

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:

Miles J. and Carol B. Erickson
495 Tally Lake Road
Whitefish, MT 59937

2. Type of action: Application for Beneficial Water Use Permit 76LJ 30066211

3. Water source name: Groundwater

4. Location affected by project: The place of use is generally located in the NESW, Section 9, Township 29N, Range 22W, Flathead County, Montana.

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

The Applicant proposes to divert and use groundwater for domestic and shop purposes January 1st thru December 31st and irrigation use April 15th - October 15th at a rate of 300 GPM up to 56.11 AF from a well in the NESW of Section 9, Township 29N, Range 22W, Flathead County, Montana. 24.89 acres of alfalfa will be irrigated. 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)

- U.S. Fish and Wildlife Service and Montana Natural Heritage Program: Endangered, Threatened Species and Species of Special Concern, Wetland Mapper program
- Montana Department of Fish Wildlife & Parks (MFWP)
- Montana Department of Environmental Quality's (MDEQ) Clean Water Act Information and PWS Drinking Water Watch databases
- U.S. Natural Resource Conservation Service (NRCS); web soil survey
- Montana Historical Society

Part II. Environmental Review

1. Environmental Impact Checklist:

<h2>PHYSICAL ENVIRONMENT</h2>

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 Flathead and Stillwater Rivers are not listed by DFWP as chronically or periodically dewatered. Upon analysis by the Department the source aquifer, Stillwater River and Flathead River were found to have water in excess of that requested by the Applicant.

Determination: No 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's Clean Water Act Information Center in 2012 Flathead River was categorized as having insufficient data to assess any use. The Stillwater River was categorized as moderately impaired due to excess nutrients (nitrate and total phosphorous) and lead. The Applicant is proposing to utilize groundwater. This appropriation will likely reduce discharge from the Deep Aquifer to the Flathead and Stillwater River in an amount equal to their consumptive use or approximately 34.79 AF. The volume of water consumed is expected to have little or no effect on the quality of either surface water source.

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.

Groundwater flow paths will be altered due to the proposed project. The proposed use will reduce discharge from the source aquifer to Flathead River and the Stillwater River in an amount equivalent to their consumptive use. Modeling done by Department groundwater hydrologists show that an adequate supply of ground water exists for the proposed appropriation and that no significant negative impact will occur to existing water users and surface/groundwater resources.

Determination: No significant impact.

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 proposed appropriation will utilize one Well (GWIC 261828) to irrigate 24.89 acres and supply water to one household and shop. The well was drilled by a licensed well driller (license # WWC-571) in accordance with MCA Title 37, Chapter 43 and ARM Title 36, Chapter 21. The well is 286 feet deep and has a static water level of 182 feet. The well casing is 8 inches in diameter -2 – 286 feet with Holte perforated slots from 274-286 feet. A Goulds Model 7CLC040 pump with a 40-hp motor and a variable frequency drive will be placed at approximately 250 feet bgs and be mounted from a 4 inch drop pipe; it is capable of pumping 335 GPM. A 6-inch Mueller gate valve will be installed on the 6-inch line to limit the flow rate to 300 GPM. Water will be pumped from the well into a 6 inch buried pipeline. It will then follow one of two courses; it will enter an 8 inch aluminum transmission main that runs along the eastern property boundary or run to a 1 inch line and pressure tank that services the house and shop. The 8 inch main line is equipped with 4 inch headers every 60 feet. The Wade Rain Powerroll wheel line sprinkler system is equipped with 32 11/64-inch Wade Rain WR-33 Double Nozzles with 3/32-inch spreaders. The system will be operated at a pressure of 72 psi to obtain uniform coverage. There are no flow meters or measurement devices within the system. Wastewater will be discharged to an individual drain field. The proposed project shall not impact any channels, barriers, riparian areas and dams. Modeling done by Department groundwater hydrologists show that no significant negative impact will occur to existing water users and surface/groundwater resources.

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 (MNHP) and MFWP websites were reviewed to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern” in Township 29N, Range 22W that could be impacted by the proposed project.

According to the MNHP there are no plant species of concern. This area has been disturbed for over 30 years, impact to the sensitive plant species has most likely already occurred.

The Bull Trout (*Salvelinus confluentus*) is listed as threatened by the USFS. The Wolverine (*Gulo gulo*), Fisher (*Martes pennanti*) and Westslope Cutthroat Trout (*Oncorhynchus clarkia lewisi*) are listed as sensitive species by the USFS. The Great Blue Heron (*Ardea herodias*), Black Tern (*Chlidonias niger*), Lewis’s Woodpecker (*Melanerpes lewis*) and Horned Grebe (*Podiceps auritus*) are listed S3 to S3B by MFWP meaning their populations are at risk because their numbers are very limited. The Lake Trout (*Salvelinus namaycush*) are listed S2 by MFWP, meaning their populations are at risk because their numbers are extremely limited and/or rapidly declining. An adequate quantity of water will still exist in the Flathead River and Stillwater River to maintain existing populations of both threatened and sensitive species of fish. This parcel of land was historically farmed and irrigated, any impacts to sensitive mammal species or

fish most likely have already occurred. The proposed project will not impact any threatened or endangered fish, wildlife, plants and aquatic species or any species of special concern.

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.*

According to soil survey data provided by the NRCS within the place of use soils are mostly Yeoman cobbly loam and gravelly loam. This soil is well drained and not susceptible to saline seep. The use of water for irrigation, domestic and shop purposes will not cause degradation of soil quality and stability.

Determination: No 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.*

Any impacts to existing vegetation will be within the range of current disturbances due to current development within the subdivision, therefore noxious weeds are not expected to be established or spread.

Determination: No impact.

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

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.

Determination: No 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 is not located on state or federal land.

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 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 located in an area with no locally adopted environmental plans.

Determination: No 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 impact.

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

There should be no significant negative impact on human health from this proposed use.

Determination: No 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 identified.

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 reasonable alternatives were identified in the EA.

PART III. Conclusion

1. Preferred Alternativ: None 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 EA is the appropriate level of analysis for the proposed action because no significant impacts were identified.

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

Name: Melissa Brickl

Title: Hydrologist/Water Resource Specialist

Date: January 13, 2014