project has been completed.

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

There is no expected change to wetlands in or around the affected area.

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

Determination: NA

NA

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 USDA classifies the vast majority of the place of use both pre and post change a Vendome sandy loam at 0-8 percent slope. About Vendome soils the USDA states: "The Vendome series consists of very deep, well drained soils that formed in gravelly alluvium. These soils are on alluvial fans, stream terraces, knolls and plains. [...] [Vendome soils are] well drained; moderately rapid permeability through the Bk1 horizon and rapid permeability in the 2Bk2 and 2Bk3 horizons." The Department finds that a negative impact to the soil quality, stability, and moisture is highly unlikely.

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

The proposed project will reduce the overall irrigated acres, allowing for the potential revegetation of native grasses on the retired acres.

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 is no potential effect to the air quality in this change.

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

The proposed project is not located on state or federal land and this section is applicable (MCA 22-3-421).

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

As shown in the adverse effect calculations, the total consumed volume will be reduced by roughly 0.03 AF per year.

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

The Department has found no evidence of existing county level ordinances, zoning restrictions, or other plans that may have been developed at the county or city level that would put this project outside of compliance.

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 proposed project is on privately owned land.

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

Determination: No Impact

The proposed project will not adversely effect 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 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 Impact
- (b) Local and state tax base and tax revenues? No Impact
- (c) Existing land uses? No Impact
- (d) Quantity and distribution of employment? No Impact
- (e) Distribution and density of population and housing? No Impact
- (f) Demands for government services? No Impact
- (g) Industrial and commercial activity? No Impact
- (h) Utilities? No Impact
- (i) Transportation? No Impact
- (j) Safety? No Impact
- (k) Other appropriate social and economic circumstances? No Impact

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:***

All required mitigation has been provided by

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:***

No Environmental or human impact is likely. The proposed change is a beneficial use, as defined in MCA 85-2-102(5) and expanded on in the Preliminary Determination for this project. The Applicant has taken reasonable measures to mitigate adverse effects. There are no reasonably available or prudent alternatives.

PART III. Conclusion

1. ***Preferred Alternative***

No preferred alternatives identified.

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:

An Environmental Assessment is the appropriate level of analysis because no significant adverse impacts were identified for the proposed project.

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

Name: Mitchell Hoffman

Title: Water Resources Specialist

Date: 3/8/2024