

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: Jon Lee
PO Box 2157
Missoula, MT 59806
2. Type of action: Application For Beneficial Water Use Permit No. 76M 30048103
3. Water source name: Groundwater
4. Location affected by project: NWNWSW Section 1, T14N, R21W, Missoula County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to divert groundwater by means of two 180' deep wells fitted with 15 hp submersible pumps from January 1 to December 31 annually at a maximum rate of 132 GPM up to 6.2 AF for multiple domestic use and 11.9 AF for lawn and garden irrigation use. The total combined annual volume of water to be appropriated is 18.1 AF. Multiple domestic use will occur on a year round basis in 21 residential units, and lawn and garden irrigation use will occur from April 15 to October 15 annually on a total of 5 acres of lawn and landscaping. The two public supply water wells are located in the NWNWSW of Section 1, T14N, R21W, Missoula County, approximately 1.4 miles southeast of the town of Frenchtown. The proposed public water supply wells are located approximately 1 mile east of the Clark Fork River. The proposed diverted volume of groundwater is 11.92 AF for lawn and garden irrigation and 6.16 AF for multiple domestic. Approximately 2.83 AF of lawn and garden irrigation diverted volume will return to the groundwater aquifer through return flows and 5.54 AF of diverted volume of multiple domestic use will be returned to the groundwater aquifer through individual septic and drain fields. The Applicant's use of individual septic and drain fields was approved by Montana Department of Environmental Quality. The consumptive use of the proposed diversion is 9.71 AF.

The use of groundwater for this project will provide the benefit of domestic water for 21 residences and lawn and garden irrigation. Both domestic and lawn and garden irrigation uses are considered beneficial by the State of Montana. The volume of water requested is reasonable, and does not constitute a waste of water.

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 Department of Fish, Wildlife and Parks	2005 Dewatered Stream List
Montana Department of Environmental Quality	303(d) list of impaired streams
Montana Natural Heritage Program	Species of Concern
Missoula Valley Soil Survey	Soil data

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.

Not applicable. The source of supply is groundwater diverted from a well.

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.

Not applicable. The source of supply is groundwater diverted from a well.

Determination: No 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.

During 24-hour constant rate pump tests, the production well MB-PWS-1 was pumped at a rate of 720 GPM, and production well MB-PWS-2 was pumped at a rate of 673 GPM, exceeding the requested flow rate of 132 GPM. Impacts to the groundwater aquifer were projected out for the entire 365-day period of appropriation. The results of the applicant's groundwater modeling indicate that after pumping continuously for 365 days the groundwater aquifer would be drawn down no greater than 0.26 feet at any location outside the applicant's property boundary. This amount of drawdown, by itself, is not great enough to impact other well users in the project

vicinity. No sources of groundwater contamination were identified. The source of groundwater is hydraulically connected to surface water, including the Clark Fork River. The applicant estimates an annual depletion of 9.71 acre-feet, which equals depletion rate ranging from a low of 2.69 GPM in April to 10.48 GPM in September. This depletion rate will not have a measurable impact on the Clark Fork River.

Determination: No 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 wells were drilled by a licensed well drilling company in accordance to state laws, rules and regulations. The Montana Department of Environmental Quality approved the well locations. The project does not involve disturbance of any stream channels and/or riparian areas. The project will not create any barriers or utilize any dams, or cause any flow modifications in adjacent surface water sources. The aquifer test performed by the applicant indicates that the drawdown resulting from pumping from the well will have no noticeable affect on neighboring wells, and will not prevent any future well construction in the area.

Determination: No 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 parcel proposed for subdivision is a 13 acre tract located 1.2 miles south east of the town of Frenchtown, Montana. The parcel is bordered by Highway 10 to the west and Interstate 90 to the east. The parcel currently is an irrigated pasture that is hayed twice annually. Due to the agricultural use of the property and its close proximity to Frenchtown and Interstate 90, the parcel provides limited wildlife habitat and is not located within any wildlife migration corridors. The proposed use of groundwater for domestic and lawn and garden will not impact surface water flowing in the Clark Fork River and will not affect aquatic species.

Determination: No 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.*

The project does not involve any wetlands.

Determination: No impact.

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

The project does not involve any ponds.

Determination: No impact.

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 the Soil Survey for the Missoula Valley Area, the soils at the project site consist of Alberton very fine sandy loam. This soil is not heavy in salts that could cause saline seep. Application of water to soil will occur during irrigation of the 5 acres of lawn and garden irrigation within the 21-lot subdivision. This irrigation will be done using sprinklers, and the amount of water applied will not cause degradation of soil quality or stability.

The actual construction of the subdivision may alter the soil on the subject property. However, the subdivision was designed by a Professional Engineer, who will be responsible for on site construction and engineering.

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.

Existing vegetative cover most likely will be removed at the site during construction of the subdivision. The existing vegetative cover consists of pasture grasses. Upon completion of the project the vegetative cover will consist of grass and landscaping. The project is located entirely on private property, and the applicants will be responsible for controlling noxious weeds.

Determination: No significant 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. The water will be diverted using submersed electric pumps. No air pollutants were identified as resulting from the applicant's proposed use of groundwater for domestic and lawn and garden purposes. There most likely will be dust and noise at the site during construction, however, this will only occur during construction, and therefore, will be limited to a one time occurrence.

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.*

The property is currently an irrigated field that has been farmed for decades. There are no buildings or other structures located on the property. The property is privately owned, and it is up to the landowner to report any cultural resources encountered during construction.

Determination: No impact.

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 the 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 in the valley.

Determination: No impact.

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

The project does not pose a significant risk to the human health

Determination: No impact.

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes ___ No **XX** 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:

No reasonable alternatives were identified in the EA.

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:**

PART III. Conclusion

1. **Preferred Alternative** None identified.

2. **Comments and Responses**

3. **Finding:**

Yes ___ No **XX** 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: Jim Nave

Title: Water Resource Specialist

Date: August 17, 2010