

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: Leonard and Jennifer Desmul, 674 Country Way, Kalispell MT 59901
2. Type of action: Application to Change A Water Right 76LJ 30064205
3. Water source name: Groundwater well
4. Location affected by project: NW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 26, Township 29N, Range 22W, Flathead County
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.

Applicant seeks to change Provisional Permit 76LJ 30067196. This right is for sprinkler irrigation of 40 acres at a rate of 200 gallons per minute (GPM) up to 100 AF per year from a point of diversion in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 27, Township 29N, Range 22W. Water was diverted by means of a well, 350 feet deep with a static water level of 123 feet and located in the Flathead Valley's deep alluvial aquifer. Proposed diversion is a well in the deep alluvial aquifer located in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 26, Township 29N, Range 22W. The place of use is the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 26, Township 29N, Range 22W, Flathead County and is generally located 1.5 miles northwest of Kalispell, Montana. Priority date of this right is February 4, 1974, with a period of diversion and period of use of April 15 through October 15 of each year.

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

Montana Natural Heritage Program
Natural Resources and Conservation Service soil maps
Montana Department of Environmental Quality
United States Fish and Wildlife Wetland Mapper
Department of Fish, Wildlife and Parks

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: Source is a groundwater well. Nearest surface source is the Stillwater River which is not identified as chronically or periodically dewatered by DFWP.

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: Source is a groundwater well. Nearest surface source is the Stillwater River which is listed by the DEQ as having aquatic life and drinking water as impaired uses with further testing to be done. But, this change is not historically changing these irrigation depletions.

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: The change process of DNRC has determined that any change in depletion timings will not adversely affect adjacent surface water flows.

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: The proposed point of diversion will be drilled into the Flathead Valley's deep alluvial aquifer system and constructed by a Montana licensed driller. This 8-inch well will have an 8-hour pump test completed to finalize the pump selection. Applicant has pre-selected a Goulds Model 5CHC020 pump with a total dynamic head of 286.8 in order to obtain the required flow rate of 200 GPM with a service pressure of approximately 38 psi. A 6-inch Mueller gate valve will be installed on the 6-inch line to control the rate water is diverted from the well. A 6-inch transmission pipeline will convey water to 4-inch headers every 60 feet. The historic 1,280 foot wheel line will continue to be used on this 40-acre parcel with no change in historic irrigation practice. The wheel line has 32 sprinkler heads which will be replaced with WR-33 single nozzles of 3/16 inch which will maintain a flow rate of 6.19 GPM per nozzle. Pump curves and nozzle specifications were included in application.

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: The Montana Natural Heritage Program was contacted to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern", that could be impacted by the proposed project. They identified the following animal and plant species that are threatened, or have special status, that are located regionally: Wolverine, Fisher, Great Blue Heron, Black Tern, Lewis's Woodpecker, Horned Grebe, Westslope Cutthroat Trout, Bull Trout, and Lake Trout. These species are found throughout this region and not necessarily at this particular spot. No immediate 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: This property is not located within a designated wetland boundary.

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

Determination: N/A

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: Soils in this area are made up of Prospect loam and Kalispell loam with both having a moderately high to high capacity to transmit water. Both of these soils are nonsaline to very slightly saline. 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.*

Determination: Good irrigation practices should help control the spread of noxious weeds.

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

Determination: No impacts are anticipated.

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.*

Determination: N/A – 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 other impacts were identified during the EA.

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 inconsistency noted.

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 expected.

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

Determination: No impact expected.

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
- (c) Existing land uses? None-continuing of historic use
- (d) Quantity and distribution of employment? None
- (e) Distribution and density of population and housing? None
- (f) Demands for government services? None

- (g) Industrial and commercial activity? None
- (h) Utilities? None
- (i) Transportation? None
- (j) Safety? None
- (k) Other appropriate social and economic circumstances? None

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 identified.

PART III. Conclusion

1. Preferred Alternative

Project should be completed as explained in application

2. Comments and Responses

3. Finding:

Yes___ NoXXX 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: Historic use of the land is not changing

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

Name: Kathy Olsen

Title: Water Resource Specialist

Date: October 18, 2013